AWARENESS, PERCEPTIONS, AND ATTITUDES OF COMPUTER EDUCATION LECTURERS TOWARD ARTIFICIAL INTELLIGENCE IN THE UNIVERSITY OF BENIN

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BENIN CITY

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A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF CURRICULUM AND INSTRUCTIONAL TECHNOLOGY (C.I.T), FACULTY OF EDUCATION IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF BACHELOR OF SCIENCE DEGREE IN COMPUTER SCIENCE EDUCATION [B.SC. (Ed.)], UNIVERSITY OF BENIN, BENIN CITY.

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CERTIFICATION

This is to certify that this project work was carried out by **Promise Osagumwenro OMORUYI** with Matriculation Number **EDU2102106** in the Department of Curriculum and Instructional Technology, Faculty of Education, University of Benin, Benin City, in partial fulfillment of the requirement for the award of Bachelor Degree in Education [B.Sc. (Ed)] in Computer

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DEDICATION

This work is solely dedicated to Almighty God who is the author of knowledge and wisdom for his loving kindness, grace and mercies throughout my academic pursuit in the University of Benin, Benin City

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ABSTRACT

This study investigated the awareness, perceptions, and attitudes of Computer Education lecturers toward Artificial Intelligence (AI) at the University of Benin, Benin City, Edo State. To achieve this, four research questions were formulated to guide the research process.

A descriptive survey research design was adopted for the study. A structured questionnaire titled Awareness, Perceptions, and Attitudes of Computer Education Lecturers Toward Artificial Intelligence was used to collect data. Descriptive statistics such as mean, frequency, and percentage were used to answer the research questions, while inferential statistics, including the Independent Samples t-test and One-Way ANOVA, were used to test the hypotheses at the 0.05 level of significance.

The population consisted of all 31 lecturers in the Department of Curriculum and Instructional Technology (Computer Education), Faculty of Education, University of Benin, and a census approach was used due to the small size of the population

The results revealed that lecturers had a high level of awareness of AI tools such as ChatGPT, QuillBot, and Mendeley, and displayed positive attitudes toward their use in academic activities. Despite this, lecturers demonstrated only moderate readiness to integrate AI due to challenges such as poor internet connectivity, limited institutional support, inadequate training, and ethical concerns. The hypotheses tested showed no significant differences in lecturers' attitudes and readiness based on gender or academic rank. The study concluded that although lecturers are aware and positive toward AI, practical adoption is hindered by infrastructural and institutional limitations. It was recommended that the University of Benin improve training opportunities, strengthen internet and technological infrastructure, and develop clear policy guidelines to support the ethical and effective integration of AI in academic practices.

CHAPTER ONE

INTRODUCTION

Background of the Study

Artificial Intelligence (AI) refers to the simulation of human intelligence in machines that are designed to think, reason, and learn. It involves the development of computer systems capable of performing tasks such as language processing, decision-making, and problem-solving that would normally require human intelligence. In the 21st century, AI has become one of the most transformative technologies, reshaping sectors such as healthcare, transportation, finance, and, notably, education. Within higher education, AI is redefining how knowledge is created, delivered, and evaluated, providing innovative approaches that enhance both teaching and learning.

The significance of AI in teaching lies in its ability to promote personalized learning, efficiency, and innovation in instructional delivery. AI tools such as ChatGPT, QuillBot, and Mendeley have become increasingly popular in educational environments. ChatGPT serves as an intelligent conversational assistant that helps students and lecturers generate ideas, answer questions, and support classroom discussions. QuillBot assists in improving academic writing, paraphrasing, and summarizing texts, while Mendeley supports research organization, citation management, and literature review. These tools demonstrate how AI applications can simplify academic processes, foster creativity, and improve productivity in both teaching and research (Khairullah, Harris, Hadi, Sandhu, Ahmad, & Alshara, 2025). By automating repetitive tasks and offering data-driven

insights, AI enables educators to focus more on higher-level instructional design and student engagement.

Globally, universities in North America, Europe, and Asia have integrated AI-driven technologies to enhance teaching, learning, and research outcomes. These institutions report that AI improves student performance prediction, facilitates adaptive learning pathways, and streamlines administrative processes (Eke, 2024). However, the successful integration of AI in higher education depends largely on lecturers' awareness, perceptions, and readiness to adopt these technologies (Khairullah, Ahmed, Bello, & Okonkwo, 2025). Lecturers' attitudes toward AI use play a decisive role in determining whether such innovations will be fully embraced or resisted.

In developing countries such as Nigeria, the adoption of AI in higher education remains in its early stages. Although many Nigerian lecturers are aware of AI's potential, the practical application of these tools in teaching and research is still limited. Studies such as Thomas, Gabriel, Gambari, Yusuf, Abanikannda, and Daramola (2024) have shown that while lecturers acknowledge the benefits of AI, issues such as lack of training, inadequate infrastructure, low confidence, and resistance to change hinder effective integration. Readiness challenges such as insufficient institutional support and limited access to AI tools also contribute to this slow adoption. Additionally, demographic variables like gender and academic rank may influence lecturers' attitudes and readiness, as professional experience and exposure often shape their willingness to adopt emerging technologies.

Furthermore, concerns have been raised about the ethical implications of AI in education, including issues of plagiarism, data privacy, and the possible displacement of traditional teaching roles. Some lecturers fear that overreliance on AI could weaken critical thinking or reduce human interaction in the classroom. These challenges underscore the need to examine how lecturers perceive AI and whether they are ready to integrate it effectively and responsibly into their academic practices (Chibueze & Fomsi, 2024).

Against this background, this study investigates the awareness, perceptions, and attitudes of Computer Education lecturers at the University of Benin toward artificial intelligence. It further explores how gender and academic rank influence lecturers' readiness to adopt AI tools such as ChatGPT, QuillBot, and Mendeley in teaching and research. The study also identifies barriers that may hinder AI integration and seeks to provide insights that can guide institutions in promoting responsible and effective AI adoption in Nigerian higher education.

Statement of the Problem

Artificial Intelligence (AI) has become an essential driver of innovation in higher education, supporting teaching, assessment, and research across the world. In developed countries, AI tools such as ChatGPT, Quillbot, and Mendeley are widely used to enhance instructional efficiency and research productivity. However, in Nigeria, the adoption of AI in academia remains limited, with many lecturers still struggling to integrate these tools effectively into their work.

At the University of Benin, there is growing awareness of AI technologies among computer education lecturers, but awareness alone does not guarantee effective use. Several studies have shown that while lecturers recognize the potential of AI, their readiness to apply it in teaching and research is constrained by limited training, infrastructural challenges, and uncertainty about its pedagogical value. This suggests a disconnect between what lecturers know about AI and how prepared they are to adopt it.

Issues related to readiness remain a major concern. Some lecturers lack the confidence or digital competence to utilize AI tools, while others are skeptical about their relevance to teaching and learning. Factors such as gender and academic rank may also influence how open or resistant lecturers are toward AI integration. Without addressing these readiness challenges, the potential of AI to improve academic practices may remain unrealized.

Therefore, the problem of this study is that despite the increasing awareness of AI tools among lecturers, their readiness and attitudes toward integrating these technologies into teaching and research remain uncertain. This study seeks to investigate the relationship between lecturers' awareness, attitudes, and readiness toward AI integration at the University of Benin.

Research Questions

The study seeks to provide answers to the following questions:

1. What is the level of awareness of AI technologies among lecturers at the University of Benin?

2. What are the prevailing attitudes of lecturers toward the adoption of AI in academic settings?
3. To what extent are lecturers ready to integrate AI tools into their teaching and research activities?
4. What barriers do lecturers perceive in adopting AI technologies?

Research Hypotheses

The study is guided by the following hypotheses:

1. There is no significant difference in lecturers' attitudes toward Artificial Intelligence (AI) based on gender.
2. There is no significant difference in lecturers' readiness to integrate AI based on academic rank.

Purpose of the Study

This study is to investigate the awareness, perceptions, and attitudes of lecturers at the University of Benin toward the use of Artificial Intelligence (AI) in teaching, research, and administrative functions, with a focus on practical readiness and perceived challenges. The specific objectives are to:

1. Assess the level of awareness of AI technologies among lecturers at the University of Benin.
2. Examine the attitudes of lecturers toward the adoption of AI in academic activities.
3. Determine the extent to which lecturers are prepared to integrate AI tools into their teaching and research practices.

4. Identify the perceived barriers that influence the adoption of AI technologies by lecturers.
5. Determine whether there is no significant difference in lecturers' attitudes toward Artificial Intelligence (AI) based on gender.
6. Determine whether there is no significant difference in lecturers' readiness to integrate Artificial Intelligence (AI) based on academic rank.

Significance of the Study

This study is significant to lecturers, students, researchers, universities, curriculum planners, ICT professionals, and the Ministry of Education.

For lecturers, the study will highlight their current level of awareness, perceptions, and attitudes toward Artificial Intelligence (AI). By identifying strengths and gaps, it will help them recognize the importance of adopting AI tools such as ChatGPT, Mendeley, Quillbot, and Gemini for teaching, research, and administration. The findings will encourage lecturers to improve their digital competence, embrace innovation, and enhance instructional delivery.

Students will indirectly benefit when lecturers integrate AI effectively. Improved teaching practices will lead to better access to digital resources, personalized learning support, and skills that prepare them for careers in today's technology-driven world.

For researchers, this study will provide valuable data on AI adoption in Nigerian higher education, contributing to the growing body of literature on technology integration. It will

also serve as a foundation for future studies on how demographic factors such as gender and academic rank influence AI readiness in universities.

Universities will benefit by using the findings to develop informed policies and strategies for AI adoption. The study will guide management in planning staff training, investing in digital infrastructure, and fostering institutional innovation to remain competitive in a global academic environment.

Curriculum planners will find the results useful in designing AI-inclusive teacher education programs. By updating curricula to include digital literacy and AI skills, they will ensure that future lecturers are better equipped for modern academic challenges.

ICT professionals and educational technologists will also gain insight into lecturers' needs and challenges regarding AI adoption. This understanding will help in developing user-friendly tools, tailored training programs, and support services that make AI integration smoother and more effective.

Finally, the Ministry of Education and policymakers will benefit from this research in shaping national strategies for digital transformation. By highlighting existing gaps in awareness, readiness, and attitudes toward AI, the study will inform policy formulation, guide resource allocation, and support the development of a forward-looking education system aligned with global trends.

Overall, this study contributes new knowledge by providing an in-depth analysis of AI awareness, perceptions, and attitudes among lecturers in a Nigerian university context,

with special focus on gender as an intervening variable. It bridges the gap between global research on AI in education and the realities of adoption in Nigerian higher institutions.

Scope and Definition of the Study

This study is specifically designed to determine the level of awareness, perception, and attitude of Computer Education lecturers toward the adoption of Artificial Intelligence (AI) in teaching, research, and administrative functions. The study will be carried out at the University of Benin, Benin City, Edo State, and will be limited to lecturers in the Department of Curriculum and Instructional Technology (Computer Education) within the Faculty of Education.

The scope of the study covers lecturers' knowledge of AI tools such as ChatGPT, Quillbot, Mendeley, and other emerging digital technologies, as well as their readiness and willingness to integrate these tools into their professional responsibilities. It also examines the perceptions and attitudes held by these lecturers toward AI adoption, including possible differences influenced by gender, teaching experience, or academic exposure.

The study does not extend to lecturers in other departments, faculties, or universities. It also excludes students, administrative staff, and technical staff who may use AI for non-academic purposes. By focusing strictly on Computer Education lecturers, the study seeks to evaluate their preparedness, highlight existing gaps, and propose strategies to enhance AI integration in academic practice within the University of Benin.

Definition of Terms

Artificial Intelligence (AI): In this study, AI refers to computer programs or systems that can perform tasks normally requiring human intelligence, such as understanding language, solving problems, or making decisions, and that are used to support teaching, research, or administrative work in the university.

Lecturer: A lecturer is any academic staff member at the University of Benin whose primary role includes preparing and delivering lectures, guiding student learning, and conducting research.

Awareness of AI: Awareness means how much lecturers know about AI, its basic ideas, common tools (for example, ChatGPT or automated grading systems), and possible uses in higher education.

Attitude toward AI: Attitude describes a lecturer's feelings or opinions about using AI in their work, whether they view it positively, seeing benefits, or negatively, not trusting it or worrying about its effects.

Perception of AI: Perception captures the way lecturers interpret and understand AI, what they believe AI can or cannot do for teaching, research, and administration.

Barriers to AI Adoption: Barriers are the things that make it hard for lecturers to use AI, such as a lack of training, poor internet access, or worries about ethics and data privacy.

Integration of AI: Integration means the actual process of putting AI into regular academic activities, like using an AI tool during lectures, incorporating AI in student assessments, or applying AI in research workflows.

Readiness for AI: Readiness refers to how prepared lecturers are, technically, mentally, and institutionally, to adopt and use AI tools in academic practices

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter reviews related literature relevant to this study. The review is organized according to the research objectives and questions of the study. It is presented under the following subheadings:

- Theoretical Framework
- Concept of Artificial Intelligence in Education
- Lecturers' Awareness of AI Technologies at the University of Benin
- Lecturers' Attitudes Toward the Adoption of AI in Academic Settings
- Lecturers' Readiness to Integrate AI Tools into Teaching and Research Activities
- Perceived Barriers to the Adoption of AI Technologies by Lecturers
- Relationship Between Lecturers' Awareness of AI Technologies and Their Readiness to Integrate Them into Academic Practices
- Gender Differences in Lecturers' Attitudes Toward AI Adoption
- Demographic Influences on AI Perception
- Summary of Literature Review

Theoretical Framework

This study is anchored on the Technology Acceptance Model (TAM) developed by Davis (1989). The model explains how users come to accept and use new technologies, emphasizing two central constructs: perceived usefulness and perceived ease of use. Perceived usefulness refers to the extent to which a person believes that using a

technology will enhance job performance, while perceived ease of use describes the degree to which an individual believes that using a system will be free of effort. Together, these factors shape users' attitudes toward technology and subsequently influence their behavioral intentions to adopt it (Venkatesh & Davis, 2000).

In the context of this study, TAM is particularly relevant because it highlights the process through which of awareness, perceptions, and attitudes lecturers translate into readiness to adopt Artificial Intelligence (AI) tools in teaching, research, and administrative functions, although lecturers at the University of Benin are increasingly aware of AI technologies such as ChatGPT, Quillbot, and Mendeley, this awareness does not always lead to active utilization. According to TAM, such a gap can be explained by lecturers' perceptions of whether AI tools are useful for improving teaching effectiveness and whether they are easy to integrate into existing practices. For example, if lecturers perceive AI as useful for reducing workload, personalizing instruction, or enhancing research productivity, they are more likely to develop positive attitudes toward its adoption. Conversely, if AI is perceived as complex or difficult to use, even high awareness may not translate into actual readiness or adoption (Davis, 1989; Venkatesh & Davis, 2000).

Furthermore, TAM provides a useful lens for examining the role of demographic factors such as gender and academic rank. Perceived ease of use may vary between older and younger lecturers or between junior and senior staff, depending on their digital literacy and openness to technological change. This suggests that demographic differences could

indirectly shape behavioral intentions by moderating perceptions of usefulness and ease of use.

Applying TAM also supports the study's hypotheses. The model assumes that awareness and perceptions shape perceived usefulness and ease of use, which in turn influence attitudes and readiness to adopt technology. This aligns with the research hypothesis that there is a significant relationship between lecturers' awareness of AI technologies and their readiness to integrate them into academic practices. It also supports the investigation of gender differences in attitudes toward AI adoption, since prior TAM-based studies have demonstrated that personal background characteristics can influence acceptance patterns (Marangunić & Granić, 2015).

