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Awareness, perception and use of Artificial Intelligence tools by LIS educators in Nigerian Higher institutions

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Abstract

The advent of Artificial Intelligence (AI) has brought transformative changes across various sectors, including education. In Library and Information Science (LIS), AI tools hold significant potential for enhancing teaching, research, and administrative functions. This study investigates the awareness, perception, and utilization of AI powered tools by LIS educators in Nigerian higher institutions. Data were collected using questionnaires and analysed with the Statistical Product and Service Solution (SPSS), with hypotheses tested via Pearson Product Moment Correlation (PPMC). The findings reveal a high degree of awareness and positive perception towards AI tools among LIS lecturers. Commonly used tools for teaching include ChatGPT, Socrative, ChatPDF, Turnitin, and Gamma. Despite recognizing AI's potential benefits for improving information retrieval, data management, and personalized learning, actual usage remains limited due to challenges such as rapid technological advancement, lack of infrastructure, and resistance to change. All hypotheses were rejected, indicating a significant relationship between awareness, perception, and the use of AI tools in teaching. If measures such as having enhanced AI literacy and training programs for LIS educators, integration of AI into the LIS curriculum, development of

institutional policies on AI adoption, and incentives for AI integration, then the challenges observed could be mitigated.

Keywords
Artificial intelligence; teaching and learning, emerging technology, library and information science

Introduction

Rapid advancement of technology especially Artificial Intelligence (AI), has brought so many changes to all facet of human activity including education. Artificial intelligence (AI) is developing at a rapid pace, and this has impacted on industries, including education. Artificial intelligence (AI)-enabled tools and technologies are being included into teaching and learning procedures more frequently, providing new opportunities to improve the quality of education. The display of intelligence in computers is known as artificial intelligence, or AI. The idea is to utilize pattern recognition and algorithms that learn from human behaviour to offer machines independence and intelligence (Hashem et al, 2023). Technological development has changed the ways that humans carry out myriad activities and the education sector is not left out. The recent explosion in AI technology has made it so that businesses, organisations and institutions of learning have had to adapt to the changes brought about by these developments As AI permeates daily life more and more, it is critical to assess how it will affect education, especially on teaching (Asirit and Hua, 2023).

Lecturers are at the forefront of introducing cutting-edge teaching techniques in universities in order to involve students and enhance learning outcomes (Pacheco-Mendoza et al, 2023). The way lecturers carry out their duties could be completely transformed by the incorporation of AI-based technology, such as automated grading, intelligent tutoring systems, and individualized learning

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platforms. Nonetheless, instructors' awareness and comprehension of these AI tools will determine how well they are adopted and used. Existing research (Shahsavar & Choudhury, 2023) suggests that the awareness and use of AI tools for teaching can vary significantly among lecturers, influenced by factors such as access to information, institutional support, and disciplinary differences. Some lecturers may be well-versed in the capabilities of AI technologies and actively incorporate them into their teaching practices, while others may be hesitant or unaware of the potential benefits.

AI tools have been posited to have the ability to revolutionise the classroom as it can improve teaching and learning, leading to smarter classrooms through personalized learning, improvement of assessments, and reduction in planning time for teachers (Ayala-Pazmiño, 2023). AI-based technologies provide a more individualized approach to education by analysing student data and customizing learning experiences to meet their specific requirements. This may enhance student participation, enhance learning results, and lower dropout rates. AI can also enhance tests by giving immediate responses and enabling a more precise assessment of students' performance. By automating administrative duties like grading and reporting, AI-based technologies can also cut down on the amount of time teachers need to arrange their lessons. This allows teachers to concentrate on more useful instructional activities. Present AI research focuses on training computers to converse intelligently with people, solve difficult problems, provide accurate predictions, and do a wide range of formerly manual tasks automatically (Holmes et al, 2023).

Artificial intelligence use in education is a concept that is being widely discussed as AI has infiltrated virtually all aspects of human endeavour. Various AI tools can be effectively integrated into teaching and learning in order to meet the growing

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need to reach leaners. AI tools in education can be described as educational technology (Lin, 2022) that are used to enhance teaching effectiveness. The use of educational technology is ingrained in the education sector and goes a long way in assisting learners. A study by Lin (2022) on the influence of AI in education on teaching effectiveness found that AI technologies can assist lecturers in providing more precise instruction by analysing students' activities and by providing more scientific practice ideas based on their level of mastery of the material to grasp the course's important and challenging information elements.

