



Lecturers' Awareness and Attitudes Towards the Use of Artificial Intelligence Tools at the University of Nigeria, Nsukka

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ARTICLE INFO	ABSTRACT
Published Online: 09 October 2026	The increasing availability of artificial intelligence (AI) tools presents new opportunities and challenges for teaching and learning in higher education. This study examined lecturers' awareness of and attitudes towards the use of AI tools at the University of Nigeria, Nsukka. A descriptive survey design was adopted. Four research questions and two hypotheses guided the study. The population comprised academic staff in the Department of Science Education, University of Nigeria, Nsukka, from whom 49 lecturers participated in the study. Data were collected using a researcher-developed instrument titled Questionnaire on Lecturers' Awareness Level and Attitude to AI Tools (QLALAAIT). The instrument was subjected to face validation and trial testing, and its overall reliability coefficient, determined using Cronbach's alpha, was 0.83. Data were analysed using mean and standard deviation to answer the research questions, while analysis of variance (ANOVA) was used to test the hypotheses at the 0.05 level of significance. The findings indicated that lecturers demonstrated awareness of selected AI tools, including ChatGPT, Turnitin, and QuillBot, and generally expressed positive attitudes towards their use in educational contexts. Further analysis showed that years of teaching experience did not significantly influence lecturers' awareness of or attitudes towards AI tools. The study highlights the need for structured professional development, institutional support, and access to appropriate resources to facilitate informed and effective use of AI tools in university teaching and related academic activities.
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KEYWORDS: artificial intelligence tools, lecturers' attitudes, lecturers' awareness, higher education, technology adoption	

I. INTRODUCTION

Artificial intelligence (AI) has become an increasingly visible component of higher education, with applications spanning teaching, assessment, research, academic writing, information retrieval, and other university activities. The growing availability of generative and AI-enabled tools has created opportunities for lecturers to support instructional planning, develop learning resources, obtain feedback, analyse information, and undertake research-related tasks. At the same time, the integration of AI into higher education raises concerns about academic integrity, privacy, reliability, ethical use, digital competence, and institutional preparedness. Earlier systematic evidence already identified AI applications in higher education across assessment and evaluation,

adaptive and personalised learning, profiling and prediction, and intelligent tutoring, while highlighting the need for stronger attention to educators' perspectives and the ethical and pedagogical implications of AI adoption (Zawacki-Richter et al., 2019). More recent research has reinforced the importance of understanding university teachers' beliefs, literacy, preparedness, and acceptance as AI becomes increasingly embedded in academic practice.

Artificial intelligence refers broadly to computational systems designed to perform tasks that ordinarily require aspects of human intelligence. Its increasing sophistication has expanded its applications across sectors, including education. In higher education, AI-enabled tools now support a range of academic activities, although the tools differ considerably in

their purposes and capabilities. Examples include generative AI applications such as ChatGPT, writing and language-support tools such as Grammarly and QuillBot, academic integrity platforms such as Turnitin, and research and reference-management tools. Their increasing availability, however, does not necessarily result in effective or responsible use. Recent evidence indicates that teachers’ decisions to use AI are associated with factors such as perceived usefulness, pedagogical relevance, AI literacy, facilitating conditions, previous experience, and institutional support (Cabero-Almenara et al., 2024; Jomezai et al., 2025).

The Nigerian context is particularly important because the country has increasingly recognised AI as a component of its digital transformation agenda. The National Centre for Artificial Intelligence and Robotics (NCAIR), commissioned in 2020, was established to promote research and development in AI, robotics, and other emerging technologies. Its activities include research, innovation, skills development, and collaboration with academic institutions. Nigeria has also developed a National Artificial Intelligence Strategy that identifies opportunities and challenges associated with AI development and emphasises responsible, ethical, and inclusive AI adoption. The strategy recognises infrastructure, skills, data, and other enabling conditions as important considerations in developing Nigeria’s AI ecosystem. These national developments demonstrate growing attention to AI; however, policy-level commitment does not necessarily indicate that lecturers across Nigerian universities possess comparable levels of awareness, preparedness, or willingness to use AI tools.

