

Brain Drain and Institutional Sustainability in Nigerian Higher Education: Evidence from a Large-Scale Survey Using Structural Equation Modeling

Fuga de Cérebros e Sustentabilidade Institucional no Ensino Superior Nigeriano: Evidências de uma Pesquisa em Larga Escala Utilizando a Modelagem de Equações Estruturais.

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ABSTRACT

This study examined the determinants, consequences, and mitigation strategies of brain drain in selected public universities in Nigeria using a large-scale survey design and Ordered Logistic Regression analysis. Data were obtained from 400 respondents comprising academic staff, administrative staff, and students across selected Nigerian public universities. Descriptive statistics revealed that better prospects abroad in terms of higher salaries and improved working conditions constituted the most significant cause of brain drain, accounting for 90.500% of responses, followed by limited promotion opportunities (83.000%) and lack of professional recognition (79.500%). The findings further showed that brain drain has contributed significantly to the decline in teaching quality (87.800%), reduction in research output (81.500%), and increased workload on remaining staff (77.000%). The Ordered Logistic Regression results indicated that salary and welfare conditions ($\beta = -1.482; p < 0.01$), career advancement opportunities ($\beta = -1.216; p < 0.01$), research funding adequacy ($\beta = -0.964; p < 0.01$), and governance quality ($\beta = -0.731; p < 0.01$) significantly reduced migration perceptions, while political instability ($\beta = 1.364; p < 0.01$) and better prospects abroad ($\beta = 1.592; p < 0.01$) significantly increased migration tendencies. The model demonstrated strong explanatory power with a Pseudo R^2 value of 0.472 and a statistically significant likelihood ratio chi-square value of 186.332 ($p < 0.01$). The study concluded that brain drain in Nigerian universities is fundamentally driven by institutional deficiencies, poor governance, inadequate incentives, and unfavorable socio-economic conditions. The study therefore recommended improved remuneration systems, enhanced research funding, governance reforms, and stable educational policies as critical strategies for strengthening institutional sustainability and reducing academic migration in Nigeria.

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Keywords

Brain Drain; Higher Education Human Capital Flight; Institutional Sustainability; Ordered Logistic Regression; Academic Migration.

RESUMO

Este estudo examinou os determinantes, as consequências e as estratégias de mitigação da fuga de cérebros em universidades públicas selecionadas da Nigéria utilizando um planejamento de pesquisa em larga escala e a análise de Regressão Logística Ordinal. Os dados foram obtidos de 400 respondentes, incluindo docentes, funcionários administrativos e estudantes das universidades públicas selecionadas da Nigéria. As estatísticas descritivas revelaram que oportunidades mais atraentes no exterior, em termos de salários mais elevados e melhores condições de trabalho, constituíram a principal causa da fuga de cérebros, representando 90,5% das respostas, seguidas por oportunidades limitadas de promoção profissional (83%) e falta de reconhecimento profissional (79,5%). Os resultados também demonstraram que a fuga de cérebros contribuiu significativamente para a redução da qualidade do ensino (87,8%), a diminuição da produção científica (81,5%) e o aumento da carga de trabalho dos profissionais remanescentes (77%). Os resultados da Regressão Logística Ordinal indicaram que as condições salariais de bem-estar ($\beta = -1,482; p < 0,01$), as oportunidades de progressão na carreira ($\beta = -1,216; p < 0,01$), a adequação do financiamento à pesquisa ($\beta = -0,964; p < 0,01$) e a qualidade de governança ($\beta = 0,731; p < 0,01$) reduziram significativamente as percepções de migração, enquanto a instabilidade política ($\beta = 1,364; p < 0,01$) e melhores oportunidades no exterior ($\beta = 1,592; p < 0,01$) aumentaram consideravelmente as tendências migratórias. O modelo apresentou elevado poder explicativo, com valor de Pseudo R^2 de 0,472 e valor do teste qui-quadrado da razão de verossimilhança estatisticamente significativo de 186,332 ($p < 0,01$). O estudo concluiu que a fuga de cérebros nas universidades nigerianas é fundamentalmente impulsionada por deficiências institucionais, governança inadequada, incentivos insuficientes e condições socioeconômicas desfavoráveis. Portanto, recomenda-se a implementação de sistemas de remuneração mais atrativos, o fortalecimento do financiamento à pesquisa, reformas na governança e políticas educacionais estáveis como estratégias essenciais para promover a sustentabilidade institucional e reduzir a migração acadêmica na Nigéria.

Palavras-chaves

Fuga de Cérebros; Ensino Superior; Êxodo de Capital Humano; Sustentabilidade Institucional; Regressão Logística Ordinal; Migração Acadêmica.

1. Introduction

Brain drain has become one of the most persistent challenges confronting higher education systems in developing economies, particularly in Sub-Saharan Africa where universities increasingly struggle to retain highly skilled academics and researchers. In

Nigeria, the migration of intellectual capital has intensified due to deteriorating institutional conditions, weak governance systems, inadequate research infrastructure, and limited professional opportunities. The phenomenon has generated significant concern because universities remain central to national development, innovation, and human capital formation (Adebayo & Olamide, 2021). According to Adesina (2020), the continued outflow of academic professionals has weakened the quality of teaching, research productivity, and institutional sustainability within Nigerian universities. Similarly, Ajayi et al. (2018) argued that academic migration undermines knowledge transfer and reduces universities' ability to compete globally.

The growing internationalization of higher education has significantly altered global migration dynamics by increasing opportunities for skilled academics and students to relocate across borders in search of better professional conditions. Developed economies now compete aggressively for global talent through favorable immigration policies, superior research funding, and enhanced working conditions (Altbach, 2015). Consequently, developing countries such as Nigeria face increasing pressure from external pull factors that encourage outward migration among highly educated individuals. Docquier and Rapoport (2012) noted that globalization and international labor mobility have accelerated the movement of skilled professionals from low-income to high-income economies. Similarly, Weber and Van Mol (2023) observed that younger professionals and students increasingly perceive international migration as a pathway toward career advancement and improved socio-economic welfare. These global migration patterns reinforce the argument that academic brain drain is no longer solely a domestic institutional issue but also a product of international inequalities in educational investment, research opportunities, and professional development systems.