Several AI tools can be used in for teaching and learning. Canva, an AI tool, can be used to enhance designs and this can be particularly useful in creating posters for the library. The use of generative AI tools such as ChatGPT to generate ideas for creative and artistic writing, help in bringing up topic outlines and general research that serve as a basis for witing. ChatPDF is particularly useful in helping students get better insights and understanding into educative documents that may be in PDF format. Socrative and Quillionz are AI powered tools used to quickly and easily create quiz questions and assessment by teachers. With the use of Turnitin plagiarism check, teachers can check for originality of their students' work (Baker, 2021; Ogurlu & Mossholder, 2023; Tzoneva, 2023).

Studies on use of AI tools for teaching are however few as ChatGPT, the precursor of AI tools only became available to the public in 2022. In the medical field, Shahsavar & Choudhury (2023) did a cross-sectional survey on users' intention to use ChatGPT for diagnostic purposes and it was revealed that users showed a positive perception and readiness to use ChatGPT for decision making about health issues. However, some studies have looked at use of chatbots and other AI tools in education especially in learning. A meta-analysis of 24 research by Wu

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& Yu (2023) looked at the moderating impacts of educational levels and length of intervention, as well as the effects of AI chatbots on students' learning results. According to the study findings, AI chatbots have a statistically significant substantial impact on learning outcomes such as learning motivation, learning self-efficacy, and learning curiosity. Tlili et al. (2023) looked into issues surrounding the usage of chatbots in the classroom. The researchers studied user experiences, content analysis of interviews, and social network analysis of tweets. The results of the study indicate that early adopters show a generally positive perception to and enthusiasm about using ChatGPT for educational purposes. Similarly, the study of Lo (2023) revealed that AI tools like ChatGPT are particularly useful to teachers as it could help in the generation of course materials and provide suggestions. Baytak (2023) in a comprehensive literature review of acceptance and adoption of generative AI tools in education, using technology acceptance model (TAM) and diffusion of innovation (DOI) theories, found that educators showed a remarkable acceptance of these tools for educational purposes but with reserves. The reserve exhibited by educators stems from issues of originality in content generation made possible by these tools. In all, these studies reveal a positive perception and acceptance of AI tools for education purposes.

Despite the proliferation and acceptance of AI tools in all areas of endeavour but most especially in the education sector in developed climes, the reverse is the case in Nigeria as majority of these tools appear not to be in use in the Nigerian educational sector. Awareness and perception are key in the utilisation of a product. A study by Adeoti (2023) examining the awareness and perception of AI in the medical sphere in Nigeria showed that lecturers were less aware of AI tools for education than their student counterpart. How then can lecturers impart what

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they are ignorant about or properly utilise these tools in teaching? Studies like that of Adeoti (2023) necessitates the conduct of this study in order to adequately answer the above question.

In order to determine the critical elements influencing the acceptance and use of AI tools for teaching, this study intends to investigate the present level of knowledge and usage of these technologies among LIS lecturers. The results, which emphasize lecturers as the main change agents through their experiences and viewpoints, will add to the expanding corpus of knowledge on the application of AI in education. The knowledge acquired can guide the creation and execution of technology solutions, institutional regulations, and professional development initiatives that enable lecturers to fully utilize artificial intelligence (AI) to improve teaching and learning of LIS in Nigerian higher institutions of learning.

Research Questions

1. What is the level of awareness of AI tools for teaching by LIS educators in Nigerian Library schools?
2. What is the perception of AI tools for teaching by LIS educators in Nigerian in Nigerian library schools?
3. Which is the most commonly used AI tools for teaching by LIS educators in Nigerian library schools?
4. What are the challenges faced by LIS educators in use of AI tools for teaching in Nigerian library schools?

