Awareness and Use of Artificial Intelligence by Undergraduate Students of Library and Information Science in Federal University Lokoja Kogi State

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Abstract
This study investigated the awareness and use of Artificial Intelligence tools among undergraduate students of Library and Information Science at Federal University Lokoja, Kogi State. The research had four objectives along with four research questions: Ascertain the level of awareness of Artificial Intelligence tools, identify the types of Artificial Intelligence tools commonly used, examine the challenges faced in using Artificial Intelligence tools, and suggest ways of enhancing use of Artificial Intelligence tools. *A descriptive survey research design was employed, with a population of 700 undergraduate students from the Department of Library and Information Science Federal University Lokoja, Kogi State. A simple random sampling technique was used to select 248 respondents and a structured questionnaire was used to collect data from 248 undergraduate students, with a response rate of 97% (242 out of 248). Data collected were analysed using descriptive statistics of percentage and arithmetic mean. The findings revealed that students have a notable level of awareness of various Artificial Intelligence tools and commonly use tools such as ChatGPT, Google Gemini, PDF Chatbox, and Photomath. However, challenges such as inadequate knowledge on the use of Artificial Intelligence, over-reliance on Artificial Intelligence, and reduction of creativity and critical thinking skills were identified. The study recommended among others that increasing awareness and training on Artificial Intelligence tools, developing Artificial Intelligence-focused courses, discouraging over-reliance on Artificial Intelligence, and encouraging critical thinking and creativity to enhance Artificial Intelligence tool usage among Library and Information Science students. It concluded that in other to enhance AI tool usage, they should be increase in awareness, development of AI-focused courses, training on AI skills, discouragement of over-reliance on AI, and encouragement critical thinking and creativity.*
Keywords: *Awareness; Artificial Intelligence; Utilization*

Introduction

Progress in Information and Communication Technology continues to push the boundaries of human capability, particularly within the field of Library and Information Science. These technological innovations have triggered a dynamic shift across various aspects of human activity. The rapid evolution of technology particularly Artificial Intelligence (AI) has significantly influenced various aspects of human life, including the educational sector. As AI continues to advance at an impressive rate, its impact on industries, especially education, becomes increasingly evident. AI-powered tools and applications are now being integrated into instructional practices, offering innovative ways to enhance educational quality. Artificial Intelligence refers to the simulation of human intelligence by machines, leveraging pattern recognition and algorithmic learning to enable machines to perform tasks independently and

intelligently (Hashem 2023). These technological innovations have reshaped how humans engage in diverse activities, and the education sector is no exception. The recent surge in AI technologies has prompted institutions, organizations, and academic environments to adjust to these transformative changes.

Artificial Intelligence (AI) serves as a broad term that refers to various Information and Communication Technology (ICT) tools and software designed to replicate human cognitive functions. Essentially, AI refers to computer programs or mobile applications—such as those found in smartphones—that are capable of performing tasks typically associated with human intelligence. Artificial Intelligence (AI) refers to the concept and advancement of computer technologies designed to carry out tasks that typically require human cognitive functions, such as speech recognition, decision-making, and pattern identification. It is a broad term that includes various technologies like machine learning, deep learning, and natural language processing. Dergunova et al., (2022) asserts that AI is generally understood as the capacity of machines to mimic human behavior. It represents a fast-evolving branch of computer science that leverages computer systems to replicate human abilities such as memory, learning, reasoning, analysis, and even creativity . Essentially, Artificial Intelligence is any software or device that applies human-like intelligence to perform functions. It is a multidisciplinary area combining science and engineering to develop systems that demonstrate intelligent behavior, including recognizing voices, making informed choices, and interpreting multiple languages. AI involves replicating human intelligence in machines through technologies that support reasoning, knowledge organization, planning, self-improvement, movement, manipulation, and innovation.