The integration of AI into Nigerian higher education is influenced by infrastructural, technical, ethical, and human-capacity considerations. Aderibigbe et al. (2023), in their review of AI implementation in developing countries, identified infrastructure limitations, skills gaps, capacity building, and ethical considerations among the issues that can affect effective AI implementation. In the Nigerian higher-education context, Afolabi (2024) similarly highlighted ethical concerns associated with AI adoption, including issues requiring attention to responsible and appropriate use. These concerns suggest that effective AI integration requires more than access to technological tools; it also requires academic staff who understand the capabilities and limitations of AI and can make informed decisions about its use.

A. Lecturers’ Awareness of Artificial Intelligence Tools

One important consideration in the integration of AI into higher education is lecturers’ awareness of available AI tools. In this study, awareness refers to lecturers’ knowledge or familiarity with the existence and potential usefulness of AI tools. Awareness is relevant because familiarity with available technologies provides a basis for evaluating their potential applications and limitations. However, awareness should not

be equated with competence or actual utilization. A lecturer may be aware of an AI tool without possessing the knowledge or confidence required to use it effectively.

Recent Nigerian evidence indicates variation in lecturers’ awareness of AI. Madu and Musa (2024), in a study of academic staff at Federal University Wukari, investigated lecturers’ AI awareness in relation to digital competence and recommended further training to strengthen lecturers’ ability to use AI effectively. Similarly, Amadi-Iwai et al. (2024) investigated awareness, competence, and utilization of AI among Business Education lecturers in universities in South-South Nigeria and reported low levels of awareness, competence, and utilization. Idhalama et al. (2023) also found that although Nigerian university lecturers were increasingly aware of emerging instructional technologies, their utilization remained relatively low. These findings indicate that awareness and actual use do not necessarily develop at the same rate and may vary according to institutional and disciplinary context.

Evidence from outside Nigeria similarly suggests that awareness and preparedness should be considered as distinct dimensions of AI adoption. Juma (2025), for example, examined AI readiness among 130 faculty members in higher institutions in Sub-Saharan Africa and found generally high levels of readiness, although readiness varied across some demographic groups. Such findings reinforce the need for context-specific investigations rather than assuming that lecturers’ awareness or readiness is uniform across institutions and populations.

B. Lecturers’ Attitudes towards the Use of Artificial Intelligence Tools

Beyond awareness, lecturers’ attitudes towards AI are important because awareness alone does not necessarily result in acceptance or use. In this study, attitude refers to an individual’s positive or negative disposition towards the use of AI tools in academic practice. Lecturers may recognise the usefulness of AI while simultaneously expressing reservations about reliability, academic integrity, privacy, ethical concerns, or the implications of AI for teaching and assessment.

Recent studies demonstrate that university teachers’ responses to AI are not necessarily uniform. Cabellos et al. (2024), in a study involving 321 university teachers, examined teachers’ beliefs about the use of generative AI for teaching and learning and showed the importance of understanding teachers’ beliefs when considering the educational implications of GenAI. Similarly, Cabero-Almenara et al. (2024), studying 425 university teachers, found that performance expectations, effort expectancy, social influence, facilitating conditions, and other factors were associated with intention and behaviour related to AI use. These findings indicate that teachers’ responses to AI are shaped by multiple factors rather than by technological availability alone.

Evidence from Nigeria also points to generally favourable perceptions alongside limitations in actual use. Ofosu-Ampong (2024) examined faculty perceptions and acceptability of AI in teaching practices and reported substantial willingness among surveyed lecturers to accept AI for students. More recently, Sheu (2025) found that lecturers in public tertiary institutions in Zamfara State perceived AI positively in relation to research and assessment, although their actual utilization of AI tools was low. The distinction between positive perceptions and actual utilization is important because it suggests that a favourable attitude does not automatically translate into extensive or sustained implementation.

C. Years of Professional Experience and AI

Lecturers’ years of professional experience may also be associated with their awareness and attitudes towards emerging technologies. Professional experience may influence lecturers’ exposure to technological change, opportunities for professional development, confidence in using digital tools, and perceptions of the relevance or difficulty of new technologies. However, the evidence does not indicate a consistent relationship between experience and AI-related responses.