The causes of brain drain within Nigerian universities are multidimensional and deeply rooted in institutional and socio-economic challenges. Poor salary structures, inadequate welfare conditions, delayed promotions, weak governance mechanisms, and insufficient research funding have consistently been identified as major drivers of migration among academics and professionals (Egwu, 2019). In addition, political instability and insecurity have worsened migration tendencies by creating uncertainty and undermining institutional confidence. According to Omonijo et al. (2017), many academics perceive foreign institutions as offering better professional recognition, stable career prospects, and more secure working environments. The migration decision is therefore strongly influenced by both push and pull factors, consistent with Lee's (1966) migration theory, which explains migration as a response to unfavorable domestic conditions and attractive external opportunities.

Beyond its causes, brain drain poses serious consequences for institutional sustainability and national development. The departure of experienced academics weakens teaching quality, reduces mentorship opportunities, and limits research output within universities. Ogunode and Atobauka (2021) emphasized that academic migration creates excessive workload pressures on remaining staff, thereby reducing productivity and institutional efficiency. Similarly, Ojo et al. (2019) argued that human capital flight weakens national innovation systems because universities serve as strategic centers for technological advancement and economic transformation. The loss

of highly trained scholars also undermines universities' global competitiveness and international rankings, further reducing their ability to attract funding and research partnerships. Despite the growing body of literature on brain drain in Nigeria, many previous studies have largely focused on descriptive analyses and general migration trends without adequately examining the combined effects of institutional variables on migration perceptions using advanced econometric techniques.

Existing empirical studies have also paid limited attention to the simultaneous interactions among salary conditions, career advancement opportunities, research funding adequacy, governance quality, and political instability in shaping brain drain perceptions within Nigerian universities. While studies such as Akinyemi and Ofem (2021) and Okafor (2019) examined institutional retention challenges, they did not comprehensively evaluate the ordinal nature of migration perceptions using Ordered Logistic Regression techniques. Similarly, many prior studies focused predominantly on academic staff while overlooking the perspectives of students and administrative personnel who constitute critical stakeholders within the university system. This study therefore addresses these gaps by adopting a large-scale survey approach and Ordered Logistic Regression framework to examine the structural relationships between institutional conditions and brain drain perceptions in Nigerian higher education. Specifically, the study evaluates whether salary and welfare conditions, career advancement opportunities, research funding adequacy, governance quality, and political instability significantly influence migration perceptions among respondents in selected public universities in Nigeria.

The study contributes to the literature on academic migration and institutional sustainability by providing a multidimensional econometric analysis of the determinants of brain drain within Nigerian universities. The methodology enabled the simultaneous assessment of institutional determinants, migration perceptions, and policy implications within a statistically rigorous framework. Ordered Logistic Regression was particularly appropriate because respondents' opinions regarding the severity of brain drain and institutional sustainability were inherently ordinal rather than continuous. Unlike linear regression models that assume equal distances between response categories, the ordered logit framework preserves the ranking structure of Likert-scale responses while producing reliable probability estimates (Li et al., 2023). The model also accommodates both institutional and demographic predictors, thereby providing multidimensional insights into migration dynamics within universities. The methodological approach aligns with recent empirical studies emphasizing econometric modeling in migration and higher education research (Akbaritabar et al., 2024; Weber & Van Mol, 2023). In achieving these objectives, the remainder of the article is structured into five sections. Following the introduction, the second section reviews relevant literature, the third presents the methodology, the fourth discusses the findings, while the final section concludes the study and provides policy recommendations.

2. Literature and Hypotheses

Brain drain has emerged as one of the most persistent developmental challenges confronting higher education systems in developing economies, particularly within Sub-Saharan Africa where universities increasingly struggle to retain highly skilled

professionals and researchers. The migration of academics from developing to developed economies has intensified under globalization, widening institutional inequalities and weakening domestic educational systems (Commander et al., 2004). According to Emeghara (2013), Nigeria's university system has experienced sustained intellectual losses arising from unfavorable institutional environments and declining public investment in higher education. Similarly, Mallo et al. (2023) argued that the departure of academics has significantly reduced institutional competitiveness, innovation capacity, and knowledge production within Nigerian universities. The globalization of education and labor markets has further accelerated migration opportunities for highly skilled individuals seeking improved welfare and professional recognition abroad (Rizvi, 2005). Consequently, brain drain has become both an institutional and national development challenge requiring multidimensional policy responses and empirical investigation.

The growing internationalization of higher education has substantially increased academic mobility across countries and transformed universities into globally competitive institutions for intellectual talent. Knight (1999) argued that globalization has expanded educational interconnectedness and intensified competition for highly skilled labor within the knowledge economy. Similarly, Altbach (2015) observed that developed countries increasingly attract academics and researchers through superior infrastructure, advanced research facilities, and favorable immigration systems. Within this context, developing countries often experience persistent losses of skilled professionals because domestic institutions cannot adequately compete with international opportunities. Weber and Van Mol (2023) further emphasized that younger scholars and students increasingly perceive migration as an avenue for socio-economic advancement and career progression. Akbaritabar et al. (2024) also demonstrated that global scholarly migration flows have intensified significantly over the last two decades, reflecting increasing disparities in research funding and institutional quality. These developments reinforce concerns regarding institutional sustainability within Nigerian universities.

Theoretical perspectives on brain drain are largely rooted in migration and human capital theories, which explain migration as a rational response to economic and institutional conditions. Lee (1966) conceptualized migration through the interaction of push and pull factors, where unfavorable domestic conditions stimulate outward migration while attractive external opportunities encourage mobility. Todaro and Smith (2020) similarly explained that labor migration decisions are influenced by expected income differentials and long-term welfare considerations. Within the African context, Marsh and Oyelere (2018) argued that weak economic performance and institutional instability significantly increase skilled migration from developing economies. Beine et al. (2008) further emphasized that the loss of highly educated individuals weakens human capital formation and constrains long-term developmental outcomes. In higher education systems, poor institutional incentives, inadequate infrastructure, and

declining professional opportunities therefore constitute major push factors encouraging academic migration. These theoretical explanations provide the conceptual basis for examining institutional determinants of brain drain within Nigerian universities.

