



AWARENESS AND PERCEPTION OF THE USE OF ARTIFICIAL INTELLIGENCE FOR LEARNING AMONG SELECT COMMUNICATION UNDERGRADUATES IN NIGERIA

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ABSTRACT: *Artificial Intelligence has come to life and is part of our everyday lives. It has disrupted and will continue to have tremendous impacts across sectors, including education. To meet the recent demands, undergraduate students in Nigerian universities need to be at home with ICTs. Thus, this study examined awareness and perception of the use of artificial intelligence for learning among select communication undergraduates in Nigeria. The study was anchored on the Technology Adoption Model (TAM). The researcher adopted a survey research method and communication undergraduates were selected from two universities in Anambra State (private and government owned universities). The researcher found that the majority of the respondents have a low level of awareness on the use of artificial intelligence for learning and 82% of the respondents do not have access to artificial intelligence for learning. Further findings showed that most of the respondents are not competent in the use of artificial intelligence for learning. The researcher concluded that competency in technological innovation is dependent on the knowledge of, availability, and access to the technological innovations. Thus, the study recommends that efforts should be made by the school authorities to create awareness to students on the use of artificial intelligence for academic purpose and also, the universities should consider including AI courses in the syllabus to encourage the students to know and explore more about AI.*

KEYWORDS: Awareness, Perception, Artificial Intelligence, Communication, Undergraduates.



INTRODUCTION

Artificial intelligence (AI) refers to computer systems capable of performing complex tasks that, basically, only human beings could do, such as reasoning, making decisions, or solving problems. Artificial intelligence (AI) is the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. Artificial Intelligence (AI) is a computer system that includes human-like processes like learning, adapting, synthesizing, self-correcting, and using data for complex processing tasks. Artificial intelligence is evolving in an accelerated manner, impacting the deep essence of higher education services (Chen, Chen & Lin, 2020). It should therefore be pointed out that machine learning is a growing artificial intelligence research area. It is widely accepted that the future is going to the Information Age where every nation's prosperity will depend on its ability to process information (Enemuo, Ezeanyi & Ezeaka, 2019). Many artificial intelligence solutions are highly programmable based, while some of these solutions have an essential ability to predict and learn patterns. AI is changing industries by improving how we get information and services (Ezeaka, 2024). Machine learning is software that makes predictions, finds trends, and applies certain patterns that have recently been discovered to situations not covered by their primary architecture (Fahimirad & Kotamjani, 2018).

Artificial Intelligence (AI) is a device or instrument that is commonly used throughout the world in various cities or campuses. These include certain technologies such as smartphones, the Internet, search engines, various applications, and household appliances. In addition, they are involved in some human-like processes to some extent and can do some complicated teaching and learning tasks in the world. It is worthy of note that the advent of these technologies brought dynamic changes in the communication landscape (Shadrach & Adikuru, 2023) and it is almost impossible to think of any event that is without ICT's impacts (Ezeaka, Ezeoke, Nwodu & Umennebuaku, 2023).

Therefore, universities are opening up a new age for higher education. This type of human-machine interaction is a turning point to help people learn and memorize information. There are some changes in technology applied in education (Obiora & Uche, 2024), especially after 2007 when the first iPhone models came on the market, according to Massachusetts Institute of Technology (MIT) scholars. Not only is the iPhone a new technology that lets us access and use knowledge that was not possible since 2006, it also triggers a significant cultural shift that influences the social lives of individuals (Liebowitz, 2011 as cited in Fahimirad & Kotamjani, 2018).

However, students are the future of a country. Today, AI technology can be applied to all aspects of our learning and it integrates more closely with education even as we learn through online platforms (Obiora & Uche, 2024; Obiora & Uche, 2022). For example, students from different departments use AI techniques to varying degrees. The widespread use of digital communication apps has reshaped how people connect (Ezeaka & Ewetuobi, 2024). Geographically specialized students use Python for positioning, financial students can use AI for data analysis, etc. From these examples, we can see that AI technology is not just for computer science students. Information and communication in particular makes the existence of people in the society possible because it is the most fundamental of all human activities (Ezeaka & Nwodu, 2022). Therefore, we should pay more attention to AI ethical learning while developing information literacy for college students



(Sijing & Lan, 2018). Teachers can use different teaching strategies to teach students about the values of AI. At the same time, teachers should know the honest thoughts of students. In the age of human-machine collaboration, teachers need more time to give emotional attention to students to prevent students from becoming dependent or overly reliant on machines (Sijing & Lan, 2018).

Nevertheless, technology has made Nigerian students more globalized, whereby students can meet their counterparts through video conferencing without traveling to a particular destination. For instance, Nigerian or African students can learn foreign languages online by getting a teacher from another country to teach them this language. Artificial intelligence (AI) has become a rapidly emerging technology that is transforming various industries: film (Obiora & Adikuru, 2024a) and communication (Obiora & Adikuru, 2024b), global news flows in social media (Udeze, Nwodu, & Nwodu, 2015), also in aiding development (Ezeaka and Nwodu, 2022), developing health communication (Ezeoke, Ezeaka, & Nwodu, 2020), even in research the presence of AI has been aided ChatGPT, etc (Nwodu, & Nwodu, 2010 & 2018) and education is no exception (Obiora & Uche, 2024). In Nigeria, as in many other countries, AI tools are increasingly being used to develop innovative tools and technologies that have the potential to transform the traditional method of learning. It is against this background that the study examined awareness and perception of the use of artificial intelligence for learning among selected communication undergraduates in Nigeria.