Ofosu-Ampong (2024) identified teaching experience among factors associated with faculty perceptions and acceptability of AI. In a different context, Juma (2025) reported differences in AI readiness between younger and older faculty members in Sub-Saharan African higher institutions, with younger faculty members demonstrating higher readiness. Conversely, the present study examines whether years of professional experience are associated with differences in awareness and attitudes among lecturers within a single Nigerian university department. The mixed evidence therefore provides a rationale for examining years of experience within the specific institutional context of the University of Nigeria, Nsukka.

D. Theoretical Framework

The Technology Acceptance Model (TAM), developed by Davis (1986), provides a theoretical lens for understanding users’ acceptance of technology. TAM proposes that perceived usefulness and perceived ease of use are important determinants of attitudes and behavioural intentions towards technology. Perceived usefulness concerns the extent to which an individual believes that using a technology will improve performance, whereas perceived ease of use concerns the extent to which the individual believes that using the technology will require minimal effort.

TAM has been widely applied in educational technology research and remains relevant to contemporary studies of AI acceptance. However, recent AI research suggests that technology acceptance in educational settings may involve additional considerations, including pedagogical relevance, AI literacy, institutional guidelines, social influence,

facilitating conditions, and prior experience. Cabero-Almenara et al. (2024) demonstrated the relevance of several UTAUT2 constructs to university teachers’ adoption of generative AI, while Jomezai et al. (2025) found that AI literacy, perceived pedagogical relevance, organisational guidelines, and previous AI experience were associated with university teachers’ behavioural intentions to use GenAI instructionally.

Although the present study does not measure all constructs contained in TAM or UTAUT2, TAM provides a useful theoretical perspective for understanding why lecturers’ awareness and attitudes may be relevant to the broader process of technology acceptance. The model therefore serves as a theoretical foundation for situating the present investigation within the literature on technology acceptance while recognising that awareness and attitude are the specific constructs examined in this study.

E. Research Gap and Purpose of the Study

The literature indicates growing attention to AI among university lecturers, but the evidence remains context-dependent. Nigerian studies have reported differences in AI awareness, competence, perceptions, and utilization across institutions and disciplinary groups (Amadi-Iwai et al., 2024; Madu & Musa, 2024; Sheu, 2025). Recent international and African studies have also shown that teachers’ AI beliefs, readiness, literacy, and intentions to use AI are influenced by multiple individual and institutional factors (Cabellos et al., 2024; Cabero-Almenara et al., 2024; Juma, 2025; Jomezai et al., 2025).

Despite this growing body of evidence, there remains a need for context-specific evidence on lecturers’ awareness of AI tools and attitudes towards their use within particular Nigerian university settings. In particular, evidence concerning lecturers in the Department of Science Education at the University of Nigeria, Nsukka, is limited. Furthermore, the relationship between years of professional experience and lecturers’ awareness and attitudes towards AI requires further empirical examination because findings from other contexts are not consistent.

The present study therefore examined lecturers’ awareness of AI tools and their attitudes towards their use at the University of Nigeria, Nsukka. Specifically, the study determined lecturers’ level of awareness of AI tools, examined their attitudes towards the use of these tools, and determined whether awareness and attitudes differed across categories of years of professional experience.

F. Research Questions

1. What is the level of lecturers’ awareness of artificial intelligence tools at the University of Nigeria, Nsukka?
2. What are the attitudes of lecturers towards the use of artificial intelligence tools at the University of Nigeria, Nsukka?

3. What differences exist in lecturers’ awareness of artificial intelligence tools across categories of years of experience?
4. What differences exist in lecturers’ attitudes towards the use of artificial intelligence tools across categories of years of experience?

G. Hypotheses

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

H₀₁: There is no significant difference in lecturers’ awareness of artificial intelligence tools across categories of years of experience at the University of Nigeria, Nsukka.

H₀₂: There is no significant difference in lecturers’ attitudes towards the use of artificial intelligence tools across categories of years of experience at the University of Nigeria, Nsukka.

II. METHODS

A. Research Design

The study adopted a descriptive survey design. The design was considered appropriate because the study sought to describe lecturers’ awareness of artificial intelligence (AI) tools and their attitudes towards the use of these tools, as well as examine differences in these variables across categories of years of professional experience. Data were collected from lecturers using a structured questionnaire administered electronically.

B. Study Setting and Population

The study was conducted in the Department of Science Education, University of Nigeria, Nsukka. The population comprised all 70 lecturers in the department. A census approach was adopted, and all 70 lecturers were invited to participate in the study. However, 49 lecturers completed and submitted the questionnaire and were included in the final analysis, representing a response rate of 70.0%.

