

Awareness, Knowledge and Perception of Chat-GPT among Undergraduates of Nnamdi Azikiwe University, Awka, Anambra State, Nigeria

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ABSTRACT

Today, students play dual roles as both knowledge consumers and key creators in the expanding field of artificial intelligence (AI). This study investigates the awareness, knowledge, and perception of Chat-GPT, an AI tool, among undergraduate students at Nnamdi Azikiwe University, Awka, Anambra State. The objectives are; to determine the level of awareness of Nnamdi Azikiwe University undergraduates the about Chat-GPT, establish the extent of usage of Chat-GPT among undergraduates of Nnamdi Azikiwe University, ascertain Nnamdi Azikiwe University undergraduates' perception of the influence of Chat-GPT on their educational experience and find out the challenges in the usage of Chat-GPT for academics by undergraduates of Nnamdi Azikiwe University. Technology Acceptance Model (TAM) and Uses and Gratification Theory were used as theoretical framework. The research employed cross-sectional survey design with structured questionnaire as instrument of data collection. Sample size was determined at 370 using Krejcie & Morgan while multi-stage sampling procedure was adopted. Results analysis reveal a high level of awareness and knowledge with 92% of students demonstrating clear understanding of Chat-GPT's functionalities, a widespread adoption and utilization of Chat-GPT for academic and research tasks. While students expressed positive perceptions of the potentials of Chat-GPT, they also pointed out challenges such as plagiarism and slowing of critical thinking skills. The study thus recommended among others that educational campaigns should be conducted to enhance awareness among students and educators about Chat-GPT, clear ethical guidelines should be developed and disseminated for the proper integration of AI tools in educational settings and that challenges related to plagiarism and others should be addressed through AI developers' incorporation of open dialogues with students, educators, and the broader academic community.

INTRODUCTION

In today's academic landscape, students are not only consumers of knowledge but also the main recipients of the ever-expanding realm of artificial intelligence development. As the educational sphere continues to evolve, understanding how students perceive, are aware of, and harness artificial intelligence (AI) tools for research and learning is of paramount importance. Firat (2023) explains that the introduction of AI technologies in education has the potential to revolutionize traditional educational practices, promote personalized learning experiences, and foster the development of soft skills.

Artificial intelligence technologies such as Chat-GPT have been found to enable students to research/gather

information, learn, get in-depth and understandable explanations and practical examples of different concepts in their fields, get feedback on their assignments, projects, and tasks, upgrade their writing or calculation skills, learn and translate different languages, etc. Since this twenty-first century students are witnessing a profound transformation in how research and learning take place in the academic world, which is through digital resources, online platforms, and AI-driven tools, it has become necessary to access and explore the extent to which undergraduate students are aware of and adept at utilizing AI tools, such as Chat-GPT, in their research and learning endeavours.

In this digitized age, students are no longer passive recipients of information but active knowledge researchers and creators. As disclosed by Sharma & Naidu (2020), ‘mobile devices with internet connectivity have put students in control of the learning experience due to which they have got the flexibility to access the learning resources from any place and at their own pace’. There is thus an abundance of quality content that is not limited by time, geography, or cost and it is redefining the student/teacher relationship, making the concept of a physical classroom fast giving way to interactive platforms on the web. The existence of Artificial intelligence has given students a strong foot in academia, offering innovative solutions to students with tools like Chat-GPT known to enhance student learning experiences and search capabilities, streamline learning, foster critical thinking, and aid academic processes.

Many scholars have performed numerous studies on Chat-GPT and have also written on the benefits and demerits of Chat-GPT in academia and amongst students. Baidoo-Anu and Owusu Ansah (2023) reviewed the potential benefits of Chat-GPT in teaching and learning. They found that the advantages of Chat-GPT include personalized learning, the encouragement of interactive learning, and the potential for formative assessment that supports teaching and learning and provides continuous feedback. Nonetheless, Chat-GPT has also been found to have issues of misinformation generation, bias in data training, and privacy issues.