Hypothesis

The following null hypotheses will be tested at 0.5level of significance

1. There is no significant relationship between awareness of AI tools and use of AI tools for teaching by LIS educators in Nigerian library schools

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2. There is no significant relationship between perception of AI tools and use of AI tools for teaching by LIS educators in Nigerian library schools
3. There is no significant relationship among awareness, perception and use of AI tools for teaching by LIS educators in Nigerian library schools

Methodology

The research method used for this study is the survey research of the correlational type. The population of the study are lecturers of Library and Information Science in all higher institutions of learning in Nigeria that offer the course. The instrument for data collection is the questionnaire which was distributed using google form (https://forms.gle/mwZjGtKE7ttTwy5x8) which was distributed through various WhatsApp platforms such as NALISE online forum (National Association of Library and Information Science Educators) and also individually to LIS lecturers. A total of 154 respondents filled the questionnaire. Data was analysed using simple statistics and SPSS. The hypotheses were analysed using Pearson Product Moment Correlation (PPMC) at 0.5 level of significance.

Results and discussion of findings

Demographic Profile of the Respondents

The demographic profile of the respondents is represented in Table 1.

Table 1: Respondents by university

S/N	Name of University	Frequency	Percentage
1.	Michael Opara University	12	7.8
2.	University of Ibadan	11	7.1
3.	Modibbo Adamawa University	11	7.1
4.	University of Ilorin	10	6.5
5.	TASUED	10	6.5

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6.	Lagos State University	8	5.2
7.	ABU	8	5.2
8.	Babcock University	8	5.2
9.	Adeleke University	6	3.9
10.	Ladoke Akintola University	6	3.9
11.	Ajayi Crowther University, Oyo	5	3.2
12.	Lead City University	5	3.2
13.	Nnamdi Azikiwe University	5	3.2
14.	IBB University, Napai	4	2.6
15.	Bayero University	4	2.6
16.	Cross River State University	4	2.6
17.	Bowen University	3	1.9
18.	Federal University of Lafia	3	1.9
19.	Federal University of Technology, Minna	3	1.9
20.	University of Lagos	3	1.9
21.	Abia State University	2	1.3
22.	Ebonyi State University	2	1.3
23.	Ignatius Agune University	2	1.3
24.	Delta State University	2	1.3
25.	Ambrose Ali University	2	1.3
26.	Federal University of Dutse, Katsina	2	1.3
27.	Prince Abubakar University	2	1.3
28.	Paul University	2	1.3
29.	University of Abuja	2	1.3
30.	Umaru Musa Yardua University	2	1.3
31.	University of Port Harcourt	1	0.6
32.	Kola-Daisi University	1	0.6
33.	Atiba University	1	0.6
34.	Federal Polytechnic Ede	1	0.6
35.	Emmanuel Alayande University of Education	1	0.6

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Total		**154**	**100.0**
	Gender		
1.	Male	97	63.0
2.	Female	57	37.0
Total		**154**	**100.0**
	Age Range		
1.	20-30years	2	1.3
2.	31-40years	51	33.1
3.	41-50years	75	48.7
4.	51-upwards	26	16.9
Total		**154**	**100.0**
	Years of work experience		
1.	0-1year	5	3.2
2.	1-5years	40	26.0
3.	6-10years	72	46.8
4.	11-15years	27	17.5
5.	15-20years	7	4.5
6.	20 years upwards	3	1.9
Total		**154**	**100.0**

Table 1 shows the demographic profile of the respondents. Michael Opara University has the highest number of respondents (7.8%), while University of Port Harcourt, Atiba University, federal Polytechnic Ede, and Emmanuel Alayande University of Education have the least number of respondents (0.6%) respectively. Furthermore, the male respondents outnumbered the females at (63.0%). The results also indicate that the majority of respondents are within the age range of 36-45years (66.1%), while few of them fall within the age range of 20-30years (1.3%), indicating that the workforce at the universities being studied are made up of technologically aware lecturers. In terms of length of working experience, large percentage of respondents (46.8%) have minimum of 6-10years of experience.

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Research Questions

Research Question 1: What is the level of awareness of AI tools for teaching by LIS lecturers in Nigerian higher institutions?

