



Perceived Influence of Ethical Artificial Intelligence Practices on Educational Management in Rivers State-Owned Universities

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DOI: 10.5281/zenodo.22164173

ARTICLE INFO

Article history:

Received : 15-08-2026

Accepted : 23-08-2026

Available online : 29-08-2026

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Citation: Brown, R. I., & Azeez, F. M. (2026). Perceived Influence of Ethical Artificial Intelligence Practices on Educational Management in Rivers State-Owned Universities. *IKR Journal of Arts, Humanities and Social Sciences (IKRJAHS)*, 2(4), 29-39.



ABSTRACT

Original Research Article

The study set out to find out how staff of Rivers State-owned universities perceive the effect of ethical Artificial Intelligence (AI) practices on the way their institutions are managed. Attention was placed on two ethical dimensions, namely AI fairness and AI transparency. Two objectives, two research questions and two null hypotheses directed the enquiry. A descriptive survey design was employed. Altogether, 2,248 staff of the two state-owned universities formed the population, made up of 1,248 academic and 1,000 non-academic staff. From this number, 500 respondents were drawn through proportionate stratified random sampling, comprising 300 academic and 200 non-academic staff. A self-designed questionnaire, the *Perceived Influence of Ethical Artificial Intelligence Practices on Educational Management Questionnaire (PIEAIPEMQ)*, built on a four-point modified Likert scale, served as the instrument for data gathering. Three experts carried out face and content validation, and Cronbach Alpha was applied to establish internal consistency, returning a coefficient of 0.86. Of the 500 copies distributed, 476 came back usable, a retrieval rate of 95.2%. The research questions were answered with mean and standard deviation, and the null hypotheses were tested with the independent samples t-test at 0.05 alpha. Results showed a high extent of influence for AI fairness, with a grand mean of 3.11, and a high extent of influence for AI transparency, with a grand mean of 3.00. On both dimensions, the ratings of academic and non-academic staff did not differ significantly. It was concluded that ethical AI practices contribute positively to effective educational management, and it was recommended, among other things, that the universities put in place institutional AI ethics policies, mount regular staff capacity-building programmes, and establish clear accountability structures for automated administrative decisions.

Keywords: Ethical Artificial Intelligence, AI Fairness, AI Transparency, Accountability, Educational Management, Rivers State-Owned Universities.

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Introduction

Artificial Intelligence has moved quickly from the margins of educational discourse to the center of institutional practice. The term describes computing systems built to carry out functions once thought to require the human mind, among them reasoning, learning from experience, solving problems, interpreting natural language and forecasting outcomes from

data. Within the university, these capabilities are now applied well beyond the classroom. They serve academic planning, administrative decision making, quality assurance, student services, the sharing of institutional resources and the wider work of governance. Institutions across the globe have taken up such technologies in pursuit of leaner operations and stronger performance. Yet the deeper AI penetrates university

administration, the louder the questions become about whether the systems are fair, whether their workings can be seen, who answers for their outputs, and how the data they consume are protected (Miao et al., 2023).

Educational management, for its part, is the work of planning, organising, coordinating, supervising and appraising the human and material resources of an educational institution so that its purposes are met. At university level this covers a wide field, from academic programme planning and admissions to staff appraisal, financial control, records administration and quality assurance. Because the volume of data generated by these functions has grown far beyond what manual systems can handle comfortably, administrators have turned to intelligent tools such as decision support systems, predictive analytics, automated timetable, electronic record management and virtual administrative assistants. Nwile and Edo (2023) observed that tools of this kind were already at work in the state-owned universities of Rivers State, easing the burden of repetitive clerical routines. Whether such tools serve or damage the institution, however, turns on the ethical principles built into them (Grassini, 2023).

Ethical Artificial Intelligence practice may be understood as the responsible design, deployment and use of AI systems in a manner that upholds fairness, openness, answerability, privacy and the rights of those affected. The purpose of such practice is to strip out algorithmic bias, secure even-handed treatment for all users, guard confidential records and supply reasons for the decisions machines produce. Memarian and Doleck (2023), reviewing the literature on fairness, accountability, transparency and ethics in higher education, found that these principles are consistently named as the core of responsible practice, but are seldom converted into working administrative procedure. This matters greatly for university management, where AI-assisted systems increasingly feed into admissions, recruitment, student support, performance monitoring, resource sharing and institutional planning. Where safeguards are absent, such systems can entrench bias, expose sensitive records, erode public confidence and weaken academic integrity. Kasneci et al. (2023) made a similar point with respect to large language models, arguing that the same features that make these tools powerful in education also make them difficult to supervise.