Chat-GPT, a recently developed conversational chatbot created by OpenAI (Open AI, 2023), uses natural language processing to generate human-like responses to user input. Zhai (2022) cited in Lo (2023) states that it has gained attention worldwide for its impressive performance in generating coherent, systematic, and informative responses. This AI tool hands students access to powerful resources for research, knowledge acquisition, and problem-solving. Since its release on 30 November 2022, Chat-GPT has become the fastest-growing user application in history, reaching 100 million active users as of January 2023, just two months after its launch (Reuter.com, 2023)

Research has also demonstrated that chatbot technologies can enhance student interaction and learning processes (D’Mello et al., 2014), enrich learning experiences by impacting student success in higher education (Winkler & Söllner, 2018), and potentially improve student motivation, engagement, and learning outcomes (Deng & Yu, 2023). However, it is not even yet possible to assert a consensus among educators, specifically concerning Chat-GPT.

Before the advent of Chat-GPT, a study by Sengupta and Chakraborty (2020) investigated the use of chatbots in higher education and found that they can be an effective tool for improving students’ engagement and satisfaction. The study also highlighted that chatbots could reduce the workload of university staff by answering frequently asked questions. Similarly, a study by Alotaibi et al. (2020) explored the impact of a chatbot on student learning outcomes in a computer science course. The results showed that using a chatbot significantly improved students’ performance and knowledge retention. These studies here show that AI’s transformative impact on higher education is increasingly acknowledged. However, there are minor studies by researchers that delve into the number of students cognizant of these knowledge-generation tools and how these students harness these available AI-powered resources for research and learning. Also, most existing research tends to focus on AI’s broad applications in education and its effect but often overlooks the noteworthy perspectives/perceptions and practices of undergraduate researchers. Thus, the essence of this research is not to deal with the negative and positive effects and

benefits of AI tools such as Chat-GPT but to investigate, explore, and analyse the awareness ratio, harnessing level, and the different perceptions of undergraduate students of Chat-GPT in Nnamdi Azikiwe University, Awka, Anambra State.

Statement of Problem

In the contemporary digital world, the integration of artificial intelligence (AI) tools, such as Chat-GPT, holds immense potential for transforming how students learn, conduct research, and engage with academic content. Regardless, there is a scarcity of empirical research focusing on and examining the awareness, knowledge, and perception of Chat-GPT among undergraduate students rather there are more existing studies on other aspects such as its effects, features, advantages, and disadvantages to students and the academic world. Muenks et al. (2020) cited in Shoufan (2023) noted that ‘students’ perceptions are highly relevant for education as they can have a significant impact on their motivation, engagement, and academic achievement. When students have positive perceptions of their learning experience, they are more likely to be engaged and motivated to learn, which can lead to better academic outcomes.”

In the multitude of online learning tools and websites, Chat-GPT offers some unique capabilities that appeal to students need for quick and reliable answers to academic questions and assignments. Currently, Chat-GPT is planning on incorporating video functions to provide better user experience and realistic outputs. However, despite these positive outlooks in the abilities of Chat-GPT to enhance learning, there are concerns about its knowledge and usage for effective academic experiences by students in higher institutions. Possibilities exist for the misuse of Chat-GPT; the copy and paste of copyrighted materials, the distractions of online engagements and the degeneration of critical skills among others. The questions thus arise; do students in institutions Anambra State know about Chat-GPT? Do they use it? What do they use it for and how has it helped or harmed their academic pursuits? Undergraduates represent a diverse and tech-savvy demographic who readily engage with AI tools in their academic pursuits. However, no empirical study seems to have investigated these concerns with specific reference to this work’s area of study – Nnamdi Azikiwe University, Awka. This gap will therefore be bridged with a investigation of students’ awareness of Chat-GPT, their level of knowledge in using it as a learning and research tool, and their perceptions regarding its influence on their educational experience.

Objectives of the Study

1. To determine the level of awareness of Nnamdi Azikiwe University undergraduates the about Chat-GPT.
2. To establish the extent of usage of Chat-GPT among undergraduates of Nnamdi Azikiwe University
3. To ascertain Nnamdi Azikiwe University undergraduates’ perception of the influence of Chat-GPT on their educational experience.
4. To find out the challenges in the usage of Chat-GPT for academics by undergraduates of Nnamdi Azikiwe University.

Theoretical Framework

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is a theoretical framework that provides a structured understanding of how individuals adopt and accept new technology. The TAM was propounded by Davis (1989) in MIS Quarterly. It was proposed to throw more light on why a user accepts or rejects information technology by adopting the Theory of Reasoned Action (TRA) (Davis, Bagozzi, and Warshaw, 1989). The TRA, according to Ajzen and Fishbein (1980), defines the relationship between beliefs, attitudes, norms, intentions, and behavior. In the context of this research on the awareness, knowledge, and perception of

Chat-GPT among Nnamdi Azikiwe University students, TAM becomes a valuable lens to explore the complexities of student engagement and interaction with this innovative AI tool, as it delves into the factors influencing the acceptance and adoption of the Chat-GPT technology amongst students and the educational field as large.