As Artificial Intelligence (AI) becomes more deeply embedded in everyday life, it is essential to evaluate its implications on educational practices, particularly in teaching and learning processes (Asirit and Hua, 2023). More so Holmes et al. (2023) argued that AI-driven technologies offer a tailored approach to education by analyzing student performance data and adjusting content delivery to align with individual learning needs. This personalization can foster greater student engagement, improve academic outcomes, and decrease attrition rates. Furthermore, AI supports more efficient and accurate assessments by providing real-time feedback and evaluating performance with greater precision. In addition, these tools can streamline administrative responsibilities, such as grading and reporting, thereby freeing educators to focus more on pedagogical tasks. Artificial Intelligence (AI) plays a pivotal role in education by providing a wide range of ready-to-use digital tools that support both independent learning and online, teacher-assisted instruction. AI enhances access to a variety of online academic resources, such as scholarly articles and digital textbooks, thereby enriching knowledge dissemination and aiding educators in their continuous professional development.

Also, AI promotes collaboration among educators by facilitating the exchange of ideas, problem-solving strategies, and the exploration of innovative pedagogical approaches, all contributing to the improvement of teaching and learning processes. Similarly, Mohsen (2023) identifies additional advantages of AI in education, including the provision of customized learning materials that align with individual learner needs, support for analyzing educational data, monitoring of student progress, and the improvement of assessment and feedback mechanisms. Furthermore, Mohsen notes that AI contributes to scientific advancement by leveraging big data analytics to guide researchers toward meaningful and novel areas of study, encouraging academic collaboration, and offering sustainable resources for ongoing learning and inquiry. Artificial Intelligence (AI) has a robust transformative impact of advanced AI models on educational practices and research. These models provide robust tools for addressing academic challenges such as responding to examination questions, generating scholarly content, simplifying complex concepts, facilitating virtual tutoring, practicing new languages, learning coding skills, and resolving technical issues in diverse disciplines, including science,

healthcare, and the humanities. Mohammad (2023), asserts that the growing relevance of AI is largely due to the massive volume of data produced by researchers, data that surpasses human capacity for interpretation. AI, not only assists in processing this data to support informed decision-making but also automates learning processes, handles repetitive tasks efficiently, and enhances the overall quality of educational tools and services.

The increasing potential for educators from diverse settings to utilize AI to streamline administrative responsibilities, offer immediate feedback, and adopt emotionally responsive and learner-centered teaching approaches. Additional trends include support for personalized and autonomous learning, reduced lesson planning demands, innovative evaluation techniques, and the use of immersive technologies like augmented and virtual reality to create more stimulating learning experiences. Al-Qahtani and Al-Dail (2020) observe that the incorporation of AI applications in education is a growing trend that not only boosts student motivation but also inspires a deeper interest in knowledge acquisition and talent development. However, they emphasize that the success of AI integration in education is significantly influenced by students' awareness and perceptions. Positive attitudes and beliefs about AI tools are key to their effective adoption and use in educational settings.

Awareness is a multifaceted concept that can refer to either an internal condition such as an emotional or intuitive response or to external occurrences perceived through the senses. It is closely related to the act of sensing, which differs from observing or perceiving, as the latter implies a more deliberate engagement with what is being sensed. The act of becoming aware, or sensing, is believed to happen when the brain is activated in specific ways. Moreover, awareness is often linked to consciousness, as it embodies the core experience of sensations, intuitions, or feelings that arise during the perception of various phenomena. Awareness signifies shared or public understanding of social, scientific, or political matters. This is why numerous advocacy efforts aim to increase awareness as a way of promoting informed engagement (Okonoko and Eruvwe 2020). Awareness often precedes action when individuals become aware of a resource or opportunity, they are more likely to make use of it. Librarians play a critical role in this regard. They are responsible for ensuring that library patrons are well-informed through orientations, training sessions, and other initiatives that help users recognize and utilize the resources available to them. Awareness refers to the recognition or comprehension of the presence or occurrence of something. Okoye et al., (2024) describes awareness as shared knowledge and understanding of a particular subject.

Awareness can be directed inward, such as through physical sensations, or outward through sensory detection of the environment. It serves as the foundational input from which creatures form basic or subjective interpretations of their surroundings. For example, insects are aware when someone attempts to swat or pursue them, yet they do not possess consciousness in the typical human sense, as they lack the complex brain structures necessary for reasoning and deep understanding. Awareness of ICT-based resources for user education programs refers to the extent to which library users possess knowledge about available information and communication technology tools that support learning and instruction. Being aware involves recognizing, sensing, or becoming conscious of events, objects, emotions, or sensory stimuli. At this cognitive level, data from the senses can be acknowledged by an individual, though this does not always indicate full comprehension. More broadly, awareness represents a state of being informed or knowledgeable about a subject.

