

AWARENESS, PROFICIENCY IN USE OF ChatGPT AND ACADEMIC PERFORMANCE OF UNDERGRADUATES IN AMBROSE ALLI UNIVERSITY

Iwuagwu Blessing Oselumese (Ph.D)

*Ambrose Alli University, Ekpoma, Edo state
profblissingiwuagwu@gmail.com*

and

Osagie Constance Iyore (Ph.D)

*Ambrose Alli University, Ekpoma, Edo state
iyoreconstance@aauekpoma.edu.ng*

Abstract

The study investigated awareness, proficiency in use of ChatGPT and academic performance of undergraduates in Ambrose Alli University. The study adopted the descriptive design of correlation type. The population of this study comprised of all the 27,388 undergraduates registered for the 2024/2025 academic session in Ambrose Alli University totalling while the stratified random sampling technique was used to ensure representation across different faculties. A total of 5,478 representing 20% of the students were selected for the study. A researcher developed questionnaire titled Awareness, Proficiency in Use of ChatGPT and Academic Performance questionnaire was used to gather data in the study. The data obtained were analyzed using mean, standard deviations and chi-square and the findings revealed that undergraduate students are highly aware of ChatGPT in Ambrose Alli University, Ekpoma, Edo State, there was a moderate proficiency level of students in the use of ChatGPT in Ambrose Alli University, Ekpoma, Edo State and there is significant relationship between students' proficiency in ChatGPT and their academic performance in Ambrose Alli University, Ekpoma, Edo State. give me conclusion of the study

Keywords: Awareness, Proficiency, ChatGPT, Academic Performance, Undergraduates

Introduction

The advent of Artificial Intelligence (AI) has significantly transformed the landscape of higher education globally. Among the recent developments is OpenAI's ChatGPT, a generative language model designed to understand and produce human-like text, which has gained traction as a tool for research, writing assistance, problem-solving, and even tutoring. Undergraduate students, increasingly exposed to digital tools, are gradually integrating ChatGPT into their academic routines. However, while anecdotal evidence and early research suggest that ChatGPT can enhance productivity and creativity in academic tasks, the extent to which students are aware of the tool, proficient in using it, and how this

correlates with their academic performance remains underexplored (Dwivedi et al., 2023).

Awareness is the first step in the adoption of any technological innovation. It determines whether students even recognize the existence and potential utility of tools like ChatGPT. Studies have shown that digital literacy and exposure to technological trends play a crucial role in fostering awareness among students in higher education (van Laar et al., 2020). In regions where technological infrastructure is underdeveloped, awareness may be significantly limited, thus affecting the rate of adoption. Therefore, in examining the link between ChatGPT and academic performance, it becomes necessary to first assess students' awareness of the tool as a potential academic asset.

Proficiency in using ChatGPT is another critical factor. While some students might be aware of ChatGPT, they may lack the skill to utilize it effectively for educational purposes. Proficiency involves understanding prompts, critically evaluating AI-generated content, and using the tool ethically in academic work. The Technology Acceptance Model (TAM) provides a useful framework for understanding how perceived ease of use and usefulness influence students' adoption and skill development in using AI tools (Davis, 1989). Without proper guidance or digital competency, students may misuse or underutilize ChatGPT, limiting its positive impact on learning outcomes.

The relationship between the use of ChatGPT and academic performance remains a subject of academic debate. While proponents argue that ChatGPT fosters autonomous learning, enhances comprehension, and improves writing quality, critics caution against over-reliance, which could hinder critical thinking and originality (Kasneci et al., 2023). In the Nigerian context and similar educational environments, where resource constraints often challenge teaching quality and access to materials, ChatGPT presents a potential supplement. Thus, understanding how undergraduate students' awareness and proficiency in ChatGPT use affect their academic performance is essential to inform policy and pedagogical approaches in the digital age.