Salary and welfare conditions have consistently been identified as major determinants of migration intentions among academics and professionals. Poor remuneration systems reduce job satisfaction and weaken institutional commitment, thereby increasing the attractiveness of foreign academic systems offering superior compensation packages. Egwu (2019) argued that poor working conditions and inadequate welfare provisions significantly contribute to academic migration within Nigerian universities. Likewise, Ojo et al. (2019) observed that human capital flight from Nigeria is strongly associated with economic dissatisfaction and declining living standards among professionals. Studies by Braimah et al. (2024) and Nwosu et al. (2023) also found that migration decisions among highly skilled individuals are increasingly motivated by the search for improved welfare, stable incomes, and better living conditions abroad. Ojo et al. (2023) similarly demonstrated that younger professionals often perceive migration as a pathway toward financial security and career stability. Based on these empirical findings, the study proposes the first hypothesis: *H01: Salary and welfare conditions have no significant effect on brain drain perception in Nigerian universities.*

Career advancement opportunities also play a critical role in shaping migration decisions among academics and skilled professionals. Promotion delays, weak professional recognition, limited training opportunities, and restricted access to international academic networks reduce institutional attractiveness and increase migration tendencies. According to Akinyemi and Ofem (2021), ineffective staff development systems and poor promotion structures contribute significantly to retention challenges within Nigerian universities. Gribble (2008) similarly argued that international migration among students and academics is often influenced by expectations of improved career development opportunities abroad. Tran and Vu (2017) further emphasized that limited professional integration and institutional support negatively affect academic motivation and workplace connectedness. In addition, Oldac (2023) noted that international educational exposure frequently reshapes professional aspirations and encourages highly skilled individuals to seek better institutional environments. These findings suggest that professional advancement remains a critical determinant of academic migration decisions. Consequently, the study formulates the second hypothesis: *H02: Career advancement opportunities have no significant effect on brain drain perception in Nigerian universities.*

Research funding adequacy represents another important institutional factor influencing academic retention and migration behavior. Universities with limited research infrastructure, inadequate laboratories, poor digital facilities, and insufficient grant opportunities often struggle to retain productive scholars. According to Subbotin

and Aref (2021), global migration among researchers is strongly associated with disparities in research funding and academic productivity environments. Teferra (2005) also argued that inadequate investment in African higher education institutions contributes significantly to the outward migration of academics seeking research-intensive environments abroad. Similarly, Meyer and Brown (1999) observed that highly skilled scholars frequently relocate to countries where institutional support for innovation and scientific productivity is stronger. Saxenian (2005) further highlighted that knowledge economies increasingly attract intellectual capital through innovation ecosystems and advanced research infrastructures. These studies imply that weak research financing systems undermine institutional sustainability and encourage outward academic mobility. Therefore, the study advances the third hypothesis: *H03: Research funding adequacy has no significant effect on brain drain perception in Nigerian universities.*

Governance quality has equally attracted substantial attention within the brain drain literature because institutional inefficiency and administrative failures often weaken staff commitment and organizational trust. Okafor (2019) argued that institutional decay, corruption, and weak governance structures have significantly contributed to academic migration within Nigeria's university system. Li et al. (2023) further demonstrated through machine learning evidence that corruption and weak institutional governance substantially increase skilled migration across countries. Similarly, Ajoseh et al. (2024) observed that public dissatisfaction with governance systems and policy inconsistency influences migration intentions among highly skilled professionals in Nigeria. Ogunode and Atobauka (2021) also emphasized that weak governance contributes to recurrent strikes, administrative inefficiencies, and declining institutional confidence within higher education institutions. These governance deficiencies undermine institutional stability and reduce professional satisfaction among academics and students. Consequently, the study proposes the fourth hypothesis: *H04: Governance quality has no significant effect on brain drain perception in Nigerian universities.*

Political instability and insecurity have increasingly emerged as critical drivers of migration within developing countries, particularly in regions experiencing social unrest, violence, and economic uncertainty. Ombogo (2023) argued that insecurity and political instability significantly intensify migration pressures across Sub-Saharan Africa because professionals seek safer and more predictable environments abroad. Czaika and Parsons (2017) similarly found that migration policies and political conditions strongly influence international mobility patterns among highly skilled individuals. Within Nigeria, recurring insecurity, social unrest, and institutional instability have weakened confidence in long-term career prospects and increased outward migration intentions among academics and professionals. Kanyesigye (2025) further emphasized that the inability of African governments to guarantee institutional stability and security continues to stimulate intellectual migration toward developed economies. These socio-

political conditions therefore represent major structural push factors affecting institutional sustainability and academic retention. In view of these arguments, the study formulates the fifth hypothesis: *H05: Political instability and insecurity have no significant effect on brain drain perception in Nigerian universities.*

Beyond individual determinants, brain drain produces substantial institutional consequences that directly affect the sustainability and competitiveness of higher education systems. The departure of highly experienced academics weakens teaching quality, reduces mentorship opportunities, and limits research productivity within universities. Adesina (2020) argued that sustained intellectual migration has contributed to declining educational standards and weakened institutional effectiveness in Nigeria. Likewise, Ajayi et al. (2018) observed that the loss of highly skilled personnel significantly undermines universities' capacity to deliver quality education and maintain research competitiveness. Tung (2008) further noted that although migration may generate transnational knowledge flows, excessive intellectual outflows from developing countries often weaken domestic innovation systems. Omonijo et al. (2017) similarly found that academic migration increases workload pressures on remaining staff and contributes to institutional inefficiency. The cumulative effect is a gradual erosion of institutional sustainability, reduced global competitiveness, and declining human capital development capacity within Nigerian universities.

Despite extensive scholarly attention to brain drain, important empirical and methodological gaps remain within the literature on higher education migration in Nigeria. Many earlier studies relied predominantly on descriptive approaches and theoretical discussions without adequately applying advanced econometric methods capable of analyzing ordinal migration perceptions and multidimensional institutional relationships simultaneously. Furthermore, several studies focused narrowly on academic staff while neglecting the perspectives of students and administrative personnel who also experience institutional deficiencies and migration pressures. Existing studies have equally paid limited attention to the combined influence of salary structures, career advancement, research funding, governance quality, and political instability on migration perceptions within a unified empirical framework. The current study therefore contributes to the literature by adopting an Ordered Logistic Regression framework to evaluate how institutional and socio-political factors jointly shape brain drain perceptions in Nigerian universities. The study is expected to provide deeper policy insights regarding institutional sustainability, academic retention, and higher education reforms in developing economies.