Utilization is a process of employing something in a manner of being productive and efficient to achieve desired goal. Mohammad (2023), asserts that the use of Artificial Intelligence (AI) is largely due to the massive volume of data produced by researchers data that surpasses human capacity for interpretation. According to Moore (2019), using these machines are capable of performing complex tasks, even ones that require human intelligence. AI and its applications and benefits gets used in various fields of life of humans as expert system solve the complex problems

in various areas as science, engineering, business, medicine, video games and Advertising. The use of Artificial intelligence can help people extend their knowledge and understanding of Medicine. Image-based AI diagnoses can help doctors better treat their patients.

However, limited awareness among students poses a major barrier to the effective utilization of AI-powered tools. When learners are not sufficiently informed about the availability and benefits of these technologies, they are unlikely to explore or adopt them. A related challenge is the perceived complexity of AI tools, which often arises from this lack of awareness. Some students view these tools as overly complicated or intimidating. Without user-friendly interfaces or proper guidance on how to incorporate AI into their academic work, many students tend to stick to conventional methods. This perception also feeds into a broader issue: resistance to change. Students who are already familiar and comfortable with traditional research and writing techniques may be hesitant to embrace new technological alternatives. Overall, inadequate awareness serves as the root cause of these challenges. It is against this background that this study seeks to assess the awareness of AI among LIS students of Federal University of Lokoja, Kogi State.

Statement of the Problem

Artificial Intelligence (AI) has revolutionized various sectors, including education and information management. In the field of Library and Information Science (LIS), AI applications such as machine learning, natural language processing, and intelligent retrieval systems have enhanced information organization, research, and library services. Many LIS students may lack adequate knowledge of AI concepts, its practical applications, and its potential benefits in their field of study. This gap in awareness could hinder their ability to leverage on the effective use of AI tools for academic research, library management, and information dissemination. Similarly, factors such as lack of institutional support, inadequate training, and limited access to AI-powered resources may contribute to the low adoption of AI technologies among these students. However, despite the growing significance of AI in academic and professional settings, there is limited empirical evidence on the level of awareness and utilization of AI tools among undergraduate students of LIS in Nigerian universities, particularly in Federal University of Lokoja. Therefore, this study seeks to investigate the level of awareness and use of AI among undergraduate students of LIS in Federal University of Lokoja, Kogi State.

Purpose of the Study

The purpose of the study was to investigate the extent to which undergraduate students are aware and utilize artificial intelligence (AI) tools in their academic activities.in Federal University Lokoja, Kogi State. Specific Purpose is to:

1. Ascertain the level of awareness of Artificial Intelligence tools among the students of LIS at Federal University of Lokoja, Kogi State.
2. Assess the extent of utilization of Artificial Intelligence tools commonly used by LIS students in Federal university of Lokoja, Kogi State.
3. Identify any challenges faced by LIS students in using Artificial Intelligence tools in Federal university of Lokoja, Kogi State.
4. Suggest ways of enhancing use of Artificial Intelligence tools by Library and Information Science students in Federal University of Lokoja, Kogi State.

Research Questions

1. What is the level of awareness of Artificial Intelligence (AI) among undergraduate students in the Department of Library and Information Science at Federal University of Lokoja, Kogi State?
2. What is the extent of utilization of Artificial Intelligence (AI) are most commonly used by these students,, Kogi State?

3. What are the challenges encountered by LIS undergraduate students in the use of AI tools in Federal University of Lokoja, Kogi State?
4. What are the ways of enhancing use of AI tools by LIS undergraduate students in Federal University of Lokoja, Kogi State?