Nigeria's universities have taken to AI gradually. Digital transformation drives have pushed institutions towards automated student records, electronic scheduling and computer-assisted planning. Ogunode et al. (2023) reported that uptake across Nigerian tertiary institutions has been uneven, and that the determining factor has been institutional leadership and infrastructure rather than the availability of the technology itself. The two Rivers State-owned universities are part of this movement, adopting digital platforms to speed up service delivery and tighten administrative control. Even so, doubts remain about whether adoption has been ethically grounded. Ifinedo (2023) warned that African universities are

acquiring AI-enabled systems more rapidly than they are constructing the data governance arrangements needed to supervise them, and that the gap between the two is widening.

The literature on AI in education has concentrated heavily on teaching, learning, assessment and research. Far less has been written on what ethical AI practice does to the administration of the university itself, and less still within the Nigerian setting. It is this shortage of evidence that the present study responds to, by examining how staff of Rivers State-owned universities perceive the influence of AI fairness and AI transparency on educational management.

AI Fairness on Educational Management

AI fairness describes the capacity of a system to arrive at decisions that are even-handed, consistent and free of discrimination. A fair system reaches its conclusions from criteria that are relevant to the matter at hand, and not from the gender, ethnic origin, economic standing, disability or other personal attributes of the person being assessed.

Applied to university administration, fairness means that judgements on admission, recruitment, appraisal, resource sharing and academic planning follow rules that are equitable and applied without variation from one case to the next. Baker and Hawn (2022) traced how bias actually enters educational algorithms, showing that it may be introduced when the data are measured, when the model is trained, or when the output is acted upon, and that its effects fall most heavily on groups already disadvantaged. Fairness is therefore not a property that a system possesses automatically; it is a property that has to be built in and then tested for.

Fairness also carries consequences for institutional standing. Marcinkowski et al. (2020) found that where applicants believed an admissions algorithm to be unfair, their attachment to the institution weakened and their rating in its reputation fell, even where the decision itself went unchanged. What people believe about a process therefore shapes their behaviour towards the institution, quite apart from what the process actually did. Alikor and Okachiku-Agbaraeke (2025), writing on social justice in Nigerian education, held that justice in the educational setting rests on three linked ideas, namely fairness, equity and accessibility, and that institutions carry a duty to build learning and working environments that give those ideas practical effect. Their argument bears directly on the matter at hand. Fairness in an AI-assisted university cannot be treated as a property of the software alone; it is a standard the institution itself must uphold in how the system is chosen, applied and reviewed. The Organisation for Economic Co-operation and Development [OECD] (2024) added a qualification worth noting, observing that AI tools may under favourable conditions reduce certain human biases in evaluation, but that this result depends on the quality of the training data and cannot be assumed. Within Rivers State-owned universities,

fair AI systems hold the promise of firmer objectivity in administrative judgement, more equitable distribution of institutional resources, and a stronger basis for staff and student confidence in management decisions.

AI Transparency on Educational Management

AI transparency refers to how far the workings, the reasoning and the outputs of an Artificial Intelligence system can be seen, explained and examined by the people they affect. Under a transparent arrangement, a member of staff knows that AI was applied to a decision, knows what information the system drew upon, knows what standards it applied, and can obtain an account of how a particular result was reached.

Transparency and fairness are close companions, but they are not the same thing, and the difference has practical weight. A system may apply an identical rule to every case, and so be fair, while keeping the basis of its judgement hidden from those it judges. The reverse is equally possible: a system may explain itself fully while applying a rule that is inequitable. Sound educational management calls for both properties together.