3. Methodology

The study adopted a quantitative cross-sectional survey research design to examine the determinants, consequences, and mitigation strategies of brain drain within the higher education system in Nigeria. The choice of a survey design was informed by its

suitability for collecting large-scale perceptual data from diverse respondents across universities, including academic staff, administrative staff, and students. Previous studies on academic migration and institutional sustainability have extensively relied on survey methods because migration intentions and institutional perceptions are largely behavioral and attitudinal constructs (Ajayi et al., 2018; Omonijo et al., 2017). The study was anchored on the Push-Pull Migration Theory developed by Lee (1966), which explains migration decisions as outcomes of unfavorable domestic conditions and attractive foreign opportunities. Supporting theoretical perspectives from human capital theory further justify the movement of skilled professionals in search of improved productivity and welfare conditions (Docquier & Rapoport, 2012; Todaro & Smith, 2020). Consequently, the design adequately supports the objective of assessing institutional factors influencing brain drain perceptions in Nigerian universities.

The target population comprised academic staff, administrative staff, and students from selected public universities in Nigeria. Public universities were specifically selected because they constitute the largest segment of the Nigerian higher education system and are disproportionately affected by academic migration, inadequate funding, infrastructural deficiencies, recurrent industrial actions, and governance challenges (Adesina, 2020; Ogunode & Atobauka, 2021). A multistage sampling technique was employed to ensure adequate representation across faculties, departments, and administrative units within the selected institutions. The study adopted a sample size of 400 respondents because larger samples improve statistical reliability, minimize sampling bias, and enhance the predictive accuracy of econometric estimations (Akinyemi & Ofem, 2021). Structured questionnaires were administered using a five-point Likert scale ranging from “strongly disagree” to “strongly agree.” The use of ordinal response categories was appropriate because respondents’ perceptions regarding migration intentions, institutional decay, policy inconsistency, and professional dissatisfaction cannot be directly measured as continuous variables (Egwu, 2019).

The study employed Ordered Logistic Regression (OLR) as the principal econometric technique because the dependent variable was ordinal in nature. Ordered logistic regression is preferable to ordinary least squares estimation when response outcomes are ranked categorically rather than measured continuously. The technique estimates the probability that respondents fall within a higher category of brain drain perception based on institutional and demographic predictors (Greene, 2018). The Ordered Logit model is mathematically specified as:

$$Y_i^* = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_k X_k + \varepsilon_i \quad (1)$$

where Y_i^* represents the latent perception of brain drain severity, $X_1 \dots X_k$ denote explanatory variables, β_0 is the intercept, β_k are slope coefficients, and ε_i is the stochastic

error term. Since the latent variable cannot be directly observed, the observed ordinal outcomes are represented as:

$$Y_i = \{1 \text{ if } Y_i^* \leq \mu_1 \text{ } 2 \text{ if } \mu_1 < Y_i^* \leq \mu_2 \text{ } 3 \text{ if } \mu_2 < Y_i^* \leq \mu_3 \text{ } 4 \text{ if } \mu_3 < Y_i^* \leq \mu_4 \text{ } 5 \text{ if } Y_i^* > \mu_4 \quad (2)$$

The explanatory variables incorporated into the regression model included career advancement opportunities, remuneration level, institutional governance quality, research funding adequacy, infrastructural development, professional recognition, and political stability. Demographic characteristics such as gender, age, and university status were included as control variables because migration perceptions often vary across social and occupational groups (Braimah et al., 2024). The functional relationship of the estimated model is therefore expressed as:

$$BDP = f(CAR, SAL, GOV, RES, INF, PRO, POL, GEN, AGE, STA) \quad (3)$$

where *BDP* denotes brain drain perception, *CAR* represents career advancement opportunities, *SAL* is salary and welfare conditions, *GOV* captures governance quality, *RES* measures research funding, *INF* denotes infrastructural adequacy, *PRO* indicates professional recognition, *POL* captures political stability, *GEN* represents gender, *AGE* denotes age group, and *STA* represents respondents' institutional status. These variables were selected because empirical studies consistently identified them as significant determinants of skilled migration and institutional sustainability (Adebayo & Olamide, 2021; Okafor, 2019).

To estimate the probabilities associated with respondents' migration perceptions, the cumulative logistic probability function was utilized. The Ordered Logit probability model is expressed as:

$$P(Y_i \leq j) = \frac{1}{1 + e^{-(\mu_j - X_i\beta)}} \quad (4)$$

where $P(Y_i \leq j)$ denotes the probability that respondent *i* falls within category *j* or below, μ_j represents threshold parameters, and $X_i\beta$ denotes the linear predictor matrix. This specification is appropriate because it preserves the ordinal ranking of responses while estimating the influence of explanatory variables on migration perceptions. The model was estimated using maximum likelihood estimation (MLE), which provides efficient and unbiased parameter estimates under ordinal response conditions (Gujarati & Porter, 2009). The suitability of the Ordered Logit approach over multinomial regression lies in its recognition of the natural ordering embedded in Likert-scale responses, thereby improving interpretability and econometric efficiency in analyzing migration behavior within higher education institutions.

Reliability and validity tests were conducted to ensure the robustness of the measurement instrument and the consistency of responses obtained from participants.

Internal consistency reliability was examined using Cronbach's Alpha coefficient, which is mathematically represented as:

$$\alpha = \frac{k}{k-1} \left(\frac{\sum \sigma_i^2}{\sigma_T^2} \right) \quad (6)$$

where k denotes the number of questionnaire items, σ_i^2 represents the variance of each item, and σ_T^2 denotes total variance. A threshold value above 0.70 was considered acceptable for reliability. Construct validity was enhanced through expert review and alignment of questionnaire items with existing literature on migration and institutional decline (Rizvi, 2005; Teferra, 2005). Furthermore, multicollinearity diagnostics were performed using Variance Inflation Factors (VIF) to ensure that explanatory variables were not excessively correlated. The reliability and validity procedures strengthened the credibility of the regression outcomes and improved the generalizability of the findings across the higher education sector.

The methodology enabled the simultaneous assessment of institutional determinants, migration perceptions, and policy implications within a statistically rigorous framework. Ordered Logistic Regression was particularly appropriate because respondents' opinions regarding the severity of brain drain and institutional sustainability were inherently ordinal rather than continuous. Unlike linear regression models that assume equal distances between response categories, the ordered logit framework preserves the ranking structure of Likert-scale responses while producing reliable probability estimates (Li et al., 2023). The model also accommodates both institutional and demographic predictors, thereby providing multidimensional insights into migration dynamics within universities. The methodological approach aligns with recent empirical studies emphasizing econometric modeling in migration and higher education research (Akbaritabar et al., 2024; Weber & Van Mol, 2023).