Empirical Review

A study conducted by Anih and Ukeh, (2024) titled " Awareness of artificial intelligence-assisted tools for research writing among students in Federal University Otuoke, Bayelsa State" explored the degree of awareness with artificial intelligence (AI) tools for research writing among students at Federal University Otuoke, Bayelsa State. Utilizing a survey research approach, the study sought to identify awareness gaps and highlight opportunities for improving the adoption of AI in academic writing. One research question and a null hypothesis guided the investigation. The study's target population consisted of 11,040 students, from which a sample of 1,104 was selected using a stratified proportionate random sampling method. Data collection was conducted through a structured questionnaire titled "Awareness of Artificial Intelligence Research-Assisted Tools Questionnaire (AAIRATQ)." The instrument was validated by experts for face validity and demonstrated strong reliability (Cronbach's alpha = 0.81). Results indicated that students had a generally low awareness of AI research tools, as reflected in the mean scores. Both studies examine university students' awareness of AI applications in academic settings using survey-based methodologies. However, the previous research investigated AI tools for research writing across multiple disciplines, while the current study specifically analyzes AI usage among Library and Information Science students.

In a study conducted by Nguyen and Nguyen (2025) on Artificial Intelligence (AI) tools: an investigation on English Language undergraduate students' attitude about the benefits and drawbacks. The authors employed the quantitative method for the descriptive, non-experimental research. The survey is divided into four sections, targeting both participants' positive and negative feedback about using AI in the learning journey. In the first part, students are asked to provide their general information, their basic knowledge of GenAI programs, the types of courses, the frequency, and learning models in which the GenAI programs are usually applied. In the second and third parts, the students were then asked to rate the benefits and the drawbacks of using these GenAI programs. A five-point Likert scale was employed in the second and third sections, ranging from 'Strongly disagree' to 'Strongly agree.' Higher ratings (3, 4 or 5 on the scale) indicate strong performance or ability, while lower ratings (1 or 2) reflect weaker ones. 193 undergraduates out of around 1500 students of the English language program voluntarily responded to the survey via Google Form for convenience. Particularly, there were 126 female students (65.3%), 59 male students (30.6%). The findings of this research revealed that ChatGPT is the most popular type of AI tool among students, approximately 94%. While Gemini and Grammarly were also commonly used—63.2% and 55% students paid less attention to Copilot and ELSA AI, 48% and 49%. The three most commonly used AI programs including ChatGPT, Gemini, and Grammarly. Both studies explore AI tools, with the previous study focusing on English Language undergraduates' attitudes and the present study investigating awareness and usage among Library and Information Science students.

Tripathi (2024) in his study titled "Awareness of artificial intelligence (AI) among undergraduate students" explored the knowledge, perspectives, and proficiency of undergraduate students in Kathmandu Valley regarding artificial intelligence (AI). It seeks to assess students' comprehension of Artificial Intelligence pinpoint areas where knowledge is lacking, and propose curriculum improvements to better align education with industry needs. Utilizing a quantitative research approach, data were gathered from 123 students across various institutions through a structured Likert-scale questionnaire. The results indicate that while many students acknowledge AI's role in enhancing academic work and future career opportunities, substantial gaps exist in their understanding and practical application of AI tools. The study emphasizes AI's dual impact acting as a facilitator of efficiency while also raising

concerns about job displacement and ethical challenges. Disparities in access to AI resources due to socioeconomic factors highlight the need to bridge the digital divide. Both studies explore awareness of Artificial Intelligence (AI) among undergraduate students, with the previous study focusing on students in Kathmandu Valley and the present study investigates students in the Department of Library and Information Science at Federal University of Lokoja, Kogi State.

Kaur, (2019) in his study titled "Awareness of artificial intelligence in education among management students" assessed the level of awareness among students in Delhi colleges regarding artificial intelligence (AI), focusing on three key demographic factors: gender, specialization, and the amount of time spent online exploring AI-related trends and technologies. A total of 222 responses were gathered through a survey using the snowball sampling method. Initially, 350 questionnaires were distributed, but only 222 were deemed valid for analysis after applying an outlier detection technique to clean the data. Homogeneity and normality checks were also conducted to ensure data reliability. The results indicate that there is no significant difference in AI awareness levels between male and female students. However, variations were observed among students specializing in different fields, with specialization influencing awareness levels. Additionally, the amount of time spent on the internet learning about AI trends also showed a significant impact on students' awareness of AI in education. The research recommended that Institutions can use these insights to design targeted knowledge programs, workshops, or lectures tailored to students' specializations, ensuring they are well-prepared to engage with AI-driven advancements in professional settings. Both studies used questionnaires as a data collection method to investigate awareness of Artificial Intelligence (AI). However, the respondents in the previous study were management students, whereas the present study focuses on Library and Information Science (LIS) undergraduate students at Federal University of Lokoja.

