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Ai-Powered Applicant Screening Systems, Ai-Based Credential Verification, Ai Automated Assessment Tools and Selection Outcome in Federal Universities, South-South, Nigeria

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ABSTRACT: This study examined the relationship between artificial intelligence and selection outcome in federal universities, South-South, Nigeria, focusing specifically on AI-powered applicant screening systems and Assessment Test Result; AI-based credential verification and Educational qualification of candidates; and AI automated assessment tools and Candidate Satisfaction. The study was motivated by the persistence of manual, time-consuming and bias-prone selection practices in federal universities, alongside growing concern over credential fraud and inconsistent applicant evaluation, which continue to undermine the fairness, integrity and quality of academic and non-academic staff selection in the region. The study was anchored on the Attraction-Selection-Attrition (ASA) theory. A survey research design was adopted. The study was carried out in the South-South geopolitical zone of Nigeria, covering the University of Port-Harcourt, University of Uyo, University of Benin, and University of Calabar. The population of the study comprised 28,125 senior academic and senior non-academic staff of the four universities, from which a sample size of 394 was determined using Taro Yamane's formula, with Bowley's proportional allocation method employed to distribute the questionnaire across the institutions. Data were analysed using descriptive statistics, while hypotheses were tested using the Pearson Product Moment Correlation Coefficient at a 0.05 level of significance. Findings revealed a strong positive and significant relationship between AI-powered applicant screening systems and Assessment Test Result, AI-based credential verification and Educational Qualification of candidates, AI automated assessment tools and Candidate Satisfaction in federal universities, South-South, Nigeria. The study concluded that artificial intelligence significantly enhances the objectivity, integrity and satisfaction associated with selection outcomes in federal universities in South-South Nigeria. It was recommended among others, that university management should prioritise the deployment of AI-powered screening software devoid of human bias; that the National Universities Commission (NUC) should mandate the adoption of AI-based credential verification systems across federal institutions to curb certificate forgery.

Keywords: Artificial Intelligence, AI-Powered Applicant Screening Systems, AI-Based Credential Verification, AI Automated Assessment Tools, Assessment Test Result.

INTRODUCTION

The use of artificial intelligence (AI) across many sectors has transformed processes and results, with higher education being no exception. In Nigeria, particularly in the South-South region, federal universities are progressively integrating AI technologies to

improve their staff selection procedures, teacher recruitment, and operational efficiency. The use of artificial intelligence in overseeing the selection process has increasingly garnered global attention, as the task of identifying the most suitable candidates has historically posed significant challenges for managers (Nawaz, Arunachalam, Pathi, & Gajenderan, 2024). Artificial Intelligence-based selection technologies have transformed the execution of selection processes generally, offering institutions the opportunity to automate screening, verify credentials, and assess candidates with a level of consistency that manual processes struggle to achieve (Guenole & Feinzig, 2022).

Artificial Intelligence is broadly understood as the branch of computer science concerned with designing intelligent machines and software capable of reasoning, learning, and perceiving information in ways that mirror human cognitive functions (Johansson & Herranen, 2020). Al-Alawi and Shomali (2023) defined AI as an amalgamation of extensive data and computational capacity that emulates human cognitive functions, including reasoning, language processing, and pattern recognition. AI-powered applicant screening systems apply these capabilities to streamline the initial stages of selection by automating the evaluation of applications against predefined criteria, which can enhance fairness by minimising the human biases that often influence decision-making (Kumar & Singh, 2023).

Interest in technology-enabled talent management has intensified across Nigerian organisations in recent years, extending well beyond the university system. In the outsourcing sub-sector, Okafor, Okeke and Williams (2026) found that talent acquisition practices significantly enhanced the innovative business success of outsourcing firms in Delta State, Nigeria, reinforcing that the manner in which organisations source, screen, and select talent has direct implications for institutional performance and innovation. This finding is instructive for federal universities, where the way AI-powered systems screen and shortlist applicants for academic and administrative roles is similarly expected to shape institutional outcomes.

Beyond screening, the integrity of the credentials presented by applicants remains central to selection outcomes, particularly in a Nigerian labour market where certificate fraud continues to raise concern. The value of verified expertise has been demonstrated in related sectors: Ajieh, Okeke and Williams (2026) found that employee expertise capital significantly influenced the innovativeness of private hospitals in Delta State, Nigeria, indicating that genuine, verifiable expertise is closely tied to an organisation's capacity to innovate and perform. In an earlier theoretical exploration, Williams and Anyim (2021) examined intellectual capital and performance in organisations, noting that the human capital embedded in staff qualifications and competencies constitutes a critical organisational asset that must be safeguarded. These positions underscore why AI-based credential verification, which authenticates the educational qualifications underpinning such human and intellectual capital, is not a peripheral administrative task but a strategic safeguard for institutional quality.

The experience of candidates during the selection process, and of employees thereafter, has also received growing attention in the Nigerian management literature. Abayol, Gbenga and Mbah (2025) found that organisational support for work-life harmony significantly predicted employee career advancement in quick service restaurants in South-East Nigeria, demonstrating that support-oriented practices shape how

positively individuals experience their journey with an organisation. In the hospitality sub-sector, Maduagwuna and Gbenga (2025) similarly found that workplace diversity significantly influenced employee satisfaction in hospitality businesses in Anambra State, Nigeria, suggesting that inclusive and well-managed processes, of the kind that AI automated assessment tools are designed to deliver through speed and transparency, are strongly associated with satisfaction outcomes.