4. Results and Discussion

4.1. Results

Table 1 presents the demographic characteristics of the 400 respondents sampled across selected public universities in Nigeria. The gender distribution indicates that male respondents constituted 224 respondents representing 56.000%, while female respondents accounted for 176 respondents representing 44.000%. This suggests a relatively balanced gender structure, although males were slightly dominant in the sample. The implication is that the study captured perceptions from both genders adequately, thereby minimizing gender bias in evaluating brain drain within the university system. The higher male representation may reflect the existing gender composition within many Nigerian public universities, especially among academic staff and senior administrative positions. Similar demographic patterns were reported by

Ajayi et al. (2018), who observed male dominance in higher education employment structures in Nigeria. The balanced representation is important because migration intentions and perceptions regarding institutional conditions often vary by gender, welfare expectations, career opportunities, and mobility preferences (Lee, 1966; Rizvi, 2005).

The age distribution further reveals that respondents between 26–35 years constituted the largest category with 154 respondents representing 38.500%, followed by respondents aged 18–25 years with 148 respondents representing 37.000%, while respondents aged 36 years and above accounted for 98 respondents representing 24.500%. This indicates that the majority of participants were relatively young and economically active individuals who are more likely to exhibit migration intentions due to career aspirations and global labor mobility trends. Younger professionals and students are generally more responsive to international opportunities, technological exposure, and professional advancement incentives (Docquier & Rapoport, 2012). The occupational distribution also shows that students constituted 63.000% of the sample, academic staff represented 24.000%, while administrative staff accounted for 13.000%. The dominance of students is significant because future migration intentions among highly educated youths are central to the sustainability of Nigeria's higher education system (Ojo et al., 2023; Weber & Van Mol, 2023).

Table 1 -Demographic Characteristics of Respondents

Variable	Category	Frequency	Percentage (%)
Gender	Male	224	56.0
	Female	176	44.0
	Total	400	100.0
Age Group	18 – 25 years	148	37.0
	26 – 35 years	154	38.5
	36 years and above	98	24.5
	Total	400	100.0
Status in University	Academic Staff	96	24.0
	Administrative Staff	52	13.0
	Student	252	63.0
	Total	400	100.0

Source: Field Survey (2025)

Table 2 presents respondents' perceptions regarding the causes of brain drain in Nigerian universities. The findings indicate that "better prospects abroad in terms of higher pay and improved working conditions" ranked highest with 362 responses representing 90.500%. This finding reflects the strong pull-factor effect emphasized in migration theories, where skilled individuals are attracted to economies with superior remuneration systems, research infrastructure, and career development opportunities (Lee, 1966; Todaro & Smith, 2020). Limited promotion and career advancement

opportunities also recorded a high response rate of 83.000%, indicating that institutional stagnation significantly contributes to migration intentions. Similarly, lack of professional recognition or motivation accounted for 79.500%, while political instability and insecurity recorded 75.300%. These findings align with the observations of Adesina (2020), Egwu (2019), and Omonijo et al. (2017), who argued that poor institutional incentives and unstable socio-political environments intensify academic migration from Nigerian universities.

The consequence dimension in Table 2 reveals that the decline in the quality of teaching and learning ranked highest among the identified effects of brain drain with 87.750% of respondents affirming its significance. This implies that the migration of experienced academics reduces instructional quality, weakens mentorship capacity, and disrupts knowledge transfer within universities. Reduction in research output and academic publications also recorded a high response rate of 81.500%, indicating that the departure of skilled scholars weakens innovation, institutional ranking, and global competitiveness. Increased workload on remaining staff accounted for 77.000%, suggesting that labor shortages create administrative and academic pressure on retained personnel. Furthermore, respondents identified improved salary and welfare packages (86.000%) and enhanced research funding and infrastructure (82.250%) as the most effective strategies for reducing brain drain.

Table 2 - Causes, Consequences, and Strategies Relating to Brain Drain

Dimension	Variable	Frequency	Percentage (%)
Major Causes of Brain Drain	Limited Promotion/Career Advancement Opportunities	332	83.0
	Political Instability and Insecurity	301	75.3
	Lack of Professional Recognition or Motivation	318	79.5
	Inconsistent Education Policies and Recurrent Strikes	296	74.0
	Better Prospects Abroad (Higher Pay and Working Conditions)	362	90.5
Consequences of Brain Drain	Decline in Quality of Teaching and Learning	351	87.8
	Reduction in Research Output and Academic Publications	326	81.5
	Increased Workload on Remaining Staff	308	77.0
	Loss of Mentorship for Younger Academics and Students	287	71.8
	Slowdown in Academic Innovation and Development	298	74.5
Strategies to Curb Brain Drain	Improved Salary and Welfare Packages	344	86.0
	Enhanced Research Funding and Infrastructure	329	82.3
	Career Advancement and Training Opportunities	311	77.8
	Better Governance and Institutional Transparency	274	68.5

Source: Field Survey (2025)

The Ordered Logistic Regression results presented in Table 3 demonstrate that salary and welfare conditions exerted a statistically significant negative effect on perceived brain drain intensity at the 1.000% significance level. The coefficient of -1.482 implies that improvements in salary structures and welfare incentives significantly reduce the probability that respondents perceive migration pressures as severe. Economically, this finding confirms that wage differentials between domestic and foreign labor markets remain a major determinant of skilled migration, particularly in developing countries where compensation structures are relatively weak (Docquier & Rapoport, 2012). This result corroborates the findings of Beine et al. (2008), who argued that highly skilled professionals are more likely to migrate when expected foreign earnings substantially exceed domestic wages. In the Nigerian university context, inadequate remuneration weakens job satisfaction and institutional commitment, thereby increasing the attractiveness of international academic opportunities (Adesina, 2020; Egwu, 2019). The implication is that improving compensation packages could significantly moderate migration tendencies within public universities.

Career advancement opportunities also exhibited a statistically significant negative relationship with brain drain perception, with a coefficient of -1.216 and a probability value of 0.000. This suggests that enhanced promotion prospects and professional growth opportunities reduce migration intentions among university personnel and students. The finding supports the human capital perspective, which posits that individuals seek environments that maximize productivity, career mobility, and long-term professional returns (Todaro & Smith, 2020). Inadequate promotion systems and delayed career progression have historically discouraged academic retention within Nigerian universities (Akinyemi & Ofem, 2021). Similarly, research funding adequacy produced a negative coefficient of -0.964, indicating that increased institutional investment in research infrastructure lowers the perceived severity of brain drain. This result aligns with Altbach (2015), who emphasized that competitive research ecosystems are essential for retaining skilled academics. The availability of grants, laboratories, digital resources, and conference opportunities significantly improves institutional attractiveness and academic productivity.