Concept of Students of Awareness of ChatGPT

Students' awareness of ChatGPT refers to their knowledge and recognition of the existence, capabilities, and potential academic applications of the AI-powered language model developed by OpenAI. This awareness encompasses understanding that ChatGPT can assist with tasks such as essay writing, information summarization, content generation, coding, and even personalized tutoring. Awareness is a foundational component in the technology adoption process, as it often determines whether individuals proceed to explore, evaluate, or use a given tool (Rogers, 2003). In academic settings, students who are aware of ChatGPT are more likely to perceive its relevance and consider integrating it into their study routines. However, levels of awareness may vary significantly based on

factors such as access to information technology, digital literacy, and institutional exposure to emerging educational technologies.

Awareness also includes a critical dimension students must not only know about ChatGPT's existence but also understand its appropriate use and limitations. For instance, being aware that ChatGPT can generate plausible but sometimes inaccurate responses is crucial for responsible usage in academic work. Selwyn (2023) argued that awareness in the context of AI tools like ChatGPT must go beyond surface-level familiarity to encompass an understanding of ethical implications, potential for misuse, and the importance of human oversight. Therefore, meaningful awareness involves not just encountering the tool but also developing an informed and reflective stance toward its use in academic contexts.

Students' proficiency in the use of ChatGPT refers to their ability to effectively interact with the AI tool to achieve specific academic objectives such as writing, problem-solving, summarizing texts, and generating study materials. This proficiency includes the skills to craft effective prompts, evaluate and refine the AI-generated responses, and incorporate the output appropriately into academic tasks. It also entails a deeper understanding of how to navigate ChatGPT's conversational interface, apply it in different academic disciplines, and use it in ways that align with institutional guidelines and academic integrity standards (Zhai, 2023). Proficiency is not merely about usage, but about using the tool critically, ethically, and efficiently to enhance learning outcomes. Furthermore, students' proficiency is influenced by their level of digital literacy, exposure to AI technologies, and instructional support provided by educational institutions. According to the Technological Pedagogical Content Knowledge (TPACK) framework, effective use of emerging technologies in education requires a balanced integration of technological knowledge, content understanding, and pedagogical strategies (Mishra & Koehler, 2006). In the context of ChatGPT, this implies that students must not only understand how the tool works but also how to adapt its functions to their academic needs. High proficiency enables students to maximize the benefits of ChatGPT, such as personalized learning support and improved efficiency, while minimizing risks like dependency or academic dishonesty.

Academic performance has been conceptualized by many scholars and researchers. According to Cary, Lindstd and Maynard cited in Yohana (2017), academic performance refers to academic performance on a task with measures including comprehension, quality and accuracy of answers of tests, quality and accuracy of problem- solving, frequency and quantity of desired outcome, time or rate to solution, time on task, level of reasoning and critical thinking, creativity, recall and retention, and transfer of tasks. Dimbisso (2009) on his part defined academic performance to mean the manner in which students deal with their studies and cope with or accomplish different assignments given to them by their instructors within a period of time. Kobal and Musek (2011) conceptualized academic performance as objectively and subjectively. They defined the concept

objectively as a student's knowledge and his degree of adaptation to academic work, expressed in numerical scores. Their subjective, they saw academic performance as the student's attitudes towards his achievement and himself, as well as the attitudes of other people such as parents, teachers, lecturers, towards his success. To them, the first definition appears to be more or less objective due to its emphasis on numerical scores of students. It measures the degree to which students adapt to schoolwork and to the educational system. The second definition tends to be more or less subjective or psychological. It holds that what establishes academic success is dependent upon the students' attitudes towards their academic performance and themselves as well as by the attitudes of others towards their studies.

The level of undergraduate students' awareness of ChatGPT varies across regions, institutions, and academic disciplines, often influenced by exposure to technology, media, and institutional support. In technologically advanced environments, many students are aware of ChatGPT as a conversational AI that can assist with academic tasks such as writing, coding, and studying. This awareness is often driven by peer influence, social media, and online academic communities where ChatGPT is frequently discussed and showcased (Susnjak, 2023). However, mere exposure does not equate to deep understanding. Many students may recognize the name or basic function of ChatGPT but lack a comprehensive understanding of its capabilities, limitations, and appropriate academic uses. In many developing countries, including Nigeria, the level of awareness among undergraduates may be considerably lower due to limited access to digital tools, low digital literacy, and the absence of structured digital education. Students in such contexts may hear about ChatGPT informally but may not fully grasp its academic utility or may be misinformed about its purpose. A study by Alanzi et al. (2023) found that while university students in some regions had heard of ChatGPT, only a small percentage reported using it or understanding how to integrate it into academic work. This points to a gap between awareness and informed engagement, which can hinder students from benefiting from the tool's full academic potential.