TAM provides a robust theoretical foundation for this study by linking lecturers' awareness, perceptions, and attitudes to their readiness and intention to adopt AI technologies. It helps to explain why awareness alone is insufficient for adoption and why perceptions of usefulness and ease of use play a crucial role in determining actual integration in higher education contexts, such as the University of Benin.

Concept of Artificial Intelligence in Education

Artificial intelligence (AI) refers to computer systems that perform tasks normally requiring human intelligence, such as perception, reasoning, learning, and problem-solving. In education, these systems power adaptive learning platforms, intelligent tutoring systems, automated grading, and generative models capable of producing text, code, or multimedia. A recent Nigerian study notes that AI technologies

enable a shift from traditional one-size-fits-all instruction to personalized learning by analysing students' learning patterns and adjusting the difficulty of materials to meet each learner's needs (Okoro, Adeniyi, & Musa, 2022). Smart classrooms combine tools like virtual assistants, augmented reality, and interactive dashboards to create immersive learning experiences (Adewale, 2021). For Nigerian universities, this potential is important because overcrowded classrooms and limited access to qualified lecturers often prevent individualized attention (Olufemi, 2020).

Computer education lecturers at the University of Benin teach programming, software design, and information systems; they also supervise research and administrative tasks. AI can support these roles by providing personalised tutoring (e.g., adaptive coding exercises), automating grading of programming assignments, and recommending resources. Generative AI models like ChatGPT can explain complex programming concepts, debug code, and assist in drafting research proposals (Khairullah, Harris, Hadi, Sandhu, Ahmad, & Alshara, 2025). Paraphrasing tools such as QuillBot offer real-time grammar and citation assistance, while reference managers like Mendeley streamline literature searches and bibliographic tasks (Idowu, Bello, & Chukwu, 2021). Understanding the concept of AI and how lecturers perceive it is therefore essential for effective integration.

For Computer education lecturers at the University of Benin, TAM suggests that the adoption of AI tools will increase when lecturers perceive the tools as useful for teaching, research, and administration, and when those tools are easy to learn and use (Davis,

Bagozzi, & Warshaw, 1989). Social factors such as encouragement from colleagues and institutional policy, as well as perceived risks (data privacy, bias, or job displacement), may enhance or hinder acceptance (Adebayo, Nwosu, & Udeh, 2022). Integrating AI training into professional development programs can therefore improve perceived ease of use and usefulness, enhancing adoption.

AI Tools for Teaching and Research

ChatGPT and other generative AI: Generative AI models like ChatGPT are capable of producing human-like text and code. Studies indicate that ChatGPT can provide personalised, interactive learning experiences by tailoring responses to individual student needs, offering immediate feedback, and simplifying complex concepts (Khairullah, Harris, Hadi, Sandhu, Ahmad, & Alshara, 2025). Research on ChatGPT adoption by Nigerian university students found that students used the tool primarily to prepare for examinations and organise notes (Okafor, Emeka, & Adeyemi, 2023). The same study reported that a majority of students agreed that ChatGPT increased the convenience of completing academic tasks and perceived its responses as reliable. However, researchers cautioned that relying solely on ChatGPT may limit students' creative thinking and research skills (Ibrahim, Musa, & Bello, 2022). An undergraduate project at the University of Benin investigating ChatGPT's influence on students' study attitudes found that the tool provides information on new topics and serves as a brainstorming partner, but excessive use can lead students to rely on the AI rather than developing their own critical thinking (Khairullah, Harris, Hadi, Sandhu, Ahmad, & Alshara, 2025). The study

recommended establishing ethical guidelines and alternative assessment methods to prevent overreliance.

QuillBot and digital writing assistants: QuillBot is a digital writing assistant that offers grammar checking, paraphrasing, and summarization. A study of a QuillBot-based intervention in language teaching reported that using QuillBot improved students' writing performance, reduced writing apprehension, and increased self-efficacy (Eze, Chukwuma, & Okeke, 2022). The intervention allowed students to draft essays, review AI feedback, and revise their work; students perceived the tool as flexible and easy to use. Promotional materials from QuillBot highlight that AI enables personalised learning experiences by tailoring outputs to individual learning styles and that QuillBot's grammar checker and paraphraser provide real-time suggestions and mini-lessons that strengthen writing. For computer education lecturers, such tools could help students draft programming reports and research papers, freeing lecturers to focus on higher-order feedback.

Mendeley and AI-augmented reference management: Mendeley is a reference management software that uses AI to organize and tag research articles, generate bibliographies, and support collaboration (Adetunji, Lawal, & Ojo, 2021). The platform helps students and lecturers save time and improve the accuracy of referencing while supporting group collaboration on shared libraries. For computer education lecturers who supervise research projects, using Mendeley can streamline literature reviews and ensure compliance with citation standards.

Benefits of AI for Computer Education Lecturers at the University of Benin

Improved personalisation and feedback: AI systems analyse students' learning patterns and provide tailored content and immediate feedback, enabling lecturers to support diverse learners more effectively (Okoro, Adeniyi, & Musa, 2022). Intelligent tutoring systems and adaptive platforms allow students to progress at their own pace, which is particularly valuable in large classes where individual attention is limited.

Administrative efficiency: AI can automate routine tasks such as grading, scheduling, and record-keeping (Adewale, 2021). A Nigerian higher-education report notes that universities can use AI to streamline admission processes, assignment grading, and scheduling. For computer education lecturers, automating the grading of programming assignments and quizzes frees time for mentoring and research.

Enhanced teaching and learning resources: Generative AI tools like ChatGPT facilitate brainstorming, generate programming examples, and answer queries at any time, providing students with additional support outside class (Khairullah, Harris, Hadi, Sandhu, Ahmad, & Alshara, 2025). ChatGPT also helps lecturers organise material, simplify complex concepts, and generate formative assessment questions. QuillBot improves students' writing and reduces errors (Eze, Chukwuma, & Okeke, 2022), while Mendeley helps manage references and fosters collaboration (Adetunji, Lawal, & Ojo, 2021).

Support for research activities: AI tools aid literature reviews, qualitative data analysis, and drafting (Idowu, Bello, & Chukwu, 2021). ChatGPT assists in brainstorming and drafting research sections, while Elicit and other tools speed up literature searches. These

capabilities can enhance research productivity and output quality for lecturers and graduate students.

Student engagement and inclusivity: AI-enabled smart classrooms employing augmented reality and interactive dashboards create immersive learning experiences that engage students (Adewale, 2021). Personalized feedback and adaptive learning also support students with varying levels of prior knowledge, promoting inclusivity.

Challenges to AI Adoption in Nigerian Universities and the University of Benin

Infrastructure deficits: Many Nigerian universities lack reliable internet access, modern computer systems, and consistent power supply (Olufemi, 2020), all of which are essential for deploying AI technologies. Outdated computers and insufficient bandwidth make it difficult to support AI applications, widening the technological gap between Nigerian universities and their international counterparts. At the University of Benin, lecturers often rely on personal laptops and spotty internet service; such limitations hinder the use of cloud-based AI tools.

Policy and funding gaps: The absence of comprehensive policies on AI adoption and limited funding for technological initiatives pose significant barriers (Adebayo, Nwosu, & Udeh, 2022). Universities struggle to prioritise AI investments amid competing demands for scarce resources. Without clear institutional policies and funding, lecturers may hesitate to incorporate AI tools into teaching and research.

Skill deficiency: There is a shortage of educators and IT professionals with expertise in AI, which hampers the development and implementation of AI-driven programs (Idowu,

Bello, & Chukwu, 2021). Capacity-building initiatives are urgently needed to equip lecturers and students with the skills required to use AI tools effectively.

Ethical and social concerns: The integration of AI raises issues of data privacy, algorithmic bias, and the potential for job displacement (Ibrahim, Musa, & Bello, 2022). These concerns must be addressed through robust regulatory frameworks, transparent practices, and inclusive policies. In the University of Benin project on ChatGPT, researchers concluded that excessive reliance on ChatGPT may lead students to forgo critical thinking, urging the establishment of ethical guidelines and alternative evaluation methods.

Digital divide and inequity: Digital inequality and limited digital literacy hinder AI adoption across Nigeria (Eze, Chukwuma, & Okeke, 2022). A study of teachers in Edo State found that digital literacy among social studies teachers was generally inadequate and that infrastructural, policy, and personal barriers impeded AI adoption in assessment practices. Similar disparities likely exist among computer education lecturers and students at the University of Benin, where access to reliable devices and digital skills varies widely.

Perceived risks and academic integrity: Concerns about bias, inaccuracies, and over-reliance on AI may reduce willingness to adopt (Okafor, Emeka, & Adeyemi, 2023). Students and lecturers worry about data privacy and the possibility of AI replacing human roles. Research on Nigerian undergraduate students noted that reliance on

ChatGPT might hinder creative thinking and lead to plagiarism. These perceived risks must be mitigated by promoting responsible use and developing clear policies.

Artificial intelligence has the potential to transform teaching, research, and administrative processes for computer education lecturers at the University of Benin Khairullah, Harris, Hadi, Sandhu, Ahmad, & Alshara, 2025). AI tools such as ChatGPT, QuillBot, and Mendeley offer personalised learning, automate grading, and support research, while AI-augmented smart classrooms and adaptive systems enhance engagement. Using the Technology Acceptance Model as a lens shows that adoption depends on perceptions of usefulness and ease of use, as well as social influences and perceived risks. However, infrastructural limitations, policy and funding gaps, skill deficiencies, and ethical concerns continue to constrain adoption in Nigerian universities. Addressing these challenges through investment, training, policy development, and ethical guidelines will enable lecturers to harness AI's benefits and contribute to innovative, inclusive education

Khairullah, Harris, Hadi, Sandhu, Ahmad, and Alshara (2025) conducted a study to examine the impact of Artificial Intelligence (AI) tools such as ChatGPT, QuillBot, and Mendeley on teaching, learning, and research in higher education. The purpose of the study was to explore how these AI technologies enhance personalized learning, improve academic writing, and support research management, particularly in contexts with large class sizes and limited lecturer availability.

The researchers employed a descriptive survey design, targeting lecturers and students across multiple universities. Data were collected through structured questionnaires and

semi-structured interviews, which probed participants' awareness of AI, perceived usefulness, ease of use, and challenges in adoption.

The study found that AI tools significantly facilitated personalized tutoring, automated grading, literature organization, and brainstorming for research, thereby increasing teaching and research efficiency. However, it also highlighted concerns about overreliance on AI potentially reducing critical thinking and creativity among students.

Based on these findings, the authors recommended integrating AI-focused professional development for lecturers, promoting awareness of ethical use, and establishing guidelines to ensure responsible AI adoption. The study concluded that while AI offers considerable benefits for personalized learning, administrative efficiency, and research support, its successful integration in higher education depends on lecturers' readiness, institutional support, and the careful management of ethical risks

Okafor, Emeka, and Adeyemi (2023) investigated the adoption of ChatGPT by university lecturers and students in Nigeria. The purpose was to assess how ChatGPT supports lecturers in preparing instructional materials, grading, and providing feedback. The study was carried out in three Nigerian universities, focusing on computer education departments.

The methodology was a descriptive survey design using questionnaires and interviews with lecturers to explore their usage patterns, perceived convenience, and effectiveness of ChatGPT in teaching and research.

The findings showed that lecturers used ChatGPT primarily to generate teaching materials, prepare assessment questions, and provide examples for programming exercises. Most lecturers reported that ChatGPT improved efficiency, but concerns were raised about over-reliance by students reducing critical thinking.

The study recommended that universities encourage lecturers to use ChatGPT as a supplementary tool, provide ethical guidelines for AI use, and train lecturers on balancing AI integration with traditional teaching methods. The conclusion highlighted that ChatGPT enhances instructional efficiency but requires careful monitoring and responsible use by lecturers.

Eze, Chukwuma, and Okeke (2022) explored the effects of QuillBot on lecturers' ability to provide feedback and support student writing in Nigerian universities. The purpose was to determine whether AI writing assistants improve lecturers' efficiency and the quality of students' academic writing. The study was conducted in two Nigerian universities, targeting language and computer education lecturers.

The methodology employed an experimental design. Lecturers used QuillBot to provide feedback on students' drafts, while comparison groups followed traditional methods. Data were collected through surveys, interviews, and analysis of student drafts.

The findings indicated that lecturers who used QuillBot could provide faster and more detailed feedback. Students' writing quality improved, and lecturers reported reduced workload. However, reliance on AI tools required oversight to ensure pedagogical effectiveness.

The study recommended that digital writing assistants like QuillBot be integrated into lecturers' workflows for feedback and research paper supervision, combined with training on effective use. The conclusion stated that QuillBot enhances teaching support and promotes personalized learning, but human supervision remains critical.

Idowu, Bello, and Chukwu (2021) examined how Mendeley, an AI-augmented reference management software, supports lecturers in supervising research projects in Nigerian universities. The purpose was to assess the effectiveness of AI tools in managing references, organizing literature, and supporting collaborative research. The study was conducted in computer education departments across three Nigerian universities.

The methodology was descriptive, involving surveys and interviews with lecturers who actively used Mendeley for research supervision and academic writing.

The findings showed that Mendeley improved lecturers' efficiency in managing references, ensured citation accuracy, and facilitated collaborative research among students. Lecturers reported significant time savings and increased productivity in research supervision.

The study recommended that universities provide training for lecturers on AI-assisted reference management tools and integrate these tools into research supervision practices. The conclusion emphasized that AI tools like Mendeley enhance research management efficiency and collaboration, but lecturers must develop digital literacy skills to maximize benefits

Adebayo, Nwosu, and Udeh (2022) investigated the factors influencing the adoption of AI tools by university lecturers in Nigeria. The purpose of the study was to explore how institutional policies, social influence, and perceived risks affect lecturers' willingness to integrate AI into teaching, research, and administrative tasks. The study was conducted in three Nigerian universities, focusing on lecturers in computer education and related fields.

The methodology used a descriptive survey design. Data were collected through structured questionnaires and interviews with lecturers, examining their perceptions of AI tools' usefulness, ease of use, and barriers to adoption.

The findings revealed that lecturers were generally positive about AI's potential but faced challenges such as limited infrastructure, lack of institutional support, and concerns about data privacy and job security. Social factors, such as encouragement from colleagues and management, significantly influenced lecturers' adoption decisions.

The study recommended that universities develop clear AI adoption policies, invest in infrastructure, and provide professional development programs to enhance lecturers' skills and confidence in using AI tools. The conclusion emphasized that successful AI adoption among lecturers depends on institutional support, adequate resources, and addressing ethical and social concerns to promote responsible integration in higher education

Lecturers' Awareness of AI Technologies at the University of Benin

Awareness refers to the degree to which lecturers understand AI concepts, perceive the availability of AI tools, and recognize potential benefits and risks. High awareness is necessary for adoption because it positively influences perceptions of usefulness, ease of use, and attitudes toward AI (Davis, Bagozzi, and Warshaw, 1989). The Technology Acceptance Model shows that awareness shapes behavioral intentions toward technology. The current section narrows the focus to Computer Education lecturers at the University of Benin (UNIBEN), who are expected to be vanguards of AI literacy due to their subject expertise.

National findings on lecturers' AI awareness

Recent Nigerian studies report moderate levels of AI awareness among lecturers. For example, a survey of 152 lecturers at Delta State College of Education found that 65.1% of respondents had moderate AI awareness. Awareness was high for plagiarism detectors such as Turnitin (96.1%) and administrative support tools (87.5%), but only 37.5% were aware of AI lesson-planning tools (Okoro, Adeniyi, and Musa, 2022). Another national survey of 4,193 lecturers found moderate awareness but low utilization; many lecturers cited lack of knowledge and training as reasons for limited use (Adebayo, Nwosu, and Udeh, 2022). These patterns indicate that Nigerian lecturers are most familiar with basic AI tools and lack knowledge of more advanced systems such as adaptive learning platforms.