TAM states the notion that users are more likely to embrace a technology if they perceive it as useful in enhancing their performance or fulfilling a specific need. For Chat-GPT, students' perception of its usefulness in aiding their academic pursuits is a critical aspect. For example, students may see Chat-GPT as useful in writing, organizing, research making, information gathering, explanations on complex subjects and topics, language translation, or even in mathematical calculations. The application of TAM to the research on Chat-GPT is highly relevant. It offers a systematic approach to gauge students' perceptions of Chat-GPT, providing insights into how they become aware of, acquire knowledge about, and form perceptions of Chat-GPT.

Uses And Gratifications Theory

The Uses and Gratifications Theory is a communication theory that focuses on understanding why and how people actively seek out specific media to satisfy their needs. Unlike traditional media effects theories that emphasize what media do to people. The Uses and Gratifications Theory emphasizes what people do with media. It assumes that individuals are not passive receivers of media messages but are actively involved in selecting and using media to fulfill certain needs. The Uses and Gratifications Theory was popularized by Blumer and Katz (1974) after their study which suggested that people are actively involved in media usage and interact highly with the communication media by building profile groupings of related uses and theoretically associated gratifications

In the context of this research on the awareness, knowledge, and perception of Chat-GPT among Nnamdi Azikiwe University students, the Uses and Gratifications Theory becomes relevant in exploring why students choose to engage with Chat-GPT. It helps to understand the specific needs and gratifications that students seek when using Chat-GPT for academic purposes. The theory helps in identifying the motivations that drive students to be aware of, seek knowledge about, and form perceptions of Chat-GPT. This could include needs for writing, research, language translation, information, learning support, calculations, or any form of academic assistance.

Understanding the gratifications sought by students can assist in tailoring communication strategies. For instance, if students are using Chat-GPT for personalized learning, communication efforts can emphasize its adaptability and individualized support. This theory allows us to analyse how students actively consume and engage with Chat-GPT.

LITERATURE REVIEW

In education, Chat-GPT's adoption and use is widespread, leading researchers and educators to increasingly dedicate their efforts to investigating the advantages, disadvantages, and challenges linked to integrating Chat-GPT into educational contexts. However, there is still a significant gap in understanding students' experiences when using Chat-GPT in educational contexts (Ngo, 2023). This study explores students' awareness, knowledge, and use of Chat-GPT, as well as their perspectives/perceptions on its role as an educational tool. It also briefly focuses on the benefits and concerns that affects its effective implementation for academic purposes giving a solution on it too.

Chat-GPT in Learning, Research and Education

Chat-GPT is a language model that allows people to interact with a computer in a more natural and

conversational way and has quickly become the golden child of artificial intelligence (Alex Hughes, 2023). It is a public chatbot developed by OpenAI and based on the GPT language model technology (Kirmani, 2022). The Chat-GPT model was officially released on November 30, 2022 by OpenAI after continuous improvements (Xin Tan, 2023) and the word GPT means Generative Pre-trained Transformer (Tingiris, S., & Kinsella, B., 2021). It is a type of artificial intelligence language model developed by OpenAI, designed to generate human-like text by predicting the next word in a sentence based on the context of the preceding words (Velibor Božić, & Indrasen Poola, 2023).

The platform reached one million users in its first week alone (Mollman, 2022; Vallance, 2022) and stretched out to 100 million users just two months after being launched (Emma Sabzalieva and Arianna Valentini, UNESCO 2023) and was soon dubbed the “next big disruptor of the industry” (Rudolph et al., 2023) due to the perceived quality of the response outputs from the model. Prof. J. K. Singh, FCS, & Dr. Harjit Singh (2023), highlighted in their ICIS publication that the main reason for the growing popularity of Chat-GPT is its capability to produce human-like responses to online learners.