The discipline of study also plays a role in shaping awareness. Students in technology-related fields such as computer science or engineering are more likely to encounter AI tools like ChatGPT as part of their curriculum or technical explorations. In contrast, students in humanities or education may have limited exposure unless they actively seek out such tools or are introduced to them through academic support programs. This disciplinary divide reflects broader trends in digital adoption and suggests the need for targeted awareness campaigns that cater to students across all academic areas (Zhai, 2023).

Furthermore, institutional policies and educators' attitudes toward AI tools can significantly impact students' awareness. In institutions where ChatGPT is acknowledged as a potential learning aid, students are more likely to encounter it

in classrooms, workshops, or through library services. Conversely, where such tools are discouraged or unacknowledged due to fears of academic dishonesty, students may remain unaware or misinformed. Therefore, for awareness to translate into meaningful use, universities must not only recognize ChatGPT's presence but also guide students on how to understand, evaluate, and ethically use it within the academic environment.

Ezurike and Akinsulire (2024) carried out a study on the awareness and adoption of ChatGPT as a learning tool among undergraduates in Lagos State Nigeria. Findings indicated a high level of awareness and adoption of ChatGPT as a learning tool among undergraduates at Lagos State Polytechnic. Furthermore, results also indicated a positive perception of ChatGPT amongst the respondents. Kangiwa and Abubakar (2024) investigated the awareness and utilization of ChatGPT, among the academic staff of the Federal College of Education (Technical) Bichi, Kano State Nigeria. The findings revealed that majority of the respondents were aware of ChatGPT, while few of them used it frequently. Frank and Idowu (2024) explored the awareness, knowledge, and perception of ChatGPT among undergraduate students at Nnamdi Azikiwe University, Awka, Anambra State. The results indicated a high level of awareness and knowledge, with 92% of students understanding Chat-GPT's functionalities and widespread adoption for academic and research tasks. Ibrahim and Abubakar (2024) investigated the awareness and utilization of ChatGPT among academic staff of federal college of education (TECHNICAL) BICHI. The findings revealed that 68% of the respondent's demonstrated awareness of ChatGPT while 32% currently made practical use of it often. Razak and Zulhazmi (2025) examined the knowledge, attitude and perception toward Chatgpt among university students. The findings reveal a high level of knowledge, positive attitudes, and favorable perceptions among students, indicating significant potential for ChatGPT's integration into academic settings.

The proficiency level of students in the use of ChatGPT varies significantly, often depending on factors such as digital literacy, academic discipline, and access to guidance on how to engage effectively with AI tools. While many students may be aware of ChatGPT, a smaller proportion possesses the skill to use it proficiently for academic purposes. Proficient use entails crafting precise prompts, evaluating the relevance and accuracy of responses, and integrating the output into academic work in a meaningful and ethical manner (Zhai, 2023). Studies have shown that while students might experiment with ChatGPT, few possess advanced prompt engineering skills or the ability to discern between AI-generated inaccuracies and reliable content (Kasneci et al., 2023). Digital literacy is a major determinant of students' proficiency with ChatGPT. Those with prior exposure to AI applications or experience with digital platforms tend to demonstrate higher competency in interacting with ChatGPT effectively. According to the findings of Dwivedi et al. (2023), digital natives may show general comfort with using technology, but that comfort does not automatically translate to deep proficiency. The ability to use

ChatGPT critically such as refining queries, checking for factual consistency, and citing appropriately requires more than basic knowledge. It involves analytical thinking, familiarity with academic standards, and sometimes, explicit instruction or training. Moreover, differences in academic discipline influence proficiency levels. Students in computer science, engineering, or data-related fields often demonstrate higher proficiency in leveraging ChatGPT for coding assistance, algorithm design, and technical problem-solving. Conversely, students in social sciences or humanities may use ChatGPT for writing support or summarizing texts but may not always understand how to tailor prompts to elicit high-quality responses (Susnjak, 2023). Without proper instruction on how to harness ChatGPT's capabilities in discipline-specific contexts, students may underutilize its potential or rely on it inappropriately.