Statement of the Problem

Artificial intelligence is driving applications that help skilled professionals do important work faster and with greater success. AI has come to life and is part of our everyday lives. It has disrupted and will continue to have tremendous impacts across sectors, including education. To meet the demands of the 21st century, undergraduate students in Nigerian universities need to know how to use ICTs. They also need to possess the necessary skills and abilities to analyse information. The possession of these skills provides flexibility and adequate security in this information economy era. Thus, undergraduate students can use AI technologies in learning and study. When undergraduate students adopt the use of AI technologies in learning, it enhances their access to information and increases their level of satisfaction in their academic pursuits. The adoption or use of AI technologies by students can improve students' knowledge and provide access to a very rich variety of information for their academic pursuits.

However, the most available literature works on artificial intelligence were mostly carried out in the Western world and in developed countries. There is a need to have a document that will expose awareness and perception of the use of artificial intelligence for learning among select communication undergraduates in Nigeria. This dearth of literature necessitated the embarking of this study.



Research Questions

1. Are communication undergraduate students aware of the use of artificial intelligence for learning?
2. Do communication undergraduate students have access to artificial intelligence for learning?
3. What is the level of communication undergraduate students' competency in the use of artificial intelligence for learning?
4. What is the perception of communication undergraduate students on the use of artificial intelligence for learning?

CONCEPT OF ARTIFICIAL INTELLIGENCE

Artificial intelligence is the theory and development of computer systems capable of performing tasks that historically required human intelligence, such as recognizing speech, making decisions, and identifying patterns. AI is an umbrella term that encompasses a wide variety of technologies, including machine learning, deep learning, and natural language processing (<https://www.coursera.org>). Artificial intelligence, defined as the ability of an intelligent machine to imitate human behaviour, is a rapidly developing field of computer science that generally requires human intelligence, using computers to simulate human memory, ability, learning, analysis and even innovation (Dergunova, Aubakirova, Yelmuratova, Gulmira, Yuzikovna, Antikeyeva & Baikonurov, 2022). Artificial Intelligence (AI) is a program or machine that requires intelligence applied by humans to complete the task. It is a concern of science and engineering which makes machines exhibit intelligence, particularly those that can recognise speech, make decisions, and translate between different languages. AI is the simulation of human intelligence by technology, particularly computer systems. This involves knowledge representation, self-correction, planning, reasoning, motion, manipulation, and creativity. It also includes learning. In addition, AI is also a science and a collection of computational methods that draw inspiration from how humans use their bodies and neural systems to feel, remember, reason, and act.

Today, we live in the age of big data and this situation can easily create many different applications, such as artificial intelligence (Yimer & Gizachew, 2022). Artificial intelligence applications can be used effectively, especially in the fields of banking, technology, and entertainment (Karaca, 2020). These are personal assistants like Siri, self-driving cars, instant language translations and smart education, which we often hear about in our lives today. Many applications such as management systems; virtual classrooms; patient follow-up systems; game theory and strategic planning; hand, speech, face and pattern recognition; automation; and robotics are the products of artificial intelligence (Uzunboyly, Prokopyev, Kashina, Makarova, Chizh & Sakhieva, 2022).

Artificial intelligence is a technological field that changes and develops social interaction areas in every aspect. Education in the fields of social interaction is affected by this change. The field of use of artificial intelligence in education has brought with it new teaching and learning approaches



that are being tested in different contexts. The most common examples of artificial intelligence applications in education can be shown as intelligence and intelligence teaching systems, also called adaptive learning management systems. Intelligence teaching systems facilitate learning by providing better support for the learner. Artificial intelligence techniques are used as models by the teacher to facilitate teaching (Hasanov, Laine & Chung, 2019). Suggestion systems are software tools based on machine learning and information retrieval techniques that provide suggestions for useful items that may be of interest to someone (Syed & Zoga, 2018).

Understanding Perception

Perception is a cognitive process by which sensory experience is organized and given meaning or significance. Person perception is a branch of social perception that concerns how people perceive one another, as well as the factors, such as eye contact and attractiveness, that affect the impression they form. However, the perception of events involves the interplay of physiological, cognitive, and cultural processes that operate in people and groups (Obaje, 2008 as cited in Kajuru, 2015). Perception is the processing, interpreting, selecting and organizing of information (Nwodu, Ezeoke & Ezeaka, 2021).

Quick and Nelson (2017) defined it as the act of processing information about another person or circumstance. This definition has made it very clear that the opinions we make about other people or things rely on the amount of information that is available to us and how effectively we can understand the information that we have. Mohammed (2008), as cited in Kajuru (2015), stated that the process of communication is influenced a lot by the perception of the target audience. How you perceive an individual will determine how you communicate with the person.

Ojiakor and Obiora (2019) opined that perception influences our experience and assessment of others and our communication with them. They further stressed that perception affects self-concept, self-efficiency and presentation of one's self. Similarly, the word perception describes the ability to see, hear, or become aware of something through the senses and the state of being aware in such a manner. Perception is the process of analyzing information obtained through the senses. However, the validity of the judgment reached or formed at the end of the processing is usually subjective, that is, tied to the experience of the person who has either seen, heard or became aware of the data from the environment (Okoro & Shaibu, 2016). It is worth noting that public perception can be thought of as the difference between an absolute truth based on facts and a virtual truth created by popular opinion, media coverage, or reputation.