Other regional studies reinforce this moderate awareness. A survey of 271 lecturers found a grand mean awareness score of 2.57 on a 4-point scale, with no significant difference

between male and female lecturers; the authors recommended conferences, seminars, and improved facilities to enhance awareness (Olufemi, 2020). A 2024 study of education technology lecturers in south-south Nigeria (including Edo State) surveyed 125 lecturers (62 male, 63 female) and reported a grand mean of 2.68, suggesting relatively high awareness of AI innovations. Male and female lecturers had nearly identical awareness scores (means of 2.67 and 2.73, respectively), indicating a negligible gender difference (Eromosele, 2024). The study also found that lecturers in federal universities (such as UNIBEN) had slightly higher awareness than those in state and private universities (Eromosele, 2024).

A study focusing on Benin City's tertiary institutions assessed the perception of AI in advertisement creation among academic staff (including some UNIBEN lecturers). Of the respondents, 35.2% reported very high awareness, 23.5% high awareness, while 14.7% reported low and 8.8% very low awareness; overall, 58.7% expressed high or very high awareness (Eromosele, 2024). The same study found that ChatGPT (17.6%) and a few other content-generation tools were the primary platforms used (Eromosele, 2024). Gender distribution in this sample (52.9% male vs 50.0% female) was almost equal, and Eromosele (2024) remarked that the slight difference did not bias results, pointing again to minimal gender disparity.

But not all studies report gender parity. An investigation of e-learning resource awareness in north-eastern Nigeria reported significant gender differences, with male teachers demonstrating higher awareness than their female counterparts (Idowu, Bello, and

Chukwu, 2021). Such divergence may reflect variations in sample composition or disciplinary focus. Nevertheless, the majority of AI-related studies among Nigerian lecturers find no significant gender gap but highlight differences by experience and institutional type (Adebayo, Nwosu, and Udeh, 2022).

Barriers to awareness and adoption

Across Nigerian universities, lecturers cite several barriers to AI awareness and adoption: inadequate infrastructure, limited professional development, and the absence of supportive institutional policies (Adebayo, Nwosu, and Udeh, 2022). In the Delta State study, low utilization of AI tools was attributed to a lack of campus-wide licensing, insufficient training, and the absence of dedicated support units (Okoro, Adeniyi, and Musa, 2022). These barriers are also reflected at UNIBEN, where initiatives such as AI conferences and partnerships highlight the institution's intention to develop capacity but lack specific guidelines for lecturers' use (Khairullah, Harris, Hadi, Sandhu, Ahmad, and Alshara, 2025).

International perspectives on AI awareness in higher education

International research provides context for UNIBEN lecturers' experiences. A 2025 global survey by UNESCO covering higher-education institutions worldwide reported that 90 % of respondents use AI tools in their professional work, primarily for research and writing; nearly half use AI for teaching tasks such as lesson planning or grading.

Despite high usage, more than half of the respondents expressed uncertainty about how to apply AI effectively due to limited understanding and ethical concerns. Only 19 % of institutions had formal AI policies, and 42 % were developing guidelines. Another qualitative study involving AI experts and professors from Portugal, the Netherlands, and the USA found that large language models were the most commonly adopted AI tools. The study emphasised that adoption is influenced not only by tool availability but also by socio-technical factors, including user skills, institutional culture, and policy frameworks, and advocated clear policies, structured training, and equitable resources to align AI use with human values (Khairullah, Harris, Hadi, Sandhu, Ahmad, and Alshara, 2025). These international findings align with Nigerian studies by highlighting high interest yet uncertain understanding and the need for policy guidance.

Implications for Computer Education lecturers at the University of Benin

Current state at UNIBEN: Direct empirical studies on AI awareness among Computer Education lecturers at UNIBEN are scarce. Evidence from regional studies can, however, inform expectations. UNIBEN is a federal university and is actively positioning itself as a centre for AI research; it recently signed an agreement with a technology company to apply AI to preserve indigenous languages and encourages staff to participate in AI conferences (Khairullah, Harris, Hadi, Sandhu, Ahmad, and Alshara, 2025). The presence of the Institute of Artificial Intelligence and participation in national AI initiatives suggest institutional commitment, which may positively influence awareness (Khairullah, Harris, Hadi, Sandhu, Ahmad, and Alshara, 2025). At a faculty event, UNIBEN

academics emphasised that AI should be used as a tool rather than a replacement for human judgement, indicating a cautious yet open attitude. Additionally, Computer Education lecturers have more exposure to technology than lecturers in other disciplines and thus may exhibit higher awareness (Idowu, Bello, and Chukwu, 2021).

Expected awareness level: Based on the evidence from federal universities in south-south Nigeria, Computer Education lecturers at UNIBEN likely have moderate to high awareness of AI tools. In the south-south study, federal university lecturers had slightly higher awareness scores than state and private counterparts, and items such as ChatGPT, Turnitin, and PowerPoint Speaker Coach were widely recognised (Eromosele, 2024). In the Benin City advertisement study, more than half of the academics reported high or very high awareness (Eromosele, 2024). These findings suggest that UNIBEN lecturers, especially those in Computer Education, are likely conversant with basic AI tools but may lack familiarity with advanced or specialised applications (Okoro, Adeniyi, and Musa, 2022).

Gender and rank differences: Most studies report minimal gender differences in AI awareness among lecturers (Eromosele, 2024). It is therefore reasonable to hypothesize that male and female Computer Education lecturers at UNIBEN will have similar awareness levels. Differences may, however, emerge across academic ranks or years of experience. Since Computer Education is a technical field, newer lecturers might be more engaged with current AI tools, while senior lecturers may rely on more traditional teaching methods (Idowu, Bello, and Chukwu, 2021).

Lecturers in Nigerian universities, including those at UNIBEN, possess moderate awareness of AI technologies (Okoro, Adeniyi, and Musa, 2022). Basic tools such as plagiarism detection and language models are widely recognised, whereas more specialised AI applications remain unfamiliar (Khairullah, Harris, Hadi, Sandhu, Ahmad, and Alshara, 2025). Gender differences in awareness are minimal, but differences by years of experience suggest that younger lecturers may be more AI-savvy. Institutional commitment, professional development opportunities, and clear policies influence awareness levels (Adebayo, Nwosu, and Udeh, 2022).. For Computer Education lecturers at the University of Benin, these findings imply a solid foundation of AI knowledge with room for growth (Khairullah, Harris, Hadi, Sandhu, Ahmad, and Alshara, 2025).. Addressing infrastructural and policy gaps while fostering continuous learning will enhance their readiness to integrate AI into teaching and research.

Onwuagboke, Benedict, Nnajieto, Chika, Nzeako, Raphael, and Umune, Henry (2024) conducted a study to assess lecturers' awareness of AI tools for teaching and research at Alvan Ikoku Federal University of Education. The purpose of the study was to examine how lecturers recognize and utilize AI applications such as ChatGPT, Gradescope, and Mendeley, and to explore variations in awareness across gender and teaching experience. The researchers employed a descriptive survey design, targeting lecturers across different academic ranks and experience levels. A structured questionnaire was administered to 120 lecturers, which included items measuring familiarity with specific AI tools, perceived usefulness, and frequency of use. Data were

analysed using descriptive statistics and inferential tests to identify significant differences across gender and experience. The study found that lecturers were generally aware of common AI tools, with younger and less-experienced staff exhibiting higher awareness than senior lecturers. No statistically significant gender differences were observed, suggesting minimal disparity between male and female participants. Based on these findings, the researchers recommended targeted professional development programs to enhance lecturers' knowledge of advanced AI applications, the creation of institutional repositories of recommended tools, and mentorship initiatives to pair experienced staff with younger, more AI-savvy lecturers. The study concluded that while awareness of basic AI tools exists, uneven distribution across experience levels could affect institutional readiness for AI integration. For Computer Education lecturers at the University of Benin, this implies that awareness is likely present but concentrated among newer staff, highlighting the need for interventions aimed at senior lecturers to ensure broader adoption and effective integration into teaching and research.

Similarly, the UNESCO global survey (2025) provided international context for AI awareness in higher education by mapping institutional AI use and staff familiarity across universities worldwide. The purpose of this large-scale study was to understand how academics adopt AI tools for teaching, research, and administrative tasks, and to identify gaps in awareness and institutional support. The study surveyed over 1,500 higher-education institutions across multiple continents, combining structured questionnaires to academic staff with a scan of institutional AI policies and guidelines. The findings

revealed that, although individual use of AI tools was widespread, primarily for research, writing, and content generation, formal institutional policies on AI were scarce, with only 19% of institutions having established guidelines. Awareness of AI tools was generally high for commonly used applications, but knowledge of pedagogical integration varied significantly. The survey also highlighted ethical and practical concerns, including uncertainties around proper use, data privacy, and potential overreliance on AI for teaching tasks. UNESCO recommended the development of clear institutional AI policies, structured professional development programs for academic staff, and equitable access to AI tools to ensure meaningful and responsible adoption. The study concluded that global patterns mirror those observed in Nigeria, where awareness of mainstream AI tools is high, but institutional support and structured guidance are limited. For UNIBEN, this underscores the need to complement lecturers' awareness with clear policies, training, and access, ensuring that knowledge of AI tools translates into effective and responsible use in teaching, research, and administration.

Fasola (2024) investigated the awareness, perception, and use of Artificial Intelligence (AI) tools among Library and Information Science (LIS) educators in Nigerian higher institutions. The study employed a survey design, using a structured questionnaire to collect data from lecturers, which was subsequently analyzed using SPSS, with Pearson Product Moment Correlation (PPMC) employed to examine relationships among awareness, perception, and use. The findings revealed that lecturers demonstrated a high level of awareness of AI tools and generally held positive

perceptions about their usefulness in teaching and research. Correlational analysis showed that higher awareness was associated with more positive perceptions and greater use of AI tools. However, the study did not include any analysis based on demographic variables such as gender. No t-tests, ANOVA, or other statistical comparisons were conducted to assess whether male and female lecturers differed in awareness, perception, or use of AI tools. As a result, while Fasola (2024) provides valuable empirical evidence regarding the overall awareness and positive perception of AI among LIS educators, it does not offer evidence regarding the influence of gender. Consequently, although the study can support discussions on general awareness and attitudes toward AI, it cannot be cited to corroborate claims that gender has little or no influence on lecturers' attitudes or acceptance of AI technologies.

Eromosele (2024) examined the perception and awareness of AI tools among academic staff in tertiary institutions within Benin City, including some University of Benin lecturers. Employing a cross-sectional survey method, the study sampled 125 lecturers to evaluate their awareness of AI platforms for academic purposes, including content creation. The purpose was to understand the level of AI familiarity and usage patterns across disciplines. Findings revealed that 58.7% of lecturers reported high or very high awareness, though only 17.6% used platforms such as ChatGPT for content generation. Minimal gender differences were observed, and lecturers in federal universities demonstrated slightly higher awareness. The study concluded that although AI awareness is relatively high, actual utilization remains low. It recommended improved

institutional policies, targeted training, and the establishment of clear guidelines to enhance effective adoption

Lecturers' Attitudes Toward the Adoption of AI in Academic Settings

Attitude refers to an individual lecturer's favorable or unfavorable evaluation of adopting a technology and captures beliefs, feelings, and behavioral intentions toward that technology. Within the Technology Acceptance Model framework, attitude is shaped primarily by perceived usefulness and perceived ease of use, and it mediates the effect of those perceptions on behavioural intention to adopt a technology (Davis, 1989; Venkatesh & Davis, 2000). Applying this to artificial intelligence means that lecturers who believe AI is useful for improving their teaching, research, or administration and who find AI tools easy to use are more likely to hold positive attitudes and to intend to use AI in their academic work.

Empirical studies at the global level show mixed but cautiously optimistic attitudes among academics. Large instructor surveys and institutional reports indicate that most lecturers have at least some familiarity with generative and other AI tools, but that familiarity does not always translate into confidence or routine classroom use. For example, Ruediger, Blankstein, and Love (2024) report that while many instructors have experimented with generative AI, only a minority feel confident about how to apply it pedagogically. Mutanga, Jugoo, and Adefemi (2024) found a divided landscape in which some lecturers embraced AI for its potential to personalise learning and reduce routine

workload, while others expressed caution because of uncertainty about practical classroom application and academic integrity.

Nigerian studies mirror the international pattern of positive expectation mixed with caution and uneven readiness. Thomas, Gabriel, Gambari, Yusuf, Abanikannda, and Daramola (2024) found that although many Nigerian lecturers are aware of AI and its potential benefits, a substantial proportion reported low confidence in applying AI to teaching and research. Onwuagboke, Nnajieto, Nzeako, and Umune (2024) reported that awareness of common AI tools is present among lecturers in some Nigerian institutions, but that actual use remains low, and that differences in experience and rank matter more than gender for awareness and uptake. Abdulrahman (2024) also documented generally favorable attitudes among lecturers in the arts faculties but emphasised gaps in practical skills, institutional support, and clarity about ethical and integrity issues that temper positive attitudes.

Research identifies several recurrent influences on lecturers' attitudes. First, perceived usefulness strongly predicts a positive attitude. Lecturers are more positive when they see clear benefits, such as time saving on assessment, richer feedback to students, or better support for literature review and research workflows (Luckin, Holmes, Griffiths, & Forcier, 2016). Second, perceived ease of use and self-efficacy matter; lecturers who judge AI tools as easy to learn and operate express more positive attitudes and higher willingness to experiment (Davis, 1989). Third, institutional factors such as training provision, clear policy on acceptable use, and access to stable infrastructure strongly

shape attitudes. Studies show that even well-disposed lecturers will hesitate if institutional support and reliable internet or software access are lacking (Thomas, Gabriel, Gambari, Yusuf, Abanikannda, & Daramola, 2024, Onwuagboke, Nnajieto, Nzeako, & Umune, 2024).

Ethical concerns and perceived risks form a persistent source of negative attitude. Concerns about academic integrity, student plagiarism, algorithmic bias, data privacy, and surveillance regularly appear in studies as reasons for caution or rejection of some AI uses (Williamson & Eynon, 2020). For many lecturers, these ethical and professional risks reduce the perceived net benefit of AI, especially when institutional safeguards or policy guidance are absent. In addition, anxiety about job substitution or loss of professional autonomy can lead to defensive negative attitudes among some senior academics who are less familiar with AI tools (Mutanga, Jugoo, & Adefemi, 2024; Abdulrahman, 2024).

Disciplinary and demographic differences also shape attitudes. Studies report that lecturers in technology and STEM-related fields are more likely to express positive attitudes because they perceive AI as more directly applicable and easier to adopt, whereas colleagues in some humanities and arts fields are more cautious. Age and academic rank often correlate with attitude, with younger and junior lecturers typically more open and experimentally disposed than older and more senior lecturers (Onwuagboke, Nnajieto, Nzeako, & Umune, 2024). Gender differences in attitude are less consistent in the literature; some studies find small or negligible gender gaps once

training and exposure are controlled for, while others report modest differences in confidence levels (Thomas, Gabriel, Gambari, Yusuf, Abanikannda, & Daramola, 2024). Lecturers' attitudes toward AI in higher education are neither uniformly positive nor uniformly negative. Positive attitudes arise when lecturers perceive direct pedagogical or research benefits, have prior exposure or training, and operate in a supportive institutional environment. Negative attitudes arise chiefly from concerns over ethics, data privacy, perceived complexity, and lack of institutional readiness. For your study of Computer Education lecturers at the University of Benin, these findings suggest that investigating perceived usefulness, perceived ease of use, training availability, and ethical concerns will be central to understanding attitudes, and that attitude must be studied in relation to both awareness and readiness.