Table 2: Level of awareness of AI tools for teaching by LIS lecturers in Nigerian higher institutions

S/N	Statement	SA	A	D	SD	Mean	Std. Deviation
1.	I am familiar with the various AI technologies that can be used for teaching and learning.	52 (33.8%)	67 (43.5%)	29 (18.8%)	6 (3.9%)	3.07	.825
2.	I understand how AI-powered tools and applications can be integrated into my teaching practices.	39 (25.3%)	86 (55.8%)	24 (15.6%)	5 (3.2%)	3.03	.736
3.	I stay up-to-date with the latest advancements in AI-based educational technologies.	50 (32.5%)	82 (53.2%)	15 (9.7%)	7 (4.5%)	3.14	.768
4.	I have received adequate training or professional development on the use of AI for teaching.	77 (50.0%)	63 (40.9%)	10 (6.5%)	4 (2.6%)	3.38	.725
5.	I am aware of the potential benefits of using AI to enhance student learning and engagement.	24 (15.6%)	106 (68.8%)	20 (13.0%)	4 (2.6%)	2.97	.626
6.	My institution provides sufficient resources and support for exploring the use of AI in teaching.	65 (42.2%)	60 (39.0%)	19 (12.3%)	10 (6.5%)	3.17	.884
7.	I am confident in my ability to effectively implement AI-powered tools and technologies in my teaching.	82 (53.2%)	39 (25.3%)	22 (14.3%)	11 (7.1%)	3.25	.952
8.	I understand the ethical considerations and	76 (49.4%)	53 (34.4%)	21 (13.6%)	4 (2.6%)	3.31	.803

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	potential risks associated with the use of AI in education.						
9.	I actively seek out information and resources to expand my knowledge of AI in teaching.	54 (35.1%)	74 (48.1%)	20 (13.0%)	6 (3.0%)	3.14	.787
10.	I believe that the use of AI in teaching will become more prevalent in the near future	65 (42.2%)	61 (39.6%)	24 (15.6%)	4 (2.6%)	3.21	.800

(SA=strongly Agree; A=Agree; D=Disagree; and SD=strongly disagree)

Table 2 illustrates the response rate on the level of awareness of AI tools for teaching by LIS lecturers in Nigerian higher institutions. From the results, the highest mean statistics value of (x = 3.38) indicates that majority of the lecturers have received adequate training or professional development on the use of AI for teaching. Lastly, the least mean value (x = 2.97) indicates the awareness of lecturers of the potential benefits of using AI to enhance student learning and engagement.

This result implies that the level of awareness of AI tools for teaching by LIS lecturers in Nigerian higher institutions is high.

Research Question 2: What is the perception of AI tools for teaching by LIS lecturers in Nigerian higher institutions?

Table 3: Perception of AI tools for teaching by LIS lecturers in Nigerian higher institutions

S/N	Statement	SA	A	D	SA	Mean	Std. Deviation
1.	AI-powered tools can enhance student engagement and motivation in my classes.	66 (42.9%)	66 (42.9%)	19 (12.3%)	3 (1.9%)	3.27	.750

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2.	The use of AI in teaching can lead to more personalized and adaptive learning experiences for students.	58 (37.7%)	50 (32.5%)	36 (23.4%)	10 (6.5%)	3.01	.936
3.	AI-based grading and feedback systems can improve the efficiency and accuracy of assessment.	27 (17.5%)	67 (43.5%)	53 (34.4%)	7 (4.5%)	2.74	.799
4.	AI-powered virtual assistants can provide valuable support for students outside of the classroom.	46 (29.9%)	57 (37.0%)	41 (26.6%)	10 (6.5%)	2.90	.906
5.	The integration of AI in teaching can free up lecturers' time to focus on more meaningful interactions with students	44 (28.6%)	56 (36.4%)	40 (26.0%)	14 (9.1%)	2.84	.944
6.	AI-based learning analytics can provide valuable insights to help me improve my teaching strategies.	51 (33.1%)	77 (50.0%)	23 (14.9%)	3 (1.9%)	3.14	.736
7.	The use of AI in teaching can lead to a more equitable and inclusive learning environment for all students.	67 (43.5%)	52 (33.8%)	29 (18.8%)	6 (3.9%)	3.17	.869
8.	AI-powered tools can enhance the delivery of course content and make it more engaging for students.	51 (33.1%)	59 (38.3%)	32 (20.8%)	12 (7.8%)	2.97	.925
9.	I believe that AI will play a significant role in shaping the future of teaching and learning	61 (39.6%)	53 (34.4%)	27 (17.5%)	13 (8.4%)	3.05	.955
10.	The use of AI in teaching can help students develop critical thinking and problem-solving skills.	50 (32.5%)	70 (45.5%)	29 (18.8%)	5 (3.2%)	3.07	.801