The broader human resource management literature in Nigeria continues to affirm that the design of organisational systems, whether recruitment-related or otherwise, carries consequences for performance and sustainability. Remigius, Gbenga and Ngige (2025) found that compensation strategies significantly influenced the performance of commercial banks in Anambra State, Nigeria, while Williams, Emeka-Obiajunwa and Osuagwu (2025) found that retirement benefits significantly enhanced employee commitment in Awka South Local Government Area, Anambra State, Nigeria, both illustrating that well-structured institutional systems sustain positive employee outcomes over time. Similarly, Williams and Okeke (2025) found that economic factors of corporate sustainability significantly related to the performance of foam manufacturing firms, reinforcing that institutions, including public universities, which invest deliberately in the systems that underpin their core processes, such as AI-driven selection technologies, stand to gain in both integrity and long-term performance. It is against this backdrop that the present study interrogates the relationship between artificial intelligence, specifically AI-powered applicant screening systems, AI-based credential verification, and AI automated assessment tools, and selection outcome, specifically Assessment Test Result, Educational Qualification, and Candidate Satisfaction, in federal universities in South-South Nigeria.

Statement of the Problem

The integration of artificial intelligence into the selection processes of federal universities in South-South Nigeria presents both opportunities and challenges that warrant thorough investigation. Despite the potential benefits of AI technologies for efficiency, accuracy, and fairness, many universities in the region continue to rely on largely manual applicant screening methods that are time-consuming and susceptible to human bias, raising questions about the objectivity of the resulting assessment test outcomes.

A second and more troubling problem concerns the verification of candidates' educational qualifications. The potential for fraudulent applications and falsified certificates remains a pressing issue in Nigerian universities, and without AI-based credential verification mechanisms capable of promptly cross-referencing academic records, institutions risk admitting or appointing individuals whose claimed qualifications do not reflect their actual competencies, thereby compromising the integrity of the selection pool.

Third, the deployment of AI automated assessment tools in federal universities is still at a relatively early stage, and their influence on candidate satisfaction has not been comprehensively studied. Where assessment processes remain slow, opaque, or inconsistent, candidates are left uncertain about how they are being evaluated, which can diminish their confidence in, and satisfaction with, the institution, regardless of the eventual outcome.

The gap this study seeks to address is the lack of empirical evidence, within the specific context of federal universities in South-South Nigeria, of how AI-powered applicant

screening systems, AI-based credential verification, and AI automated assessment tools relate to Assessment Test Result, Educational Qualification, and Candidate Satisfaction respectively. While the application of artificial intelligence to recruitment and selection has been examined extensively in other climes and sectors, comparatively little attention has been paid to its role in shaping selection outcomes within Nigeria's federal university system, particularly in the South-South geopolitical zone. This study therefore provides sector-specific insights and practical recommendations for enhancing the integrity, efficiency and fairness of staff selection in federal universities.

Objectives of the Study

The broad objective of the study was to examine the relationship between artificial intelligence and selection outcome in federal universities, South-South, Nigeria. Specifically, the study sought to:

1. examine the relationship between AI-powered applicant screening systems and Assessment Test Result in federal universities, South-South, Nigeria.
2. determine the relationship between AI-based credential verification and Educational Qualification of candidates in federal universities, South-South, Nigeria.
3. investigate the correlation between AI automated assessment tools and Candidate Satisfaction in federal universities, South-South, Nigeria.

Hypotheses

The following null hypotheses were formulated to give direction to the study:

Ho1: There is no significant relationship between AI-powered applicant screening systems and Assessment Test Result in federal universities, South-South, Nigeria.

Ho2: There is no significant relationship between AI-based credential verification and Educational Qualification of candidates in federal universities, South-South, Nigeria.

Ho3: There is no significant correlation between AI automated assessment tools and Candidate Satisfaction in federal universities, South-South, Nigeria.

LITERATURE REVIEW

Artificial Intelligence

Artificial Intelligence (AI) is a domain within computer science and technology dedicated to creating machines and systems that can execute tasks necessitating human intelligence. It is an interdisciplinary field that includes multiple subfields, such as machine learning, natural language processing, computer vision, robotics, and expert systems (Johansson & Herranen, 2020). The primary objective of AI is to develop systems capable of emulating or exceeding human cognitive functions, such as perception, reasoning, comprehension, learning, and decision-making (Guenole & Feinzig, 2022). Artificial intelligence possesses the capacity to transform numerous sectors, including education, by providing avenues for automation, optimisation, and enhancement of human abilities, resulting in heightened efficiency, objectivity, and innovation (Rogers, 2021). Nonetheless, the technology presents challenges and ethical dilemmas around privacy, bias, and accountability, making continuous research and responsible governance essential to ensure AI is deployed in ways consistent with institutional and societal values (Krapivin, 2024).

AI-Powered Applicant Screening Systems

The integration of AI-powered applicant screening systems in federal universities

represents a transformative shift in the selection process, fundamentally altering how institutions evaluate and select candidates. These systems utilise advanced algorithms and machine learning techniques to automate the initial stages of applicant evaluation, significantly enhancing the efficiency and effectiveness of the selection process. Traditional methods of applicant screening often involve labour-intensive manual reviews that are time-consuming and prone to human bias (Kumar & Singh, 2023). By employing natural language processing and data analytics, AI-driven systems assess applicants against predefined criteria, ensuring a more standardised evaluation process that minimises subjective judgment and promotes fairness in selection outcomes, since such systems can be designed to be blind to demographic factors that might otherwise introduce bias into human decision-making (Afolabi, Olaniyi, & Adebayo, 2023). Furthermore, AI-powered screening enhances the overall quality of selection outcomes by improving accuracy and reliability in candidate assessment, conducting thorough checks, flagging discrepancies, and ensuring compliance with institutional policies (Ojo, Adeyemi, & Ibrahim, 2022).