Methodology

This study adopted descriptive survey design**.** This design was deemed appropriate because it allows for the collection of data from a large population in a systematic and structured manner without manipulating any variables. Ansari et.al. (2022) defines descriptive research survey design as a type of research project that aims to obtain information in other to systematically de scribe an object, situation, or population. The population of the study comprises 700 Library an Information Science Undergraduate Students in Federal University of Lokoja. The area of this study is Lokoja. Kogi State. The sample size of 248 was used for the study. This in line with Kejcie and Morgan (1970), which states that for a population size of 700, 248 sample size could be used across 100-400 level. A simple random sampling technique was used to randomly select 248 Library and Information Science undergraduate students from 100- 400 levels as respondents for this research. Out of 248 copies of the questionnaire distributed to the undergraduate students, 242 were adequately filled, submitted and considered useful for the analysis, representing 97% response rate. The instrument for data collection for this study was a carefully structured questionnaire that was divided into two sections. Section A and section B, Section A collected respondents demographic data like age, sex, marital status and level. While section B was tailored towards collecting data that answers the four research question of the study The instrument was subjected to face validity, correctness of content and accuracy of the instrument by an expert in the Department of Library and Information Science.

The questionnaire was administered through personal contact by the researcher. Data was collected the researcher from the respondents. The data collected for this research was analyzed using descriptive statistics of percentage and arithmetic mean based on a 4-point rating scale was used to answer the research questions. The response options for research questions 1 was assigned the following values: Highly Aware (HA)=4, Aware (A)=3, Not

Aware (NA)=2, and Less Aware (LA)=1. The response options for research questions 2 was, Commonly Use (CU)=4, Rarely Use (RU)=3, Less Use (LU)=2, and Not Use (NU)=1. The response options for research questions 3&4 were assigned the following values: Strongly Agree (SA) = 4, Agree (A) = 3, Disagree (D) = 2, and Strongly Disagree (SD) = 1. A mean score of 2.50, derived from the midpoint of the scale, served as the threshold for agreement. Items with a mean score below 2.50 was considered less aware, not use, and disagreed, while those with a mean score of 2.50 or above was considered aware, use, and agreed

Table 1: Level of Awareness of Artificial Intelligence tools among the students of LIS at Federal University of Lokoja

S/No	Items	HA	A	LA	NA	Mean	Remark
1.	.ChatGPT	120(49.6%)	84(34.7%)	30(12.4%)	8(3.3%)	3.28	Aware
2.	Grammarly	100(41.3%)	95(39.3%)	40(16.5%)	7(2.9%)	3.18	Aware
3.	PDF Chatbox	60(24.8%)	85(35.1%)	70(28.9%)	27(11.2%)	2.76	Aware
4.	Education Capilot	50(20.7%)	75(31%)	80(33.1%)	37(15.3%)	2.58	Aware
5.	TOME	40(16.5%)	65(26.9%)	90(37.2%)	47(19.4%)	2.41	Less Aware
6.	Google Gemini	80(33.1%)	95(39.3%)	50(20.7%)	17(7%)	3.08	Aware
7.	DeepL Translator	70(28.9%)	85(35.1%)	60(24.8%)	27(11.2%)	2.93	Aware
8.	Youtube Summary	50(20.7%)	75(31%)	80(33.1%)	37(15.3%)	2.58	Aware
9.	Symbolab	80(33.1%)	95(39.3%)	50(20.7%)	17(7%)	3.08	Aware
10.	Photomath	90(37.2%)	80(33.1%)	40(16.5%)	32(13.2%)	2.94	Aware

Keys: HA= *Highly Aware*, **A** = *Aware*, **LA** = *Less Aware*, **NA**= *Not Aware*
Survey. 2025

Table 1 shows the level of awareness of AI tools among respondents, with awareness of ChatGPT (3.28), Grammarly (3.18), Google Gemini (3.08), Symbolab (3.08), Photomath (2.94), DeepL Translator (2.93), PDF Chatbox (2.76), Education Copilot (2.58), and Youtube Summary (2.58), while they are less aware of TOME (2.41).