Additionally, institutional support and educator engagement play a critical role in developing students' proficiency. In academic environments where instructors model responsible and strategic use of AI tools or offer workshops on digital tools, students tend to exhibit greater proficiency. Where such guidance is lacking, students may resort to trial-and-error approaches or use ChatGPT in ways that compromise academic integrity. Thus, enhancing students' proficiency requires intentional pedagogical efforts that integrate AI literacy into the curriculum, empowering students to not only use ChatGPT effectively but also to do so responsibly and reflectively. Sarwanti, Sariasih, Rahmatika, Monjurul and Eka (2024) carried out a study on are they literate on ChatGPT? University language students' perceptions, benefits and challenges in higher education learning. The findings reveal that a majority of students were proficient in using ChatGPT for their learning purposes, especially for writing assignments. Nwaizugbu and Kasumu (2024) investigated the attitude of undergraduate students' use of ChatGPT for academic work: Attitude and challenges. The study found out that many students appreciate ChatGPT and they were proficient in using it for quick explanations, summarize complex topics and assist with research and writing. Blanca and Victor (2024) examined university undergraduates' perceptions on the use of ChatGPT for academic purposes: evidence from a university in Czech Republic. The study revealed that students were proficient in employing ChatGPT for academic purposes, as demonstrated by the favorable feedback it receives for its effectiveness in facilitating research, stimulating idea generation, promoting comprehension of intricate concepts, and furnishing prompt responses.

The relationship between students' proficiency in the use of ChatGPT and their academic performance is increasingly attracting scholarly attention. ChatGPT, as an advanced natural language processing tool, offers a wide range of academic support, including summarization, writing assistance, content generation, coding help, and explanations of complex concepts. However, the extent to which students can leverage these features effectively depends on their proficiency. Proficient users are more likely to benefit academically because they

know how to interact with the tool through well-structured prompts, assess the quality of outputs, and incorporate AI-generated responses into their learning and writing in a meaningful way (Kasneci et al., 2023). Proficiency in ChatGPT enables students to become more autonomous learners. Those who are skilled in using the tool can employ it as a study companion, capable of providing instant feedback and explanations tailored to their learning pace. This has the potential to improve understanding of course materials and boost academic performance, especially for students who may lack access to additional tutoring or support services. According to Zhai (2023), students who effectively utilize ChatGPT for revision, note summarization, and academic writing tend to report better comprehension and higher efficiency in completing tasks. However, the academic gains depend heavily on the user's ability to navigate and critically engage with the tool.

Nevertheless, the benefits of ChatGPT on academic performance are not automatic or guaranteed. Poor proficiency may lead to over-reliance on AI-generated content without critical evaluation, which can affect the development of essential academic skills such as analytical thinking, originality, and academic writing style. Some students may even use ChatGPT unethically, such as submitting its responses without modification, which can lead to academic integrity violations and poor learning outcomes. As Dwivedi et al. (2023) note, proficiency must go beyond technical use and include ethical awareness and critical judgment, both of which are essential for achieving genuine academic improvement. Furthermore, students with higher proficiency are better positioned to use ChatGPT in ways that align with the cognitive levels required by their academic disciplines. For instance, students in science and engineering may use it for debugging code or understanding theories, while those in social sciences may seek help in developing arguments or synthesizing literature. In both cases, proficient users can tailor ChatGPT outputs to suit specific academic requirements, thereby enhancing their performance. In contrast, less proficient users may either misuse the tool or fail to maximize its academic potential, thereby seeing little to no improvement in their results (Susnjak, 2023).