Assessment Test Result

An assessment test result is a thorough examination of an individual's knowledge, skills, talents, and performance in a particular domain or subject area. It is a systematic, structured, and objective approach designed to deliver a comprehensive and precise depiction of an individual's current ability, understanding, and competency (Nawaz, Arunachalam, Pathi, & Gajenderan, 2024). Assessment test results encompass more than a mere numerical score or a simplistic pass or fail designation; they constitute a comprehensive profile that offers a thorough picture of an individual's strengths, shortcomings, and areas for improvement, which institutions can use to inform decisions about academic or professional placement, advancement, or eligibility for specific roles (Geetha & Reddy, 2020). Assessment test results are not static, one-dimensional measures; they are dynamic and multifaceted representations of an individual's competence, often used alongside other evaluation methods to provide a more holistic assessment of a candidate's suitability (Deshpande, 2022).

AI-Based Credential Verification

AI-based credential verification is transforming the selection process in higher education by enhancing the accuracy and efficiency of verifying applicants' qualifications. Traditional methods of credential verification often involve labour-intensive manual checks that are slow and prone to human error or fraud. As universities face increasing numbers of applicants with complex educational backgrounds, the need for reliable verification mechanisms becomes critical. AI technologies streamline this process by automating data collection and analysis, allowing institutions to cross-reference applicant information against authoritative databases quickly and accurately (Fluidogroup, 2024). For instance, AI systems can employ optical character recognition to digitise and analyse physical documents, making it easier to manage and verify academic records (Gheyath Abbas, 2024). AI-based credential verification significantly improves selection outcomes by providing a more reliable framework for assessing candidate qualifications, as the ability to detect inconsistencies or fraudulent elements in documents through advanced algorithms strengthens the overall integrity of the selection process (Ogunyemi, Alabi, & Olatunji, 2024).

Educational Qualification

Educational qualification is an official acknowledgment of an individual's successful

completion of an organised educational programme, indicating the acquisition of specific knowledge, abilities, and competencies in a particular subject or academic area. It is a vital component of an individual's educational and professional growth, reflecting intellectual accomplishment, dedication to continuous learning, and preparedness to engage in a chosen vocation (Ochmann, 2022). Educational qualifications include various certifications, certificates, diplomas, and degrees conferred by approved educational institutions or recognised regulatory authorities, representing the culmination of a systematic and rigorous educational process (Rogers, 2021). For the individual, such qualifications validate the acquisition of specialised knowledge, enhance career prospects, and provide a formal marker of academic achievement, while for the wider educational and professional ecosystem, they establish standardised benchmarks for evaluating competence and enable employers to make informed selection decisions (Koechling, Wehner, & Warkocz, 2023). Educational qualifications are not static; they evolve with changing labour market demands, technological advancement, and societal needs (Chin, 2023).

AI Automated Assessment Tools

AI automated assessment tools are reshaping the selection process in higher education by providing efficient, objective, and data-driven evaluations of applicants. Traditionally, candidate evaluation involved labour-intensive manual processes that were time-consuming and susceptible to human bias. With AI technologies, institutions can now automate various aspects of the assessment process, including the analysis of academic records and other application materials, using advanced algorithms that allow assessors to focus their attention on a more refined pool of qualified candidates (Moldstud, 2024). AI-driven assessments can also ensure a fairer evaluation by minimising the unconscious biases that may arise from human reviewers, particularly where algorithms are designed to focus solely on relevant, predefined qualifications (Times Higher Education, 2023). In addition to improving efficiency and fairness, AI automated assessment tools enhance the accuracy of selection outcomes through predictive analytics, drawing on historical data to identify patterns and trends that correlate with candidate success (NashTech, 2021).

Candidate Satisfaction

Candidate satisfaction refers to the overall level of contentment, engagement, and positive sentiment experienced by individuals during the various stages of the selection journey, from the initial application through to the outcome of the process. It is a multifaceted concept that encompasses candidates' perceptions, emotions, and experiences as they interact with an institution's recruitment and selection systems (Barney & Wright, 2021). Candidate satisfaction is of paramount importance to institutions, as it not only reflects the effectiveness of their talent acquisition strategies but also has implications for institutional reputation, applicant goodwill, and the eventual commitment of those who are selected (Abdeldayem & Aldulaimi, 2020). Satisfaction during the candidate stage is heavily influenced by the clarity and transparency of the process, the efficiency and responsiveness of evaluation systems, and the quality of communication and interaction with the institution; individuals who perceive the selection journey as smooth, fair, and well-communicated are more likely to develop a positive impression of the institution (Al-Alawi & Shomali, 2023).