Within the university, transparency is what makes accountability possible. Khosravi et al. (2022) argued that education has particular need of explainable AI, since those who manage educational institutions must be able to justify their decisions to students, to staff, to parents and to regulatory authorities, and cannot do so on the strength of an output they do not understand. Novelli et al. (2024) took the argument a step further, contending that accountability only becomes real when a specific office can be held answerable for a given decision and when a route exists through which that decision may be questioned and, where necessary, set aside. Transparent systems accordingly strengthen governance by sharpening the quality of decisions, easing monitoring and evaluation, and keeping the institution within ethical and regulatory bounds (Dwivedi et al., 2023). They also allow errors and hidden biases to be spotted and corrected rather than repeated. For Rivers State-owned universities, transparency in AI-supported administration offers a means of widening openness, lifting administrative efficiency and building the confidence of staff in decisions that machines have helped to shape.

Theoretical Framework

Organisational Justice Theory (Greenberg, 1987)

This study is anchored on the Organisational Justice Theory advanced by Greenberg (1987). The theory holds that people working within an organisation are continuously assessing whether the organisation treats them fairly, and that the conclusions they reach shape their commitment, their cooperation and ultimately their performance. Three strands

of justice are distinguished within the theory. Distributive justice has to do with the fairness of outcomes, that is, whether benefits and burdens are shared equitably among members. Procedural justice has to do with the fairness of the process by which those outcomes are arrived at, that is, whether the rules are known, stable and applied without favour. Informational justice has to do with whether members are given adequate explanation for the decisions taken about them.

The theory speaks directly to the two variables of this study. AI fairness belongs to the distributive and procedural strands, since it concerns both the equity of what a system produces and the impartiality of the rules it applies. AI transparency belongs to the informational strand, since it concerns whether staff are told how and why a decision was reached. The theory also justifies the choice of perception as the object of measurement in this study. Greenberg's central contention is that it is the fairness members perceive, rather than fairness measured in the abstract, that governs how they respond to their organisation. On this reasoning, an AI-supported management system in a Rivers State-owned university will strengthen administration only to the degree that the staff subject to it accept it as fair and understand how it works.

Statement of the Problem

The spread of Artificial Intelligence through higher education has opened real possibilities for better educational management, in the form of sharper decisions, faster administrative processes and more reliable planning. Whether those possibilities are realised, however, depends on whether the systems adopted observe ethical principles, chief among them fairness and transparency.

Across Nigerian universities, and the Rivers State-owned universities are not exempt, worries continue about biased algorithms, unexplained automated decisions, missing ethical guidelines and thin awareness of what responsible AI practice requires. The concern is sharpened by the administrative climate itself. Decisions on promotion, workload, admission and the sharing of institutional resources are regularly disputed on grounds of favouritism, ethnic consideration or personal interest. Where AI is introduced into such an environment without safeguards, there is a real danger that established patterns of inequity will simply be automated and clothed in the appearance of objectivity. Shittu et al. (2024) argued that Nigeria has pursued digital transformation without building a matching body of enforceable ethical guidance, leaving each institution to devise its own standards or to proceed without any.

These conditions threaten to weaken the trust of staff, to compromise equity in administrative processes and to lower the quality of educational management. While a good number of studies have looked at AI in teaching, learning and research, empirical evidence on what ethical AI practice does to educational management in Rivers State-owned

universities remains scarce. Nor is it known whether academic staff and non-academic staff, who sit at different points in the administrative structure and are affected differently by its decisions, read these ethical questions in the same way. The present study was undertaken to close that gap by investigating the perceived influence of AI fairness and AI transparency on educational management in Rivers State-owned universities.

Aim and Objectives of the Study

The aim of the study is to examine the influence of ethical Artificial Intelligence practices on educational management in Rivers State-owned universities. The specific objectives are to:

1. Determine the influence of AI fairness on educational management in Rivers State-owned universities.
2. Examine the influence of AI transparency on educational management in Rivers State-owned universities.

Research Questions

The following research questions guided the study:

1. To what extent does AI fairness influence educational management in Rivers State-owned universities?
2. To what extent does AI transparency influence educational management in Rivers State-owned universities?

Hypotheses

The following null hypotheses were tested at the 0.05 level of significance:

1. There is no significant difference between the mean ratings of academic and non-academic staff on the influence of AI fairness on educational management in Rivers State-owned universities.
2. There is no significant difference between the mean ratings of academic and non-academic staff on the influence of AI transparency on educational management in Rivers State-owned universities.