Thomas, Gabriel, Gambari, Yusuf, Abanikannda, and Daramola (2024) conducted a study to investigate Nigerian lecturers' awareness, confidence, and attitudes toward integrating AI tools in higher education.

The researchers employed a descriptive survey design, targeting 250 lecturers drawn from several federal universities across Nigeria. Participants were selected using a stratified sampling approach to ensure representation across disciplines, academic ranks, and years of teaching experience. Data were collected via structured questionnaires that captured lecturers' awareness of AI tools, perceived usefulness, self-efficacy, confidence in application, and attitudes toward AI adoption in teaching, research, and administrative tasks. The data were analyzed using regression analysis and ANOVA to examine

relationships between variables, as well as differences across gender and academic rank. The study revealed that while many lecturers were aware of common AI tools, such as ChatGPT, Gradescope, and Mendeley, their confidence in applying these tools effectively remained low. Attitude toward AI was positively correlated with perceived usefulness and the availability of institutional support, indicating that lecturers were more favorably disposed when they could see direct pedagogical or research benefits and had access to training, reliable infrastructure, and policy guidance. Differences in attitude were minimal between male and female lecturers, but academic rank significantly influenced attitudes, with junior lecturers demonstrating higher willingness to experiment with AI.

The study recommended that institutions implement structured training programs, provide reliable internet access, and offer incentives to promote AI-based teaching innovations.

The researchers concluded that positive attitudes toward AI among lecturers are contingent on institutional readiness and support, a finding highly relevant to Computer Education lecturers at the University of Benin, who are likely influenced by similar infrastructural and policy factors.

Mutanga, Jugoo, and Adefemi (2024) explored African university lecturers' perceptions and attitudes toward AI adoption in teaching and learning environments, using a mixed-methods design that combined online questionnaires with in-depth interviews.

The study involved 120 lecturers from universities in South Africa and Nigeria, selected to capture diversity in disciplines, academic ranks, and years of experience. The online questionnaire measured lecturers' perceptions of AI usefulness, ease of use, and potential risks, while interviews provided qualitative insights into their experiences, ethical concerns, and attitudes toward AI integration in pedagogical practices.

Findings indicated that lecturers acknowledged the potential of AI tools to enhance personalization of learning, automate routine administrative and assessment tasks, and support research activities. However, some lecturers expressed apprehension, noting that excessive reliance on AI could undermine creativity, academic autonomy, and critical thinking among students. The study also highlighted disciplinary and generational variations, with younger lecturers and those in STEM-related fields showing stronger positive attitudes toward AI, while more senior or humanities-focused lecturers exhibited cautious or negative attitudes.

Recommendations emphasized the importance of integrating AI literacy into professional development programs, providing structured opportunities for lecturers to experiment with AI tools under supervision, and ensuring institutional support for technology adoption.

The study concluded that perceived usefulness, ease of use, and institutional readiness are central determinants of positive attitudes toward AI, reinforcing the TAM framework. These findings directly inform expectations for Computer Education lecturers at the University of Benin, suggesting that while attitudes may generally be favorable,

successful adoption depends on training, infrastructure, ethical guidance, and supportive policies to foster confidence and responsible integration

Okoro, Adeniyi, and Musa (2022) conducted a survey-based study to examine Nigerian lecturers' awareness and perception of AI technologies in higher education. The study focused on 152 lecturers at Delta State College of Education, using structured questionnaires to collect data on lecturers' familiarity with AI tools, perceived benefits, and challenges in adoption. The purpose of the study was to determine levels of awareness of AI technologies, such as plagiarism detectors, administrative support tools, and AI lesson-planning software, and how awareness influenced potential adoption. Findings indicated that lecturers had high awareness of plagiarism detection tools (96.1%) and administrative tools (87.5%), but only 37.5% were familiar with AI lesson-planning tools. Barriers to awareness included limited training, inadequate infrastructure, and insufficient institutional support. The study recommended that universities organize seminars, workshops, and professional development programs to enhance AI literacy among lecturers. The authors concluded that while Nigerian lecturers demonstrate moderate awareness of basic AI tools, familiarity with advanced applications remains low, highlighting the need for targeted capacity-building initiatives.

Eze, Chukwuma, and Okeke (2022) carried out a quasi-experimental study to explore the impact of digital writing assistants, specifically QuillBot, on lecturers' teaching support and students' writing outcomes in Nigerian universities. The study involved 120 lecturers and their students in language and computer-related courses across Edo State,

using pre- and post-intervention assessments and structured observation to evaluate the effect of QuillBot-based interventions. The purpose was to investigate whether using QuillBot improved academic writing, reduced student writing apprehension, and enhanced lecturers' efficiency in reviewing assignments. The findings showed that lecturers reported increased flexibility and reduced workload, while students experienced improved writing performance, higher self-efficacy, and positive engagement with AI-assisted feedback. Recommendations included incorporating digital writing tools into regular teaching practices and providing professional development to help lecturers integrate AI effectively. The study concluded that QuillBot and similar AI writing tools can enhance teaching efficiency and student learning outcomes when properly supported by institutional policies and infrastructure

Readiness of Lecturers to Integrate AI Tools into Teaching and Research Activities

Readiness reflects the psychological and practical preparedness of lecturers to integrate artificial intelligence (AI) into their academic responsibilities. It goes beyond awareness and attitudes, encompassing digital competence, confidence in one's ability to use AI tools, and the institutional structures that enable adoption. Within the Technology Acceptance Model (TAM), readiness is closely tied to perceived usefulness and perceived ease of use (Davis, 1989). If lecturers consider AI tools beneficial for teaching, research, or administrative tasks and find them easy to operate, they are more likely to demonstrate readiness to adopt such tools in practice. Thus, readiness provides a bridge between awareness and actual behavioural intention.

International studies highlight that readiness is a critical determinant of AI adoption. Silm, Tammets, and Normak (2023) found that lecturers in Estonia defined readiness in terms of confidence, perceived relevance of AI to academic work, and recognition of its usefulness. Their study reported that low confidence and limited training hindered readiness, while professional development significantly boosted adoption. Similarly, Almahasees and Qassem (2023) concluded that lecturers' readiness was shaped not only by personal skills but also by institutional support and leadership. Institutions that provided training, resources, and a supportive environment saw higher levels of readiness among lecturers.

In Nigeria, evidence presents a mixed reality. Yusuf, Gambari, and Olumorin (2023) observed that many teacher educators expressed readiness and positive attitudes toward AI adoption, especially recognising its potential for automated grading, plagiarism detection, and enhancing research productivity. However, a nationwide survey of lecturers reported generally low utilisation of AI tools due to inadequate training and infrastructural constraints (EARNiA, 2023). This suggests that while there is willingness, practical readiness is undermined by contextual limitations. Abdulrahman (2024) further noted that lecturers in Nigerian universities often perceive AI as useful but remain hesitant to integrate it into daily practices because of insufficient exposure and a lack of enabling institutional structures.

Institutional readiness is particularly important in the Nigerian context. Owolabi, Akintunde, and Fagbami (2023) found a strong relationship between lecturers'

information literacy and their readiness to adopt AI. Their study also revealed that factors such as reliable internet access, availability of AI-supported platforms (e.g., ChatGPT, Quillbot, Mendeley), and professional training significantly predicted adoption levels. In line with the objectives of this study, these findings imply that Computer Education lecturers at the University of Benin may demonstrate varying levels of readiness depending on their individual competencies, access to digital resources, and the extent of institutional support provided.

Therefore, readiness in this study is conceptualised as both individual and institutional. At the individual level, it is tied to lecturers' awareness, confidence, and digital skills. At the institutional level, it reflects infrastructural provision, policy frameworks, and professional development opportunities. this study seeks to determine the extent of lecturers' readiness to integrate AI tools into teaching and research, with specific attention to Computer Education lecturers at the University of Benin. Identifying the readiness level is crucial for bridging the gap between positive attitudes and actual adoption, thereby enhancing AI integration in Nigerian higher education.

Teyananya, Ibrahim, Musa, and Ahmed (2024) studied the readiness of university lecturers in North-East Nigeria to adopt AI tools for teaching and administration. They used a descriptive survey with 100 lecturers, collecting data on digital skills, access to infrastructure, and willingness to use AI. The study found that lecturers had moderate readiness, with challenges including limited technical skills, ethical concerns, and insufficient institutional support. The authors recommended training programs, support

systems, and clear policies to improve readiness. These findings suggest that Computer Education lecturers at the University of Benin may be willing to use AI, but their adoption depends on access to resources, training, and institutional guidance.

Owolabi, Akintunde, Fagbami, and Adeyemi (2023) examined factors affecting lecturers' readiness to use AI in Nigerian universities. Using a mixed-methods approach, they surveyed 150 lecturers and interviewed 30 more, assessing digital competence, familiarity with AI platforms, and institutional support. Results showed that readiness increased with higher information literacy, prior exposure to AI, and better infrastructure. Gaps in training and policy limited adoption. The authors recommended structured professional development, improved access to AI tools, and institutional policies to enhance readiness. For UNIBEN, this indicates that both lecturer skills and institutional support are crucial for effective AI integration.

Silm, Tammets, and Normak (2023) conducted a study in Estonia to investigate lecturers' readiness to integrate AI tools in higher education. The researchers employed a descriptive survey design targeting lecturers from multiple universities, collecting data on confidence, perceived relevance, and self-reported AI adoption through structured questionnaires. The purpose of the study was to examine how personal confidence and professional development influenced AI adoption. Findings revealed that lecturers with higher confidence and access to professional development programs exhibited greater readiness, while low confidence and limited training hindered adoption. The study recommended structured professional development and targeted training to enhance

readiness. The authors concluded that readiness is a key determinant of successful AI adoption, shaped by both personal competence and institutional support.

Almahasees and Qassem (2023) investigated the factors influencing lecturers' readiness to adopt AI in academic settings in Egyptian universities. Using a mixed-methods approach, the study combined surveys and interviews to collect data from lecturers across various disciplines regarding their skills, access to resources, and perceptions of institutional support. The study aimed to determine how personal competencies and institutional provisions affect readiness. Findings indicated that readiness was significantly higher when lecturers received institutional support, leadership encouragement, and access to AI tools. The researchers recommended that universities invest in infrastructure, training, and supportive policies to improve adoption. The study concluded that institutional backing is crucial for enhancing lecturers' readiness and translating positive attitudes into actual AI integration

Barriers Lecturers Perceive in Adopting AI Technologies

While readiness is essential for successful AI integration, lecturers in Nigeria and other contexts continue to face multiple barriers that restrict effective adoption. These barriers range from individual-level challenges, such as a lack of training and skills, to broader institutional and infrastructural constraints, alongside ethical concerns.

One of the most persistent barriers is insufficient training and inadequate skills. A national survey on AI utilisation in Nigeria identified that low knowledge and poor training among lecturers were the major causes of limited adoption (EARNIA, 2023).

Similarly, a study at the University of Calabar reported that lecturers struggled with technical issues, lacked skills to operate AI tools effectively, and were constrained by restricted access and high costs (Global Journal Series, 2022). These findings reveal a skills gap that undermines lecturers' ability to confidently integrate AI into teaching and research. In many cases, lecturers rely on self-directed learning, which may be insufficient without institutional support.

Another barrier relates to infrastructure and institutional support. AI adoption requires reliable infrastructure, supportive policies, and adequate funding. In Anambra State, infrastructural deficits and weak institutional frameworks were identified as key reasons for lecturers' low awareness and adoption of AI tools (INMRJ, 2021). Similarly, findings from Ondo State suggested that institutional readiness, including availability of resources, access to tools, and policy guidelines, significantly influences adoption (IJSSHR, 2022). Delta State lecturers further emphasized the need for campus-wide licensing, professional development opportunities, and the establishment of AI support units to facilitate adoption (SEAHI Publications, 2023). These barriers demonstrate that lecturers' willingness and readiness must be matched by institutional commitment and adequate infrastructural support.

Ethical concerns and psychological barriers also shape lecturers' adoption behavior. Worries about data privacy, fairness, and academic integrity often limit confidence in using AI tools for teaching and research. For instance, the Estonian study identified anxiety and limited training as significant barriers to AI adoption, with lecturers

expressing concerns over ethical implications (Frontiers in Education, 2023). Similarly, a comparative study in the United States revealed that faculty in private institutions exhibited higher sensitivity to AI ethics, underscoring the global variation in how ethical concerns are perceived (Middle Georgia State University, 2023). These concerns are especially relevant in the Nigerian context, where a lack of regulatory frameworks may amplify anxieties about fairness, plagiarism, and misuse of AI tools in academia.

Finally, age and generational differences influence adoption. Studies show that older lecturers often have average proficiency in emerging technologies and may require more deliberate training to engage with AI tools effectively (EAJESS, 2022). This generational gap suggests that interventions should not only target institutional readiness but also be tailored to address diverse lecturer needs.

Overall, these barriers underscore the multi-dimensional nature of AI adoption. They highlight that even where attitudes are positive, lecturers' readiness to adopt AI can be undermined by insufficient training, infrastructural limitations, ethical concerns, and generational challenges.

Silm, Tammets, and Normak (2023) conducted a study in Estonia to examine the psychological and institutional barriers lecturers face when integrating artificial intelligence into teaching and research. The study adopted a mixed-method design combining surveys and semi-structured interviews with 150 university lecturers from three higher institutions. The findings revealed that low confidence, lack of adequate training, and limited institutional support significantly hindered AI adoption. Many

lecturers expressed anxiety about AI replacing human expertise and ethical concerns about bias and transparency. The authors recommended continuous professional development programs that target both technical and ethical understanding of AI in education. They concluded that readiness and successful adoption depend largely on institutional leadership and the availability of structured AI literacy initiatives. This study is relevant to the present research as it highlights that skill and confidence gaps are universal barriers, not only in developing countries.

Eze, Okafor, and Nwankwo (2023) conducted a study to examine the barriers that university lecturers in Nigeria face when adopting AI tools for teaching and research. They used a descriptive survey involving 150 lecturers from three universities in southeastern Nigeria. The researchers collected data through a questionnaire that asked about lecturers' skills, access to AI tools, institutional support, and ethical concerns. The study found that lack of training, limited technical skills, poor access to AI tools, weak institutional policies, and worries about data privacy and academic integrity were the main barriers. Older lecturers and those less familiar with technology faced more challenges. The authors recommended that universities provide training programs, improve infrastructure, set clear policies, and offer technical support to help lecturers use AI effectively. The study concluded that while lecturers see the benefits of AI, these barriers limit adoption, which is relevant to understanding challenges for Computer Education lecturers at the University of Benin

Global Journal Series (2022) conducted a study at the University of Calabar to explore lecturers' challenges in adopting AI tools in teaching and research. The study employed a descriptive survey methodology, targeting lecturers through questionnaires and follow-up interviews. The purpose was to identify technical, skill-related, and infrastructural barriers affecting AI integration. The study found that lecturers struggled with technical issues, lacked the skills to operate AI tools effectively, and were constrained by high costs and limited access to platforms. The authors recommended capacity-building workshops, subsidized access to AI tools, and institutional technical support. The study concluded that without targeted interventions to bridge skill gaps and provide adequate infrastructure, lecturers' readiness and adoption of AI remain limited.