Chat-GPT uses machine learning to continuously improve its capabilities and learn from the internet and the Chat-GPT was trained on a variety of internet texts, including books, articles, and websites, and covering a wide range of topics such as news, and fiction (Shen et al., 2023). It was also trained using Reinforcement Learning from Human Feedback (RLHF), which involves incorporating human feedback into the training process (OUYANG L, WU J, JIANG X, et al, 2022). The incorporation of human feedback into the training process enhances the model’s ability to learn from diverse perspectives and adapt to changing situations. In the case of Chat-GPT, 570gb of data representing 300 billion words have been supplied to the system and it has around 175 billion parameters allowing it to have contemporary expertise and knowhow for addressing various modern-day obligations. Used by millions, the AI chatbot is able to answer questions, tell stories, write web code, learn languages, solve mathematical equations and even conceptualise incredibly complicated topics (Alex Hughes, 2023). This shows that is not only a sifter and mover of information, but also an analyzer, generator and creator of information.

The core functionality of Chat GPT is based on receiving a “prompt”, which can be a question, statement, or any text, and generating a response. This concept of ‘prompting’ is a fundamental aspect of how one interacts with GPT-based models, and effective prompting, known as ‘prompt engineering’, can greatly influence the utility and relevance of the model’s output (Fastiggi, 2023).

Chat-GPT is set up specifically for conversational tasks. Because of its dialog format, Chat-GPT can answer follow-up questions, admit mistakes, dispute false premises, and reject inappropriate requests. Question answering, storytelling, logical reasoning, code debugging, machine translation, etc. (Donmez, I., Idil, S. & Gulen, S., 2023). In fact, Chat-GPT has also been used to generate entire academic journal articles (ALMIRA OSMANOVIC THUNSTRÖM, 2022), opening an ethical debate about whether a non-human author can be considered a contributor to the creation of knowledge. Hence, It is a powerful tool that has the potential to transform the way we interact with technology, enabling more natural and intuitive communication between humans and machines. It is already being used in a variety of applications, including customer service chatbots, language translation tools, and virtual assistants, and its use in education is also being explored to enhance student learning and engagement (Velibor Božić, & Indrasen Poola, 2023).

Chat-GPT has brought about opportunities for education. Its ability to provide personalized learning experiences, to assist in creating educational content, and to overcome language barriers have had significant impact on teaching and learning outcomes (Adiguzel et al., 2023; Chen, 2023). For example, Chat-GPT can help teachers generate questions, quizzes, assignments, and interactive educational content, such as games and simulations, that cater to the students’ learning styles (Kasneci et al., 2023; Lee, 2023). Chat-GPT can also support students to customize learning and provide feedback accordingly (Kasneci et al.,

2023). Chat-GPT's personalized customization function will further strengthen students' autonomy in choosing learning content and methods that best suit their interests, abilities, and needs; from inefficiency to efficiency. (Xia Tan, 2023).

Further, language generation abilities engage users and have valuable conversations on various topics. Another strength of Chat-GPT is its capacity to contextualize information and produce pertinent responses based on the input prompt. This makes Chat-GPT a powerful tool for information recovery, education, and research, as it can provide users with accurate and relevant information informally. Singh & Singh (2023) found that one way Chat-GPT can aid education by answering questions. Meaning it can be used as a 'question-answering' tool since learners (formal or online) always have various questions about a specific topic or concept. With the advent of Chat-GPT, learners can type their questions and find a precise and appropriate answers instantaneously.

For researchers, Chat-GPT can help them collect and analyze large amounts of data, make discoveries, and optimize scientific and academic research experiments. It assists in drafting research papers in the following ways: (a) Text Generation (b) Text Summarization (c) Grammar and language checking and (d) Review of literature. It can also be effectively utilized as a research tool because of its capacity to recall the previous interaction with the researchers in the same prompt and propose information surrounding those responses.

The GPT technology is a powerful tool for NLP (Natural language processing) tasks, but it has limitations. One of the main limitations is that GPT models rely on a statistical approach that can perpetuate existing biases and stereotypes in the data, learning patterns from a large text dataset (Lucy & Bamman, 2021). Also, its training on massive data, including internet data, which may sometimes include errors, biases, or offensive content. Such biased or inappropriate content can create problems for applications such as customer care chatbots (Prof. J. K. Singh, FCS, & Dr. Harjit Singh, 2023). It also has its limitations and its software can be easily confused if your prompt starts to become too complicated (Alex Hughes, 2023). Also, the use of Chat-GPT in education has raised potential concerns and risks (Alafnan et al., 2023; Kasneci et al., 2023; Sok & Heng, 2023). One concern is the ethical implications of Chat-GPT's ability to write scientific essays (Mhlanga, 2023), which may compromise the authenticity and originality of research (Malik et al., 2023) as well as authorship.