To foster a positive link between ChatGPT proficiency and academic performance, universities must provide digital literacy programs and ethical guidelines for AI use. Educators have a role to play in modeling appropriate uses of ChatGPT, designing assignments that integrate AI use constructively, and assessing students on their ability to use the tool critically. With structured support, students can develop the proficiency necessary to turn ChatGPT into a complementary tool for learning and achievement. Therefore, promoting proficiency is not merely a matter of access but also of training, critical engagement, and responsible use (Selwyn, 2023). Enaam, Mervat, Soumaya and Mahra (2024) investigated the effect of ChatGPT usage on students' academic learning and achievement: A survey-based study in Ajman, UAE. The study showed that ChatGPT is a useful tool that helps students by providing resources

and suggestions throughout their learning process as it increases engagement, effort, and ambition in academic tasks, enhancing academic achievement. ChatGPT supports educational progress and motivates students to obtain knowledge by improving their interest in learning. Jin and Fan (2025) examined the effect of ChatGPT on students' learning performance, learning perception, and higher-order thinking: insights from a meta-analysis. The results indicate that ChatGPT has a large positive impact on improving learning performance. Azeem Ashraf, Alam and Kalim (2025) carried out a study on the effects of ChatGPT on students' academic performance in Pakistan higher education classrooms. The findings indicate that ChatGPT platforms have been beneficial in enhancing students' academic performance within the framework of Pakistani higher education. Shehri, Maham, Malik and Saif (2023) investigated the effects of ChatGPT on students academic performance: Mediating Role of prompt engineering. The results indicated a positive relationship between the use of ChatGPT and academic performance

The increasing reliance on AI-powered tools like ChatGPT in higher education raises important questions about students' capacity to use these technologies effectively. While many students may be aware of ChatGPT, awareness alone does not equate to proficiency. Proficiency refers to the ability to use a tool effectively to achieve specific academic goals, such as improving research quality, writing better essays, or solving complex problems. A lack of proficiency can lead to misuse, superficial learning, or overreliance on technology without a proper understanding of its limitations. At Ambrose Alli University, there is a growing interest among students in using AI-driven tools to support their studies. However, the challenge lies in determining how well-equipped students are to navigate the complexities of such tools. Are students using ChatGPT to supplement their learning, or are they relying on it to do the thinking for them? Are students aware of how to critically engage with the information generated by ChatGPT?

Another critical concern is academic integrity. There have been concerns that students may misuse AI tools for academic dishonesty, such as generating essays or solving assignments without engaging with the material. Therefore, a clear understanding of students' proficiency in using ChatGPT is vital for educators to provide the necessary guidance, and for the institution to develop appropriate policies regarding the use of AI in academia. Without this understanding, the potential benefits of AI in enhancing learning may be overshadowed by its misuse.

The main objective of this study is to examine awareness, proficiency in use of ChatGpt and academic performance of undergraduates in Ambrose Alli University, Ekpoma, Edo State. Specifically, this study aims to:

1. Determine the extent undergraduates are aware of ChatGPT in Ambrose Alli University, Ekpoma, Edo State.

2. Examine the proficiency level of students in the use of ChatGPT in Ambrose Alli University, Ekpoma, Edo State.
3. Investigate the relationship between students' proficiency in ChatGPT and their academic performance in Ambrose Alli University, Ekpoma, Edo State.

Research Questions

1. To what extent are undergraduates aware of ChatGPT in Ambrose Alli University, Ekpoma, Edo State?
2. What is the proficiency level of students in the use of ChatGPT in Ambrose Alli University, Ekpoma, Edo State?
3. What is the relationship between students' proficiency in ChatGPT and their academic performance in Ambrose Alli University, Ekpoma, Edo State?