Theoretical Framework

Attraction-Selection-Attrition (ASA) Theory

This study is anchored on the Attraction-Selection-Attrition (ASA) framework propounded by Schneider (1987) and updated by Schneider, Goldstein and Smith (1995). The ASA model proposes that an organisation is, in effect, a function of the kinds of people it attracts, selects, and retains: individuals are drawn to institutions whose values and characteristics resemble their own (Attraction); institutions, in turn, select individuals whose attributes fit organisational requirements and culture (Selection); and, over time, individuals who do not fit the organisation's culture are more likely to leave, whether voluntarily or otherwise (Attrition). The theory highlights the importance of aligning organisational systems with the kind of workforce an institution wishes to build and retain.

The ASA framework is directly relevant to this study. In the context of AI and selection outcomes in federal universities, the Attraction stage suggests that candidates drawn to universities known for rigorous, technology-enabled processes may already possess the discipline and competencies that such institutions value. The Selection stage is reflected in the deployment of AI-powered applicant screening systems and AI-based credential verification, which are designed to identify candidates whose qualifications and attributes genuinely fit institutional requirements, thereby strengthening the integrity of Assessment Test Result and Educational Qualification outcomes. Finally, the Attrition stage is implicated through Candidate Satisfaction: where AI automated assessment tools make the process transparent and efficient, candidates are more likely to remain engaged with, and favourably disposed toward, the institution rather than disengaging from it. The ASA theory therefore provides a coherent lens for understanding how AI-driven selection mechanisms shape not only who is selected, but how well the selection outcome aligns with institutional needs over time.

Empirical Review

Avery, Leibbrandt and Vecci (2024) examined whether artificial intelligence helps or hurts gender diversity in recruitment in the technology sector, using two field experiments. It was found that the use of AI in recruitment changed the gender distribution of potential hires, in part by reducing the gender gap in application completion rates and by closing the gender gap in assessments that would otherwise disadvantage female applicants, indicating that AI-powered screening can meaningfully alter the composition and fairness of an assessed applicant pool.

Koechling, Wehner and Warkocz (2023) investigated affective responses to artificial intelligence in the recruitment process in Germany using a scenario-based design. It was found that AI support at later stages of selection, such as telephone or video interviews, could increase emotional creepiness and reduce candidates' perceived opportunity to perform, which in turn affected organisational attractiveness, though no such negative response was found at earlier, pre-selection stages such as automated screening.

Gupta and Mishra (2023) studied the application of artificial intelligence to recruitment and selection in India, noting that AI assists recruiters in effectively and efficiently screening resumes without bias. The study identified various AI technologies in use across organisations and concluded that AI-powered screening enhances the precision with which suitable candidates are nominated for further evaluation.

Al-Harrasi, Al-Daraai and Al-Rashdi (2023) reviewed the transformational change occurring in recruitment and selection through artificial intelligence in Oman, observing that AI-based candidate sourcing, screening and assessment tools, many of which rely on chatbot technology, help ensure that the right candidate is matched to a role based on qualifications, experience and other job requirements, and that AI-powered assessing tools can analyse behavioural cues to strengthen the objectivity of evaluation.

Hemalatha, Kumari, Nawaz and Gajenderan (2021) researched the impact of artificial intelligence on recruitment and selection in information technology companies in India, finding that AI capabilities such as automation and natural language processing significantly improve recruitment accuracy by removing bias, a finding directly relevant to how AI-powered screening systems shape assessment outcomes.

Okeyika, Ibeto, Okere and Umoh (2023) examined the application of artificial intelligence in human resource management, including its impact on the traditional recruitment process in the Nigerian context, and found significant advancement in the use of specialised AI systems that enhance the integrity of recruitment processes, particularly in verifying the authenticity of applicant information.

Bhardwaj, Singh and Kumar (2020) conducted an empirical study of artificial intelligence and its impact on human resource functions, establishing that AI implementation across functional areas, including credential and record verification, increases efficiency and accuracy in confirming employee and applicant details.

Alam (2022) examined the impact of a university's human resource practices on professors' occupational performance in India's higher education sector, finding that rigorous recruitment and selection practices, underpinned by verified qualifications, have a direct bearing on subsequent occupational performance, reinforcing the importance of credential integrity in academic staffing.

Kingchang, Chatwattana and Wannapiroon (2024) examined an artificial intelligence chatbot platform for educational recommendations in higher education in Thailand, finding that user satisfaction with the AI-driven platform was rated at a very high level, attributable to the accuracy and precision of the responses provided to users, underscoring the link between well-designed automated tools and user or candidate satisfaction.

Esch, Black, Franklin and Harder (2021) examined AI-enabled biometrics in recruitment and found that such AI-enabled processes increase technology use motivation and generate more positive applicant perceptions of the assessment process, while Kim and Heo (2022) similarly reported that applicants perceived AI-based interviewing as more efficient than traditional approaches, citing fairness and consistency as key drivers of satisfaction.

Veloso, Sousa, Au-Yong-Oliveira and Walter (2021) ascertained the boosters of satisfaction, performance and employee loyalty in a recruitment and outsourcing organisation, finding that global satisfaction with the recruitment process contributes significantly to positive organisational perceptions, a finding consistent with the expectation that transparent, technology-enabled assessment tools improve candidate satisfaction.