Artificial Intelligence in Learning

Artificial intelligence (AI) has received remarkable attention for a very long time and is sometimes referred to as the Fourth Industrial Revolution (Abid, 2019). With the advancement of tools used in computing and information processing, AI opens up new possibilities and chances in educational processes and can offer crucial insights to everyone at the institutional level in the learning and education industry. Besides that, AI has been extensively used in the education field, including intelligent tutoring systems, teaching robots, learning analytics dashboards, adaptive learning systems, and human-computer interactions, computing, and information processing techniques with the current advancement and industry revolution 4.0 (Kaur, 2021).



According to Chaudhari, More, Bhadak, Chaudhari and Gawali (2020), there are various types of AI application used in learning which include machine learning based approach for data analysis and categorization, AI Chatbots which enhance learning experience, interactive AI for linguistic education with the use of VR as well as English online course that provides a teaching method using AI. In addition, chatbot utilization and integration with AI both enhance the learning experiences of students because they make use of machine learning algorithms and give content tailored to students' learning requirements and skills. The AI used in enhancing the learning experience included machine translation tools, adaptive educational systems, and intelligent tutoring systems (Obiora et al., 2024; Chen, Chen & Lin, 2020).

Advantages of Artificial Intelligence in the Education Sector

The advantages of artificial intelligence in the education sector are given below:

i. Access to Information: In the past, it was complicated to find the information sought among thousands of books by visiting libraries to access information. With artificial intelligence and technology development, it has become much easier and faster to reach the desired information by pressing just a few buttons. Virtual assistants used on phones have provided speedier access to the desired information with voice commands (Nalbant, 2021).

ii. Distance Learning: The development of technology and computers has enabled distance education (online). In this difficult COVID-19 process we are in, machines have played a significant role in both the continuity of education and the prevention of the epidemic with distance education.

iii. Personalization in Education: One teacher in the classroom cannot meet the expectations of all students. Artificial intelligence can provide a teacher for every student. Students can listen to the part they do not understand over and over again. Thus, the student can personalize their learning (Abid, 2019).

iv. Global Knowledge: We do not know the education offered in a different language can be translated into our language with artificial intelligence systems. We can quickly get an education and learn a language that we do not know at all. In addition, we can translate texts written in different languages and adapt them to our language.

v. Student Attendance Tracking: With intelligent sensors at the entrance and exit of the school, the days of the student's attendance can be easily entered into the system. Absenteeism can be easily tracked without the need for teachers to take attendance.

vi. Digitalization and Environmental Protection: The use of electronic resources has increased while educational resources are now transitioning from paper to digital. In this way, the cutting of trees was prevented, and a significant contribution was made to the environment. Moreover, since the shuttle vehicles used by students for transportation are no longer needed in online education, both the traffic problem and the effect of harmful gases released by cars have decreased.

vii. Removing Barriers: Artificial intelligence has made it much easier for special (disabled) students to access information. The aim is to ensure the full and equal participation of special



(disabled) students in social life. Thus, disabled individuals are integrated into independent and free energy. Visually impaired people can receive education with systems that convert text to sound, and hearing-impaired people can receive training with systems that convert audio to text. Individuals with walking disabilities and sick people can attend both classes and meetings from their homes without going to school, and they do not fall behind (Nalbant, 2021).

viii. Medical Applications: Artificial intelligence applications are also applied in the medical sector. Doctors use artificial intelligence machines to examine the condition of their patients. There are artificial intelligence applications that analyze medical records to help doctors make faster and more accurate decisions. There are also artificial intelligence applications that enable medical students to understand their lessons better.

Disadvantages of Artificial Intelligence in the Education Sector

The disadvantages of artificial intelligence in the education sector are given below:

i. Technology Addiction: Students interact with each other on social platforms rather than social interaction. Since students spend too much time with technology, they cannot allocate enough time to their education and lessons and cannot provide motivation. Since a student spends almost 90% of his free time in virtual environments and games, he cannot give the necessary importance to his education. It is one of the issues that parents complain about the most.

ii. Negative Impact on Social Life: Before the development of artificial intelligence, students were doing more social and group work. With the development of technology, work has become more individual. Tablets and computers, which are the closest friends of the individual, have replaced the libraries used to be visited by the class for research and study. Now, the ability of a single individual to access information with a few keys has isolated individuals and given them an asocial personality.

iii. Negative Impact on Health: As the development of artificial intelligence increases competition among students, this situation will stress them. It will put pressure on them. In this case, it can negatively affect the mental health and psychology of students. In addition, technological products cause various health problems due to the radiation they emit. Health problems such as eye disorder, nerve compression, neck, waist, and wrist pain can also be seen in individuals who spend a lot of time with technology.

iv. Probability of Causing Unemployment: The fact that machines replace people by doing the work that people do is an indicator of unemployment. As artificial intelligence develops, people may become dependent on machines and robots. This reduces people's creativity and causes them to be lazy individuals. If we consider unemployment in terms of education, robotic teachers can replace ordinary teachers. Many jobs in the education sector are at risk. Unlike humans, robots are less likely to make mistakes. Because robots do not have situations such as being late for work and not coming to work, they need to get the proper instructions (Nalbant, 2021).

v. Lack of Creativity: Imagination and creativity are features that do not belong to artificial intelligence. Although machines create designs, they cannot rival the invention of the human brain.