C. Instrument for Data Collection

Data were collected using a researcher-developed questionnaire titled Questionnaire on Lecturers’ Awareness Level and Attitude to AI Tools (QLALAAIT). The questionnaire comprised three sections. Section A elicited information on respondents’ years of professional experience. Section B measured lecturers’ awareness of AI tools, while Section C measured their attitudes towards the use of AI tools.

Section B consisted of items rated on a four-point awareness scale: Very High (4), High (3), Low (2), and Very Low (1). Section C consisted of attitude statements rated on a four-point Likert scale: Strongly Agree (4), Agree (3), Disagree (2), and Strongly Disagree (1).

The three sections provided data for addressing the four research questions. Section B provided data for Research Questions 1 and 3, while Section C provided data for Research Questions 2 and 4. Section A provided the information required to classify respondents into the relevant categories of

years of professional experience for the analysis of Research Questions 3 and 4.

D. Validity and Reliability of the Instrument

The questionnaire was subjected to face validation to assess the clarity, relevance, and appropriateness of its items. The instrument was also trial-tested among 20 lecturers in the Department of Arts Education, Faculty of Education, University of Nigeria, Nsukka, who were not included in the main study. The internal consistency of the instrument was determined using Cronbach’s alpha. The reliability coefficients were 0.80 for Section B and 0.86 for Section C, yielding an overall reliability coefficient of 0.83. These coefficients indicated satisfactory internal consistency for the instrument.

E. Data Collection Procedure

The questionnaire was administered electronically using Google Forms. The questionnaire link was made available to all 70 lecturers in the study population. Forty-nine lecturers completed the questionnaire, and only complete responses were included in the final analysis.

F. Data Analysis

Data were analysed using the Statistical Package for the Social Sciences (SPSS), version 25. Mean and standard deviation were used to answer Research Questions 1 and 2. To answer Research Questions 3 and 4, the mean awareness and attitude scores of lecturers were compared across the categories of years of professional experience.

A criterion mean of 2.50 was used to interpret responses to the four-point scales. For the awareness scale, a mean score of 2.50 or above indicated a high level of awareness, whereas a mean score below 2.50 indicated a low level of awareness. For the attitude scale, a mean score of 2.50 or above indicated agreement with the attitude statement, whereas a mean score below 2.50 indicated disagreement. One-way Analysis of Variance (ANOVA) was used to test Hypotheses 1 and 2 at the 0.05 level of significance. The analysis examined whether statistically significant differences existed in lecturers’ mean awareness scores and mean attitude scores across the categories of years of professional experience. The null hypothesis was rejected when the p-value was less than 0.05 and was not rejected when the p-value was greater than or equal to 0.05.

III. RESULTS

The results are presented according to the four research questions and two null hypotheses that guided the study. Descriptive statistics, including mean and standard deviation, were used to address the research questions, while one-way analysis of variance (ANOVA) was used to test the hypotheses at the 0.05 level of significance.

A. Research Question One

What is the level of lecturers’ awareness of artificial intelligence tools at the University of Nigeria, Nsukka?

TABLE I. MEAN AND STANDARD DEVIATION RATINGS OF LECTURERS’ LEVEL OF AWARENESS OF ARTIFICIAL INTELLIGENCE TOOLS

S/ N	Items	N	Mean	Std. Deviation	Remarks
1	ChatGPT	49	2.70	1.29	Aware
2	Turnitin	49	2.92	0.86	Aware
3	Connected Papers	49	2.08	1.02	Not Aware
4	Quillbot	49	2.67	1.06	Aware
5	Endnote Mendeley	49	3.57	0.68	Aware
6	Grammarly	49	3.27	0.61	Aware
7	Consensus	49	2.96	1.17	Aware
8	Trinka	49	2.20	0.84	Not Aware
9	Research Rabbit	49	2.41	0.73	Not Aware
10	Google Scholar	49	2.53	1.24	Aware
11	Tableau	49	2.13	1.22	Not Aware
Cluster Mean			2.68	0.98	Aware

The results in Table I show that the lecturers demonstrated awareness of most of the AI tools included in the study. Specifically, the mean scores for ChatGPT (2.70), Turnitin (2.92), Quillbot (2.67), EndNote Mendeley (3.57), Grammarly (3.27), Consensus (2.96), and Google Scholar (2.53) were above the criterion mean of 2.50 and were therefore classified as **Aware**. However, the mean scores for Connected Papers (2.08), Trinka (2.20), Research Rabbit (2.41), and Tableau (2.13) were below the criterion mean and were classified as **Not Aware**.