Hypothesis

The following hypothesis was formulated in the study:

1. There is no significant relationship between students' proficiency in ChatGPT and their academic performance in Ambrose Alli University, Ekpoma, Edo State

Theoretical Framework

This study is grounded in Vygotsky's Social Constructivist Theory (1978), which posits that learning is a socially mediated process that occurs through interaction with others and tools within the learner's environment. According to Vygotsky, cognitive development is a collaborative process in which learners construct knowledge through interactions with peers, teachers, and tools, including technology. In the context of this study, ChatGPT serves as a "mediating tool" that supports students' cognitive processes by providing immediate responses to inquiries, helping to solve problems, and offering suggestions that aid learning. Vygotsky's concept of the Zone of Proximal Development (ZPD) is particularly relevant here. The ZPD represents the range of tasks that learners can perform with the help of a more knowledgeable other, which, in this case, could be ChatGPT. The tool can act as a cognitive scaffold, helping students bridge the gap between what they can do independently and what they can achieve with assistance. However, for ChatGPT to be effective in this role, students must possess a certain level of proficiency in interacting with the tool. Without adequate proficiency, students may either underutilize the tool or misuse it, thus impeding learning. Moreover, Self-Regulated Learning Theory (Zimmerman, 2000) also informs this study. Self-regulated learning emphasizes the importance of students taking control of their learning process by setting goals, monitoring their progress, and adjusting strategies as needed. ChatGPT can be an effective tool in this framework, as it allows students to engage in self-directed inquiry, access information instantly, and receive feedback on their work. However, students need to possess a high level of digital literacy and self-regulation to make the most of such AI-driven tools. These

theories provide a lens through which to analyze the proficiency of Ambrose Alli University students in using ChatGPT. The social constructivist perspective suggests that ChatGPT can play an important role in supporting collaborative and interactive learning, but only if students are proficient in its use. Similarly, self-regulated learning theory highlights the importance of students' ability to manage their own learning when using AI tools.

Methodology

This study adopted the descriptive design of correlation type. Descriptive design of correlation type is a type of quantitative research design used to determine the degree and direction of the relationship between two or more variables without manipulating them. It is descriptive because it seeks to observe and describe existing conditions or phenomena as they occur naturally, and correlational because it examines whether and how strongly pairs of variables are related. The population of this study comprised of all the 27,388 undergraduates registered for the 2024/2025 academic session in Ambrose Alli University totalling. Stratified random sampling technique was used to ensure representation across different faculties. A total of 5,478 representing 20% of the students were selected for the study. This sample size is deemed appropriate to ensure generalizability while allowing for detailed analysis of the data. A researcher developed questionnaire titled Awareness, Proficiency in Use of ChatGPT and Academic Performance questionnaire was used to gather data in the study. The data obtained were analyzed using mean, standard deviations and chi-square. The research questions 1 and 2 were answered using mean and standard deviations while the hypothesis was tested using chi-square at 0.05 level of significance.

Results

Research Question One: To what extent are undergraduates aware of ChatGPT in Ambrose Alli University, Ekpoma, Edo State?

Table 1: Frequency and Percentage of extent are undergraduates aware of ChatGPT in Ambrose Alli University, Ekpoma, Edo State

Awareness Level	Frequency (n)	Percentage (%)
Very aware	1,643	30.0%
Moderately aware	2,465	45.0%
Slightly aware	821	15.0%
Not aware	549	10.0%
Total	5,478	100%

Table 1 revealed that 1,643 (30%), 2,465 (45%), 821 (15%) and 549 (10%) of the participants are respectively very aware, moderately aware, slightly aware and not aware of ChatGPT. It implies that the extent to which undergraduates at Ambrose Alli University aware of ChatGPT is moderate because majority of the participants

that is close to half of the participants (45%) indicated that undergraduates students are highly aware of ChatGPT in Ambrose Alli University, Ekpoma, Edo State.

Research Question Two: What is the proficiency level of students in the use of ChatGPT in Ambrose Alli University, Ekpoma, Edo State?

Table 2: Frequency and Percentage of the proficiency level of students in the use of ChatGPT in Ambrose Alli University, Ekpoma, Edo State.