People's intelligence and feelings are endless. They have emotional intelligence. People can shape their thoughts with their emotions. But machines cannot even imitate these emotions.

vi. High Cost: Developing artificial intelligence is a difficult task because machines are highly complex. Repair and maintenance of these machines can also be quite costly because day by day, they need to be more innovative and renew themselves. In addition, to meet the desired demands, their software must be constantly developed and updated. Their system may crash; they may need to be rebooted. Solving such problems can cause significant loss of time and financial loss. This is also true for the education sector (Nalbant, 2021).

vii. Unethical: Artificial intelligence can make unethical decisions when using their decision-making mechanisms because they do not have feelings and ethical understandings that are unique to humans. Human intelligence cannot be copied. Machines only do what they are programmed to do. In an extreme situation, they may not be able to make the right decision.

viii. Lack of Experience: People can learn from their experiences and gain experience. However, machines do not have such a feature. Even if they have the data, they use it differently. Devices do not have feelings of worry or anxiety. These machines, which lack belonging, unity, and togetherness, cannot act like humans.

Empirical Review

Obiora et al. (2024) investigated communication scholars' views, concerns, and expectations regarding ChatGPT's integration into media studies through in-depth interview of 20 communication scholars purposively drawn from all communication scholars scattered in various universities within Anambra State, Nigeria. Findings revealed that most communication scholars in Anambra State, Nigeria viewed ChatGPT as a beneficial tool for media studies sustainability regardless of the disadvantages inherent in its usage and are willing to adopt it as some have already put it into use for various activities in media studies. It is recommended that training programmes focused on AI literacy are essential to equip communication scholars with the necessary skills to engage with ChatGPT effectively.

Alimi, Buraimoh, Aladesusi and Babalola (2021) examined university students' awareness of, access to, and use of artificial Intelligence for learning in Kwara State. The study adopted descriptive research of the survey type. This study adopted a descriptive research design of the survey method and employed a three-sectioned questionnaire to elicit information from the respondents. The sample size included a multistage sample of 200 undergraduates across three universities in Kwara State. The scholars found that the majority of the university students are not aware of artificial intelligence for learning and there was no significant difference between male and female university students' awareness of the use of artificial intelligence for learning. The scholars concluded that students' ability to explore digital resources such as AI is dependent on their awareness and access to digital technologies. A lack of these will result in a lack of use and lack of skill to use them.

This study is related to the present study in terms of the subject matter. While the previous study examined university students' awareness of, access to, and use of artificial Intelligence for learning



in Kwara State, the present study looked at the awareness and perception of the use of artificial intelligence for learning among select communication undergraduates in Nigeria. Both studies are interesting to students. In terms of the difference, the previous study was carried out in Kwara State, Nigeria while the present study was carried out in Anambra State. The previous study looks at the whole undergraduate students generally while the present study focused on communication undergraduate students in select universities in Nigeria.

Dergunova, Aubakirova, Yelmuratova, Gulmira, Yuzikovna, Antikeyeva and Baikonurov (2022) carried out a study on the artificial intelligence awareness levels of students. The research was carried out in the fall semester of 2021–2022. The researchers adopted a qualitative research design. The research consisted of students studying at the engineering faculties of the university. The research sample was 98 students determined by the purposeful sampling method. The data were collected with artificial intelligence awareness research questions prepared by the researchers. The findings showed that the artificial intelligence awareness levels of the students within the scope of the research were at a good level.

According to the results of the research, it was concluded that the students' knowledge about the concept of mind and intelligence was insufficient. From the opinions of university students, the researchers concluded that the use of technology in education is important. The researchers noted that artificial intelligence will take away human jobs. The researchers concluded that artificial intelligence tools facilitate every field and, as well, their use in education facilitates teaching. The study is different from the current study in terms of scope. The previous work was carried out in Kazakhstan while the present work was carried out in Nigeria. The previous study examined engineering students and adopted a qualitative research design while the present study adopted a survey research method and examined communication undergraduates.

Noah, Ganiyu and John (2021) examined how knowledgeable the Nigerian insurance industry is, their attitude and perception towards artificial intelligence, as well as to investigate if the application of artificial intelligence will have a significant improvement on insurance claims provision, marketing of insurance services, customer service delivery and insurance underwriting within the industry. A questionnaire adapted from a previous study was used to elicit information from the respondents. The population of the study consisted of all the insurance companies in the Nigerian insurance industry, and a total of 60 employees were purposely selected from the 60 companies for the study.

The scholars found that the insurance companies in the Nigerian insurance industry are knowledgeable on the issue of artificial intelligence, have a positive attitude towards artificial intelligence, and also perceive artificial intelligence positively as an innovation that stands to improve the key operations of insurance companies. The study further concluded that the application of artificial intelligence has a significant improvement in the marketing, underwriting, claims, and service delivery of insurance companies within the Nigerian insurance industry.