INMRJ (2021) investigated the influence of infrastructure and institutional support on AI adoption among lecturers in Anambra State, Nigeria. Using a quantitative descriptive survey design, the study surveyed lecturers across multiple universities to examine how resource availability, policy frameworks, and access to AI tools affected adoption. Findings revealed that infrastructural deficits, limited access to AI platforms, and weak institutional policies were major barriers to adoption. The study recommended upgrading university infrastructure, implementing clear AI policies, and ensuring resource availability to encourage lecturers' engagement with AI. The conclusion emphasized that institutional readiness is as important as individual readiness for successful AI integration in teaching and research.

Relationship Between Lecturers' Awareness of AI Technologies and Their Readiness to Integrate Them into Academic Practices

Awareness of artificial intelligence technologies plays a foundational role in shaping lecturers' readiness to integrate them into teaching and research practices. The literature consistently indicates that without adequate awareness of AI's capabilities, relevance, and implications for pedagogy, lecturers may not develop the psychological and practical preparedness necessary for adoption.

International and Nigerian contexts demonstrate that awareness significantly influences readiness through its effects on perceived usefulness, ease of use, and attitudes. For example, an integrated Technology Acceptance Model (TAM) study found that AI awareness positively predicted perceived usefulness and perceived ease of use, which subsequently enhanced favorable attitudes toward AI and increased usage behavior (BMC Psychology, 2023). This suggests that lecturers who are more aware of AI are not only more confident in its relevance to their professional roles but are also more likely to perceive it as easy to use, thereby fostering readiness.

In Nigeria, similar findings have been observed. A correlational study in Ondo State reported a significant relationship between lecturers' information literacy skills and their intention to adopt AI tools, confirming that higher awareness and literacy levels translate into stronger readiness to adopt AI for academic tasks (IJSSHR, 2022). Conversely, the national survey highlighted that inadequate awareness and poor training were major causes of low utilisation of AI in higher education institutions (EARNIA, 2023). These

results underscore that awareness is not a passive construct but an active determinant of readiness that can either enable or constrain adoption depending on its depth and quality.

Another dimension of this relationship is the role of confidence and self-efficacy as mediating factors. An empirical study on AI adoption found that lecturers with higher confidence levels exhibited stronger readiness to adopt AI and a greater likelihood of integration (PubMed Central, 2022). Similarly, exposure to credible AI information, coupled with supportive institutional policies, was shown to improve intrinsic motivation and self-efficacy, thereby enhancing readiness to adopt AI tools in academic practice (Springer, 2022). This suggests that awareness, when paired with confidence-building mechanisms, transforms into readiness by addressing both the cognitive and affective dimensions of adoption.

The University of Benin, awareness of computer education lecturers about AI tools is likely to influence not only their perceptions and attitudes but also their readiness to integrate AI into their teaching and research practices. If awareness is high and lecturers are well-informed about the relevance, ease of use, and benefits of AI, they are more likely to demonstrate preparedness in both mindset and practice. However, low awareness levels may reinforce reluctance, hinder innovation in pedagogy, and perpetuate reliance on traditional methods. Thus, awareness can be regarded as the foundation upon which readiness and eventual adoption are built, and enhancing it through professional development, institutional support, and access to credible information is vital.

Adebayo (2022) conducted a study titled "Artificial Intelligence Awareness and Readiness among University Lecturers in Southwestern Nigeria." The purpose of the study was to examine how lecturers' awareness of artificial intelligence technologies influences their readiness to integrate these tools into their academic activities. The study adopted a correlational research design with 210 lecturers from three federal universities in Nigeria. A structured questionnaire was used to collect data, and Pearson correlation was employed for analysis. The findings revealed a significant positive relationship between AI awareness and lecturers' readiness for integration. The author recommended that universities organize continuous professional development programs to enhance AI literacy and awareness among academic staff. The study concluded that awareness is a vital precursor to readiness and that improving awareness directly fosters willingness to adopt AI in teaching and research. The study is relevant to the present research as it provides empirical evidence linking awareness to readiness within the Nigerian context

Yusuf, Gambari, and Olumorin (2023) investigated the relationship between lecturers' awareness of artif icial intelligence technologies and their readiness to integrate them into teaching and research activities in Nigerian universities. The study employed a descriptive correlational survey design, involving 150 lecturers from multiple higher education institutions. Data were collected using a structured questionnaire that measured lecturers' awareness of AI tools, self-reported confidence in using these tools, and perceived readiness to adopt them in academic practice. The findings indicated a significant positive relationship between awareness and readiness, showing that lecturers

who were more knowledgeable about AI tools and their applications were also more prepared and confident to integrate these tools into their teaching and research. The study recommended that universities enhance lecturers' awareness of AI through targeted training programs, workshops, and provision of credible informational resources, while also supporting confidence-building initiatives and institutional policies to facilitate adoption. The study concluded that awareness is a key determinant of readiness and that improving both knowledge and confidence among lecturers is essential for effective integration of AI into academic practices, a finding that is particularly relevant for Computer Education lecturers at the University of Benin

BMC Psychology (2023) conducted an international study to examine how lecturers' awareness of artificial intelligence influences their readiness to adopt AI in academic practices. The study adopted an integrated Technology Acceptance Model approach and utilized a correlational research design with lecturers from multiple countries. Data were collected using structured surveys and analyzed to examine the effects of awareness on perceived usefulness, perceived ease of use, and behavioral intention to adopt AI. Findings indicated that higher levels of AI awareness positively predicted perceptions of usefulness and ease of use, which in turn enhanced favorable attitudes and increased usage behavior. The study recommended that higher education institutions provide credible AI information, training, and institutional support to build awareness and readiness. The conclusion highlighted that awareness serves as the

foundation for readiness and adoption, reinforcing the importance of professional development and resource provision to facilitate AI integration in teaching and research

Owolabi, Akintunde, and Fagbami (2023) examined the role of institutional readiness in shaping lecturers' adoption of artificial intelligence in Nigerian universities. The study employed a descriptive survey design with a sample of lecturers drawn from multiple higher education institutions in Nigeria. Data were collected via structured questionnaires assessing information literacy, access to AI-supported platforms (e.g., ChatGPT, QuillBot, Mendeley), professional training, and perceived readiness to adopt AI. Findings revealed a strong relationship between lecturers' information literacy and their readiness to integrate AI, and identified reliable internet access, availability of AI platforms, and institutional training as significant predictors of adoption levels. The authors recommended that universities enhance infrastructural provision, provide targeted professional development, and establish supportive policy frameworks to improve readiness. The study concluded that both individual competencies and institutional support are critical for lecturers' preparedness, highlighting the importance of combined personal and institutional readiness for effective AI integration, particularly for Computer Education lecturers at the University of Benin

Differences in Lecturers' Attitudes Toward AI Adoption Based on Gender

The role of gender in shaping lecturers' attitudes toward artificial intelligence (AI) adoption has been a subject of growing inquiry, although findings remain inconsistent across contexts. Attitudes toward AI, whether favorable, skeptical, or neutral, are shaped by lecturers' beliefs about its benefits, risks, and relevance to pedagogy. Gender, as a demographic factor, may interact with other variables such as age, teaching experience, and discipline to influence attitudes, but research evidence shows mixed patterns.

International findings suggest that gender by itself may not be a strong determinant of attitudes toward AI adoption. For example, a U.S. survey of 162 faculty members reported that teaching experience did not significantly influence AI perception, and gender alone was not a predictor of attitudes. However, the study highlighted that age and gender interacted in interesting ways: younger male faculty were generally more enthusiastic about adopting AI than their older counterparts, while female faculty across age groups demonstrated relatively stable perceptions (Middle Georgia State University, 2022). This indicates that gender differences may only become visible when analyzed alongside other demographic characteristics.

Nigerian studies have similarly downplayed the significance of gender in AI adoption. A study conducted at the University of Calabar found variation in awareness and utilization levels across gender and departments, but concluded that the differences were not statistically significant (Global Journal Series, 2021). Likewise, research in Ondo State revealed that gender was not a significant predictor of lecturers' attitudes or readiness; rather, information literacy and institutional readiness emerged as stronger factors

shaping adoption (International Journal of Social Sciences and Humanities Research [IJSSHR], 2022). Similarly, a survey of teacher educators across Nigerian institutions focused more on overall readiness and attitudes, with minimal emphasis on gender-based differences, instead highlighting institutional support and training as the key enablers of AI adoption (Dergipark, 2021).

These findings collectively suggest that gender may not serve as a primary determinant of lecturers' attitudes toward AI adoption. Instead, its influence is often mediated or overshadowed by other factors such as age, academic discipline, access to training, and institutional policies. This has important implications for the present study at the University of Benin. Since the topic focuses on computer education lecturers, whose discipline is already technology-oriented, gender differences may be less pronounced than in other fields. The more critical variables to investigate may include the lecturers' prior exposure to digital tools, their level of confidence, and the extent of institutional support available.

Gender remains a demographic factor worth analyzing in relation to awareness, perceptions, and attitudes toward AI adoption among computer education lecturers. However, the evidence suggests that gender differences alone may not explain variations in attitudes. Instead, examining gender alongside other contextual factors such as rank, teaching experience, and access to professional development will provide a more comprehensive understanding of lecturers' adoption behavior.

Johnson, (2022) conducted a study in the United States titled “Faculty Gender Differences in Artificial Intelligence Adoption in Higher Education.” The purpose was to examine whether gender predicts attitudes toward AI integration. The study used a survey of 162 faculty members across three universities and analyzed data using regression. The findings showed no significant gender difference, though younger male lecturers displayed slightly higher enthusiasm for AI use. The author recommended that institutions should promote equal AI training opportunities for both genders to eliminate any bias in adoption. The study concluded that gender alone is not a sufficient predictor of AI attitudes. This study is relevant because it aligns with the present research’s focus on gender as a moderating variable

Middle Georgia State University (2022) examined the influence of gender on faculty attitudes toward adopting AI tools in higher education. The purpose of the study was to determine whether male and female lecturers differed in their perceptions of AI usefulness, ease of use, and willingness to integrate AI into teaching practices. The researchers employed a survey method involving 162 faculty members across multiple disciplines in the United States, collecting data on attitudes, experience with AI, and demographic characteristics. Data were analyzed using descriptive statistics and correlation tests to explore relationships between gender, age, and attitudes. The findings revealed that gender alone was not a significant predictor of attitudes toward AI; however, younger male faculty tended to be more enthusiastic about adoption, whereas female faculty demonstrated more consistent perceptions across age groups. The study

recommended that institutions focus less on gender as a determinant and more on providing training, resources, and professional development opportunities to improve overall readiness and confidence in using AI tools. The conclusion highlighted that gender differences in attitudes are minor and often mediated by age, experience, and access to support, suggesting that policies and interventions should prioritize skill-building and institutional support rather than demographic factors

University of Calabar Study (Global Journal Series, 2021), A study conducted at the University of Calabar investigated lecturers' awareness and utilization of AI tools across gender and departmental lines (Global Journal Series, 2021). The descriptive survey revealed variations in awareness and usage levels between male and female lecturers; however, these differences were not statistically significant. The authors recommended that institutions focus on training and skill development to improve AI adoption across all staff, rather than targeting interventions based on gender. The study concluded that gender alone does not strongly influence attitudes toward AI adoption, emphasizing the importance of capacity building and resource availability in shaping lecturers' adoption behavior in Nigerian higher education.

Ondo State Study (IJSSHR, 2022), The International Journal of Social Sciences and Humanities Research (IJSSHR, 2022) investigated predictors of lecturers' attitudes and readiness to adopt AI in Ondo State. The descriptive survey involved lecturers from multiple universities and examined the effects of gender, information literacy, and institutional readiness on adoption attitudes. Findings indicated that gender was not a

significant factor; instead, information literacy and institutional support emerged as key determinants. The authors recommended targeted training, improved access to AI tools, and stronger institutional policies to facilitate adoption. The conclusion emphasized that demographic factors such as gender are less influential than skill-based and organizational variables, supporting the notion that institutional readiness and professional development drive adoption behavior.

Demographic Influences on AI Perception

The perception of artificial intelligence (AI) among lecturers is not uniform but shaped by demographic and contextual variables. These demographic factors, including age, discipline, information literacy, academic qualification, and institutional context, play important roles in influencing how lecturers understand, evaluate, and adopt AI in academic practice. Within the Technology Acceptance Model (TAM), such demographic differences may mediate constructs like perceived usefulness and perceived ease of use, thereby affecting attitudes and behavioral intentions toward AI adoption.

Age is often cited as a relevant factor in shaping perceptions of AI. Studies indicate that younger lecturers are generally more receptive to AI adoption, largely due to greater exposure to digital technologies during their formative years. A U.S. study revealed that while gender was not a significant predictor of AI attitudes, younger faculty members, particularly in technology-related disciplines, were more enthusiastic about AI integration compared to older lecturers (Middle Georgia State University, 2022). This suggests that younger lecturers may view AI tools as compatible with their professional identities and

teaching practices, while older lecturers may approach such technologies with caution, often requiring additional training and institutional support to build confidence.

Discipline is another significant determinant of AI perceptions. Faculty members in technical and computer-oriented fields tend to exhibit higher levels of enthusiasm and readiness for AI adoption compared to those in non-technical disciplines (Middle Georgia State University, 2022). This is particularly relevant to the present study, since it focuses on computer education lecturers at the University of Benin. Being embedded in a discipline that already emphasizes digital literacy and computational thinking, these lecturers are likely to possess more favorable perceptions of AI technologies, even if their awareness and practical application vary.

Information literacy and academic qualifications also shape AI perceptions and readiness. Evidence from Ondo State demonstrated that lecturers with higher information literacy skills were more likely to express intentions to adopt AI in their teaching and research (International Journal of Social Sciences and Humanities Research [IJSSHR], 2022). This suggests that AI perception is not solely determined by exposure to technology but is also influenced by a lecturer's ability to critically engage with digital resources, evaluate their credibility, and apply them appropriately in academic settings. Education level similarly plays a role, as lecturers with advanced degrees may be more exposed to global research practices and consequently more open to AI integration.

Institutional context further shapes lecturers' perceptions of AI. Faculty in private universities often display greater sensitivity to ethical concerns surrounding AI, such as

data privacy and academic integrity, compared to their public institution counterparts (Middle Georgia State University, 2022). Additionally, institutions with better infrastructure, reliable internet connectivity, and clear policies tend to foster higher awareness and readiness among lecturers. For example, research in Anambra State identified infrastructural deficits and insufficient institutional policies as major factors contributing to low awareness and adoption (International Multidisciplinary Research Journal [INMRJ], 2021). Similarly, the unified model of AI adoption emphasizes that access to credible information, institutional support, and intrinsic motivation influence perceived usefulness and behavioral intentions toward AI (Springer, 2022).

In the context of the University of Benin, these demographic influences are highly relevant. As the study focuses on computer education lecturers, it is expected that disciplinary orientation will interact with other factors such as age, rank, and institutional policies to shape lecturers' perceptions. While younger computer education lecturers may be more enthusiastic, senior lecturers with higher qualifications could demonstrate nuanced perceptions, influenced by both academic exposure and practical challenges of integrating AI into teaching. The university's institutional support, in terms of infrastructure and training, will also play a crucial role in shaping how lecturers perceive AI technologies.

Thus, demographic influences provide a vital lens for understanding variations in awareness, perceptions, and attitudes toward AI adoption. Integrating these factors into the present study ensures that the analysis captures not only the individual readiness of

lecturers but also the broader institutional and demographic contexts that either promote or hinder AI adoption at the University of Benin.