The cluster mean of 2.68 indicates an overall **Aware** level of awareness of the AI tools assessed among the lecturers. The cluster standard deviation of 0.98 indicates the degree of variation in the lecturers’ awareness ratings across the listed tools.

B. Research Question Two

What are the attitudes of lecturers towards the use of artificial intelligence tools at the University of Nigeria, Nsukka?

TABLE II. MEAN AND STANDARD DEVIATION RATINGS OF LECTURERS’ ATTITUDES TOWARDS THE IMPLEMENTATION OF AI TOOLS

S/ N	Items	N	Mean	Std. Deviation	Remarks
1	I make use of ChatGPT in preparing my lesson plan.	49	2.92	0.98	Agree
2	I encourage my colleagues to use AI-powered tools in their teaching	49	3.04	0.91	Agree
3	I use AI-powered grading systems to support my assessment works	49	1.86	1.15	Disagree
4	I use Turnitin for plagiarism checks	49	3.23	0.82	Agree
5	I integrate AI-powered virtual assistants into my courses	49	1.65	0.48	Disagree
6	I use data analysis tools such as Python, Tableau, and SAS	49	3.43	0.68	Agree
7	I participate in professional development workshops to improve my skills in using AI-powered tools.	49	3.49	0.55	Agree
8	I incorporate AI-powered simulations or games into my teaching	49	2.31	0.65	Disagree
9	I advocate for the integration of AI-powered tools into our institution’s curriculum	49	2.25	0.56	Disagree
10	I employ citation management tools like Zotero, EndNote, and Mendeley.	49	3.79	0.54	Agree
Cluster Mean			2.80	0.73	Agree

Table II shows that the lecturers agreed with six of the ten attitude statements and disagreed with four. The lecturers agreed that they make use of ChatGPT in preparing lesson plans ($M = 2.92$), encourage colleagues to use AI-powered tools in teaching ($M = 3.04$), use Turnitin for plagiarism checking ($M = 3.23$), use data analysis tools such as Python, Tableau, and SAS ($M = 3.43$), participate in professional development workshops to improve their AI-related skills (M

= 3.49), and employ citation management tools such as Zotero and EndNote Mendeley (M = 3.79).

However, the lecturers disagreed with the statements concerning the use of AI-powered grading systems to support assessment (M = 1.86), integration of AI-powered virtual assistants into courses (M = 1.65), incorporation of AI-powered simulations or games into teaching (M = 2.31), and advocacy for the integration of AI-powered tools into the institution’s curriculum (M = 2.25).

The cluster mean of 2.80, which is above the criterion mean of 2.50, indicates an overall **positive attitude** towards the implementation of AI tools. The cluster standard deviation of 0.73 indicates the variation in the lecturers’ responses across the attitude items.

C. Research Question Three

What differences exist in lecturers’ awareness of artificial intelligence tools across categories of years of experience?

TABLE III. MEAN AND STANDARD DEVIATION RATINGS OF LECTURERS’ AWARENESS OF AI TOOLS BY YEARS OF EXPERIENCE

Years of Experience	N	Mean	Std. Deviation	Remark
0-5	10	3.10	0.37	Aware
6-10	23	2.92	0.48	Aware
11-15	11	2.85	0.57	Aware
16-20	4	3.11	0.26	Aware
Above 20	1	3.36	0.00	Aware
Total	49	3.06	0.34	Aware

Table III shows the distribution of lecturers’ awareness scores across the categories of years of experience. Lecturers with 0-5 years of experience recorded a mean awareness score of 3.10 (SD = 0.37), those with 6-10 years recorded a mean of 2.92 (SD = 0.48), those with 11-15 years recorded a mean of 2.85 (SD = 0.57), those with 16-20 years recorded a mean of 3.11 (SD = 0.26), while the lecturer with above 20 years of experience recorded a mean of 3.36 (SD = 0.00).