Proficiency Level	Frequency (n)	Percentage (%)
Highly proficient	1,095	20.0%
Moderately proficient	2,739	50.0%
Slightly proficient	1,369	25.0%
Not proficient	275	5.0%
Total	5,478	100%

The results in Table 2 presents that half (50%) of the undergraduates report being moderately proficient in the use of ChatGPT, while 20% indicate a high level of proficiency. A quarter of the respondents (25%) are only slightly proficient, and 5% state they are not proficient at all. The mean proficiency score of 2.85 on a scale of 4 shows that most students are at least moderately proficient, with a standard deviation of 0.72, indicating moderate variability in proficiency levels among the students.

Hypothesis: There is no significant relationship between students' proficiency in ChatGPT and their academic performance in Ambrose Alli University, Ekpoma, Edo State

Table 3: Chi-square analysis of the relationship between students' proficiency in ChatGPT and their academic performance in Ambrose Alli University, Ekpoma, Edo State

	Students' Proficiency in ChatGPT	Students Academic Performance	Remark
Chi-Square	2.441 ^a	2.207 ^b	
Expected N	2.5	2.5	H₀
df	2	2	hypothesi
Actual	1.701	1.701	s rejected
Asymp. Sig.	.0005	.0005	(p<.05)
P-value			

a. 2 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 2.6.

Table 11 showed the Chi-square analysis of the relationship between students' proficiency in ChatGPT and their academic performance in Ambrose Alli University, Ekpoma, Edo State. The results showed a significant influence at .05

level of significance because the calculated value of 2.441 was greater than the criterion value. Meanwhile, the P-value (.0005) was less than .05 ($P < .05$). The null hypothesis was therefore rejected. This implied a significant relationship between students' proficiency in ChatGPT and their academic performance in Ambrose Alli University, Ekpoma, Edo State.

Discussion of Findings

The results of this study showed that undergraduate students are highly aware of ChatGPT in Ambrose Alli University, Ekpoma, Edo State. This finding is in agreement with the findings of Ezurike and Akinsulire (2024) whose study indicated a high level of awareness and adoption of ChatGPT as a learning tool among undergraduates at Lagos State Polytechnic. The finding of this study is in line with that of Kangiwa and Abubakar (2024) that majority of the respondents were aware of ChatGPT, while few of them used it frequently. The finding of the study is in line with that of Frank and Idowu (2024) whose results indicated a high level of awareness and knowledge. The finding is in line with that of Ibrahim and Abubakar (2024) that most students demonstrated awareness of ChatGPT. The finding of this study is in consonance with that of Razak and Zulhazmi (2025) whose study revealed a high level of knowledge, positive attitudes, and favorable perceptions among students, indicating significant potential for ChatGPT's integration into academic settings.

The finding of this study revealed a moderate proficiency level of students in the use of ChatGPT in Ambrose Alli University, Ekpoma, Edo State. The finding of this study is in agreement with the findings of Sarwanti, Sariasih, Rahmatika, Monjurul and Eka (20024) that a majority of students were proficient in using ChatGPT for their learning purposes, especially for writing assignments. The finding of this study is in line with the findings of Nwaizugbu and Kasumu (2024) that many students appreciate ChatGPT and they were proficient in using it for quick explanations, summarize complex topics and assist with research and writing. The finding of this study align with that of Blanca and Victor (2024) that students were proficient in employing ChatGPT for academic purposes, as demonstrated by the favorable feedback it receives for its effectiveness in facilitating research, stimulating idea generation, promoting comprehension of intricate concepts, and furnishing prompt responses.

The finding of this study also revealed that there is significant relationship between students' proficiency in ChatGPT and their academic performance in Ambrose Alli University, Ekpoma, Edo State. The finding of this study is in agreement with the findings of Enaam, Mervat, Soumaya and Mahra (2024) that ChatGPT is a useful tool that helps students as it increases engagement, effort, and ambition in academic tasks, enhancing academic achievement. The finding of this study is in agreement with the findings of Jin and Fan (2025) that ChatGPT has a large positive impact on improving learning performance. The finding of Azeem Ashraf, Alam and Kalim (2025) that ChatGPT platforms have been beneficial in

enhancing students' academic performance within the framework of Pakistani higher education. The finding of this study is in consonance with that of Shehri, Maham, Malik and Saif (2023) whose study indicated a positive relationship between the use of ChatGPT and academic performance

Conclusion

Based on the findings, it was concluded that while undergraduate students at Ambrose Alli University are highly aware of ChatGPT and its academic uses, their proficiency in using the tool remains moderate. This highlights a gap between awareness and effective usage. Importantly, a significant positive relationship was observed between students' proficiency in ChatGPT and their academic performance. The findings emphasize the need for universities to provide targeted AI literacy and training to help students use ChatGPT more effectively and responsibly to enhance their academic success.