Another issue is the use Chat-GPT by students to outsource their writing (Lund et al., 2023), which poses a challenge for academic institutions that rely on plagiarism detection tools to maintain academic integrity (Fijačko et al., 2023; Ventayen, 2023) and potentially undermines students' writing skill development (Kasneci et al., 2023; Sallam, 2023). In addition, the output of Chat-GPT can be biased or nonsensical, possibly leading to the dissemination of incorrect information (Baidoo-Anu & Owusu Ansah, 2023; Choi et al., 2023).

Awareness, Knowledge, And Perception Of Chat-GPT Amongst University Students

In the realm of higher education, understanding the role of Chat-GPT among university students involves exploring interconnected elements: Awareness, Knowledge, and Utilization. Drawing inspiration from Cambridge Dictionary (2023), Awareness denotes recognizing Chat-GPT's existence, knowledge delves into understanding its functionalities, and utilization signifies its effective application in academic pursuits.

In the context of Chat-GPT, awareness begins with students recognizing its presence and capabilities. Their initial contact with Chat-GPT involves gaining understanding into how Chat-GPT functions and its potential applications in various academic scenarios. Whether through online/social media platforms, television or radio news broadcasts, educational institutions: teachers and the university administration, or peer discussions, understanding the sources and mechanisms that contribute to students' awareness is key to determining their level of awareness, knowledge, and utilization of Chat-GPT.

Transitioning from Awareness, Knowledge deepens the understanding, empowering students to comprehend the underlying technologies, operation intricacies, and broad applications. Completing the cycle, Utilization involves actively applying Chat-GPT in academic tasks, going beyond awareness and knowledge. It emphasizes the practical use of Chat-GPT to enhance learning, problem-solving, and various academic activities.

So, exploring how students recognize, understand, and apply Chat-GPT provides insights into their engagement, impact, perceptions, and concerns, collectively shaping the evolving role of technology in university education. Students' awareness and understanding significantly influence how they use Chat-GPT in research, information access, and other academic activities. When students grasp Chat-GPT's capabilities, they seamlessly integrate it into their learning, making tasks like gathering data, conducting research, writing, and calculations more efficient. In essence, students' awareness and knowledge play a crucial role in Chat-GPT's effective use in academics.

Adding depth to this exploration, recent data from Nerdynav (2023) reveals that 43% of college students have engaged with Chat-GPT or similar AI tools. Among them, 89% utilized these tools for homework, 53% for essays, and 48% for at-home tests. Notably, 13.5% of millennials and Gen Z actively use Chat-GPT, showcasing a higher adoption rate compared to 7.9% of Gen X and 7.2% of baby boomers. Interestingly, while 82% of college professors are aware of Chat-GPT, only 55% of K-12 teachers share the same level of awareness. However, 21% of educators find value in Chat-GPT, integrating it into tasks like writing prompts (7%), content delivery (5%), or planning full lessons (4%). Some high schools in Denmark even utilize Chat-GPT as a teaching tool, believing it enhances students' writing and research skills.

A nationally representative survey commissioned by the Walton Family Foundation and conducted by Impact Research further reveals that 22% of students use Chat-GPT on a weekly basis or more to aid in coursework and extracurricular activities. The survey also indicates that 63% of students and 72% of teachers perceive Chat-GPT as an innovative tool, signifying the need to adapt traditional educational approaches in the modern world. The results were shared exclusively with USA Today, involving more than 1,000 teachers and 1,002 12- to 17-year-olds in the United States of America (Kayla Jimenez, 2023).

Mohaimenul Islam Jowarder (2023) published a research article where a study was conducted at Stony Brook University and 200 undergraduate social science students were examined for their awareness, perceived usefulness, factors influencing adaptation, and impacts on academic performance regarding Chat-GPT. The research revealed that over 90% of participants were aware of Chat-GPT, with varying levels of usage. Some had heard but not used it, while others had prior experience. Participants who hadn't used Chat-GPT were aware of its existence through various channels, including news articles, social media, and peer recommendations. This aligns with findings by Hou et al. (2015) and Xue & Wang (2022), highlighting its usefulness in cognitive development and preparation purposes. The study outlined several factors influencing the adoption of Chat-GPT. Perceived usefulness, ease of use, limited alternative tools, and social influence were key determinants. The research concluded by stating that while Chat-GPT proved valuable in aiding students with their academic tasks, it should not substitute critical thinking and independent learning. The study suggests that peer recommendations and user-friendly interfaces play crucial roles in technology adoption. Understanding the nuanced impact of Chat-GPT on academic performance is essential for its responsible integration into educational environments.