All the experience groups were classified as **Aware**, as their mean scores exceeded the criterion mean of 2.50. The total mean of 3.06 (SD = 0.34) further indicates an overall high level of awareness across the experience categories. The descriptive results therefore indicate that lecturers across all categories of years of experience demonstrated awareness of the AI tools assessed.

D. Research Question Four

What differences exist in lecturers’ attitudes towards the use of artificial intelligence tools across categories of years of experience?

TABLE IV. MEAN AND STANDARD DEVIATION RATINGS OF LECTURERS’ ATTITUDES TOWARDS AI TOOLS BY YEARS OF EXPERIENCE

Years of Experience	N	Mean	Std. Deviation	Remark
0-5	10	3.38	0.26	Agree
6-10	23	3.33	0.22	Agree
11-15	11	3.32	0.23	Agree
16-20	4	3.40	0.29	Agree
Above 20	1	3.00	0.00	Agree
Total	49	3.29	0.20	Agree

Table IV shows that lecturers across all categories of years of experience recorded mean attitude scores above the criterion mean of 2.50. Lecturers with 0-5 years of experience recorded a mean of 3.38 (SD = 0.26), those with 6-10 years recorded a mean of 3.33 (SD = 0.22), those with 11-15 years recorded a mean of 3.32 (SD = 0.23), those with 16-20 years recorded a mean of 3.40 (SD = 0.29), and the lecturer with above 20 years of experience recorded a mean of 3.00 (SD = 0.00).

All experience groups were therefore classified as **Agree**, indicating positive attitudes towards AI tools across the categories of years of experience. The overall mean of 3.29 (SD = 0.20) also indicates agreement with the attitude statements. As with Research Question 3, however, differences in descriptive means do not necessarily indicate statistically significant group differences. The corresponding ANOVA result is presented in Table VI.

E. Hypothesis 1

H₀₁: There is no significant difference in lecturers’ awareness of artificial intelligence tools across categories of years of experience at the University of Nigeria, Nsukka.

TABLE V. ONE-WAY ANOVA OF LECTURERS’ YEARS OF EXPERIENCE AND AWARENESS OF AI TOOLS

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.606	4	.152	.69	.60
Within Groups	9.696	44	.220		
Total	10.302	48			

Table V shows that the difference in lecturers’ awareness scores across the categories of years of experience was not statistically significant, $F(4, 44) = 0.69$, $p = .60$. Since the p-value of .60 is greater than the 0.05 level of significance, the null hypothesis was **not rejected**. This indicates that the observed differences in lecturers’ awareness scores across the categories of years of experience were not statistically significant.

F. Hypothesis 2

H₀₂: There is no significant difference in lecturers’ attitudes towards the use of artificial intelligence tools across categories of years of experience at the University of Nigeria, Nsukka.

TABLE VI. ONE-WAY ANOVA OF LECTURERS’ YEARS OF EXPERIENCE AND ATTITUDES TOWARDS AI TOOLS

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.153	4	.038	.678	.611
Within Groups	2.481	44	.056		
Total	2.634	48			

Table VI shows that the difference in lecturers’ attitude scores across the categories of years of experience was not statistically significant, $F(4, 44) = 0.678$, $p = .611$. Since the p -value of .611 is greater than the 0.05 level of significance, the null hypothesis was **not rejected**. This indicates that the observed differences in lecturers’ attitude scores across the categories of years of experience were not statistically significant.

IV. DISCUSSION OF THE FINDINGS

The discussion of the findings is presented according to the four research questions and the corresponding hypotheses.

A. Lecturers' Level of Awareness of Artificial Intelligence Tools

The findings revealed that lecturers in the Department of Science Education, University of Nigeria, Nsukka, demonstrated an overall awareness of the AI tools examined, with a cluster mean of 2.68. However, awareness varied across the individual tools. The lecturers were aware of ChatGPT, Turnitin, Quillbot, EndNote Mendeley, Grammarly, Consensus, and Google Scholar, whereas they reported lower awareness of Connected Papers, Trinka, Research Rabbit, and Tableau.

The differences observed across the tools may reflect differences in their visibility, accessibility, and relevance to lecturers’ existing academic activities. Tools associated with familiar tasks such as academic writing, plagiarism checking, language support, and reference management may be more readily encountered than tools that require more specialised knowledge or have narrower applications. Nevertheless, these explanations should be treated cautiously because the present study did not directly investigate the sources or determinants of lecturers’ awareness.