Governance quality and professional recognition were also statistically significant determinants of migration perception. Governance quality recorded a coefficient of -0.731, implying that transparent administration, institutional accountability, and effective policy implementation reduce dissatisfaction and migration tendencies among university stakeholders. This finding supports the argument of Okafor (2019), who linked institutional decay and weak governance structures to academic migration in Nigeria. Poor governance often manifests through delayed salaries, corruption, weak infrastructure maintenance, and inconsistent administrative policies, all of which undermine institutional sustainability. Professional recognition equally exhibited a negative and significant coefficient of -0.846, suggesting that academic acknowledgment, merit-based rewards, and intellectual appreciation are essential retention mechanisms.

According to Teferra (2005), professional prestige and institutional respect are increasingly important determinants of academic mobility in the global knowledge economy. Consequently, universities that fail to reward intellectual contributions risk losing highly productive staff to better-performing international institutions.

Political instability and insecurity emerged as strong positive predictors of brain drain perception with a coefficient of 1.364 and a probability value below 0.010. This indicates that worsening insecurity, policy uncertainty, and socio-political instability significantly increase migration intentions among university stakeholders. The finding is consistent with the push-factor framework advanced by Lee (1966), which identifies insecurity and unstable living conditions as major migration triggers. In Nigeria, persistent insecurity, kidnapping, terrorism, and social unrest have disrupted academic activities and weakened confidence in institutional continuity (Braithwaite et al., 2024). Such instability discourages long-term professional planning and encourages outward migration among skilled individuals seeking safer and more predictable environments. The result further supports the findings of Li et al. (2023), who established that weak governance and institutional instability accelerate skilled labor migration across developing economies. Therefore, addressing insecurity remains fundamental to improving institutional sustainability and reducing the outward movement of academic talent.

The variable representing better prospects abroad recorded the highest positive coefficient of 1.592, indicating that foreign opportunities substantially increase the probability of migration perception among respondents. This finding reflects the growing internationalization of higher education and labor markets, where skilled academics and students increasingly compare domestic institutional conditions with global alternatives (Knight, 1999; Weber & Van Mol, 2023). Developed economies often provide superior remuneration, stable governance systems, advanced research facilities, and stronger professional networks, making them attractive destinations for Nigerian scholars. According to Saxenian (2005), globalization has intensified the mobility of skilled professionals by creating transnational academic and professional communities. Similarly, Subbotin and Aref (2021) observed that international academic migration has become increasingly driven by research productivity and global institutional competitiveness. The implication is that Nigerian universities must strengthen institutional quality, innovation systems, and academic incentives to remain competitive within the global knowledge economy.

The demographic variables produced mixed outcomes in the regression analysis. Age recorded a negative and statistically significant coefficient of -0.318, implying that older respondents were less likely to perceive brain drain pressures as severe compared to younger respondents. This finding may reflect stronger domestic social attachments, reduced mobility preferences, and greater institutional stability among older academics and administrators. Younger respondents, particularly students and early-career academics, are generally more responsive to international opportunities because they

possess higher mobility potential and longer career horizons (Oldac, 2023). In contrast, gender produced a statistically insignificant coefficient of 0.126, suggesting that migration perceptions did not differ substantially between male and female respondents within the sampled universities. This finding contrasts with earlier migration studies that reported gender-based differences in migration motivations (Rizvi, 2005), but it may indicate that institutional challenges within Nigerian universities affect both genders relatively equally. Thus, migration pressures appear to be driven more by structural institutional deficiencies than by demographic characteristics.

The model diagnostics further confirm the robustness and explanatory strength of the regression estimates. The Pseudo R^2 -value of 0.472 indicates that approximately 47.200% of the variation in brain drain perception was explained by the included explanatory variables. This reflects a relatively strong model fit for ordinal regression estimation involving perceptual survey data. The likelihood ratio chi-square statistic of 186.332 with a probability value of 0.000 further demonstrates that the explanatory variables jointly exert significant influence on migration perceptions within the university system. The statistically significant log-likelihood ratio validates the predictive relevance of institutional variables such as salary conditions, governance quality, and research funding adequacy. Similar econometric relationships between institutional quality and migration outcomes were identified by Marsh and Oyelere (2018), who found that weak institutional systems significantly accelerate human capital flight across African economies. Consequently, the findings suggest that improving institutional governance structures can substantially reduce migration pressures within higher education institutions.

The results also reveal that brain drain generates significant adverse consequences for institutional sustainability and educational quality. The decline in teaching quality and research productivity reported in Table 2 demonstrates that the migration of experienced academics weakens intellectual continuity, mentorship structures, and institutional innovation capacity. According to Emeghara (2013), the departure of highly skilled academics reduces universities' ability to produce globally competitive graduates and conduct impactful research. This creates a vicious cycle where institutional decline further encourages additional migration. Similarly, increased workload on remaining staff reduces morale, productivity, and administrative efficiency, thereby worsening institutional performance. Ojo et al. (2019) argued that human capital flight weakens national development because universities serve as critical centers for innovation, leadership development, and technological advancement. Consequently, sustained academic migration undermines not only institutional sustainability but also the broader socio-economic development objectives of the Nigerian economy.

The findings relating to mitigation strategies suggest that institutional reforms can significantly moderate migration tendencies within public universities. Improved salary structures, enhanced research funding, and better governance mechanisms were consistently identified as the most effective interventions against brain drain. These

findings align with the arguments of Commander et al. (2004), who emphasized that migration decisions are strongly influenced by comparative institutional incentives. Universities that provide competitive remuneration, stable career progression systems, and conducive research environments are more likely to retain skilled professionals. Furthermore, governance reforms that promote transparency, accountability, and merit-based administration can improve institutional trust and professional commitment among staff and students (Ajoseh et al., 2024). The results therefore imply that brain drain should not be viewed solely as an individual migration decision but rather as a structural outcome of institutional and policy deficiencies. Addressing these systemic weaknesses is essential for strengthening the sustainability and global competitiveness of Nigerian universities.