Table 2: Artificial Intelligence tools commonly use by LIS students

S/No	Items	CU	RU	LU	NU	Mean	Remark
1.	.ChatGPT	124(51.2%)	80(33.1%)	33(13.6%)	5(2.1%)	3.32	Use
2.	Grammarly	40(16.5%)	50(20.7%)	80(33.1%)	72(29.8%)	2.24	Not Use
3.	PDF Chatbox	70(28.9%)	85(35.1%)	65(26.9%)	22(9.1%)	2.83	Use
4.	Education Capilot	30(12.4%)	40(16.5%)	90(37.2%)	82(33.9%)	2.08	Not Use
5.	TOME	20(8.3%)	30(12.4%)	100(41.3%)	92(38%)	1.93	Not Use

6.	Google Gemini	85(35.1%)	95(39.3%)	45(18.6%)	17(7%)	3.13	Use
7.	DeepL Translator	35(14.5%)	45(18.6%)	85(35.1%)	77(31.8%)	2.16	Not Use
8.	Youtube Summary	55(22.7%)	75(31%)	75(31%)	37(15.3%)	2.63	Use
9.	Symbolab	40(16.5%)	50(20.7%)	80(33.1%)	72(29.8%)	2.24	Not Use
10	Photomath	85(35.1%)	90(37.2%)	35(14.5%)	32(13.2%)	2.99	Use

***Keys: CU**= Commonly Use, **RU**= Rarely Use, **LU**= Less Use, **NU**= Not Use.*
Survey. 2025

Table 2 shows the types of AI tools commonly used by respondents, with the level of usage for ChatGPT (3.32), PDF Chatbox (2.83), Google Gemini (3.13), Photomath (2.99), and Youtube Summary (2.63), while not use for Grammarly (2.24), Education Copilot (2.08), TOME (1.93), DeepL Translator (2.16), and Symbolab (2.24).

Table 3: Challenges or barriers faced by LIS students in using Artificial Intelligence tools

S/No	Items	SA	A	D	SD	Mean	Remark
1.	Low level of awareness	40(16.5%)	60(24.8%)	80(33.1%)	62(25.6%)	2.24	Disagree
2.	Inadequate knowledge on the use of AI	90(37.2%)	85(35.1%)	35(14.5%)	32(13.2%)	3.07	Agree
3.	Lack of AI skills and operations	30(12.4%)	50(20.7%)	90(37.2%)	72(29.8%)	2.17	Disagree
4.	Over reliance on AI	70(28.9%)	80(33.1%)	50(20.7%)	42(17.4%)	2.83	Agree
5.	Reduction of creativity and critical thinking skills	75(31%)	85(35.1%)	45(18.6%)	37(15.3%)	2.92	Agree

Keys: SA= *Strongly Agree*, **A**= *Agree*, **D**= *Disagree*, **SD**= *Strongly Disagree*
Survey. 2025

Table 3 shows the challenges faced by respondents in using AI tools, with agreement on Inadequate knowledge on the use of AI (3.07), Over reliance on AI (2.83), and Reduction of creativity and critical thinking skills (2.92), while disagreement on Low level of awareness (2.24) and Lack of AI skills and operations (2.17).