Significance of the Study

Several groups stand to gain from the outcome of this study. For those who administer universities, the findings offer a clearer view of how ethical AI practice bears on institutional decision making, and in particular of the fact that an automated decision gains acceptance not merely by being accurate but by being seen to rest on rules that are fair and explicable.

For academic and non-academic staff, the study clarifies why fairness and openness matter in systems that increasingly touch appointment, promotion, workload and welfare, and

strengthens their standing to seek explanation for automated decisions that concern them.

For policymakers and university governing bodies, the findings provide a basis for framing institutional policy and ethical guidance on AI, covering such matters as data governance, human oversight of automated outputs, and the right of a staff member or student to appeal a decision in which a machine took part.

For researchers, the study adds to the body of knowledge on ethical AI in educational management and opens a path towards further work on the dimensions not covered here, such as privacy, data protection and human oversight. Developers of educational technology will also find in the results an indication of what Nigerian university administrators expect of the systems they buy, namely tools that are fair, explainable and suited to local administrative conditions.

Methodology

The descriptive survey design was adopted for the study. The design suited the enquiry because the intention was to gather and describe the opinions of a large body of respondents about a situation already in existence, without any manipulation of variables.

Rivers State, Nigeria, served as the study area. The population consisted of 2,248 academic and non-academic staff drawn from the two state-owned universities, namely Rivers State University, Port Harcourt, and Ignatius Ajuru University of Education, Rumuolumeni, made up of an estimated 1,248 academic staff and 1,000 non-academic staff.

Proportionate stratified random sampling was used to draw a sample of 500 respondents, consisting of 300 academic staff and 200 non-academic staff. Staff category formed the basis of stratification, and selection within each stratum was made at random.

The instrument for data collection was a self-designed questionnaire titled *Perceived Influence of Ethical Artificial Intelligence Practices on Educational Management Questionnaire (PIEAIPEMQ)*. It carried two sections. Section A sought the demographic details of respondents, while Section B held ten items shared equally between the two clusters of the study, five on AI fairness and five on AI transparency. Responses were structured on a four-point modified Likert scale of Very High Extent (4), High Extent (3), Low Extent (2) and Very Low Extent (1).

Three experts, two from the Department of Educational Foundations and one from Measurement and Evaluation, undertook face and content validation of the instrument, and their observations guided the final wording of the items. Reliability was established through a pilot study, with internal consistency computed by the Cronbach Alpha method, which

returned a coefficient of 0.86. This value was judged sufficiently high for the instrument to be accepted as reliable.

Two trained research assistants helped in administering the 500 copies of the questionnaire. Of these, 476 copies were retrieved in usable condition, giving a retrieval rate of 95.2%, while 24 copies, or 4.8%, were not recovered. The usable returns comprised 286 from academic staff and 190 from non-academic staff.

Mean and standard deviation answered the research questions. A criterion mean of 2.50 was adopted, derived by adding the numerical values of the four response options and

dividing the sum by four. Items with a mean of 2.50 or above were rated High Extent, and those falling below 2.50 were rated Low Extent. The independent samples *t*-test tested the null hypotheses at the 0.05 level of significance, with a hypothesis retained where the significance value exceeded 0.05 and rejected where it stood at or below 0.05. IBM SPSS Version 26 was used for all computations.

Result of the Study

Research Question One: To what extent does AI fairness influence educational management in Rivers State-owned universities?