(SA=strongly Agree; A=Agree; D=Disagree; and SD=strongly disagree)

Table 3 reveals that all of the statements have a mean score above 2.0. This indicates that LIS lecturers in Nigerian higher institutions have a positive and high perception of AI tools being used for teaching. This is so as many of these lecturers perceived that AI-powered tools can 'enhance student engagement and motivation in my classes', 'lead to a more equitable and inclusive learning environment for all students', 'can provide valuable insights to help them improve

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teaching strategies', 'can help students develop critical thinking and problem-solving skills', and so on.

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Research Question 3: Which is the most commonly used AI tools for teaching by LIS lecturers in Nigerian higher institutions?

Table 4: The most commonly used AI tools for teaching by LIS lecturers in Nigerian institutions

S/N	Statement	SA	A	D	SD	Mean	Std. Deviation
1.	I use AI tools like Canva for creating engaging presentations and handouts in my teaching	35 (22.7%)	31 (20.1%)	81 (52.6%)	7 (4.5%)	2.18	.781
2.	I leverage AI tools such as Gradescope for efficient grading and feedback in my teaching practices.	16 (10.4%)	10 (6.5%)	47 (30.5%)	81 (52.6%)	1.32	.817
3.	I incorporate AI-powered virtual assistants like ChatGPT to aid in lesson planning and content creation.	84 (54.5%)	55 (35.7%)	12 (7.8%)	3 (1.9%)	3.43	.722
4.	I utilize AI tools such as Socrative for creating quizzes and assessments to enhance student learning.	29 (18.8%)	105 (68.2%)	15 (9.7%)	5 (3.2%)	3.03	.646
5.	I rely on AI platforms like Turnitin for plagiarism detection and maintaining academic integrity in my teaching.	77 (50.0%)	53 (34.4%)	13 (8.4%)	11 (7.1%)	3.27	.895
6.	I make use of AI tools like Gamma to enhance my presentation skills and delivery.	82 (53.2%)	25 (29.2%)	17 (11.0%)	10 (6.5%)	3.29	.907
7.	I employ AI tools such as Copilot Education for generating comprehensive lesson plans and handouts.	4 (2.6%)	22 (14.3%)	51 (33.1%)	77 (50.0%)	1.54	.811
8.	I integrate AI tools like Beautiful AI for simplifying slide creation and using professional templates in my teaching	5 (3.2%)	25 (16.2%)	68 (44.2%)	56 (36.4%)	1.67	.801
9.	I utilize AI platforms such as SlidesAI.io for automating slide production and enhancing visual presentations.	3 (1.9%)	21 (13.6%)	53 (34.4%)	77 (50.0%)	1.52	.783
10.	I rely on AI tools like ChatPDF for summarizing documents and facilitating content delivery in my teaching practices.	65 (42.2%)	63 (40.9%)	23 (14.9%)	3 (1.9%)	3.23	.774

(SA=strongly Agree; A=Agree; D=Disagree; and SD=strongly disagree)

The results presented in table 4 shows that the most commonly used AI tools for teaching by LIS lecturers in Nigerian universities are ChatGPT, with mean value (x = 3.43); Gamma (x = 3.29); Turnitin (x = 3.27); ChatPDF (x = 3.23) and

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Socrative (x=3.03) while the least used is Gradescope (x=1.32). This implies that ChatGPT, Gamma, Turnitin, ChatPDF and Socrative are the most commonly used AI tools by LIS lecturers for teaching.