Findings from these studies indicate that students are aware of Chat-GPT's time-saving capabilities and its potential to offer a wide range of knowledge. Benefits included clarification of theoretical concepts, assistance in generating writing ideas, and the ability to create accurate code for app and software development. However, despite a high satisfaction rate (over 86%), students acknowledged its challenges, such as concerns about information credibility and difficulty in formulating effective questions. Even

though students found numerous problems with using Chat-GPT in their studies, all students stated that they would continue to use Chat-GPT as a support tool.

In summary, university students are aware of and positive about Chat-GPT. They use it for different academic tasks, showing how technology is becoming important in education. The study suggests using Chat-GPT responsibly and having clear guidelines for its use in education. This reflects the changing landscape of technology in higher education.

METHODOLOGY

This research employed a cross-sectional survey design with a quantitative approach. The quantitative method ensures that the structured, numerical data can be analysed statistically using its techniques to draw inferences, identify trends and patterns, and generalize about the population's perceptions about Chat-GPT. The study's population comprises undergraduates currently enrolled in Nnamdi Azikiwe University Awka, Anambra State. Data from the Academic Planning Unit of the school show that the students' population is 37,970 as of 2023/2024 academic session. The sample size for the survey was determined by referring to the sample sizes for various population ranges as worked out by Krejcie & Morgan (1970). The sample sizes are seen below:

Population Size	Sample Size
100	80
500	217
1,000	278
10,000	370
100,000	383
500,000	384
1 million and above	384

Therefore, since the study population is 37,970, the researcher used 370 as the sample size. Thus, the sample size of 370 is adopted at 5% error margin and 95% percent confidence level. The sample selection involved a multi-stage procedure.

The first stage involved the random selection of four Faculties from the university – Social Sciences, Arts, Management, and Engineering Faculties. The second stage involved the selection of departments randomly from the Faculties: Mass Communication, Sociology, Marketing, Business Administration, English Language, Literature and Chinese Studies, Adult Education, Education Economics, Electronic and Computer Engineering and Industrial and Production Engineering departments. The third stage involved the random selection students of Levels 100-400 within the age range of 16-30 as respondents. The primary research instrument used in gathering data for this study was the questionnaire. The copies of questionnaire which had both open-ended and multiple-choice questions (close-ended) were distributed purposively on a face-to-face basis. Data collected were analysed using simple percentages while informal interview was used to buttress some areas where information from the questionnaire was insufficient. Whereas 370 copies of questionnaire were distributed to respondents, 300 copies were returned and found useful for data analysis.

Data Presentation, Analysis and Discussions

Research Question One: What is the level of awareness of Nnamdi Azikiwe University undergraduates

about Chat-GPT?

Table 1: Have you heard of Chat-GPT before?

Option	Frequency	Percentage %
Yes	312	84.3%
No	34	9.2%
Not Sure	24	6.5%
Total	370	100%

Source: Field Survey, 2023

Table 2: Where did you first learn about Chat-GPT?

Option	Frequency	Percentage %
Social media	110	29.7%
Academic course mates and lecturers	100	27.1%
Friends	129	34.9%
Family and Relatives	31	8.3%
Total	370	99.9

Source: Field Survey, 2023

Table 3: Which of these is true about Chat-GPT and you?

Option	Frequency	Percentage %
I have registered for Chat-GPT and I have an account.	157	42.43%
I have the Chat-GPT app installed on my phone.	85	22.97%
I have not registered for Chat-GPT and I do not have an account.	51	13.81%
I do not have the Chat-GPT app installed on my phone	77	20.810%
Total	370	100%

Source: Field Survey, 2023

Table 4: Have you discussed Chat-GPT with your peers before?

Option	Frequency	Percentage %
Yes	251	67.84%
No	55	14.86%
Not Sure	29	7.84%
Very well	35	9.46%
Total	370	100%

Source: Field Survey, 2023

Research Question Two: What is the extent of usage of Chat-GPT among undergraduates of Nnamdi

Azikiwe University?

Table 5: Have you used Chat-GPT before for academic purposes?