The finding of overall awareness is consistent with Madu and Musa (2024), who examined AI awareness among academic staff at Federal University Wukari and identified awareness as an important issue in strengthening lecturers’ digital competence. It also complements the findings of Idhalama et al. (2023), who reported increasing awareness of

emerging instructional technologies among Nigerian university lecturers, although actual utilization remained relatively low. In contrast, Amadi-Iwai et al. (2024) reported low awareness of AI among Business Education lecturers in South-South Nigeria.

The differences among these Nigerian studies suggest that lecturers’ awareness of AI may vary by institution, discipline, exposure, and the particular technologies considered. The present study therefore contributes institution-specific evidence from lecturers in Science Education at the University of Nigeria, Nsukka.

B. Lecturers' Attitudes towards the Use of Artificial Intelligence Tools

The findings showed that lecturers generally expressed a positive attitude towards the use of AI tools, as indicated by the cluster mean of 2.80. However, the responses across individual items indicate that this positive attitude was not uniform across all forms of AI use.

The lecturers agreed with statements relating to the use of ChatGPT in lesson preparation, encouraging colleagues to use AI-powered tools, using Turnitin for plagiarism checking, using data-analysis tools, participating in professional development workshops, and employing citation-management tools. Conversely, they disagreed with statements concerning the use of AI-powered grading systems, integration of AI-powered virtual assistants into courses, incorporation of AI-powered simulations or games into teaching, and advocacy for integrating AI-powered tools into the institutional curriculum.

This pattern suggests that a positive general attitude does not necessarily imply equal acceptance of every form of AI application. Lecturers may be more comfortable with AI applications associated with familiar academic and research tasks than with applications that involve greater changes to teaching, assessment, or curriculum practices. Because the study did not directly investigate the reasons for these differences, this interpretation should be regarded as a plausible explanation rather than a demonstrated causal mechanism.

The finding of a generally positive attitude is consistent with Ofosu-Ampong (2024), whose study examined faculty perceptions and acceptability of AI in teaching practices and reported substantial willingness among surveyed lecturers to accept AI for students. It is also consistent with Cabellos et al. (2024), who demonstrated the importance of university teachers’ beliefs in understanding how they respond to the use of generative AI for teaching and learning. Eleje et al. (2025) likewise provides recent Nigerian evidence concerning lecturers’ perceptions of AI effectiveness in higher education.

However, positive attitudes should not be interpreted as evidence of extensive implementation. This distinction is supported by Sheu (2025), who found that lecturers in public tertiary institutions in Zamfara State perceived AI positively

in relation to research and assessment but reported low utilization of AI tools. The present findings similarly suggest the importance of distinguishing between lecturers’ attitudes towards AI and the extent to which particular AI applications are actually incorporated into academic practice.

C. Differences in Lecturers' Awareness of AI Tools across Years of Experience

The findings showed that lecturers across all categories of years of experience were classified as aware of the AI tools, with group means ranging from 2.85 to 3.36. The overall mean across the experience categories was 3.06.

The ANOVA result showed that the observed differences in awareness across the experience groups were not statistically significant, $F(4, 44) = 0.69$, $p = .60$. The null hypothesis was therefore not rejected. This indicates that, within the respondents studied, lecturers’ awareness of the AI tools did not differ significantly across categories of years of professional experience.

The finding may suggest that exposure to increasingly visible AI technologies is not confined to lecturers at particular stages of their careers. However, the present study did not investigate how lecturers acquired their knowledge of AI, their frequency of exposure to AI tools, or their participation in AI-related professional development. Consequently, these factors cannot be established as explanations for the observed finding.

The finding is particularly interesting when considered alongside recent evidence showing that demographic and professional characteristics can sometimes be associated with AI readiness. Juma (2025), for example, reported higher AI readiness among younger faculty members than older faculty members in a Sub-Saharan African higher-education context. The difference between that finding and the present result may reflect differences in the construct measured: Juma examined **AI readiness**, whereas the present study examined **awareness**. The studies also involved different institutional contexts and populations.