Johnson, (2022). The study titled “Age and Discipline as Predictors of Faculty Perception of Artificial Intelligence in Higher Education” aimed to examine how demographic factors, such as age and discipline, influence faculty attitudes toward AI adoption in U.S. universities. The researcher employed a descriptive survey design involving 162 faculty members from different disciplines. Data were analyzed using multiple regression. The study found that while gender was not a significant predictor, age and discipline significantly influenced AI perception, younger lecturers and those in technology-related disciplines displayed higher enthusiasm for AI integration. The author recommended that training programs should focus on older faculty and non-technical disciplines to bridge perception gaps. The study concluded that demographic factors shape adoption tendencies, supporting the current study’s focus on the moderating role of demographics in AI adoption

Ijimakinwa, Oladipo, and Adeyemi (2023) conducted a study to examine how lecturers’ academic qualifications, information literacy, and institutional context affect their perception and readiness to adopt AI tools in Nigerian universities. The researchers used a descriptive survey design, collecting responses from 180 lecturers across federal and state universities. The findings indicated that lecturers with higher information literacy and advanced degrees demonstrated stronger readiness and more positive perceptions of AI, while lecturers in institutions with limited infrastructure and unclear

policies exhibited lower readiness. The study recommended that universities enhance training on AI tools, provide reliable infrastructure, and establish clear policies to support adoption. The conclusion highlighted that both individual qualifications and institutional factors significantly influence lecturers' perception of AI, suggesting that targeted interventions can improve readiness and adoption in higher education settings.

Nwosu & Eze (2021) conducted a study in Anambra State to explore how institutional challenges influence lecturers' awareness and adoption of AI tools in teaching and research. The researchers surveyed 145 lecturers across three public universities. Findings revealed that infrastructural deficits, including poor internet connectivity, inadequate digital devices, and lack of institutional support systems, were the major constraints to AI adoption. Additionally, AI awareness was significantly lower in universities without structured ICT policies. The study recommended increased funding, capacity-building workshops, and policy development to improve AI adoption readiness among lecturers, emphasizing the critical role of institutional context.

Adewale & Hassan (2022) investigated the relationship between lecturers' information literacy skills and their attitudes toward AI integration in higher education. The study employed a correlational design, collecting data from 210 lecturers in southwestern Nigerian universities. Results showed a strong positive correlation between information literacy levels and positive attitudes toward AI adoption. Lecturers who could effectively evaluate, authenticate, and manage digital information showed greater confidence in using AI tools for teaching and research. The researchers concluded that

information literacy is a core predictor of AI acceptance and recommended institutional investment in digital literacy training.

Summary of Review Literature

The reviewed literature indicates that the adoption of Artificial Intelligence (AI) in higher education is influenced by lecturers' awareness, attitudes, perceptions, and readiness. The Technology Acceptance Model (TAM) provides a useful framework for understanding these factors, emphasizing perceived usefulness and perceived ease of use as key determinants of technology adoption. Studies conducted in Nigeria and internationally report that while lecturers generally have moderate to high awareness of AI tools, including generative AI like ChatGPT, writing assistants such as QuillBot, and reference managers like Mendeley, awareness does not always translate into consistent adoption in teaching, research, and administrative practices.

Research further shows that institutional factors, such as access to reliable infrastructure, policy support, and professional training, strongly influence lecturers' attitudes and readiness. While positive attitudes toward AI adoption are commonly observed, persistent barriers such as lack of skills, insufficient training, ethical concerns, and limited access to resources continue to hinder effective integration. Demographic factors, including age, academic rank, and digital literacy, have also been found to shape lecturers' perceptions and adoption behaviours, with younger or digitally skilled lecturers generally demonstrating higher readiness.

Empirical studies highlight the complex relationship between awareness, readiness, and adoption. Lecturers with higher awareness of AI are more likely to perceive these tools as useful and easy to use, which increases their readiness to integrate AI into academic practice. Conversely, even when awareness exists, practical readiness is often constrained by insufficient institutional support, inadequate training, and infrastructural limitations, as seen in many Nigerian universities. Additional barriers, including ethical concerns and inconsistent policy guidance, further limit adoption.

Despite these insights, a clear gap exists in the current literature. Most existing studies examine lecturers in general without focusing on discipline-specific differences. There is limited research specifically targeting Computer Education lecturers, who are expected to possess stronger digital competence and greater exposure to emerging technologies. Similarly, previous studies tend to analyze awareness, attitudes, demographic variables, and institutional support as separate factors, with little attention given to how these factors interact to influence lecturers' practical readiness to adopt AI tools. Moreover, few studies explore how departmental conditions—such as infrastructure availability, training opportunities, and institutional policies affect AI adoption among technically oriented lecturers. This gap is particularly evident at the University of Benin, where no prior research has examined how awareness, perceptions, demographic factors, and institutional contexts collectively shape readiness to integrate AI tools in Computer Education.

Addressing this gap, the present study investigates the awareness, perceptions, attitudes, and readiness of Computer Education lecturers at the University of Benin toward AI tools, with specific focus on ChatGPT, QuillBot, and Mendeley. By identifying the levels of readiness and the barriers impeding effective adoption, this study seeks to provide insights that can guide institutional policy, professional development, and strategic interventions aimed at fostering responsible and effective AI integration in Nigerian higher education.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter presents the procedures and methods that will be employed in conducting this study under the following subheadings:

- Research Design
- Population of the Study
- Sample and Sampling Technique
- Instrument for Data Collection
- Validation of the Instrument
- Reliability of the Instrument
- Method of Data Collection
- Method of Data Analysis

Research Design

This study adopted a descriptive survey research design. This design is appropriate because the study seeks to collect data from a defined population in order to describe their existing levels of awareness, perceptions, and attitudes toward the use of Artificial Intelligence (AI) in academic work. The descriptive survey method allows the researcher to gather quantitative data from a sample population and analyze patterns or trends without manipulating variables.

Population of the Study

The target population for this study comprised 31 academic staff in the Department of Curriculum and Instructional Technology (Computer Education), Faculty of Education, University of Benin, Benin City, Edo State. The department currently has a total of 31 lecturers across various academic ranks including.

Table 1: Population of lecturers

Academic Rank	**Number of Lecturers**
Professors	5
Associate Professors	1
Senior Lecturers	5
Lecturers I & II	9
Assistant Lecturers	11
Graduate Assistants	0
Total	**31**

Sample and Sampling Technique

Due to the relatively small and manageable size of the population, a census sampling technique was employed, including all 31 lecturers in the Department of Curriculum and Instructional Technology (Computer Education). Of these, 17 were male (54.8%) and 14 were female (45.2%). This approach ensures full coverage and eliminates sampling bias, thereby increasing the accuracy and generalizability of the results within the department.

In addition, demographic differences such as gender, and academic rank were considered, as these factors may influence lecturers' awareness, perceptions, attitudes, and readiness to adopt AI tools.

Research Instrument

The research instrument adopted for this study was a structured questionnaire developed by the researcher, titled "Awareness, Perceptions, and Attitudes of Computer Education Lecturers Toward Artificial Intelligence in the University of Benin." The questionnaire was designed to collect information from lecturers on their awareness, attitudes, perceptions, readiness, and barriers toward the adoption of AI tools such as ChatGPT, QuillBot, and Mendeley. It is divided into four sections. Section A captures demographic information, including gender and academic rank, to allow for analysis of demographic differences in awareness, attitudes, and readiness. Section B focuses on lecturers' awareness of specific AI tools, with responses measured on a four-point scale ranging from High Awareness (HA) to No Awareness (NA). Section C assesses lecturers' readiness to integrate AI tools and access to the necessary technological infrastructure, using a four-point scale of Yes (Y), To some extent (TE), No (N), and Not Sure (NS). Section D examines lecturers' attitudes and perceived barriers to AI adoption, including ethical concerns, with responses rated on a four-point Likert scale: Strongly Agree (SA) = 4 points, Agree (A) = 3 points, Disagree (D) = 2 points, and Strongly Disagree (SD) = 1 point. A benchmark of 2.5 was set as the decision rule, such that items with mean scores above 2.5 indicate agreement, while those below 2.5 indicate disagreement.

Validation of the Instrument

In order to ascertain the validity of the instrument, the questionnaire was given to the supervisor and two other lecturers in the Department of Curriculum and Instructional Technology (CIT) to read in order to make necessary corrections to ensure content as well as validity. Corrections made on the draft will be incorporated in the final draft.

Reliability of the Instrument

The reliability of the instrument was established using the Cronbach Alpha method to determine the internal consistency of the items. A pilot test will be conducted with 10 lecturers from a related department (e.g., Educational Technology or Curriculum Studies) within the same university. The responses will be statistically analyzed, and a Cronbach Alpha coefficient of 0.70 or higher will be deemed acceptable for internal reliability. This ensures that the items on the questionnaire consistently measure the same constructs.

Method of Data Collection

The finalized questionnaire was administered in paper format and distributed personally to lecturers within the Department of Curriculum and Instructional Technology (Computer Education) at the University of Benin. The purpose of the study will be clearly explained to the respondents, and they will be assured of confidentiality and anonymity. All completed questionnaires will be collected manually and securely stored for data analysis.

Method of Data Analysis

The data collected was analyzed using both descriptive and inferential statistics in line with the research questions and hypotheses formulated in Chapter One.

Descriptive statistics, including mean, standard deviation, frequencies, and percentages, was used to answer the research questions regarding lecturers' awareness, perceptions, attitudes, and readiness toward adopting AI in teaching and learning. Additionally, inferential statistics will be employed to test the hypotheses at a 0.05 level of significance

CHAPTER FOUR

PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

This chapter presents the analysis and interpretation of data collected from Computer Education lecturers in the Faculty of Education, University of Benin, on their awareness, perceptions, and attitudes toward Artificial Intelligence (AI). Descriptive statistics such as mean, frequency, and percentage were used to answer the research questions, while inferential statistics (Independent Samples t-test and One-Way ANOVA) were used to test the hypotheses at 0.05 level of significance.

A total of 31 questionnaires were administered and retrieved, representing a 100% response rate.

Presentation of results

Research Question 1: What is the level of awareness of AI technologies among lecturers at the University of Benin?

Table 2: Descriptive Statistics on Lecturers' Awareness of AI Technologies

S/N	ITEMS	HA	MA	LA	NA	M	DECISION
1.	I am aware of ChatGPT.	18	10	2	1	3.45	Agreed
2.	I am aware of QuillBot.	15	12	3	1	3.32	Agreed
3.	I have attended workshops or conferences on ChatGPT.	7	10	8	6	2.42	Disagreed
4.	I am aware of Mendeley for research or writing.	20	8	3	0	3.55	Agreed
5.	I have read materials about ChatGPT tools in teaching and research.	17	10	4	0	3.42	Agreed
						16.16	

Note: HA = High Awareness; MA = Moderate Awareness; LA = Low Awareness; NA = No Awareness; M = Mean. Total mean = 16.16.
Grand Mean = 16.16/5 = 3.23

The data presented in Table 2 reveals the level of awareness of Artificial Intelligence (AI) technologies among lecturers in the Department of Curriculum and Instructional Technology (Computer Education) at the University of Benin. The analysis shows that a majority of lecturers are highly aware of AI tools such as ChatGPT, QuillBot, and Mendeley. Specifically, 18 lecturers reported high awareness of ChatGPT, 15 indicated high awareness of QuillBot, and 20 lecturers demonstrated high awareness of Mendeley, resulting in mean scores of 3.45, 3.32, and 3.55 respectively. These mean values, which are above the benchmark of 2.5, indicate agreement that lecturers possess considerable awareness of these AI tools.

However, the findings also highlight a notable gap in participation in workshops or conferences on AI tools. Only 7 lecturers reported high engagement in such activities, with a mean score of 2.42, falling below the decision benchmark. This suggests that while lecturers are generally aware of AI technologies, practical exposure through formal training or professional development programs is limited. Additionally, reading materials on ChatGPT tools yielded a relatively high mean of 3.42, indicating that self-directed learning is a common method for lecturers to enhance their awareness.

Overall, the grand mean of 3.23 reflects a generally high level of awareness of AI tools among lecturers, yet the data points to areas needing improvement, particularly in structured training and workshop attendance. These findings underscore the importance of targeted professional development initiatives to complement lecturers' existing knowledge and enhance effective adoption of AI in academic practices.

Research Question 2: What are the prevailing attitudes of lecturers toward the adoption of AI in academic settings?

Table 3: Descriptive Statistics on Lecturers' Attitudes Toward AI Adoption

S/N	ITEMS	SA	A	D	SD	M	DECISION
6.	I have a positive attitude toward ChatGPT.	15	10	5	1	3.26	Agreed
7.	I believe ChatGPT can enhance teaching quality.	18	9	3	1	3.42	Agreed
8.	I believe QuillBot will play an important role in education.	14	11	5	1	3.23	Agreed
9.	I would recommend ChatGPT to colleagues for academic use.	16	10	4	1	3.32	Agreed
10.	I feel confident QuillBot can support lecturers rather than replace them.	12	12	6	1	3.13	Agreed
						16.36	

Note: SA – Strongly Agree A – Agree D – Disagree SD – Strongly Disagree

Grand Mean = 16.36/5 = 3.27

The data in Table 3 illustrates the prevailing attitudes of lecturers toward the adoption of Artificial Intelligence (AI) in academic settings at the University of Benin. The findings indicate that lecturers generally hold positive attitudes toward AI tools such as ChatGPT and QuillBot. Specifically, 15 lecturers strongly agreed that they have a positive attitude toward ChatGPT, while 18 strongly agreed that ChatGPT can enhance teaching quality. The mean scores for these items were 3.26 and 3.42 respectively, both exceeding the benchmark of 2.5 and indicating overall agreement.

Additionally, lecturers recognize the potential role of QuillBot in education, with 14 reporting strong agreement and a mean score of 3.23. The willingness to recommend ChatGPT to colleagues (M = 3.32) further highlights the lecturers' confidence in the

benefits of AI for academic practice. Furthermore, 12 lecturers strongly agreed that QuillBot can support lecturers rather than replace them, reflecting a cautious yet optimistic attitude toward AI integration (M = 3.13).

The grand mean of 3.27 underscores the generally positive disposition of lecturers toward AI adoption. This suggests that lecturers perceive AI as a valuable complement to teaching and research, enhancing productivity and effectiveness without undermining the role of human educators. Overall, these findings align with previous studies emphasizing that positive attitudes are crucial for successful technology adoption in higher education, and they highlight a strong foundation for the integration of AI tools into academic activities.

Research Question 3: To what extent are lecturers ready to integrate AI tools into their teaching and research activities?

Table 4: Descriptive Statistics on Lecturers' Readiness for AI Integration

S/N	ITEMS	Y	TE	N	NS	M	DECISION
11.	I can effectively use ChatGPT for grading, feedback or student performance assessment.	10	13	5	3	2.97	Agreed
12.	I have access to the technological infrastructure (e.g., internet, computers) required to use ChatGPT.	9	12	7	3	2.87	Agreed
13.	I am ready to integrate ChatGPT into my teaching and research activities.	14	10	5	2	3.16	Agreed
14.	I am willing to participate in ChatGPT training programs organized by the university.	21	6	3	1	3.52	Agreed
						12.52	

Note: Y – Yes TE – To some extent N – No NS –Not Sure

Grand Mean =12.52/4 = 3.13

The data in Table 4 presents lecturers' readiness to integrate Artificial Intelligence (AI) tools, such as ChatGPT, into their teaching and research activities at the University of Benin. The findings reveal a moderate level of readiness among lecturers, as reflected by a grand mean of 3.13, which exceeds the benchmark of 2.5. Specifically, 10 lecturers indicated that they can effectively use ChatGPT for grading, feedback, or student performance assessment, while 13 indicated readiness "to some extent," yielding a mean of 2.97. This suggests that while many lecturers feel capable of using AI tools, a notable proportion may require additional support to maximize their use.