Table 1: Mean and standard deviation of respondents on the extent AI fairness influences educational management in Rivers State-owned universities

S/N	Items	Academic Staff (n=286)		Non-Academic Staff (n=190)		Mean Set (n=476)	Remarks
		Mean	SD	Mean	SD		
1	AI fairness promotes objective decision making in educational management.	3.48	0.89	3.78	0.53	3.63	High Extent
2	AI fairness enhances equity in the allocation of institutional resources.	3.07	0.82	3.07	0.73	3.07	High Extent
3	AI fairness reduces bias in staff and student administrative decisions.	2.91	0.98	2.87	0.95	2.89	High Extent
4	AI fairness improves transparency in educational management processes.	2.93	1.03	2.69	1.15	2.81	High Extent
5	AI fairness supports effective educational management in Rivers State-owned universities.	3.13	0.95	3.13	0.90	3.13	High Extent
	Grand Mean	3.10	0.93	3.11	0.85	3.11	High Extent

Source: IBM SPSS, Version 26

Data in Table 1 shows the mean and standard deviation of academic and non-academic staff on the extent to which AI fairness influences educational management in Rivers State-owned universities. Every one of the five items returned a mean set value above the criterion mean of 2.50, the values falling between 2.81 and 3.63. The respondents therefore rated the influence of AI fairness as high on each item without exception.

Item 1 attracted the strongest agreement, with a mean set value of 3.63, showing that respondents were most convinced that AI fairness makes decision making in educational management more objective. Item 5 came next at 3.13, followed by item 2 at 3.07. The weakest rating went to item 4, at 2.81, indicating that respondents were least persuaded that AI fairness improves transparency in management processes. Item 3, concerning the reduction of bias in staff and student administrative decisions, stood at 2.89.

This ordering repays attention. The items that drew the highest agreement were those making a general claim about

better decision making, while the two lowest-rated items were those making specific claims about the removal of bias and the improvement of transparency. The pattern suggests that respondents endorsed the principle of fairness more readily than they accepted that fairness by itself would dislodge entrenched administrative bias.

The grand mean for academic staff was 3.10 with a standard deviation of 0.93, while non-academic staff returned a grand mean of 3.11 with a standard deviation of 0.85. The overall grand mean set of 3.11 confirms a high extent of influence. Standard deviation values across the cluster fell between 0.53 and 1.15, showing that responses clustered fairly closely around the mean rather than scattering widely. The near-identical grand means indicate that the two categories of staff held much the same view.

Research Question Two: To what extent does AI transparency influence educational management in Rivers State-owned universities?

Table 2: Mean and standard deviation of respondents on the extent AI transparency influences educational management in Rivers State-owned universities

S/N	Items	Academic Staff (n=286)		Non-Academic Staff (n=190)		Mean Set (n=476)	Remarks
		Mean	SD	Mean	SD		
1	AI transparency promotes openness in educational management decision making.	2.93	1.03	2.69	1.15	2.81	High Extent
2	AI transparency improves accountability in university administrative processes.	3.13	0.95	3.13	0.90	3.13	High Extent
3	AI transparency enhances trust in AI-supported educational management decisions.	2.93	0.93	2.83	0.82	2.88	High Extent
4	AI transparency enables university staff to understand how AI-generated decisions are made.	3.04	1.00	2.83	1.04	2.94	High Extent
5	AI transparency strengthens effective educational management in Rivers State-owned universities.	3.29	0.84	3.22	0.95	3.26	High Extent
	Grand Mean	3.06	0.95	2.94	0.97	3.00	High Extent

Source: IBM SPSS, Version 26

Data in Table 2 presents the mean and standard deviation of academic and non-academic staff on the extent to which AI transparency influences educational management in Rivers State-owned universities. All five items exceeded the criterion mean of 2.50, with mean set values running from 2.81 to 3.26. Respondents accordingly rated the influence of AI transparency as high across the cluster.

The highest rating went to item 5, at 3.26, showing strongest agreement that AI transparency strengthens effective educational management. Item 2 followed at 3.13, pointing to firm agreement that transparency improves accountability in administrative processes. Item 4 recorded 2.94, item 3 recorded 2.88, and item 1 returned to the lowest value at 2.81.

Here too the distribution of ratings tells its own story. Respondents rated the broad contribution of transparency to management effectiveness more highly than they rated its particular contribution to openness in decision making and to trust in AI-assisted decisions. The inference is that

transparency is valued as a principle, but that respondents are not yet satisfied that the systems currently operating in their institutions are genuinely open to scrutiny.

Academic staff returned to a grand mean of 3.06 with a standard deviation of 0.95, while non-academic staff returned 2.94 with a standard deviation of 0.97. The overall grand mean set of 3.00 confirms a high extent of influence. Standard deviation values between 0.82 and 1.15 indicate reasonably consistent responses. Academic staff rated the transparency items marginally higher than their non-academic counterparts, though the margin is slight.