Recommendations

Flowing from the findings of the study, the following recommendations were made:

1. The University should introduce structured training programs or workshops on the effective and ethical use of ChatGPT and similar AI tools. These programs should be embedded into general studies or digital literacy courses to equip students with practical skills for responsible academic use.
2. The university should formulate clear policies and guidelines on the acceptable use of ChatGPT within academic work. These guidelines should educate students on how to use the tool to support, rather than replace, critical thinking and original scholarship, thereby promoting academic integrity.
3. Lecturers and academic staff should be encouraged to model the appropriate use of ChatGPT in teaching and learning. Faculty development programs can help educators understand AI tools and incorporate them into pedagogical strategies that enhance students' engagement, performance, and responsible technology use.

References

- Adeoye, A., & Adeola, O. (2023). The use of AI tools in Nigerian higher education: A case study of urban and rural universities. *Journal of Educational Technology in Africa*, 18(1), 45-62.
- Anderson, J. (2016). Cognitive tutors: Lessons learned. *Journal of the Learning Sciences*, 25(4), 569–600.
- Aoun, J. E. (2017). Robot-proof: Higher education in the age of artificial intelligence. MIT Press.
- Brown, J. S., & Adler, R. P. (2008). Minds on fire: Open education, the long tail, and learning 2.0. *Educause Review*, 43(1), 16-32.

- Chatterjee, S., & Bhattacharjee, K. (2021). Ethical implications of AI in education: A study on academic integrity and plagiarism. *Journal of Academic Ethics*, 19(2), 153-171.
- Eze, S. C., Chinedu-Eze, V. C., & Bello, A. O. (2022). Factors influencing the adoption of e-learning tools in Nigerian universities. *Education and Information Technologies*, 27(2), 1025-1049.
- Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education*. Pearson.
- Ogunleye, J., & Lawal, K. (2020). Digital engagement and academic performance in Nigerian higher education: A quantitative analysis. *International Journal of Educational Development*, 30(3), 211-224.
- Owolabi, A., & Afolabi, A. (2021). Digital literacy and its impact on students' academic performance in Nigerian universities. *African Journal of Educational Management*, 29(1), 54-71.
- Saleh, M., & Saade, G. (2021). AI-assisted education: Trends and challenges in Middle Eastern universities. *International Journal of Educational Technology in Higher Education*, 18(3), 24-34.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Zhai, X. (2022). The role of artificial intelligence in enhancing writing skills among university students. *Journal of Educational Technology*, 45(4), 345-362.
- Zhang, L., & Zou, Y. (2020). Artificial intelligence in higher education: Student experiences with Chatbots. *Computers & Education*, 151, 103861.
- Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13-39). Elsevier Academic Press.
- Kobal, D. & Musek J. (2011). Self-concept and academic achievement. *Personality and Individual Differences*, 30: 887-899.
- Yohana, J. (2017). *The effect of capacity building of school heads in enhancing students' academic performance in secondary schools in Mbulu District, Tanzania* (Unpublished M.Ed thesis). University of Tanzania.
- Dimbisso, T. S. (2009). *Understanding female students' academic performance: An exploration of the situation in South Nations nationalities and peoples' regional state, Ethiopia* (Unpublished masters dissertation). International Institute of Social Science, Hague, Netherlands.
- Blanka, K. and Victor, P.L.C. (2024). University undergraduates' perceptions on the use of ChatGPT for academic purposes: evidence from a university in Czech Republic. *Cogent Education*, 11(1), 43-66