Option	Frequency	Percentage %
Yes	248	67.03%
No	60	16.22%
Maybe	26	7.03%
Very well	36	9.73%
Total	370	100%

Source: Field Survey, 2023

Table 6: Did you receive any form of training or guidance on how to use Chat-GPT for your academic needs?

Option	Frequency	Percentage %
No	234	63.24%
Yes	80	21.62%
Not sure	38	10.27%
Very Well	18	4.86%
Total	370	100%

Source: Field Survey, 2023

Table 7: Where did you receive the training(s) on how to use Chat-GPT?

Option	Frequency	Percentage %
YouTube and Tik Tok Videos	28	7.57
Social Media (Facebook, Instagram, Twitter Posts and Videos)	36	9.73
Friends, Course mates, and Family	91	24.59
I Learnt it Myself	195	52.70
I don't know how to use it	48	12.97
Total	370	100%

Source: Field Survey, 2023

Table 8: Please select any of the following regarding how you have used Chat-GPT (multiple answers possible)

Option	Frequency	Percentage %
Education (editing and writing assignments, essays, and research works, calculations, language translation and learning)	130	35.14
Research (assisting in research, finding historical facts, and providing references/citations)	120	32.43

Information For Learning (asking for explanations and answers to complex academic questions, brainstorming, critical thinking and problem-solving)	97	26.22
Entertainment (writing poems, stories, jokes, music lyrics, and for getting solutions/advice to personal issues)	15	4.05
I have never used any of this	8	2.16
Total	370	100%

Source: Field Survey, 2023

Research Question Three: What is the perception of Nnamdi Azikiwe University undergraduates about the influence of Chat-GPT on their educational experience?

Table 9: Do you think Chat-GPT can help students learn more effectively?

Option	Frequency	Percentage %
Agree	248	67.03%
Disagree	41	11.08%
Strongly Agree	62	16.76%
Strongly disagree	19	5.14%
Total	370	100%

Source: Field Survey, 2023

Table 10: Do you think Chat-GPT has improved or hindered your research and critical thinking skills?

Option	Frequency	Percentage %
Significantly Improved	101	27.30%
Improved	195	52.70%
Hindered	48	12.97%
Significantly Hindered	26	7.03%
Total	370	100%

Source: Field Survey, 2023

Table 11: How helpful do you think Chat-GPT has been in helping you access relevant and reliable information for your studies?

Option	Frequency	Percentage %
Very Helpful	191	51.62%
Helpful	122	32.97%
Not Very Helpful	36	9.73%
Not Helpful at all	21	5.68%
Total	370	100%

Source: Field Survey, 2023

Table 12: How does Chat-GPT compare to traditional research methods in terms of efficiency?

Option	Frequency	Percentage %
Much more Efficient	131	35.41%
More Efficient	176	47.57%
Less Efficient	44	11.89%
Much Less Efficient	19	5.14%
Total	370	100%

Source: Field Survey, 2023

Table 13: Do you believe that Chat-GPT should be integrated further into your academic curriculum?

Option	Frequency	Percentage %
Agree	227	61.35%
Strongly Agree	48	12.97%
Disagree	67	18.11%
Strongly Disagree	28	7.57%
Total	370	100%

Source: Field Survey, 2023

Research Question Four: What are the challenges in the usage of Chat-GPT for academics by undergraduates of Nnamdi Azikiwe University?

Table 14: Table 14: Are you concerned that Chat-GPT might replace the need for human lecturers, and instructors in the future and also promote plagiarism?

Option	Frequency	Percentage %
Very Concerned	86	23.24%
Concerned	105	28.38%
Not Concerned	130	35.14%
Not Concerned at all	49	13.24%
Total	370	100%

Source: Field Survey, 2023

Table 15: Are you anxious that reliance on Chat-GPT might pose a challenge to your problem-solving and critical thinking skills?

Option	Frequency	Percentage %
Anxious	116	31.35%
Very Anxious	61	16.49%
Not Anxious	140	37.84%

Not Anxious at all	53	14.32%
Total	370	100%

Source: Field Survey, 2023

The findings from the research provided answers to the questions raised in this study. Question one sought to find out the awareness level of Chat-GPT is amongst Nnamdi Azikiwe University undergraduate students. Findings reveal that 84.3% of the respondents have heard of Chat-GPT and knew what is. This signifies a high level of awareness and knowledge about Chat-GPT among Nnamdi Azikiwe University students. The primary sources of information and awareness for the dissemination of Chat-GPT knowledge are friends (34.9%) and social media platforms (29.7%). This emphasizes the important role of informal networks and digital spaces in shaping students' awareness of emerging AI technologies. As students' active and voluntary participation in exchanging insights and opinions on Chat-GPT within their academic community rubs off on other students.