The present finding therefore suggests that years of professional experience, considered alone, may not be sufficient to explain lecturers’ awareness of AI tools in the study setting. Other factors, such as digital competence, exposure, professional development, institutional support, and individual interest in technology, may warrant investigation in future studies.

D. Differences in Lecturers' Attitudes towards the Use of AI Tools across Years of Experience

The findings showed that lecturers across all categories of years of experience agreed with the attitude statements, with group mean scores ranging from 3.00 to 3.40. The overall mean of 3.29 indicates a generally positive attitude towards AI tools across the experience categories.

The ANOVA result further showed that the differences in attitude scores across the categories of years of experience were not statistically significant, $F(4, 44) = 0.678$, $p = .611$.

The second null hypothesis was therefore not rejected. This indicates that the lecturers’ attitudes towards AI tools did not differ significantly across the categories of years of professional experience.

This finding can be considered alongside recent research showing that AI acceptance among university teachers is influenced by multiple factors beyond professional experience. Cabero-Almenara et al. (2024), for example, found that performance expectations, effort expectancy, social influence, facilitating conditions, and other factors were associated with university teachers’ intention and behaviour concerning AI adoption. Similarly, Jogeza et al. (2025) found that AI literacy, perceived pedagogical relevance, organisational guidelines, and previous AI experience were important factors associated with university teachers’ intentions to use generative AI instructionally.

The absence of a significant difference by years of experience in the present study should therefore not be interpreted as meaning that experience is irrelevant to AI adoption generally. Rather, it indicates that **within this sample and for the attitude measure used in this study**, the observed differences between experience groups were not statistically significant. Future studies could examine whether variables such as AI literacy, perceived usefulness, perceived ease of use, institutional support, professional development, or prior AI experience better explain differences in lecturers’ attitudes.

V. CONCLUSION

This study examined lecturers’ awareness of and attitudes towards the use of artificial intelligence tools at the University of Nigeria, Nsukka, with particular attention to differences across categories of years of professional experience. The findings showed an overall awareness of the AI tools examined, although the level of awareness varied across individual tools. Lecturers reported higher awareness of some tools, including ChatGPT, Turnitin, Quillbot, EndNote Mendeley, Grammarly, Consensus, and Google Scholar, whereas awareness of Connected Papers, Trinka, Research Rabbit, and Tableau was comparatively lower.

The study also revealed an overall positive attitude towards the use of AI tools. However, responses to individual attitude items showed that positive attitudes were stronger towards some academic and research applications than towards certain forms of direct instructional integration. This suggests that a generally positive attitude towards AI does not necessarily translate into equal acceptance of all forms of AI application in academic practice.

Furthermore, no significant differences were found in lecturers’ awareness or attitudes towards AI tools across categories of years of professional experience. Thus, differences in lecturers’ awareness and attitudes cannot be adequately explained by years of professional experience alone. Overall, the findings indicate a generally favourable

disposition towards AI among the lecturers studied, while also highlighting differences in familiarity with specific tools and in the perceived appropriateness of different AI applications.

VI. RECOMMENDATIONS

Based on the findings of the study, the following recommendations are made:

1. **Strengthen AI-focused professional development:** The university and relevant academic units should provide regular professional development programmes that expose lecturers to both commonly used and less familiar AI tools for academic writing, research, data analysis, assessment, and instructional design.
2. **Provide guidance for responsible AI use:** The university should develop clear institutional guidelines on the appropriate and responsible use of AI in teaching, research, assessment, and academic writing. Such guidelines should address academic integrity, appropriate attribution, privacy, and the responsible use of AI-generated content.
3. **Improve access to relevant AI resources:** The university should facilitate lecturers’ access to appropriate AI-enabled tools and supporting digital infrastructure. Where feasible, institutional or subsidised access should be considered to reduce financial barriers to relevant educational and research technologies.
4. **Promote peer learning and collaborative practice:** Departments should encourage lecturers to share experiences, practical strategies, and examples of effective AI use. Such collaboration could improve familiarity with less widely known tools and support the development of contextually appropriate approaches to AI use.
5. **Encourage practical and gradual integration:** Given that lecturers expressed generally positive attitudes towards AI but differed in their responses to specific applications, professional development should move beyond awareness to practical demonstrations of how AI tools can be appropriately integrated into teaching, assessment, research, and other academic activities.

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