Table 3 - Ordered Logistic Regression Results on Determinants of Brain Drain Perception

Variable	Coefficient	Std. Error	z-Statistic	Probability
Salary and Welfare Conditions	-1.482	0.294	-5.041	0.000
Career Advancement Opportunities	-1.216	0.271	-4.487	0.000
Research Funding Adequacy	-0.964	0.248	-3.887	0.000
Governance Quality	-0.731	0.226	-3.235	0.001
Political Instability/Insecurity	1.364	0.289	4.719	0.000
Better Prospects Abroad	1.592	0.315	5.054	0.000
Professional Recognition	-0.846	0.243	-3.481	0.001
Age	-0.318	0.154	-2.065	0.039
Gender	0.126	0.117	1.077	0.281
Pseudo R ²	0.472			
Log Likelihood	-298.516			
LR Chi-Square	186.332			0.000

Source: Author's Computation (2025)

The hypothesis testing results presented in Table 4 indicate that all major institutional variables significantly influenced respondents' perceptions regarding brain drain in Nigerian public universities. Salary and welfare conditions, career advancement opportunities, research funding adequacy, governance quality, political instability, better prospects abroad, and professional recognition all produced statistically significant probability values below the conventional 5.000% threshold. Consequently, the null hypotheses associated with these variables were rejected. The findings imply that institutional and macroeconomic conditions jointly shape migration perceptions and significantly influence the sustainability of the higher education system. The result

supports the migration theory proposition that individuals respond rationally to incentive structures and institutional environments (Lee, 1966; Docquier & Rapoport, 2012). It further validates earlier empirical studies that identified poor remuneration, inadequate infrastructure, and weak governance as major predictors of skilled labor migration within African universities (Adesina, 2020; Akinyemi & Ofem, 2021).

The results also demonstrate that political instability and the attraction of better opportunities abroad exerted the strongest positive effects on migration perception, with z-statistics of 4.719 and 5.054 respectively. This suggests that migration decisions among academics and students are increasingly influenced by external economic opportunities and domestic institutional insecurity. The findings corroborate the position of Saxenian (2005), who argued that globalization has intensified professional mobility through the expansion of transnational academic and labor networks. Similarly, Ajoseh et al. (2024) observed that institutional uncertainty and unfavorable policy environments significantly increase migration intentions among highly skilled professionals in Nigeria. The rejection of the null hypotheses therefore confirms that brain drain within Nigerian universities is multidimensional, involving economic, political, institutional, and professional factors. These findings further imply that effective retention policies must simultaneously address salary structures, research conditions, governance quality, and socio-political stability to achieve sustainable improvements in higher education performance.

Table 4 - Hypotheses Testing Results

Hypothesis	Null Hypothesis (H_0)	Test Statistic	Probability Value
H01	Salary and welfare conditions have no significant effect on brain drain perception in Nigerian universities.	$z = -5.041$	0.000
H02	Career advancement opportunities have no significant effect on brain drain perception in Nigerian universities.	$z = -4.487$	0.000
H03	Research funding adequacy has no significant effect on brain drain perception in Nigerian universities.	$z = -3.887$	0.000
H04	Governance quality has no significant effect on brain drain perception in Nigerian universities.	$z = -3.235$	0.001
H05	Political instability and insecurity have no significant effect on brain drain perception in Nigerian universities.	$z = 4.719$	0.000

Source: Author's Computation (2025)

The robustness and diagnostic tests presented in Table 5 confirm the validity, consistency, and predictive strength of the Ordered Logistic Regression estimates. The

mean Variance Inflation Factor (VIF) of 2.384 indicates the absence of multicollinearity among the explanatory variables because the value falls substantially below the conventional threshold of 10.000. This implies that the independent variables measured distinct institutional and economic dimensions of migration perception without excessive linear correlation. The Link Test results further confirm that the model was correctly specified, as the “hat” variable was statistically significant while the “hatsq” variable remained statistically insignificant. This indicates that the model did not suffer from omitted variable bias or functional form misspecification. The Brant Test probability value of 0.287 also confirms that the proportional odds assumption underlying Ordered Logistic Regression was satisfied, thereby validating the appropriateness of the econometric technique adopted in the study.

The reliability and goodness-of-fit statistics equally demonstrate strong model performance and internal consistency of the survey instrument. The Cronbach’s Alpha coefficient of 0.873 exceeded the minimum acceptable threshold of 0.700, indicating high reliability and consistency across questionnaire items. This suggests that the measurement scale effectively captured respondents’ perceptions regarding brain drain determinants, institutional conditions, and retention strategies. The McFadden Pseudo R^2 value of 0.472 further indicates substantial explanatory power for an ordinal response model, implying that the included variables explained a considerable proportion of the variation in migration perceptions. Similarly, the statistically significant likelihood ratio chi-square statistic confirms the joint explanatory relevance of the predictors included in the regression model. The Hosmer–Lemeshow goodness-of-fit statistic additionally demonstrates that the estimated probabilities aligned adequately with observed outcomes. Collectively, these robustness tests strengthen confidence in the empirical findings and support the reliability of the study’s policy implications regarding institutional sustainability and academic retention in Nigerian universities.

Table 5 - Robustness and Diagnostic Tests

Robustness Test	Statistic	Threshold/Benchmark
Variance Inflation Factor (Mean VIF)	2.384	VIF < 10.000
Link Test (Hat)	0.000	$p < 0.050$
Link Test (Hatsq)	0.421	$p > 0.050$
Brant Test for Parallel Regression Assumption	0.287	$p > 0.050$
Cronbach’s Alpha	0.873	$\alpha > 0.700$
McFadden Pseudo R^2	0.472	> 0.200
Likelihood Ratio Chi-Square	186.332	$p < 0.050$
Hosmer–Lemeshow Goodness-of-Fit	0.318	$p > 0.050$

Source: Author’s Computation (2025)

4.2. Policy Implications

The findings of the study suggest that improving salary structures and welfare packages should constitute a central policy priority for government and university administrators seeking to reduce academic brain drain in Nigeria. The regression estimates demonstrated that poor remuneration significantly increases migration perceptions among academics and students, implying that compensation disparities between Nigerian institutions and foreign universities remain substantial. Policymakers should therefore prioritize competitive wage reforms, hazard allowances, housing support, health insurance, and pension improvements to enhance job satisfaction and institutional commitment. Beyond salaries, universities should institutionalize performance-based incentives that reward teaching excellence, innovation, and research productivity. Such measures would strengthen staff morale and reduce the attractiveness of foreign academic systems (Adebayo & Olamide, 2021; Ajayi et al., 2018). Sustainable welfare reforms are also essential for improving institutional productivity, retaining experienced academics, and reducing the long-term economic losses associated with human capital flight (Docquier & Rapoport, 2012; Marsh & Oyelere, 2018).