Research Question 4: What are the challenges faced by LIS educators in use of AI tools for teaching in Nigerian higher institutions?

Table 5: Challenges faced by LIS lecturers in use of AI tools for teaching in Nigerian higher institutions

S/N	Statement	SA	A	D	SD	Mean	Std. Deviation
1.	I face technical challenges when trying to integrate AI-powered tools into my teaching	57 (37.0%)	43 (27.9%)	47 (30.5%)	7 (4.5%)	2.97	.928
2.	I encounter resistance from colleagues or administrators when proposing the use of AI in my teaching.	32 (20.8%)	73 (47.4%)	41 (26.6%)	8 (5.2%)	2.84	.812
3.	I find it difficult to find suitable AI tools that align with my teaching objectives and methods.	51 (33.1%)	57 (37.0%)	39 (25.3%)	7 (4.5%)	2.99	.878
4.	I lack the necessary training or support to effectively implement AI technologies in my teaching.	47 (30.5%)	55 (35.7%)	39 (25.3%)	13 (8.4%)	2.88	.942
5.	I am concerned about the privacy and security implications of using AI in my teaching practices	53 (34.4%)	75 (48.7%)	23 (14.9%)	3 (1.9%)	3.16	.742
6.	I face challenges in interpreting and utilizing the data generated by AI tools for teaching improvement.	69 (44.8%)	53 (34.4%)	26 (16.9%)	6 (3.9%)	3.20	.858
7.	I struggle with integrating AI seamlessly into my existing teaching methods and curriculum.	63 (40.9%)	50 (32.5%)	30 (19.5%)	11 (7.1%)	3.07	.944
8.	I perceive a lack of institutional support or resources for implementing AI in my teaching.	63 (40.9%)	61 (39.6%)	17 (11.0%)	13 (8.4%)	3.13	.920
9.	I feel overwhelmed by the rapid pace of technological advancements in AI for education	68 (44.2%)	63 (40.9%)	16 (10.4%)	7 (4.5%)	3.25	.819
10.	I believe that cultural or organizational barriers hinder the successful integration of AI in my teaching practices	32 (20.8%)	91 (59.1%)	28 918.2%)	3 (1.9%)	2.99	.688

(SA=strongly Agree; A=Agree; D=Disagree; and SD=strongly disagree)

Table 5 reveals the results above highlighted the challenges faced by LIS lecturers in using AI tools for teaching to include: being overwhelmed by the rapid

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pace of technological advancements in AI for education, inability to interpret and utilize AI generated data for teaching, concerns about the privacy and security of using AI in teaching practices, lack of institutional support or resources for implementing AI in teaching, struggles to integrate AI seamlessly into the existing teaching methods and curriculum, difficulties in finding suitable AI tools that align with teaching objectives and methods, technical issues in integrating AI-powered tools into teaching, and resistance form colleagues and administrators to the adoption of AI in teaching.

Test of Hypothesis

Table 5: Relationship between awareness of AI tools and use of AI tools for teaching by LIS educators in Nigerian higher institutions

Correlations			
		Awareness of AI tools	Use of AI Tools
Awareness of AI tools	Pearson Correlation	1	.263**
	Sig. (2-tailed)		.001
	N	154	154
Use of AI Tools	Pearson Correlation	.263**	1
	Sig. (2-tailed)	.001	
	N	154	154
**. Correlation is significant at the 0.01 level (2-tailed).			

The Pearson Correlation Coefficient value (r = 0.263) indicates a positive correlation between the two variables tested. The result also shows that there is a significant relationship between awareness and the use of AI tools for teaching by LIS educators in Nigerian higher institutions, as indicated by p-value (0.01<0.05). Therefore, the null hypothesis is rejected. This implies that the more informed the lecturers are about AI tools, the more their usage for teaching would be increased.

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Table 7: Relationship between perception of AI tools and use of AI tools for teaching by LIS lecturers in Nigerian higher institutions

Correlations			
		Perception of AI Tools	Use of AI Tools
Perception of AI Tools	Pearson Correlation	1	.266**
	Sig. (2-tailed)		.001
	N	154	154
Use of AI Tools	Pearson Correlation	.266**	1
	Sig. (2-tailed)	.001	
	N	154	154
**. Correlation is significant at the 0.01 level (2-tailed).			