Test of Hypotheses

Ho1: There is no significant difference between the mean ratings of academic and non-academic staff on the influence of AI fairness on educational management in Rivers State-owned universities.

Table 3: Summary of t-test on the difference between the mean ratings of academic and non-academic staff on the influence of AI fairness on educational management in Rivers State-owned universities

Variables	N	Mean	SD	Df	t-cal	Sig.	Remark
Academic Staff	286	3.10	0.93	474	1.012	0.312	NS
Non-Academic Staff	190	3.11	0.85				

NS = Not Significant

Source: IBM SPSS, Version 26

Table 3 sets out the summary of the independent samples *t*-test on the difference between the ratings of academic and non-academic staff regarding the influence of AI fairness on educational management. Academic staff recorded a mean of 3.10 with a standard deviation of 0.93, against a mean of 3.11

and a standard deviation of 0.85 for non-academic staff. The computed *t*-value of 1.012 at 474 degrees of freedom carried a significance value of 0.312, which lies above the 0.05 alpha level. No statistically significant difference therefore exists between the ratings of the two groups, and the null hypothesis

was retained. What this indicates is that staff on both sides of the academic and administrative divide read the influence of AI fairness in much the same way, despite occupying different positions within the management structure of their universities.

Table 4: Summary of t-test on the difference between the mean ratings of academic and non-academic staff on the influence of AI transparency on educational management in Rivers State-owned universities

Variables	N	Mean	SD	Df	t-cal	Sig.	Remark
Academic Staff	286	3.06	0.95	474	0.410	0.682	NS
Non-Academic Staff	190	2.94	0.97				

NS = Not Significant

Source: IBM SPSS, Version 26

Table 4 sets out the summary of the independent samples *t*-test on the difference between the ratings of academic and non-academic staff regarding the influence of AI transparency on educational management. Academic staff recorded a mean of 3.06 with a standard deviation of 0.95, against a mean of 2.94 and a standard deviation of 0.97 for non-academic staff. The computed *t*-value of 0.410 at 474 degrees of freedom carried a significance value of 0.682, again above the 0.05 alpha level. The difference between the two groups is therefore not statistically significant, and the null hypothesis was retained. The modest gap observed between the two grand means is thus attributable to ordinary sampling variation rather than to any genuine divergence of opinion between the categories of staff.

Summary of Findings

The study produced the following findings:

1. AI fairness exerts a high level of influence on educational management in Rivers State-owned universities, with a grand mean of 3.11, expressed through more objective decision making, greater equity in resource allocation, reduced bias in staff and student administrative decisions, improved transparency in management processes, and stronger overall management effectiveness.
2. AI transparency exerts a high level of influence on educational management in Rivers State-owned universities, with a grand mean of 3.00, expressed through greater openness in decision making, improved accountability in administrative processes, stronger trust in AI-assisted decisions, better staff understanding of how automated decisions are reached, and stronger overall management effectiveness.
3. The mean ratings of academic and non-academic staff on the influence of AI fairness on educational management do not differ significantly.
4. The mean ratings of academic and non-academic staff on the influence of AI transparency on educational management do not differ significantly.

Ho2: There is no significant difference between the mean ratings of academic and non-academic staff on the influence of AI transparency on educational management in Rivers State-owned universities.

Discussion of Findings

Influence of AI Fairness on Educational Management

The first objective was directed at establishing how AI fairness influences educational management in Rivers State-owned universities, and the result showed influence at a high level, with a grand mean of 3.11. Respondents accepted that fairness in AI supports objective decision making, spreads institutional resources more equitably, curbs bias in administrative decisions and improves management effectiveness overall.

An explanation for this result may be sought in the administrative environment of Nigerian public universities. Judgements on promotion, workload, admission and the distribution of resources are frequently contested on grounds of favouritism and personal interest. A mechanism that applies one rule to every case therefore has evident appeal for staff on both sides of the academic and administrative divide. Read against the Organisational Justice Theory, what the respondents were expressing is a preference for procedural justice, that is, for rules known ahead of time and applied without variation.