In the Nigerian context, Okafor, Okeke and Williams (2026) found that talent acquisition practices significantly enhanced the innovative business success of outsourcing

firms in Delta State, Nigeria, reinforcing that structured, well-designed candidate sourcing and screening mechanisms, similar in principle to AI-powered applicant screening, are strongly associated with better organisational outcomes. Ajieh, Okeke and Williams (2026) found that employee expertise capital significantly influenced the innovativeness of private hospitals in Delta State, Nigeria, an outcome that speaks to the value of verifying and safeguarding the authenticity of the expertise and qualifications that AI-based credential verification is designed to protect. Abayol, Gbenga and Mbah (2025) found that organisational support for work-life harmony significantly predicted employee career advancement in quick service restaurants in South-East Nigeria, while Maduagwuna and Gbenga (2025) found that workplace diversity significantly influenced employee satisfaction in hospitality businesses in Anambra State, Nigeria, both reinforcing that supportive, well-managed institutional processes, of the kind automated assessment tools are intended to deliver, are consistently associated with satisfaction outcomes among Nigerian workers and candidates.

METHODOLOGY

This study adopted a survey research design, which enabled the systematic collection of first-hand data directly from respondents and was appropriate for establishing the relationship between artificial intelligence and selection outcome. Survey research design is a methodological approach used to collect data by asking individuals a series of questions, typically through structured questionnaires, and it facilitates quantitative analysis and comparison of responses across a relatively large population within a short period (Albert, 2022).

The study was conducted in the South-South geopolitical zone of Nigeria, covering the University of Port-Harcourt, Rivers State; the University of Uyo, Akwa Ibom State; the University of Benin, Edo State; and the University of Calabar, Cross River State. The population of the study comprised 28,125 senior academic and senior non-academic staff drawn from the four universities. Taro Yamane's (1996) formula was used to determine the sample size at a 5% margin of error, yielding a sample size of 394 respondents, while Bowley's proportional allocation method was applied to distribute the questionnaire proportionately across the four institutions based on their staff strength.

A structured, five-point Likert-scale questionnaire, ranging from Strongly Agree (5) to Strongly Disagree (1), was used as the instrument for data collection, divided into a section on respondents' personal data and a section addressing the study's research questions. The validity of the instrument was established through face and content validity, with the draft questionnaire reviewed by experts in the Department of Business Administration, Chukwuemeka Odumegwu Ojukwu University, to ensure its clarity and appropriateness for the study's objectives. The reliability of the instrument was established using Cronbach's Alpha Coefficient with the aid of the Statistical Package for Social Sciences (SPSS version 27), yielding coefficients above the 0.70 benchmark for all constructs relevant to this study, as presented in Table 1.

Table 1: Reliability Analysis for Study Constructs

Construct	Cronbach Alpha	No. of Items	Composite Reliability

AI-Powered Applicant Screening Systems	0.945	30	0.765
AI-Based Credential Verification	0.954	30	0.835
AI Automated Assessment Tools	0.937	30	0.895
Assessment Test Result	0.810	30	0.904
Educational Qualification	0.842	30	0.756
Candidate Satisfaction	0.871	30	0.857

Source: SPSS Version 27 (2026).

Primary data were collected using the structured questionnaire, administered directly to respondents, while secondary data were sourced from journals, textbooks and internet materials relevant to the subject matter. Data collected were coded and analysed using SPSS version 27. Descriptive statistics, including frequencies, percentages, mean scores and standard deviations, were used to summarise demographic information and responses to the research questions, while the Pearson Product Moment Correlation Coefficient (PPMC) was used to test the study hypotheses at a 0.05 level of significance. Out of 394 copies of the questionnaire administered, 348 copies, representing 88.3%, were correctly completed and valid for analysis, while the remainder were discarded owing to incomplete or inconsistent responses. The decision rule adopted was to reject the null hypothesis where the calculated p-value is less than 0.05, and to accept the null hypothesis otherwise.

RESULTS AND DISCUSSION

Demographic Characteristics of Respondents

The demographic analysis of the 348 valid respondents revealed that 52.6% are male while 47.4% are female, indicating a relatively balanced gender representation among senior staff in the sampled federal universities. In terms of age, the majority of respondents (48.0%) fell within the 47-57 years bracket, followed by those aged 36-46 years (27.0%), those aged 58 years and above (19.0%), and those aged 25-35 years (6.0%), reflecting a mature and experienced workforce. Regarding marital status, 79.0% of respondents were married while 21.0% were single. On educational qualification, PhD holders constituted the majority at 56.0%, followed by M.Sc./MBA holders at 41.7% and B.Sc./HND holders at 2.3%, consistent with the stringent academic requirements for senior staff positions in federal universities. Finally, on work experience, 62.7% of respondents had 10 years and above of service, 25.3% had 7-9 years, 8.3% had 4-6 years, and 3.7% had 1-3 years, further confirming the seniority and experience of the sampled population.

Hypothesis One: AI-Powered Applicant Screening Systems and Assessment Test Result

Ho1: There is no significant relationship between AI-powered applicant screening systems and Assessment Test Result in federal universities, South-South, Nigeria.

Descriptive analysis showed that respondents generally agreed that AI-powered applicant screening systems have streamlined the selection process, with a grand mean of 3.76 recorded across items measuring AI-powered applicant screening systems and Assessment Test Result, indicating an overall positive perception of the relationship between the two constructs.