Table 4: Ways of enhancing use of Artificial Intelligence tools by Library and Information Science students in Federal University of Lokoja

S/No	Items	SA	A	D	SD	Mean	Remark
1.	Low level of awareness should be increased by lecturers and relevant stakeholders	120(49.6%)	80(33.1%)	20(8.3%)	22(9.1%)	3.38	Agree
2.	Development and implementation of AI focused courses by the curriculum	130(53.7%)	75(31%)	15(6.2%)	22(9.1%)	3.45	Agree

	developer and educationist						
3.	Students should be trained on the acquisition of AI skills	140(57.9%)	70(28.9%)	10(4.1%)	22(9.1%)	3.53	Agree
4.	Discourage over reliance on AI	90(37.2%)	80(33.1%)	40(16.5%)	32(13.2%)	3.07	Agree
5.	Encourage students on critical thinking and creativity	110(45.5%)	85(35.1%)	25(10.3%)	22(9.1%)	3.34	Agree

Keys: SA= *Strongly Agree*, **A**= *Agree*, **D**= *Disagree*, **SD**= *Strongly Disagree*
Survey. 2025

Table 4 shows ways to enhance AI tool usage, with agreement on increasing awareness (3.38), developing AI-focused courses (3.45), training students on AI skills (3.53), discouraging over-reliance on AI (3.07), and encouraging critical thinking and creativity (3.34).

Discussion of Findings

The study reveals that Library and Information Science (LIS) students have a notable level of awareness of various AI tools, with mean scores ranging from 2.58 to 3.28 for tools such as ChatGPT (3.28), Grammarly (3.18), Google Gemini (3.08), and Symbolab (3.08), while they are less aware of TOME(2.41). This finding contradict with previous studies that found limited awareness of AI applications among university students. Nwodu's (2025) study found that most communication students had limited awareness of AI in learning, with 82% indicating no access to AI tools for educational use. Alimi et al.'s (2021) study also revealed that university students in Kwara State were largely unaware of artificial intelligence for learning.

The study reveals that Library and Information Science (LIS) students commonly use various AI tools, with a high extent of usage for ChatGPT (3.32), Google Gemini (3.13), PDF Chatbox (2.83), and Photomath (2.99), while not use for Grammarly (2.24), Education Copilot (2.08), TOME (1.93), DeepL Translator (2.16). These findings are in line with previous studies that found students utilize AI tools for academic purposes. Ventura and Lopez's (2023) study found that students used Canva, Quillbot, ChatGPT, Grammarly, and Photomath, among other tools. Nguyen and Nguyen's (2025) study also revealed that ChatGPT was the most popular AI tool among English Language undergraduates, followed by Gemini and Grammarly. However, the current study found that Grammarly was not as commonly used among LIS students, with a mean score of 2.24.

The study reveals that Library and Information Science (LIS) students face challenges in using AI tools, including inadequate knowledge on the use of AI (3.07), over-reliance on AI (2.83), and reduction of creativity and critical thinking skills (2.92). These findings are consistent with Jie and Kamrozzaman's (2024) study, which found that students faced challenges such as over-reliance on AI, lack of understanding and awareness, and ethical considerations.

The study reveals that Library and Information Science (LIS) students agree on several ways to enhance AI tool usage, including increasing awareness (3.38), developing AI-focused courses (3.45), training students on AI skills (3.53), discouraging over-reliance on AI (3.07), and encouraging critical thinking and creativity (3.34). These findings is in line with Fasola's (2024) study, which suggested initiatives such as AI literacy and training programs for LIS

educators, incorporating AI into the LIS curriculum, and establishing institutional policies on AI adoption. Kaur's (2019) study also recommended that institutions design targeted knowledge programs, workshops, or lectures tailored to students' specializations to enhance their awareness and engagement with AI-driven advancements.

Conclusion

The study revealed that Library and Information Science (LIS) students have a notable level of awareness of various AI tools and commonly use tools such as ChatGPT, Google Gemini, PDF Chatbox, and Photomath. However, students face challenges in using AI tools, including inadequate knowledge on the use of AI, over-reliance on AI, and reduction of creativity and critical thinking skills. To enhance AI tool usage, students suggest strategies such as increasing awareness, developing AI-focused courses, training students on AI skills, discouraging over-reliance on AI, and encouraging critical thinking and creativity.

Recommendations

1. The library and information science program should provide training and awareness on AI tools to equip students with the necessary skills to utilize these tools effectively.
2. The library and information science program should develop AI-focused courses to educate students on the applications and implications of AI in the field.
3. Educators should discourage over-reliance on AI and encourage students to develop critical thinking and creativity skills.
4. Educators should encourage critical thinking and creativity in students to ensure that they can effectively utilize AI tools in their academic and professional pursuits.

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