The result aligns with the position of Miao et al. (2023), for whom fairness stands among the foundational principles of ethical AI and is indispensable to equitable and inclusive decision making in higher education. It agrees equally with Chiu et al. (2023), who reported that ethical AI practice raises institutional effectiveness by keeping AI-assisted decisions objective and useful to every category of stakeholder.

Further support comes from Nwuke and Yellowe (2025), whose study of artificial intelligence in school supervision in Rivers State found that supervisory judgement supported by AI became more consistent across schools and less dependent on the personal disposition of the supervisor. Because that work was carried out within the same state, its agreement with the present finding carries particular local weight. Taylor et al. (2025) contributed a related insight from within the very institutions studied here, reporting that adult educators in Rivers State-owned universities who were aware of AI tools and made use of them performed better in their duties. Read alongside the present result, this suggests that fairness has a

practical as well as a principled dimension: where access to AI tools is uneven, the benefit of those tools is unevenly distributed, and the outcome is inequitable regardless of how impartial the algorithm itself may be.

The lower ratings on items 3 and 4 nevertheless deserve comment. Respondents were noticeably less confident that AI fairness would actually reduce bias or increase transparency than they were that it would improve decision making in general. This caution is well founded. Baker and Hawn (2022) demonstrated that algorithms in education do not arrive free of bias, and that bias enters at several distinct points in the development and deployment chain. A university that procures an AI system in the expectation that fairness comes packaged with it is likely to be disappointed. Fairness has to be specified, tested for and monitored.

Difference in the Ratings of Academic and Non-Academic Staff on AI Fairness

The first hypothesis returned no significant difference between the two categories of staff, with a t-value of 1.012 and a significance value of 0.312. Academic and non-academic staff therefore converge in their reading of what AI fairness does for educational management.

This convergence is worth pausing over, because the two groups do not stand in the same relation to the administrative machinery of the university. Academic staff are chiefly affected by decisions on promotion, workload and research support, while non-academic staff are affected by decisions on grading, posting and conditions of service. That two groups with such different exposure should rate the matter almost identically suggests that the appetite for impartial decision-making cuts across the institutional hierarchy rather than belonging to any one segment of it.

The findings are according to the reasoning of the Organisational Justice Theory, under which the desire for fair treatment is a general feature of organisational membership and not the preserve of a particular grade or cadre. It also carries an administrative implication: a university that introduces AI-supported systems on fair terms is unlikely to face resistance from one staff category while enjoying support from the other.

Influence of AI Transparency on Educational Management

The second objective examined the influence of AI transparency, and the result again showed influence at a high level, with a grand mean of 3.00. Respondents held that transparency widens openness in decision making, tightens accountability in administrative processes, builds trust in AI-assisted decisions, helps staff to follow how such decisions are arrived at, and strengthens management effectiveness.

The finding supports the argument of Dwivedi et al. (2023) that explainability and openness are prerequisites for trust and accountability in organisations that deploy AI. It is consistent

as well with Porayska-Pomsta et al. (2024), who maintained that transparency is a condition of legitimate AI use in education, on the grounds that stakeholders can neither consent to nor contest a process they are unable to see. Slimi and Carballido (2023), comparing AI ethics policies from seven jurisdictions, found transparency named in every one of them, which indicates that the principle is not a local preference but a settled international expectation.

Support from within the Nigerian and Rivers State context comes from two directions. LongJohn and LongJohn (2026) showed, in their study of cyber security measures and examination question leakages in Port Harcourt, that confidence in a digital system rests on the ability of users to see and verify what the system is doing, and that openness without enforcement does not by itself secure trust. Ndalul (2025) argued from a national perspective that artificial intelligence serves educational management in Nigeria principally by processing and summarising administrative data at speeds beyond manual capacity, an advantage that only becomes safe where the basis of the resulting summaries can be inspected.

The pattern within the cluster once more merits notice. The highest-rated item concerned the general contribution of transparency to management effectiveness, while the lowest concerned openness in actual decision making. Respondents, in other words, endorse transparency as a value more readily than they credit the systems currently running in their institutions with possessing it. Ifinedo (2023) offers a plausible account of this gap, having observed that African universities are acquiring AI-enabled systems ahead of the governance arrangements needed to superintend them. Where no institutional machinery exists for explaining or reviewing an automated decision, the principle of transparency remains an aspiration rather than a practice.