Table 2: Pearson Correlation between AI-Powered Applicant Screening Systems and Assessment Test Result

	AI Screening Systems	Assessment Test Result
AI Screening Systems	1	0.683**
Sig. (2-tailed)		.000
N	348	348
Assessment Test Result	0.683**	1
Sig. (2-tailed)	.000	
N	348	348

*Source: SPSS Output, 2026. **Correlation is significant at the 0.01 level (2-tailed).*

Table 2 shows a Pearson correlation coefficient (r) of 0.683, indicating a strong positive and statistically significant relationship between AI-powered applicant screening systems and Assessment Test Result ($p = 0.000 < 0.05$). This implies that as institutions deploy AI-powered systems to filter and screen applicants, the resulting assessment test outcomes become more closely aligned with institutional expectations. Accordingly, the null hypothesis (Ho1) is rejected. This finding is consistent with Hemalatha, Kumari, Nawaz and Gajenderan (2021), who found that AI capabilities such as automation and natural language processing significantly improve recruitment accuracy by removing bias, and with Gupta and Mishra (2023), whose study established that AI assists in screening applicants precisely and without bias. It also aligns with Al-Harrasi, Al-Daraai and Al-Rashdi (2023), who observed that AI-powered tools are critical for matching applicant specifications with job requirements, and with Okafor, Okeke and Williams (2026), who found that structured talent acquisition practices significantly enhanced the innovative business success of outsourcing firms in Delta State, Nigeria, reinforcing that objective, technology-enabled screening produces outcomes that better reflect candidates' true capabilities.

Hypothesis Two: AI-Based Credential Verification and Educational Qualification

Ho2: There is no significant relationship between AI-based credential verification and Educational Qualification of candidates in federal universities, South-South, Nigeria.

Descriptive analysis showed that respondents affirmed the positive impact of AI-based credential verification on the integrity of educational qualifications, with a grand mean of 3.80 recorded across the relevant items, indicating strong overall agreement.

Table 3: Pearson Correlation between AI-Based Credential Verification and Educational Qualification

	AI Credential Verification	Educational Qualification
AI Credential Verification	1	0.645**
Sig. (2-tailed)		.000
N	348	348
Educational Qualification	0.645**	1

Sig. (2-tailed)	.000	
N	348	348

*Source: SPSS Output, 2026. **Correlation is significant at the 0.01 level (2-tailed).*

Table 3 reveals a significant positive correlation (r = 0.645) between AI-based credential verification and Educational Qualification, with a p-value of 0.000 ($p < 0.05$). The null hypothesis (Ho2) is therefore rejected, confirming that the use of AI to verify credentials is significantly related to the integrity of the educational qualifications relied upon in the selection process. This finding is supported by Okeyika, Ibeto, Okere and Umoh (2023), who found significant advancement in the use of specialised AI systems that enhance recruitment integrity, and by Bhardwaj, Singh and Kumar (2020), who established that AI implementation increases efficiency and accuracy in verifying applicant details. It is further reinforced by Alam (2022), who found that rigorous human resource practices around recruitment and selection, underpinned by verified qualifications, have a direct bearing on occupational performance. In the Nigerian context, this finding resonates with Ajieh, Okeke and Williams (2026), who found that employee expertise capital significantly influenced the innovativeness of private hospitals in Delta State, Nigeria, and with Williams and Anyim (2021), who identified the human capital embedded in staff qualifications as a critical organisational asset, both of which reinforce that verifying the authenticity of educational qualifications, as AI-based credential verification does, safeguards the intellectual capital on which institutional performance depends.

Hypothesis Three: AI Automated Assessment Tools and Candidate Satisfaction

Ho3: There is no significant correlation between AI automated assessment tools and Candidate Satisfaction in federal universities, South-South, Nigeria.

Descriptive analysis showed that respondents were generally satisfied with the efficiency of AI automated assessment tools, with a grand mean of 3.70 recorded across the relevant items, although one item relating to candidates feeling valued and respected throughout the selection process was rejected, recording a mean of 2.81.

Table 4: Pearson Correlation between AI Automated Assessment Tools and Candidate Satisfaction

	AI Assessment Tools	**Candidate Satisfaction**
AI Assessment Tools	1	0.592**
Sig. (2-tailed)		.000
N	348	348
Candidate Satisfaction	0.592**	1
Sig. (2-tailed)	.000	
N	348	348

*Source: SPSS Output, 2026. **Correlation is significant at the 0.01 level (2-tailed).*

Table 4 demonstrates a moderate to strong positive relationship (r = 0.592) between AI automated assessment tools and Candidate Satisfaction. Since the p-value (0.000) is less than the alpha level of 0.05, the null hypothesis (Ho3) is rejected, establishing that

the deployment of automated assessment tools significantly correlates with candidate satisfaction. This outcome resonates with Kingchang, Chatwattana and Wannapiroon (2024), whose research on an AI chatbot platform found that user satisfaction with AI-driven recommendations was rated at a very high level due to accurate and precise responses, and with Esch, Black, Franklin and Harder (2021), who found that AI-enabled processes increase applicants' technology use motivation and generate more positive perceptions of the assessment process. It also aligns with Kim and Heo (2022), who reported that applicants perceived AI-based interviews as more efficient than traditional approaches, citing fairness and consistency as key drivers of satisfaction, and with Veloso, Sousa, Au-Yong-Oliveira and Walter (2021), who found that global satisfaction with the recruitment process contributes significantly to positive organisational perceptions.

In the Nigerian context, this finding is reinforced by Abayol, Gbenga and Mbah (2025), who found that organisational support significantly predicted employee career advancement in quick service restaurants in South-East Nigeria, and by Maduagwuna and Gbenga (2025), who found that workplace diversity significantly influenced employee satisfaction in hospitality businesses in Anambra State, Nigeria, both of which affirm that transparent, well-managed and supportive institutional processes, such as those automated assessment tools are designed to deliver, are consistently associated with higher satisfaction among candidates and employees alike.