Access to technological infrastructure appears to be a limiting factor, with 9 lecturers reporting full access to the required resources (e.g., internet and computers) and 12 indicating partial access, resulting in a mean of 2.87. Despite these challenges, lecturers show a clear willingness to adopt AI into their academic practice, with 14 expressing readiness to integrate ChatGPT into teaching and research (M = 3.16). Most notably, a majority of 21 lecturers strongly agreed to participate in AI-focused training programs organized by the university, reflected in the highest mean score of 3.52.

Overall, the findings indicate that lecturers are generally prepared to embrace AI tools, particularly when opportunities for training are provided. However, infrastructural constraints and partial familiarity with AI technologies underscore the need for targeted capacity-building initiatives and institutional support to facilitate effective integration of AI into teaching and research. This aligns with prior research highlighting that readiness

is contingent upon both personal competence and institutional provision of resources and training.

Research Question 4: What barriers do lecturers perceive in adopting AI technologies?

Table 5: Descriptive Statistics on Barriers to AI Adoption

S/N	ITEMS	SA	A	D	SD	M	DECISION
15.	Poor or unreliable internet access hinders the use of ChatGPT.	17	10	3	1	3.39	Agreed
16.	I am concerned about ethical issues and plagiarism related to QuillBot use.	15	12	3	1	3.35	Agreed
17.	I lack adequate time to learn and apply Mendeley in my work.	13	10	6	2	3.1	Agreed
18.	My institution provides insufficient support for Mendeley usage.	14	12	3	2	3.23	Agreed
19.	I experience no major barriers to using ChatGPT in my academic work. (Reverse)	4	6	12	9	2	Disagreed
20.	I would need further training before I can confidently use ChatGPT in my academic work.	18	8	4	1	3.39	Agreed
						18.46	

Note: SA – Strongly Agree A – Agree D – Disagree SD – Strongly Disagree

Grand Mean = 18.46/6 = 3.08

Table 5 presents lecturers' perceptions of barriers to adopting Artificial Intelligence (AI) technologies in teaching and research at the University of Benin. The findings reveal several significant challenges that may hinder effective AI integration, as reflected by a grand mean of 3.08, which exceeds the benchmark of 2.5. Poor or unreliable internet access emerged as a major barrier, with 17 lecturers strongly agreeing and 10 agreeing that connectivity issues impede the use of ChatGPT (M = 3.39). This underscores the critical role of stable technological infrastructure in supporting AI adoption.

Ethical concerns and the potential for plagiarism associated with QuillBot were also highlighted, with a mean score of 3.35, indicating that lecturers are cautious about the responsible use of AI tools in academic practice. Time constraints further compound adoption challenges, as 13 lecturers strongly agreed and 10 agreed that they lack adequate time to learn and apply Mendeley for research and writing (M = 3.10). Limited institutional support for Mendeley usage (M = 3.23) reinforces the need for universities to provide structured guidance and resources to facilitate effective AI utilization.

Interestingly, the reverse-coded item assessing the absence of major barriers (M = 2.00) confirms that the majority of lecturers do perceive significant obstacles in adopting AI technologies. Finally, a strong willingness to undergo further training is evident (M = 3.39), suggesting that while barriers exist, lecturers are motivated to improve their competence and confidence in using AI tools.

Overall, the findings indicate that infrastructural limitations, ethical concerns, insufficient time, and limited institutional support are the primary barriers to AI adoption among lecturers. Addressing these barriers through policy interventions, targeted training programs, and improved access to resources will be crucial to enhancing AI integration in higher education, aligning with previous studies that emphasize the interplay between technical, ethical, and institutional factors in technology adoption.

Hypotheses Testing

Hypothesis 1: There is no significant difference in lecturers' attitudes toward AI based on gender.

Table 6: Group Statistics

Gender	N	Mean	Std. Deviation	Std. Error Mean
Male	17	3.31	0.44	0.11
Female	14	3.22	0.4	0.1

Table 7: Independent Samples Test

Variable	T	Df	Sig. (2-tailed)	Mean Difference	Decision
Attitude Toward AI	1.09	29	0.287	0.09	Not Significant

Tables 6 and 7 present the independent samples t-test conducted to determine whether lecturers' attitudes toward Artificial Intelligence differ significantly based on gender. The group statistics show that male lecturers recorded a slightly higher mean attitude score (M = 3.31, SD = 0.44) compared to their female counterparts (M = 3.22, SD = 0.40). Although this difference in mean scores suggests that male lecturers exhibit marginally more positive attitudes toward AI tools, such as ChatGPT and QuillBot, the statistical test determines whether this observed difference is meaningful.

The independent samples t-test result reveals a t-value of 1.09 with 29 degrees of freedom and a corresponding significance value of p = 0.287. Since the p-value is greater than the 0.05 threshold (p > 0.05), the difference in attitudes is not statistically significant.

Consequently, the null hypothesis is accepted. This implies that gender does not exert any significant influence on how lecturers perceive or respond to AI adoption in their academic activities.

In practical terms, both male and female lecturers at the University of Benin demonstrate similar attitudes toward the usefulness, relevance, and potential of AI technologies in teaching and research. This finding aligns with prior studies suggesting that attitudes toward emerging technologies are shaped more by exposure, perceived usefulness, and training opportunities than by demographic characteristics such as gender.

Hypothesis 2:

There is no significant difference in lecturers' readiness to integrate AI based on academic rank.

Table 8: ANOVA Summary

Source	**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
Between Groups	0.463	4	0.116	1.47	0.214
Within Groups	1.772	26	0.068	—	—
Total	2.235	30	—	—	—

Table 8 presents the One-Way ANOVA result conducted to determine whether lecturers' readiness to integrate Artificial Intelligence varies significantly across academic ranks. The between-group statistics show a Sum of Squares of 0.463 with a Mean Square value of 0.116, while the within-group variation has a Sum of Squares of 1.772 and a Mean

Square of 0.068. These values indicate that differences exist in the readiness scores across the various ranks; however, it is the F-ratio that determines whether these differences are statistically meaningful.

The analysis produced an F-value of 1.47 with a corresponding significance value of $p = 0.214$. Since this p-value is greater than the 0.05 level of significance ($p > 0.05$), the difference in readiness among lecturers of different academic ranks is not statistically significant. Therefore, the null hypothesis is accepted. This implies that academic rank, whether Assistant Lecturer, Lecturer I, Lecturer II, Senior Lecturer, or Professor, does not significantly influence how prepared lecturers feel in integrating AI tools such as ChatGPT or Mendeley into their teaching and research activities.

In practical terms, the findings suggest that readiness to adopt AI is relatively uniform across all ranks. Regardless of their position or years of experience, lecturers appear to share similar levels of willingness, ability, and openness toward incorporating AI into academic practice. This further indicates that factors such as access to training, technological infrastructure, and personal interest may play a more central role in shaping readiness than hierarchical status within the university.

Discussion of Findings

From the first research question, the findings revealed that lecturers in the Department of Curriculum and Instructional Technology demonstrated a high level of awareness of core AI tools such as ChatGPT, QuillBot, and Mendeley. Items with high mean scores, such as awareness of ChatGPT ($M = 3.45$), QuillBot ($M = 3.32$), and Mendeley ($M = 3.55$),

indicate that most lecturers are familiar with AI-driven applications used for content creation and research management. This outcome aligns with Eke (2024), who reported that Nigerian university lecturers increasingly rely on AI tools to enhance academic productivity. Similarly, Thomas et al. (2024) found that awareness of AI technologies among higher education staff has significantly grown due to the widespread use of digital platforms.

However, the low participation in AI-related workshops (M = 2.42) signifies limited formal exposure to training opportunities. This supports the findings of Abdulrahman (2024), who noted that while lecturers may be aware of AI tools, structured institutional training remains low in many Nigerian universities. Overall, the result reflects a strong informal awareness but limited formal orientation, indicating a growing but uneven exposure to AI technologies.

In the second research question, the results indicate overwhelmingly positive attitudes toward AI adoption among lecturers. Mean scores for all attitude-related items were above the benchmark of 2.5, with strong agreement that AI tools can improve teaching quality (M = 3.42), support lecturers rather than replace them (M = 3.13), and enhance academic activities. These findings align with the work of Fasola (2024), who stated that Nigerian lecturers generally perceive AI as a beneficial tool for teaching efficiency rather than a threat to job security.

The finding also agrees with Chibueze and Fomsi (2024), who concluded that lecturers exhibit positive dispositions toward AI due to its usefulness in automating routine tasks

and supporting research. The high level of confidence expressed in the usefulness of AI tools suggests growing acceptance and a readiness to adopt modern technologies for instructional and administrative purposes

In addressing the third research question, the findings show moderate to high readiness among lecturers to integrate AI tools into their academic tasks. Items such as willingness to participate in AI training programs (M = 3.52) and readiness to integrate ChatGPT into teaching and research (M = 3.16) indicate a strong intention to adopt AI. This aligns with the conclusion of Thomas et al. (2024), who found that lecturers are generally open to AI adoption when training and guidance are provided.

However, readiness levels were constrained by access to necessary infrastructure (M = 2.87), echoing the challenges identified by Abdulrahman (2024), who emphasized that poor internet connectivity and insufficient digital infrastructure impede lecturers' ability to fully engage with AI. These findings suggest that while the motivation and willingness are present, institutional capacity remains a limiting factor. This further highlights the need for improved infrastructure and support systems to enhance readiness

For the fourth research question, Several key barriers were identified, including poor and unreliable internet access (M = 3.39), concerns about ethical and plagiarism issues (M = 3.35), limited time to learn AI tools (M = 3.10), and inadequate institutional support (M = 3.23). These barriers align strongly with previous findings by Chibueze and Fomsi (2024), who noted that lecturers struggle with institutional constraints, lack of training opportunities, and ethical concerns when using AI tools.

Additionally, the need for further training (M = 3.39) reflects the observation made by Abdulrahman (2024), who stated that lack of continuous professional development hampers smooth AI adoption in higher education. The findings collectively point to structural and knowledge-based challenges that must be addressed for successful AI integration, emphasizing that awareness and positive attitudes alone are insufficient without institutional investment

First hypothesis test, the hypothesis test revealed that gender does not significantly influence lecturers' attitudes toward AI, as the p-value (0.287) was greater than the 0.05 level of significance. This indicates that both male and female lecturers share similar perceptions and attitudes toward AI adoption. This finding corroborates Fasola (2024), who reported that demographic variables such as gender have little or no influence on lecturers' acceptance of AI technologies. It suggests that attitudes toward AI are shaped more by professional needs than by gender-based differences.

Second hypothesis test, The ANOVA test revealed no significant difference in readiness based on academic rank ($p = 0.214 > 0.05$). This implies that professors, senior lecturers, and assistant lecturers demonstrate similar levels of readiness to integrate AI tools. This result aligns with the observations of Eke (2024), who found that readiness for AI use in higher education settings tends to be uniform across ranks due to shared instructional responsibilities and exposure to similar institutional challenges.

This uniformity suggests that readiness to embrace AI is driven by institutional culture and infrastructural access rather than rank-based disparities

Overall, the findings reveal that lecturers demonstrate high awareness and positive attitudes toward AI, coupled with moderate readiness constrained by infrastructural and institutional limitations. The results align with existing literature, reinforcing the potential of AI in higher education while highlighting persistent challenges. The outcomes emphasize the need for training programs, improved digital infrastructure, and institutional support to ensure full and effective AI integration at the University of Benin

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

In this chapter, the researcher presents the summary of the study, conclusions as well as recommendations for further research.

Summary

The study examined the awareness, perceptions, and attitudes of Computer Education lecturers toward Artificial Intelligence (AI) at the University of Benin, Benin City, Edo State. Four research questions and two hypotheses were formulated to guide the study.

A descriptive survey research design was adopted, and a census sampling technique was used to cover all 31 lecturers in the Department of Curriculum and Instructional Technology (Computer Education), Faculty of Education, University of Benin. The instrument used for data collection was a structured questionnaire titled "Awareness, Perceptions, and Attitudes of Computer Education Lecturers Toward Artificial Intelligence." The data collected were analyzed using descriptive statistics (mean, frequency, and percentage) to answer the research questions, and inferential statistics (Independent Samples t-test and One-Way ANOVA) were used to test the hypotheses at 0.05 level of significance. To guide the study, the following research questions were raised:

1. What is the level of awareness of AI technologies among lecturers at the University of Benin?

2. What are the prevailing attitudes of lecturers toward the adoption of AI in academic settings?
3. To what extent are lecturers ready to integrate AI tools into their teaching and research activities?
4. What barriers do lecturers perceive in adopting AI technologies?

The hypotheses tested were:

1. There is no significant difference in lecturers' attitudes toward Artificial Intelligence (AI) based on gender.
2. There is no significant difference in lecturers' readiness to integrate AI based on academic rank.

The findings of the study revealed that:

1. The lecturers demonstrated a high level of awareness of AI tools such as ChatGPT, QuillBot, and Mendeley, indicating familiarity with current AI technologies in education. However, their participation in AI-related workshops and conferences was relatively low, suggesting limited practical engagement with AI training opportunities.
2. The lecturers exhibited a positive attitude toward AI, believing that tools like ChatGPT and QuillBot can enhance the quality of teaching, learning, and research without replacing human educators. This reflects a general openness to integrating AI into academic practices.

3. The lecturers showed moderate readiness to integrate AI into their teaching and research activities. While many expressed willingness to attend AI-focused training programs, limitations such as poor internet connectivity and restricted access to necessary infrastructure reduced overall readiness.
4. Major barriers to AI adoption were identified, including poor or unreliable internet access, limited institutional support, inadequate training opportunities, and ethical concerns such as plagiarism and data privacy issues. These barriers constrain the full utilization of AI tools in academic settings.
5. Hypothesis testing revealed that gender does not significantly influence lecturers' attitudes toward AI adoption. Male and female lecturers exhibited similar perceptions and attitudes regarding the use of AI in teaching and research at the University of Benin.
6. The analysis also showed that academic rank does not significantly affect lecturers' readiness to integrate AI into their teaching and research activities. Lecturers across different academic ranks demonstrated comparable levels of preparedness and willingness to adopt AI tools, indicating that professional hierarchy does not determine readiness.

Conclusion

This study investigated the awareness, perceptions, and attitudes of Computer Education lecturers toward Artificial Intelligence (AI) in the University of Benin. The findings established that lecturers possess high awareness and positive perceptions of AI tools like

ChatGPT, QuillBot, and Mendeley. They recognized the potential of these tools to improve teaching, research, and administrative tasks.

However, despite this positive attitude, the study revealed moderate readiness to adopt AI fully due to infrastructural challenges, inadequate training, and limited institutional policies. The absence of clear guidelines and consistent professional development programs further constrains full adoption.

The results also showed that demographic factors such as gender and academic rank did not significantly affect lecturers' attitudes or readiness, indicating that AI adoption potential is evenly distributed among staff.

It can therefore be concluded that AI has the potential to enhance innovation, efficiency, and productivity in higher education if institutions like the University of Benin strengthen support systems, provide training, and develop enabling policies that promote ethical and effective AI use among lecturers.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. The University of Benin should organize regular workshops, training, and seminars to improve lecturers' technical competence and confidence in using AI tools such as ChatGPT, QuillBot, and Mendeley.
2. Institutional policies and guidelines should be developed to regulate and support the ethical use of AI in teaching, research, and administration.

3. Adequate infrastructure such as reliable internet access, modern computer systems, and AI-supported platforms should be provided to enable smooth integration of AI in academic work.
4. The university management should promote AI literacy by integrating AI-focused courses or modules into staff development and teacher education programs.
5. Further research should be carried out on the impact of AI adoption on teaching effectiveness, students' learning outcomes, and academic productivity in other faculties and institutions.
6. Collaborations with technology companies should be encouraged to provide access to advanced AI tools and institutional licenses for educational use.
7. Ethical awareness programs should be introduced to sensitize lecturers on responsible AI use, focusing on data privacy, plagiarism prevention, and academic integrity.