The difficulty is a familiar one in Nigerian education. Orlunga and Alikor (2023) showed, in the case of inclusive education, that a policy may be plainly written into national documents and still fail at the point of implementation, and they traced that failure to corruption, poor sensitisation, inadequate facilities and the siting of institutions. Guidelines on ethical AI are exposed to the same fate. A written commitment to transparency counts for little unless the university builds the procedures, assigns the offices and trains the staff needed to honour it, and the ratings recorded in Table 2 suggest that respondents are alert to precisely this distinction.

Difference in the Ratings of Academic and Non-Academic Staff on AI Transparency

The second hypothesis likewise returned no significant difference, with a t-value of 0.410 and a significance value of 0.682. The slightly higher rating given by academic staff, at 3.06 against 2.94, therefore falls within ordinary sampling variation.

Even so, the direction of that small gap is consistent with what might be expected. Academic staff engage more regularly with digital platforms in the course of teaching, research and publication, and greater familiarity with such systems tends to accompany a firmer appreciation of what explainability offers. Madu and Musa (2024) reported a positive relationship between lecturers' awareness of artificial intelligence and their digital competence and observed that lecturers with higher competence dealt more confidently with AI-assisted systems. Abubakar et al. (2024), surveying students across Nigerian tertiary institutions, found awareness of AI to be moderate rather than high, which suggests that familiarity with these tools is still uneven throughout the university community.

The absence of a significant difference nonetheless carries the more important message. Both categories of staff want to understand the decisions that affect them, and neither is content to accept an administrative outcome simply because a machine produced it. Novelli et al. (2024) argued that accountability becomes meaningful only when a named office answers for a decision and a route exists for questioning it. The convergence of the two staff groups in this study indicates that such an arrangement would be welcomed across the institution rather than in any one part of it. Nwile and Edo (2023) had already established that AI and robotic tools were in administrative use in these same universities; what the present finding adds is that the staff subject to those tools expect to be shown how they work.

Conclusion

The study concluded that ethical Artificial Intelligence practices exert a positive influence on educational management in Rivers State-owned universities. AI fairness contributes by making administrative judgement more objective, by distributing institutional resources more equitably, by curbing bias in decisions affecting staff and students, and by lending greater openness to management processes. AI transparency contributes by widening openness, tightening accountability, strengthening the trust of stakeholders and enabling staff to follow the reasoning behind decisions that machines have helped to shape.

The study further established that academic and non-academic staff do not differ significantly in their assessment of either dimension, which points to a shared recognition, across the institutional hierarchy, that ethical practice matters to the quality of university administration. Yet the pattern within the responses carries a caution. Respondents endorsed both principles more strongly in general terms than they credited the systems presently in use with embodying them. The gap between principle and practice is therefore where institutional attention is most needed.

As universities lean more heavily on AI to carry the weight of administrative work, the standards governing that technology deserve as much attention as the technology itself. Building

fairness and transparency into AI-assisted decision making will reinforce institutional credibility, raise the confidence of staff and students, secure accountability and improve the effectiveness of educational management. Responsible adoption of ethical AI practice has accordingly become a condition of sound and sustainable university administration in Rivers State-owned universities.

Recommendations

1. The management of Rivers State-owned universities should adopt only those AI systems whose fairness can be demonstrated and should subject such systems to periodic testing for bias so that objectivity in administrative decision making is maintained rather than assumed.
2. University management should formulate written policies and guidelines governing transparency and accountability in the deployment of AI for administrative purposes, specifying which office answers for an automated decision and by what procedure a staff member or student may seek a review of it.
3. Regular training programmes and workshops should be mounted for academic and non-academic staff alike, to deepen their understanding of ethical AI practice and to equip them to interrogate rather than merely receive the outputs of AI-assisted systems.
4. Government and university authorities should provide adequate digital infrastructure and strengthen institutional data governance frameworks, so that the ethical implementation of Artificial Intelligence in educational management rests on a sound technical and administrative foundation.

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