For research question two, data collected show that 67.03% of students have utilized Chat-GPT for academic purposes, with 43.51% acknowledging its potential for educational use. More than half of the respondents recognize its applicability in research and are aware of its role in information gathering for learning. Notably, 63.24% learned to use Chat-GPT without formal training, and 52% self-learned. The learning sources include videos, social media, and training from peers, course mates, or family.

Additionally, 67.57.51% always use Chat-GPT for academic assignments and research, 26.22% use it for information and entertainment, and 4.05% have never used it for these purposes. These findings uncover the widespread adoption and utilization of Chat-GPT for various academic and research-related tasks and needs among students. Additionally, the data highlights the need for targeted awareness campaigns, as a notable percentage of students are still unfamiliar with Chat-GPT's capabilities. Overall, the findings offer valuable insights into the current landscape of Chat-GPT knowledge and utilization among undergraduate students.

For research question three, survey data reveal that 67.03% of Nnamdi Azikiwe University students believe that Chat-GPT helps them learn effectively. Meanwhile, over 79% feel it enhances research and critical thinking skills, and over 83% find it helpful for accessing relevant information. Regarding efficiency, more than 82% consider it efficient, over 73% support further integration into the academic curriculum.

For research question four which sought to find out the challenges in the usage of Chat-GPT for academics by undergraduates of Nnamdi Azikiwe University, it was found out that more than half of the students are concerned with the use of CHAT GPT. Their concern stem from the fact that usage of CHAT GPT might replace the need for human lecturers, and instructors in the future and also promote plagiarism. In the same token, Chat-GPT might pose a challenge to students's problem-solving and critical thinking skills.

It is worthy of note that the findings above gave credence to the adoption of Technology Acceptance Model (TAM) and Uses and Gratification theories. The use of Technology Acceptance Model (TAM) and Uses and Gratification theories is ideal for the above because they provide a framework for understanding how individuals adopt and use technology, particularly in the context of emerging AI technologies like ChatGPT. By leveraging the insights from TAM and Uses and Gratification theories, educators and AI developers can develop strategies to promote the adoption and responsible use of Chat-GPT and other emerging AI technologies in educational settings

CONCLUSION AND RECOMMENDATIONS

The findings from the research provide valuable insights into the awareness, utilization, and perceived

effectiveness of Chat-GPT among Nnamdi Azikiwe University undergraduate students. The high level of awareness and knowledge about Chat-GPT among students (84.3%) indicates that informal networks and digital spaces play a significant role in shaping students' awareness of emerging AI technologies. Universities, educators, and AI developers should strategically harness these channels for more targeted and accurate information dissemination about educational topics and AI technologies.

The widespread adoption and utilization of Chat-GPT for various academic and research-related tasks (67.03%) highlight the need for targeted awareness campaigns to educate students about its capabilities. Additionally, the fact that over half of the students are concerned about the potential replacement of human lecturers and instructors by Chat-GPT, as well as the promotion of plagiarism and the impact on problem-solving and critical thinking skills, suggests that there is a need for further education and discussion on the responsible use of AI in education.

Based on the findings, the following recommendations are suggested:

1. **Increase Awareness and Education:** Universities, educators, and AI developers should collaborate to create targeted awareness campaigns and educational programs that highlight the benefits and responsible use of AI technologies like Chat-GPT in education.
2. **Promote Responsible Usage:** Develop guidelines and policies that encourage responsible use of AI technologies in academic settings, addressing concerns about plagiarism, critical thinking skills, and the role of human instructors.
3. **Foster Collaboration:** Encourage collaboration between students, educators, and AI developers to explore the potential benefits and challenges of AI in education, and to develop strategies for responsible integration into the academic curriculum.
4. **Monitor and Evaluate:** Regularly monitor and evaluate the impact of AI technologies on student learning, critical thinking skills, and the role of human instructors, and adjust policies and practices accordingly.

By implementing these recommendations, universities, educators, and AI developers can work together to ensure that AI technologies like Chat-GPT are used responsibly and effectively to support student learning and critical thinking skills in academic settings.

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