The previous study is related to the current study especially as it concerns the subject matter. However, it is different in terms of the scope. The previous study by Noah, Ganiyu, and John (2021) examined how knowledgeable the Nigerian insurance industry is, their attitude and perception towards artificial intelligence, as well as to investigate if the application of artificial



intelligence will have a significant improvement on insurance claims provision, marketing of insurance services, customer service delivery and insurance underwriting within the industry. This scope is large while the present study is interested in awareness and perception of the use of artificial intelligence for learning among select communication undergraduates in Nigeria, especially in Anambra State.

Gracia-Martinez, Femandez-Batanero, Fernandez-Cerero, and Leon (2023) studied artificial intelligence (AI) and computational sciences have aroused a growing interest in education. Despite its relatively recent history, AI is increasingly being introduced into the classroom through different modalities, to improve student achievement. Thus, the purpose of the research is to analyse quantitatively and qualitatively the impact of AI components and computational sciences on student performance. For this purpose, a systematic review and meta-analysis have been carried out in WOS and Scopus databases. After applying the inclusion and exclusion criteria, the sample was set at 25 articles.

The results support the positive impact that AI and computational sciences have on student performance, finding a rise in their attitude toward learning and their motivation, especially in the STEM (Science, Technology, Engineering, and Mathematics) areas. Despite the multiple benefits provided, the implementation of these technologies in instructional processes involves a great educational and ethical challenge for teachers concerning their design and implementation, which requires further analysis from educational research. These findings are consistent at all educational stages. The difference between the previous study and the current one is that the previous study adopted a mixed research design while the current study used a survey research design. The previous study was conducted in Spain, which is a developed country while the present study was conducted in Nigeria, which is a developing country. However, both of them looked at the students.

THEORETICAL FRAMEWORK

This study is anchored on the Technology Adoption Model (TAM) propounded by Davis in 1989. The theory was used to explain user adoption of technology and how it is used in various environments. TAM is a model that shows how users accept and use technology. According to Nafsaniath (2015), the basis of this theory is built on the premise that when users are presented with a new technology, three major factors are considered determinants of key predictors that influence users' decisions on how to and when they use it. These are: perceived usefulness (PU), perceived ease of use (PEoU), and attitude towards users (ATU). This theory agrees with the fact that when users are presented with a new technology, they do not just automatically accept it and get carried away using it. Several factors influence their decision on whether to accept it or not, as well as how and when they will use it. The model aims not only to explain key factors of user acceptance of ICTs but also to predict the relative importance of such factors. Matching this side by side, this theory is relevant to this research because it agrees with the fact that communication undergraduate students of select universities will develop a positive intention of using artificial intelligence if they find it easy to use. This implies that, similarly, users' positive attitude toward a specific technology leads them to develop an intention to use the technology.



METHODOLOGY

The researchers adopted a survey research method, using the questionnaire as the instrument of data collection. Nwodu (2017), Asemah, Gujbawu, Ekhareafo and Okpanachi (2017) and Asemah, Nkwam- Uwaoma and Sabo (2023) noted that surveys are used when dealing with a very large population. The population of this study consists of communication undergraduates of Nnamdi Azikiwe University, Awka and Tansian University Umunya, Anambra State. The total number of registered communication undergraduate students for the 2023/2024 academic session at Unizik Mass Communication Department, according to the Head of the Department, was 727, while at Tansian University, it was 102. The total population of the two schools' communication undergraduate students is 829.

Therefore, the sample size from a population of 829 using the Krejcie and Morgan formula with a precision level of 5% and a confidence level of 95% was 278. The census method was applied because the population of selected communication undergraduate students was not too large to warrant any kind of sampling. Thus, all the members of the population were studied. This study employs a questionnaire to elicit information from the respondents.

Data Presentation and Analysis

The percentage method was used in data analysis and presentation. Out of the 278 copies of the questionnaire administered to respondents in Nnamdi Azikiwe, Awka and Tansian University, Umunya, Anambra State, only 267 (96%) were returned and found useable, thus giving the questionnaire a mortality rate of 11 (4%). Therefore, only 267 copies of the questionnaires were used for data analysis. The demographic data of the respondents indicates that 169 (63%) were females while 98 (37%) were males. The age brackets of the respondents indicate that 18 and 22 (36%) accounted for most, while the age bracket of 28 and above (15%) had the smallest number of the respondents sampled.

Table 1: Respondents' Level of Awareness of the Use of Artificial Intelligence for Learning

Level of Awareness	Frequency of Response	Percentage of Response
Very high	27	11
High	53	20
Low	102	38.2
Very low	76	28.4
Not at all	9	3.4
Total	267	100

Table 1 shows that the majority (38.2%) of the respondents have a low level of awareness on the use of artificial intelligence for learning.

**Table 2: Respondents' Access to Artificial Intelligence for Learning**

Access to AI	Frequency of Response	Percentage of Response
Yes	31	12
No	219	82
Can't say	17	6
Total	267	100

The above data indicates that most (82%) of the respondents do not have access to artificial intelligence for learning.

Table 3: Level of Respondents' Competency in the Use of Artificial Intelligence for Learning

Competency in the use of AI	Frequency of Response	Percentage of Response
I am competent	26	10
I am not competent	227	85
Can't say	14	5
Total	267	100

It can be deduced from the data in the above table that most of the respondents are not competent in the use of artificial intelligence for learning.