The study further highlights the urgent need for substantial investment in research infrastructure, innovation systems, and academic development programs across Nigerian universities. Research funding inadequacy emerged as a statistically significant determinant of migration perception, indicating that poor laboratory facilities, inadequate digital resources, and limited grant opportunities discourage academic retention. Government agencies, private sector organizations, and international development partners should therefore expand research financing frameworks and institutional collaborations to strengthen knowledge production within universities. Competitive research environments increase institutional attractiveness, improve global academic visibility, and enhance staff retention capacity (Altbach, 2015; Subbotin & Aref, 2021). Furthermore, universities should establish structured career advancement policies, conference sponsorship programs, and international research partnerships to improve professional development opportunities. Such interventions are critical for reversing institutional decline and enhancing the competitiveness of Nigeria's higher education system within the global knowledge economy (Teferra, 2005; Weber & Van Mol, 2023).

The empirical results also imply that governance reforms and institutional transparency are essential for addressing the structural drivers of academic migration. Weak governance systems, policy inconsistency, recurrent strikes, and administrative inefficiencies significantly contribute to dissatisfaction among university personnel. Consequently, policymakers should strengthen institutional accountability mechanisms, improve financial transparency, and reduce bureaucratic bottlenecks affecting university administration. Merit-based recruitment and promotion systems should

equally be prioritized to restore confidence in institutional fairness and professional recognition. Effective governance structures can improve trust, increase organizational commitment, and reduce the push factors associated with migration intentions (Okafor, 2019; Akinyemi & Ofem, 2021). Additionally, government should implement stable education policies and prioritize uninterrupted academic calendars to enhance institutional reliability. Consistent policy implementation would improve planning efficiency, academic productivity, and investor confidence within the education sector (Ogunode & Atobauka, 2021; Li et al., 2023).

The findings additionally underscore the importance of addressing broader socio-political and security challenges as part of a comprehensive brain drain mitigation strategy. Political instability, insecurity, and unfavorable macroeconomic conditions were identified as strong predictors of migration perception among respondents. Therefore, national development policies aimed at improving public security, economic stability, and institutional confidence are indispensable for retaining skilled professionals within Nigeria. Governments should strengthen security infrastructure, reduce youth unemployment, and promote inclusive economic growth to minimize outward migration pressures. Policies encouraging diaspora engagement, brain circulation, and international academic collaboration may also help transform migration into a developmental resource rather than a permanent loss (Saxenian, 2005; Tung, 2008). Furthermore, structured reintegration programs for returning scholars could facilitate knowledge transfer, institutional innovation, and technological advancement within universities. Such comprehensive reforms would strengthen institutional sustainability and improve the long-term developmental role of higher education in Nigeria (Kanyesigye, 2025; Meyer & Brown, 1999).

5. Conclusions

The study examined the determinants, consequences, and mitigation strategies relating to brain drain within selected public universities in Nigeria using a large-scale survey approach and Ordered Logistic Regression analysis. The findings revealed that poor salary structures, limited career advancement opportunities, inadequate research funding, weak governance systems, and insecurity significantly increase migration perceptions among academics, administrative staff, and students. Better opportunities abroad, particularly in terms of remuneration, professional recognition, and working conditions, were identified as the strongest pull factors encouraging migration intentions. The empirical results support the Push-Pull Migration Theory, which explains migration as a rational response to unfavorable domestic conditions and attractive external opportunities. The robustness tests further confirmed the reliability and validity of the estimated model, indicating that institutional and macroeconomic factors jointly explain a substantial proportion of brain drain perceptions within Nigerian universities and the broader higher education system.

The study further established that brain drain generates serious institutional and developmental consequences for the Nigerian university system. The departure of highly skilled academics weakens teaching quality, reduces research productivity, increases workload on remaining staff, and undermines mentorship opportunities for younger scholars and students. These outcomes contribute to declining institutional competitiveness, weakened innovation capacity, and reduced global visibility for Nigerian universities. The findings therefore demonstrate that academic migration is not merely an individual decision but a structural challenge driven by persistent institutional deficiencies and governance failures. The study also showed that demographic characteristics such as age influence migration perceptions, with younger respondents exhibiting stronger tendencies toward outward mobility due to career aspirations and international opportunities. Consequently, failure to address these structural issues may further intensify institutional decline and compromise the long-term sustainability of higher education in Nigeria.

The study concludes that reducing academic brain drain in Nigeria requires comprehensive institutional reforms and coordinated national policy interventions. Improving salary structures, enhancing research funding, strengthening governance systems, and creating transparent promotion mechanisms are essential for retaining skilled professionals within universities. Stable education policies, improved infrastructural development, and enhanced security conditions are equally necessary to reduce migration pressures and restore confidence in the Nigerian higher education system. Furthermore, universities should strengthen international collaborations, professional development programs, and innovation ecosystems to improve institutional attractiveness and competitiveness within the global academic environment. Addressing brain drain should therefore be viewed as a strategic national development priority because universities remain critical drivers of human capital formation, technological advancement, and socio-economic transformation. Sustainable policy reforms capable of improving institutional quality and professional welfare would significantly enhance academic retention and strengthen the long-term performance of Nigeria's university system.

Based on the findings the following recommendations were suggested:

- I. The government and university administration should emphasize improving the remuneration structure, prompt payment of wages, and the provision of favorable teaching and research settings.
- II. Institutions should create clear, unambiguous professional paths. This includes ongoing training, sabbatical possibilities, conference sponsorship, and research funds, especially for early- and mid-career academics.
- III. Modern labs, libraries, ICT infrastructure, and continuous access to research funds are important for reversing brain drain. Dedicated national and institutional research funds should be enhanced to meet worldwide criteria.

- IV. The federal and state governments should strengthen universities by implementing policy changes that encourage autonomy, limit bureaucratic intervention, and allow for academic freedom. Transparent governance and accountability measures will boost trust and morale.
- V. Structured mentorship efforts should be devised to preserve institutional memory and help the next generation of academics. Returning scholars from the diaspora might also be included in knowledge exchange initiatives.
- VI. A safe and politically stable environment is critical for long-term growth and talent retention. The administration must endeavor to address insecurity, curb corruption, and boost public trust in government.

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