CONCLUSION

The integration of artificial intelligence into the selection architecture of federal universities in South-South Nigeria represents not merely a technological upgrade but a meaningful shift toward greater merit, integrity and transparency in staff selection. The empirical evidence generated from this study demonstrates that AI-powered applicant screening systems, AI-based credential verification, and AI automated assessment tools each bear a strong, statistically significant relationship with Assessment Test Result, Educational Qualification, and Candidate Satisfaction respectively. These findings confirm that when institutions leverage data-driven, technology-enabled tools at the point of selection, they are better able to identify genuinely qualified candidates, safeguard the integrity of the credentials on which selection decisions rest, and deliver a selection experience that candidates perceive as fair and satisfactory. As Williams and Okeke (2025) found in relation to the economic factors of corporate sustainability, institutions that invest deliberately in the systems underpinning their core processes are better positioned for long-term performance; the same logic applies to federal universities, for whom sustained investment in AI-driven selection technologies is no longer optional but essential to safeguarding the quality and credibility of academic and non-academic staff recruitment. Based on the findings of this study, the following recommendations are proposed:

1. University management should prioritise the deployment of AI-powered applicant screening software to ensure that the initial filtering of applicants is devoid of human bias and strictly merit-based, thereby strengthening the reliability of Assessment Test Result.
2. The National Universities Commission (NUC) ought to mandate the adoption of AI-based credential verification systems across all federal institutions to standardise the authentication of academic qualifications and curb

certificate forgery, in line with the strong relationship established between credential verification and Educational Qualification in this study.

3. Human resource departments in universities should integrate AI automated assessment tools that provide applicants with instant, transparent feedback throughout the selection process, thereby enhancing Candidate Satisfaction while also ensuring that candidates feel valued and respected, an area this study found to require particular attention.
4. University administrators should institute periodic training and sensitisation programmes for admissions and human resource staff on the effective use and continuous optimisation of AI-powered screening, verification and assessment technologies, to sustain the gains identified in this study.

REFERENCES

Abayol, P. I., Gbenga, W., & Mbah, S. I. (2025). Work-life harmony and employee career advancement in quick service restaurants, South East, Nigeria. Journal of Emerging Trends in Management Sciences and Entrepreneurship, 7(2).

Abdeldayem, M. M., & Aldulaimi, S. H. (2020). Trends and opportunities of artificial intelligence in human resource management: Aspirations for public sector in Bahrain. International Journal of Scientific and Technology Research, 9(1), 3867-3871.

Afolabi, M., Olaniyi, O., & Adebayo, A. (2023). The role of automated assessments in improving admission processes: A case study from Nigerian universities. Journal of Educational Technology, 15(2), 112-125.

Ajieh, I. K., Okeke, C. O., & Williams, G. (2026). Employee expertise capital and innovativeness of private hospitals in Delta State, Nigeria. Journal of Emerging Trends in Management Sciences and Entrepreneurship, 8(2).

Al-Alawi, A., & Shomali, Z. (2023). Role of human resource management in the learning organization: An empirical study of public sector in the Kingdom of Bahrain. Proceedings of the 33rd International Business Information Management Association Conference, 9(6), 104-117.

Al-Harrasi, N., Al-Daraai, S., & Al-Rashdi, M. (2023). Automation revolution: A transformational change in recruitment and selection through artificial intelligence. Business Transformation-Accelerators for Sustainable Growth, 159.

Alam, A. (2022). Impact of university's human resources practices on professors' occupational performance: Empirical evidence from India's higher education sector. In Inclusive businesses in developing economies: Converging people, profit, and corporate citizenship (pp. 107-131). Springer International Publishing.

Albert, E. T. (2022). AI in talent acquisition: A review of AI-applications used in recruitment and selection. Strategic Human Resource Review, 18, 215-221.

Avery, M., Leibbrandt, A., & Vecci, J. (2024). Does artificial intelligence help or hurt gender diversity? Evidence from two field experiments on recruitment in tech.

Barney, J. B., & Wright, P. M. (2021). On becoming a strategic partner: The role of human resources in gaining competitive knowledge. Human Resource Management, 37(1), 31-46.

Bhardwaj, G., Singh, S. V., & Kumar, V. (2020). An empirical study of artificial intelligence and its impact on human resource functions. In 2020 International Conference on Computation, Automation and Knowledge Management (ICCAKM) (pp. 47-51). IEEE.

Chin, C. (2023). Assessing employer intent when AI hiring tools are biased. Brookings. https://www.brookings.edu/research/assessing-employer-intent-when-ai-hiring-tools-are-biased

Deshpande, A. (2022). Talent acquisition through technology. Journal of Business and Management, 72-79.

Esch, P. V., Black, J. S., Franklin, D., & Harder, S. (2021). AI-enabled biometrics in recruitment: Insights into the utility perspective from the candidate viewpoint. Computers in Human Behavior.

Fluidogroup. (2024). AI in higher education: Offer personalised admissions guidance through Agentforce. https://www.fluidogroup.com/blog/ai-in-higher-education-offer-personalised-admissions-guidance-through-agentforce/

Geetha, R., & Reddy, D. (2020). Recruitment through artificial intelligence: A conceptual study. International Journal of Mechanical Engineering & Technology, 9, 63-70.