Table 4: Respondents' Perception of the use of Artificial Intelligence for Learning

Level of Awareness	Frequency of Response	Percentage of Response
Very good	105	39
Good	133	50
Not good	8	3
Can't say	21	8
Total	267	100

In the above table, the respondents perceived the use of artificial intelligence for learning to be good. This is based on the fact that the majority of the respondents answered in that direction.



DISCUSSION OF FINDINGS

The findings revealed that the majority (38.2%) of the respondents have a low level of awareness in the use of artificial intelligence for learning. This suggests that most communication undergraduates' students do not know much about the use of artificial intelligence. This finding aligns with that of Alimi, Buraimoh, Aladesusi and Babalola (2021) as reviewed in the literature that the majority of university students are not aware of the use of AI for learning. This finding could be premised on the fact that AI is relatively new to the Nigerian learning community. The application of AI in education is largely credited to the developed countries where some of the students are aware and their resources to access them (Lazarus, Thurlow, Lail & Christensen, 2009 as cited in Alimi et al., 2021).

It was also found that most (82%) of the respondents do not have access to artificial intelligence for learning. In a similar study, Ikedinachi, Misra, Assibong, Olu-Owolabi, Maskeliūnas and Damasevicius, (2019) found that knowledge about and access to AI among students is one of the long-term consequences of increasing the emergence of AI technological devices for educational purposes. The researchers stressed that perhaps AI is the evolution of what is termed smart classrooms, that is, a departure from the traditional classroom. However, it is largely technologically dependent, with greater focus on large integration of resources which could be relatively unavailable to the students.

More so, further findings showed that most of the respondents are not competent in the use of artificial intelligence for learning. The data in table three revealed that 26 (10%) respondents said they are competent in the use of AI, 227 (85%) respondents said they are not competent in the use of AI while 14 (5%) respondents could not say anything on the issue. This discovery aligns with the Technology Adoption Model (TAM) as used in the study. TAM is a model that shows how users accept and use technology. According to Nafsaniath (2015), the basis of this theory is built on the premise that when users are presented with a new technology, three major factors are considered as determinants of key predictors that influence users' decision on how to and when they use it. These are: perceived usefulness (PU), perceived ease of use (PEoU), and attitude towards users (ATU). This theory agrees with the fact that when users are presented with a new technology, they do not just automatically accept and get carried away using it. A number of factors influence their decision on whether to accept it or not, as well as how and when they will use it. Also, the researcher found that the respondents perceived the use of artificial intelligence for learning to be good. This is based on the fact that the majority of the respondents answered in that direction.



CONCLUSION

This study has provided evidence that students' ability to explore digital resources such as AI is dependent on their awareness and access to digital technologies. A lack of these will result in a lack of use and lack of skill to use them. The study has shown that most of the respondents have a low level of awareness in the use of artificial intelligence for learning. The study concludes that the respondents do not have access to artificial intelligence for learning and most of them are not competent in the use of artificial intelligence for learning. It is believed that competency in technological innovation is dependent on the knowledge of, availability, and access to the technological innovations.

RECOMMENDATIONS

Thus, the following recommendations are hereby given:

1. Efforts should be made by the school authorities to create awareness to students on the use of artificial intelligence for academic purposes.
2. The Nigerian government should build a fiber optic backbone network to ensure high bandwidth availability, universal funding, and programs for access to emerging digital technologies, such as artificial intelligence. This will ensure growth and adoption of ICT in Nigeria's educational system.
3. The universities in Nigeria should also consider involving AI in practical learning and curriculums. This is giving the students a chance to learn through AI and adapt with the application of AI.
4. Also, the universities should consider including AI courses in the syllabus to encourage the students to know and explore more about AI.