From the result above, a positive correlation was found to exist between the variables, as evident by the Pearson Correlation Coefficient value (r = 0.266). Also, the p-value (0.01<0.05), indicates a significant relationship between perception of AI tools and the use of AI tools for teaching by LIS lecturers in Nigerian universities. Since the significance value (0.01) is less than the Alpha value (0.05), the null hypothesis is therefore rejected. This implies that the use of AI tools for teaching by LIS lecturers in Nigerian universities is greatly dependent on their level of perceptions of these tools.

Table 8: Relationship between awareness, perception and use of AI tools for teaching by LIS lecturers in Nigerian higher institutions

Correlations				
		Awareness of AI tools	Perception of AI Tools	Use of AI Tools
Awareness of AI tools	Pearson Correlation	1	.556**	.263**
	Sig. (2-tailed)		.000	.001
	N	154	154	154
Perception of AI Tools	Pearson Correlation	.556**	1	.266**
	Sig. (2-tailed)	.000		.001
	N	154	154	154

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Use of AI Tools	Pearson Correlation	.263**	.266**	1
	Sig. (2-tailed)	.001	.001	
	N	154	154	154
**. Correlation is significant at the 0.01 level (2-tailed).				

In table above, the p-value of the three variables tested, corresponding to (p = 0.01<0.05) respectively, shows that there is a positive significant relationship among the level of awareness, perception and use of AI tools for teaching by LIS educators in Nigerian library schools. Since the p-values are less than the alpha value (0.05), the null hypothesis is therefore rejected. This implies that a good level of awareness of AI tools among lecturers can positively influenced how they perceive these tools, which can automatically result in the acceptance of its usage for teaching, and vice versa.

Discussion of findings

Artificial intelligence tools have proliferated virtually all sphere of human endeavour and the education sector is not exempted. These tools have revolutionised teaching and learning as various aspect of education since they can be used for their effectiveness and efficiency. This study set out to investigate the awareness, perception and use of artificial intelligence tools for teaching by LIS educators in Nigerian higher institutions. The findings on level of awareness shows that majority of the respondents have a high level of awareness of AI tools. This finding contradicts Adeoti (2023). The high level of awareness shown in the study could be as a result of the respondents being in the tech savvy age range. The findings on perception of AI tools for teaching revealed that LIS lecturers in Nigerian higher institutions have a positive and high perception of these tools. This finding support Tlili et al. (2023) who found in their study that early adopters of AI tools for teaching had a high perception of them. It also supports Shahsavar

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& Choudhury (2023). On usage of AI tools, the findings revealed that ChatGPT was the most commonly used AI tool by LIS lecturers. This is not surprising as ChatGPT is the precursor of AI tools. Other AI tools like ChatPDF, Turnitin and Socrative were also shown to be highly in use by the lecturers. The finding support Shahsavar & Choudhury (2023) and Lin (2022). Use of these AI tools in Nigeria being a developing country are likely to come with some challenges. The findings show that being overwhelmed by the rapid pace of technological advancements in AI for education appears to be the major challenge, although there are other also important challenges as shown. The null hypothesis was rejected for all of the three hypotheses put forward as the findings shows a significant relationship between awareness and perception and among the three variables. This implies that a good level of awareness of AI tools among lecturers can positively influenced how they perceive these tools, which can automatically result in the acceptance of its usage for teaching, and vice versa.

Conclusion

A variety of conditions is revealed by the study on LIS educators' awareness, perception, and usage of AI tools for teaching in Nigerian higher education institutions. Although the potential benefits of artificial intelligence (AI) in improving educational outcomes are becoming more widely recognized, actual use of AI is still inconsistent because of limited technological access, inadequate training, and disparities in digital literacy. It is crucial to put in place thorough training programs, upgrade infrastructure, and encourage an innovative culture within LIS departments in order to close this gap. Higher education institutions in Nigeria may fully utilize AI tools to improve teaching and learning, which would ultimately advance the field of library and information science, by tackling these difficulties.

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