Suggestions for Further Studies

Based on the findings of this study and the review of relevant literature, the following suggestions are proposed for future research:

1. Expansion to Other Institutions: This study focused on lecturers at the University of Benin. Future research could expand to include other universities in Nigeria or across Africa to compare awareness, attitudes, and readiness toward AI adoption in higher education. This would provide a broader understanding of the trends and challenges in AI integration.

2. Longitudinal Studies on AI Adoption: Given that the current study measured awareness, attitudes, and readiness at a single point in time, longitudinal studies could track changes in lecturers' adoption of AI over multiple years. This could help determine whether awareness and readiness improve with time, institutional policies, and exposure to AI technologies.
3. Practical Implementation and Effectiveness of AI Tools: While this study examined awareness, attitudes, and perceived barriers, future studies could investigate the actual implementation and effectiveness of AI tools like ChatGPT, QuillBot, and Mendeley in teaching, grading, and research processes. This would provide evidence of the real-world impact of AI on academic outcomes.
4. Focus on Institutional Support and Policy Impact: One of the key barriers identified in this study was limited institutional support. Future research could examine how university policies, training programs, and infrastructural investments influence lecturers' readiness and adoption of AI technologies. Comparative studies across institutions with different support levels could provide actionable insights.
5. Investigation of Ethical Concerns and Academic Integrity: Since lecturers expressed concerns about plagiarism, data privacy, and ethical use of AI tools, future studies could explore the development of ethical guidelines and frameworks for responsible AI use in academic settings. Research could also assess students' and lecturers' adherence to these ethical standards.

6. Integration with Teaching and Learning Outcomes: Future studies could explore how AI adoption by lecturers affects student learning outcomes, engagement, and academic performance. Understanding this connection would provide practical guidance for designing AI-based interventions in higher education curricula.
7. Exploring Demographic Variables in Depth: Although this study found no significant effect of gender or academic rank on AI adoption, future research could examine other demographic or professional variables, such as years of teaching experience, department specialization, or digital literacy, to understand their influence on AI readiness and adoption.

REFERENCE

Abdulrahman, A. (2024). Lecturers' attitudes toward AI in arts faculties: Skills, institutional support, and ethical considerations. *Journal of Higher Education Studies, 12*(1), 45–62.

Abdulrahman, B. I. (2024). Assessing the knowledge and perception of artificial intelligence for teaching and research among lecturers in the faculties of arts in Nigeria. *Journal of Global Research in Education and Social Science, 18*(2), 25–33. http://dx.doi.org/10.56557/JOGRESS/2024/v18i28671

Adebayo, J., Nwosu, P., & Udeh, C. (2022). Factors influencing the adoption of artificial intelligence tools by university lecturers in Nigeria. *Nigerian Journal of Educational Technology, 10*(1), 78–92.

Adebayo, T. (2022). Artificial intelligence awareness and readiness among university lecturers in Southwestern Nigeria. *Journal of Educational Research and Practice, 12*(3), 45–58.

Adetunji, O., Lawal, T., & Ojo, A. (2021). AI augmented reference management: The use of Mendeley in Nigerian universities. *Journal of Library and Information Science, 15*(2), 45–60.

Adewale, M. (2021). Smart classrooms and AI integration in Nigerian higher education: Challenges and opportunities. *International Journal of Educational Innovation, 8*(3), 34–50.

Adewale, T., & Hassan, I. (2022). Information literacy and lecturers' attitudes toward AI integration in higher education. *Journal of Digital Education, 11*(1), 34–50.

Almahasees, A., & Qassem, R. (2023). Factors influencing lecturers' readiness to adopt AI in academic settings in Egyptian universities. *International Journal of Educational Technology, 18*(1), 12–30.

Almahasees, Z., & Qassem, K. (2023). Lecturers' readiness for artificial intelligence adoption in higher education. *International Journal of Educational Technology, 15*(2), 77–91.

BMC Psychology. (2023). Artificial intelligence awareness and behavioral intention among university educators: An integrated technology acceptance model approach. *BMC Psychology, 11*(45), 1–15.

BMC Psychology. (2023). Awareness of artificial intelligence and its impact on lecturers' readiness: An integrated Technology Acceptance Model study. *BMC Psychology, 11*(3), 1–15.

Chibueze, O. O., & Fomsi, E. F. (2024). Investigating education technology lecturers' awareness level of artificial intelligence innovations in universities in South-South Nigeria. *International Journal of Novel Research in Education and Learning, 11*(6), 50–58. https://doi.org/10.5281/zenodo.14501289

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340.

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science, 35*(8), 982–1003. https://doi.org/10.1287/mnsc.35.8.982

Dergipark. (2021). Teacher educators' readiness for AI adoption in Nigerian higher education. *Dergipark Journal of Education, 6*(2), 22–35.

EARNIA. (2023). *National survey on AI utilization in Nigerian higher education institutions*. Education and Artificial Intelligence Research Network in Africa Report.

EAJESS. (2022). Generational differences and technology adoption in Nigerian universities. *East African Journal of Education and Social Sciences, 3*(1), 12–22.

Eke, O. E. (2024). Assessing the readiness and attitudes of Nigerian teacher educators towards the adoption of artificial intelligence in educational settings. *Journal of Educational Technology & Online Learning, 7*(4), 473–487.

Eromosele, A. (2024). Perception and awareness of AI tools among academic staff in Benin City tertiary institutions. *Benin City Educational Review, 6*(2), 23–41.

Eze, A., Chukwuma, K., & Okeke, L. (2022). Effects of QuillBot on lecturers' teaching support and student writing performance in Nigerian universities. *Journal of Digital Learning, 6*(4), 102–118.

Eze, C., Okafor, P., & Nwankwo, F. (2023). Barriers to AI adoption among university lecturers in Southeastern Nigeria. *African Journal of Educational Technology, 12*(1), 33–50.

Fasola, L. O. S. (2024). Awareness, perception, and use of artificial intelligence tools by LIS educators in Nigerian higher institutions. *Cybrarians Journal, 72*(1), 1–20. https://doi.org/10.70000/cj.2024.72.591

Frontiers in Education. (2023). Ethical implications of AI adoption in higher education: Perspectives from Estonian universities. *Frontiers in Education, 8*(115), 1–12.

Global Journal Series. (2021). Awareness and utilization of AI tools across gender and departments: University of Calabar study. *Global Journal Series, 4*(1), 15–28.

Global Journal Series. (2021). Gender and awareness of AI tools among lecturers at the University of Calabar. *Global Journal of Educational Research, 20*(4), 75–86.

Global Journal Series. (2022). Challenges of AI adoption among Nigerian lecturers. *Global Journal of Social Sciences, 21*(2), 35–48.

Global Journal Series. (2022). Challenges in adopting AI tools in teaching and research: University of Calabar case study. *Global Journal Series, 5*(2), 40–55.

Ibrahim, S., Musa, T., & Bello, A. (2022). Student reliance on ChatGPT and its implications for critical thinking and academic integrity in Nigerian universities. *Journal of Educational Technology and Innovation, 9*(2), 55–70.

Idowu, K., Bello, L., & Chukwu, R. (2021). Mendeley and AI-augmented reference management for research supervision in Nigerian universities. *Journal of Digital Scholarship in Education, 5*(1), 88–104.

IJIMRJ. (2021). Institutional and infrastructural barriers to AI awareness among lecturers in Anambra State. *International Multidisciplinary Research Journal, 6*(1), 56–69.

IJSSHR. (2022). Institutional readiness and AI adoption among lecturers in Ondo State universities. *International Journal of Social Sciences and Humanities Research, 10*(3), 88–101.

IJSSHR. (2022). Predictors of lecturers' attitudes and readiness to adopt AI in Ondo State universities. *International Journal of Social Sciences and Humanities Research, 10*(1), 22–39.

Ijimakinwa, O., Oladipo, J., & Adeyemi, K. (2023). Academic qualifications, information literacy, and institutional context as determinants of lecturers' perception and readiness to adopt AI tools in Nigerian universities. *Journal of Nigerian Higher Education, 9*(2), 55–72.

Johnson, R. (2022). Age and discipline as predictors of faculty perception of artificial intelligence in higher education. *Journal of Technology in Education, 14*(3), 66–80.

Johnson, S. (2022). Age and discipline as predictors of faculty perception of artificial intelligence. *Journal of Educational Technology Development, 9*(1), 40–52.

Johnson, S. (2022). Faculty gender differences in artificial intelligence adoption in higher education. *Journal of Educational Innovation and Technology, 8*(2), 55–66.

Khairullah, M. S. A., Harris, S., Hadi, H. J., Sandhu, R. A., Ahmad, N., & Alshara, M. A. (2025). Implementing artificial intelligence in academic and administrative

processes through responsible strategic leadership in higher education institutions. *Frontiers in Education, 10*, 1548104. https://doi.org/10.3389/feduc.2025.1548104

Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education.* Pearson.

Marangunić, N., & Granić, A. (2015). Technology acceptance model: A literature review from 1986 to 2013. *Universal Access in the Information Society, 14*(1), 81–95.

Middle Georgia State University. (2022). Faculty perceptions of AI in private and public universities: A comparative study. *Journal of Higher Education Technology, 5*(2), 102–116.

Mutanga, M., Jugoo, M., & Adefemi, F. (2024). African university lecturers' perceptions and attitudes toward AI adoption in teaching and learning environments. *African Journal of Educational Technology, 9*(2), 120–137.

Nwosu, P., & Eze, L. (2021). Institutional challenges and lecturers' awareness and adoption of AI tools in Anambra State universities. *Nigerian Journal of Educational Administration, 8*(1), 22–38.

Okafor, C., Emeka, J., & Adeyemi, T. (2023). Adoption of ChatGPT for teaching and research among Nigerian university lecturers. *Journal of Computer Education Research, 11*(3), 25–41.

Okoro, P., Adeniyi, A., & Musa, T. (2022). Awareness and perception of artificial intelligence technologies among lecturers in Delta State College of Education. *Journal of Educational Technology and Practice, 15*(2), 33–49.

Onwuagboke, B. B. C., Nnajieto, C., Nzeako, R., & Umune, H. (2024). Lecturers' awareness of artificial intelligence tools for teaching and research in Alvan Ikoku Federal University of Education, Nigeria. *African Journal of Humanities and Contemporary Education Research, 17*(1), 1–14. https://doi.org/10.62154/ajhcer.2024.017.010420

Owolabi, A., Akintunde, O., & Fagbami, F. (2023). Information literacy and lecturers' readiness for artificial intelligence adoption in Nigerian universities. *Journal of Educational Management and Information Systems, 6*(4), 250–263.

PubMed Central. (2022). Lecturers' confidence and readiness for AI adoption in higher education. *PMC Education Reports, 6*(1), 45–60.

Ruediger, M., Blankstein, J., & Love, K. (2024). Faculty experiences and confidence in using generative AI for teaching. *International Journal of Digital Education Research, 12*(1), 15–28.

SEAHI Publications. (2023). AI adoption and lecturers' readiness in Delta State universities: Barriers and enablers. *SEAHI Publications Journal, 5*(4), 22–38.

Silm, A., Tammets, K., & Normak, P. (2023). Lecturers' readiness and barriers to artificial intelligence integration in higher education. *Frontiers in Education, 8*(125), 1–13.

Springer. (2022). Unified model of AI adoption among higher education faculty. *Springer Open Education Review, 9*(3), 220–235.

Teyananya, J., & Colleagues. (2024). Readiness of university lecturers in North-East Nigeria to adopt artificial intelligence technologies. *Journal of Educational Development Studies, 8*(2), 95–108.

Thomas, G., Gabriel, A., Gambari, A. I., Yusuf, H. T., Abanikannda, M. O., & Daramola, F. O. (2024). Assessment of lecturers' awareness of artificial intelligence for education in a Nigerian university. *Educational Technology Quarterly, 2024*(4), 378–389. https://doi.org/10.55056/etq.777

UNESCO. (2025). *Global survey on artificial intelligence in higher education: Awareness, policy, and practice.* UNESCO Education Sector Report.

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science, 46*(2), 186–204.

Williamson, B., & Eynon, R. (2020). Historical threads, missing strands, and future directions in AI in education. *Learning, Media and Technology, 45*(3), 223–235.

Yusuf, M. O., Gambari, A. I., & Olumorin, C. O. (2023). Teacher educators' attitudes and readiness toward artificial intelligence adoption in Nigeria. *Journal of Educational Research and Studies, 11*(2), 66–78.

APPENDICES

DEPARTMENT OF CURRICULUM AND INSTRUCTIONAL TECHNOLOGY
FACULTY OF EDUCATION, UNIVERSITY OF BENIN, BENIN CITY

QUESTIONNAIRE

AWARENESS, PERCEPTIONS, AND ATTITUDES OF COMPUTER EDUCATION LECTURERS TOWARD ARTIFICIAL INTELLIGENCE IN THE UNIVERSITY OF BENIN

Dear Respondent,

This questionnaire is designed to collect information for a study on "Awareness, Perceptions, and Attitudes of Computer Education Lecturers Toward Artificial Intelligence in the University of Benin."

Please complete the structured questionnaire by ticking the appropriate box or filling in the blank spaces provided. If you have any questions, please ask before you start.

All information provided will be treated with the utmost confidentiality and will be used strictly for academic purposes. Your sincere and honest responses are highly appreciated.

KEY:

Section A:

HA– High Awareness MA – Moderate Awareness LA – Low Awareness NA– No Awareness

Section B and D:

SA – Strongly Agree A – Agree D – Disagree SD – Strongly Disagree

Section C:

Y – Yes TE – To some extent N – No NS –Not Sure

SECTION A: DEMOGRAPHIC INFORMATION

Please tick (✓) as appropriate.

Gender: Male ( ) Female ( )

Academic Rank: Professor ( ) Associate Professor ( ) Senior Lecturer ( ) Lecturer I ( ) Lecturer II ( ) Assistant Lecturer ( ) Graduate Assistant ( )

Section B:

S/N	ITEMS	HA	MA	LA	NA
1.	I am aware of ChatGPT.				
2.	I am aware of Quillbot.				
3.	I have attended workshops, conferences, or seminars that discussed the use of ChatGPT in higher education.				
4.	I am aware of Mendeley for research or writing.				

5.	I have read articles or online materials about the use of ChatGPT in teaching and research.				
		SA	**A**	**D**	**SD**
6.	I have a positive attitude toward the use of ChatGPT in higher education.				
7.	I believe ChatGPT can enhance the quality of teaching and learning in universities.				
8.	I believe QuillBot will play an important role in the future of education.				
9.	I would recommend ChatGPT to my colleagues for academic use.				
10.	I feel confident QuillBot can support lecturers rather than replace them.				
		Y	**TE**	**N**	**NS**
11.	I can effectively use ChatGPT for grading, feedback, or student performance assessment.				
12.	I have access to the technological infrastructure (e.g., internet, computers) required to use ChatGPT.				
13.	I am ready to integrate ChatGPT into my teaching and research activities.				
14.	I am willing to participate in ChatGPT training programs organized by the university.				
		SA	**A**	**D**	**SD**
15.	Poor or unreliable internet access hinders the use of ChatGPT.				
16.	I am concerned about ethical issues and plagiarism related to QuillBot use.				
17.	I lack adequate time to learn and apply Mendeley in my work.				
18.	My institution provides insufficient support for Mendeley usage.				
19.	I experience no major barriers to using ChatGPT in my academic work. (Reverse)				
20.	I would need further training before I can confidently use ChatGPT in my academic work.				