REFERENCES

- Asemah, E. S., Nwammuo, A. N. & Nkwam-Uwaoma, A. O. A. (2017). *Theories and models of communication*. Jos: University Press.
- Asemah, E. S., Nkwam-Uwaoma, A. O. & Sabo, S. S. (2023). Research and tactics in public relations and advertising. Jos: University Press.
- Asemah, E. S., Nwaoboli, E. P. & Beli, B. (2022). Textual analysis of comments on select social media sites on Chidinma Ojukwu's alleged murder case. *Discourses on Communication and Media Studies in Contemporary Society* (pp. 22-31), Jos University Press.
- Abid . U. (2019). Artificial Intelligence: Medical Student's Attitude in District Peshawar Pakistan. *Pakistan Journal of Public Health*, 9(1), 19–21. <https://doi.org/10.32413/pjph.v9i1.295>.
- Alimi, A. E., Buraimoh, O.F., Aladesusi, G. A. and Babalola, E. O. (2021). University Students' awareness of, access to, and use of artificial intelligence for learning in Kwara State. *Indonesian Journal of Teaching in Science* 1(2), 91-104.
- Chen, L., Chen, P. & Lin, Z. (2020a). Artificial intelligence in education: A review. *Ieee Access* 8, 75264-75278.
- Chaudhari, S., More, P., Bhadak, S., Chaudhari, S., & Gawali, T. (2020). A Survey on Applications of Artificial Intelligence for Enhancement in Learning Experience. *Asian Journal of Convergence in Technology*, 6(3), 86–89.
- Chen, L., Chen, P., & Lin, Z. (2020). *Artificial Intelligence in Education: A Review*. *IEEE Access*, 8, 75264–75278.
- Dergunova, Y, Aubakirova, R. Yelmuratova, B, Gulmira, T.M., Yuzikovna, P.N., Samal Antikeyeva, S., and Baikonurov, Z. (2022). Artificial Intelligence Awareness Levels of Students. Retrieved from file:///C:/Users/USER/PC/Downloads/26_Artificial+Intelligence+Awareness+Levels+of+Students.pdf. <https://doi.org/10.3991/ijet.v17i18.32195>.
- Enemuo, C.J., Ezeanyi, B.C & Ezeaka, N.B. (2019). Extent of Information Technology (ICT) Integration among Students in Tertiary Institutions in Anambra State. *International Journal of Education and Research*. 7(7).
- Ezeaka, N.B., Ezeoke, C.B., Nwodu, G.E. & Umennebuaku, V.A. (2023). *The use of ICTs to communicate about waste disposal management by residents of Onitsha, Nigeria*. In N.T. Ekeanyanwu; A.S. Bashir & E.S. Asemah (eds) African Council for Communication Education 85-97
- Ezeaka, N.B & Nwodu, E.G (2022). *Communication for Partnership in Development*. In A.N Nwammuo; G.U Nwafor & B.N Ogbonna (eds) Twenty-One Scholars' Viewpoints on Development Communication. Enugu: Rhyce Kerex Publishers
- Ezeaka, N.B & Ewetuobi, E.I (2024). Influence of Whatsapp Online Phishing messages on data security among undergraduates in Anambra State. *African Journal of Social Sciences and Humanities Research* ISSN: 2689-5129 7 (4) 273-282.
- Ezeaka, N.B. (2024). Artificial Intelligence (AI) and Health Communication Policy in Nigeria: Challenges and Prospects. *Journal of Advanced Research and Multidisciplinary Studies* 6(1) 141-149.



- Ezeali, C. T., Nwodu, G. E. & Udoh, W. A. (2023). Effectiveness of mobile telecommunication networks (MTN), corporate social responsibility in the development of education in Enugu state, Nigeria. Microsoft Word - IMSUJCS 1 imsujcs.com/Journals/2023_02/05.pdf
- Ezeoke, B. C., Ezeaka, N. B. & Nwodu, G. E. (2020) Understanding Health Communication. In C. S. Okunna (ed) *Communication and Media Studies Multiple Perspectives*; Enugu: New Generation Educare LTD
- Fahimirad, M., and Kotamjani, S. S. (2018). A review on application of artificial intelligence in teaching and learning in educational contexts. *International Journal of Learning and Development*, 8(4), 106-118.
- Gracia-Martinez, I., Fernandez-Batanero, J.M., Fernandez-Cerero, J. and Leon, S.P. (2023). Analysing the Impact of Artificial Intelligence and Computational Sciences on Student Performance: Systematic Review and Meta-analysis. *Journal of New Approaches in Educational Research*, 12(1), 171-197.
- Hasanov, A., Laine, T. H., & Chung, T. S. (2019). A survey of adaptive context-aware learning environments. *Journal of Ambient Intelligence and Smart Environments*, 11(5), 403–428. <https://doi.org/10.3233/AIS-190534>
- Hwang, G.-J. & Tu, Y.-F. (2021). Roles and Research Trends of Artificial Intelligence in Mathematics Education: A Bibliometric Mapping Analysis and Systematic Review. *Mathematics* 9(6), 584-592.
- Ibrahim, F.O. (2023). The impact of emerging AI technologies. Retrieved from www.susafrica.com.
- Ikedinachi, A. P., Misra, S., Assibong, P. A., Olu-Owolabi, E. F., Maskeliūnas, R., and Damasevicius, R. (2019). Artificial intelligence, smart classrooms and online education in the 21st century: Implications for human development. *Journal of Cases on Information Technology (JCIT)*, 21(3), 66-79.
- Karaca, A. (2020). Innovative technologies and living spaces; Updated living standards according to the evolution of homo sapiens. *New Trends and Issues Proceedings on Advances in Pure and Applied Sciences*, 12, 91–108. <https://doi.org/10.18844/gjpaas.v0i12.4990>
- Kaur, K. (2021). Role of Artificial Intelligence in Education: Peninsula College Central Malaysia. *HRMARS International Journal of Academic Research in Progressive Education and Development*, 10(2), 1006–1016.
- Kajuru, A.Y. (2015). Audience perception of media coverage and management of the 2011 post-election violence in Kaduna state. Unpublished M.Sc. Dissertation submitted to the Department of Theatre and Performing Arts Faculty Of Arts, Ahmadu Bello University, Zaria Kaduna State, Nigeria.
- Moreno, R. D. (2019). The arrival of artificial intelligence to education. *RITI Journal*, 7(14), 260–270. <https://doi.org/10.36825/RITI.07.14.022>.
- Nafsaniath, F. D. S. & Margaret, R. (2015). Expanding the technology acceptance model (TAM) to examine faculty use of learning management systems (LMSs) in higher education institutions. *MERLOT Journal of Online Learning and Teaching*, 11(2), 50-66.
- Nalbant, K.G. (2021). The importance of artificial intelligence in education: A short review. *Journal of Review in Science and Engineering*, 6, 1-10.