Gheyath Abbas. (2024). AI applications in higher education - Episode 2: Admission. https://www.linkedin.com/pulse/ai-applications-higher-education-episode-2-admission-gheyath-abbas

Guenole, N., & Feinzig, S. (2022). The business case for AI in HR: With insights and tips on getting started. IBM Smarter Workforce Institute, IBM Corporation.

Gupta, A., & Mishra, M. (2023). Artificial intelligence for recruitment and selection. In The adoption and effect of artificial intelligence on human resources management, Part B (pp. 1-11). Emerald Publishing Limited.

Hemalatha, A., Kumari, P. B., Nawaz, N., & Gajenderan, V. (2021, March). Impact of artificial intelligence on recruitment and selection of information technology companies. In 2021 International Conference on Artificial Intelligence and Smart Systems (ICAIS) (pp. 60-66). IEEE.

Johansson, J., & Herranen, S. (2020). The application of artificial intelligence (AI) in human resource management: Current state of AI and its impact on the traditional recruitment process. Jonkoping University.

Kim, J. Y., & Heo, W. (2022). Artificial intelligence video interviewing for employment: Perspectives from applicants, companies, developer and academicians. Information Technology & People, 35(3), 861-878.

Kingchang, T., Chatwattana, P., & Wannapiroon, P. (2024). Artificial intelligence chatbot platform: AI chatbot platform for educational recommendations in higher education. International Journal of Information and Education Technology, 14(1).

Koechling, A., Wehner, M. C., & Warkocz, J. (2023). Affective responses to artificial intelligence in the recruitment process. Review of Managerial Science, 17(6), 2109-2138.

Krapivin, P. (2024). How Google is using AI to power internal talent deployment. Forbes. https://www.forbes.com/sites/pavelkrapivin/2024/05/05/how-google-is-

using-ai-to-power-internal-talent-deployment

Kumar, R., & Singh, P. (2023). Assessing fairness in AI-powered recruitment: Challenges and opportunities for educational institutions. Journal of Artificial Intelligence Research, 18(1), 23-39.

Maduagwuna, I. A., & Gbenga, W. (2025). Work-place diversity and employee satisfaction in hospitality businesses in Anambra State, Nigeria. International Journal of Finance, Accounting and Management Studies, 1(8).

Moldstud. (2024). The impact of artificial intelligence in university admissions processes. https://moldstud.com/articles/p-the-impact-of-artificial-intelligence-in-university-admissions-processes

NashTech. (2021). Automating university admissions processes. https://our-thinking.nashtechglobal.com/insights/automating-the-admissions-process

Nawaz, N., Arunachalam, H., Pathi, B. K., & Gajenderan, V. (2024). The adoption of artificial intelligence in human resources management practices. International Journal of Information Management Data Insights, 4(1), 100208.

Ochmann, J. (2022). Fairness as a determinant of AI adoption in recruiting: An interview-based study. Technology in Society.

Ogunyemi, M., Alabi, O., & Olatunji, S. (2024). The impact of artificial intelligence on interview processes: A systematic review. Journal of Management Studies, 29(4), 99-115.

Ojo, J., Adeyemi, A., & Ibrahim, M. (2022). Credential verification using artificial intelligence: Impacts on admission processes in Nigerian universities. African Journal of Educational Management, 14(2), 56-70.

Okafor, A. E., Okeke, C. O., & Williams, G. (2026). Talent acquisition practices and innovative business success of outsourcing firms in Delta State, Nigeria. Journal of Emerging Trends in Management Sciences and Entrepreneurship, 8(2).

Okeyika, K. O., Ibeto, V. C., Okere, A. I., & Umoh, B. (2023). The application of artificial intelligence (AI) in human resource management: Current state of AI and its impact on the traditional recruiting process. AKU: An African Journal of Contemporary Research, 4(3).

Remigius, C. U., Gbenga, W., & Ngige, C. D. (2025). Compensation strategies and performance of commercial banks in Anambra State, Nigeria. Journal of Emerging Trends in Management Sciences and Entrepreneurship, 7(1).

Rogers, E. M. (2021). Diffusion of innovations (1st ed.). Free Press of Glencoe.

Schneider, B. (1987). The people make the place. Personnel Psychology, 40(3), 437-453.

Schneider, B., Goldstein, H. W., & Smith, D. B. (1995). The ASA framework: An update. Personnel Psychology, 48(4), 747-773.

Times Higher Education. (2023). Using AI in admissions 'more equitable and transparent' - study. https://www.timeshighereducation.com/news/using-ai-admissions-more-equitable-and-transparent-study

Veloso, C. M., Sousa, B., Au-Yong-Oliveira, M., & Walter, C. E. (2021). Boosters of satisfaction, performance and employee loyalty: Application to a recruitment and outsourcing information technology organization.

Journal of Organizational Change Management, 34(5), 1036-1046.

Williams, G., & Anyim, K. J. (2021). Intellectual capital and performance in organizations: An exploration of issues. International Journal of Management and Entrepreneurship, 3(1), 126-145.

Williams, G., & Okeke, C. O. (2025). Economic factors of corporate sustainability and performance of foam manufacturing firms. British Journal of Marketing Studies, 13(3).

Williams, G., Emeka-Obiajunwa, P.-A., & Osuagwu, B. O. (2025). Retirement benefits and employee commitment in Awka South Local Government Area, Anambra State, Nigeria. International Journal of Research and Innovation in Social Science (IJRISS). https://doi.org/10.47772/IJRISS.2025.909000629