- Noah, A, Ganiyu, K, and John, A. (2021). Knowledge, attitude and perception of artificial intelligence and Its Application in the key operations of Insurance in Nigeria. Retrieved from <file:///C:/Users/USER/PC/downloads/artificial%20%20intelligence%20and%20its%20application%20in%20the%20key%20operations%20of%20insurance%20in%20nigeria.htm>.
- Nagao, K. (2019). Artificial intelligence in education. In *Artificial intelligence accelerates human learning*, 1-17. Springer.
- Nwodu, G. E., Ezeoke, B. C. & Ezeaka, N. B. (2021) Audience Perception Of Social Media Messages On Security Challenges In The South East, Nigeria: Implication For Audience Gatekeeping. *World Journal of Innovative Research*. Vol 11 No 2 www.wjir.org/vol/vol-11issue2
- Nwodu, L.C.(2017) Research in communication and other behavioural sciences: Principles, methods and issues (2nd) edition. Enugu. Rhyce Kerex Publishers
- Nwodu, L. C. & Nwodu, G. E. (2010). Exploring the Basics of communication research” in I. S. Ndolo (ed.), *Contemporary issues in communication and society*, (90-107). Enugu: Rhyce Kerex Publishers.
- Nwodu, L. C. & Nwodu, G. E. (2018). Evolving research agenda for international communication in the era of social media” in L. C. NWODU & I. S. ONUNKWOR (ed.s), *Evolving Thoughts on International Communication, Diplomacy and the Social Media*, (276-283) Enugu: Rhyce Kerex Publishers
- Obiora, A.V., Nwammuo, O.S., & Nwammuo, A.N. (2025). Perception of communication scholars on the adoption and usage of ChatGPT for media studies. *British Journal of Mass Communication and Media Research*, 5(1), 1-13.
- Obiora, A. V., & Uche, A. O. (2024). Adopting information and communication technologies for effective school leadership in Nigeria. *Social Science Research*, 10(2), 34–49. <https://journals.aphriapub.com/index.php/SSR/article/view/2627>
- Obiora, A.V., & Adikuru, C.C. (2024a). Emerging artificial intelligence techniques in the production of “Jagun Jagun” movie. *Social Science Research*, 10(3), 13–30. <https://journals.aphriapub.com/index.php/SSR/article/view/2754/2538>
- Obiora, A.V., & Adikuru, C.C. (2024b). Intervention communication strategy: Boosting fight against drug abuse among Nigerian youth through artificial intelligence generated memes on social media. *Advance Journal of Arts, Humanities and Social Sciences*, Volume: 7(4), 57–72. <https://aspjournals.org/ajahss/index.php/ajahss/article/view/112>
- Obiora, A.V., & Uche, A. O. (2022). Impact of online radio programme preferences on academic pursuit of undergraduates in South-east Nigeria. *Mass Media Review*, 4(1).
- Ojiakor, O.E., & Obiora, A. V. (2019). Perception of Nigerian audience on reallife of nollywood artistes repeatedly characterized as villains. *International Journal of Social Sciences and Management Research*, 5(6). 37–48.
- Okoro, N and Shaibu, M.O. (2016). Students’ perception of newspaper cartoons as tools for political communication: A study of the three Universities in Kogi State, Nigeria. *Novena Journal of Communication*, 2, 1-18.
- Quick, D. L. & Nelson, J.C. (2017). *Organisational Behaviour: Foundations, realities and Challenges*. New York: West Publishing Company.



- Shadrach, I., & Adikuru, C.C. (2023). Assessment of Adoption and Practice of Citizen Journalism Among Women in North-East, Nigeria. *Gender and Society, Journal of Centre for Gender and Women Studies, Alex Ekwueme Federal University, Ndufu Alike*, Volume: 1, 2023, 28–41.
- Sijing, L. & Lan, W. (2018). Artificial intelligence education ethical problems and solutions. In 2018 13th International Conference on Computer Science & Education (ICCSE), 1-5.
- Syed, A. B. & Zoga, A. C. (2018). Artificial intelligence in radiology: current technology and future directions. *Seminars in Musculoskeletal Radiology*, 22, 540–545. <https://doi.org/10.1055/s-0038-1673383>
- Udeze, S. E, Nwodu, L. C. & Nwodu, G. E. (2015). Social media and global news flow: what has changed? In J. E. Aliede (ed) *Studies in Communication, Mass Media and Society, Discourses and Debates*, (Pp 247-254). Lagos: Public Relations Mix (PR-MIX).
- Uzunboyulu, H., Prokopyev, A. I., Kashina, S. G., Makarova, E. V., Chizh, N. V., & Sakhieva, R. G. (2022). Determining the opinions of university students on the education they receive with technology during the pandemic process. *International Journal of Engineering Pedagogy (iJEP)*, 12(2), 48–61. <https://doi.org/10.3991/ijep.v12i2.29329>.
- Yimer, S., & Gizachew, B. (2022). The development of a web-based application security testing framework in Addis Ababa, Ethiopia. *Global Journal of Computer Sciences: Theory and Research*, 12(1), 12–22. <https://doi.org/10.18844/gjcs.v12i1.6762>.
- UNESCO. (2019). The Sustainable Development Goals Report. Retrieved from <https://bit.ly/34nbq60>.