

Sociological Effects of Artificial Intelligence on Theological Students in Selected Seminaries of The Church of Nigeria (Anglican Communion)

Lead Author

**David
Oluwabukun
mi Ogunbiyi**

Affiliation:

Department
of Religious
Studies and
Philosophy
Redeemer's
University
Ede, Osun
State



Abstract

Artificial intelligence, a computer science field, can revolutionise education by enabling machines to perceive their environment and use learning to achieve goals. However, it poses threats to teachers' job security, dehumanised learning experiences, and increased dependency on technology. Overreliance on AI can limit critical thinking and cognitive abilities, making students increasingly dependent on machines. The study investigates the effect of artificial intelligence on theological education, particularly among Anglican postulants in Church of Nigeria seminaries. The research involved 82 participants from three major geopolitical zones in Nigeria, including 27 lecturers and 55 students from Immanuel College of Theology & Christian Education and Archbishop Vining College of Theology. The results showed that in Anglican seminaries of the Church of Nigeria (Anglican Communion), artificial intelligence can improve education through adaptive learning platforms, automated grading systems, virtual teaching assistants, speech recognition, behavioural analytics, assignment and research compilations, and real-time student behaviour monitoring. Artificial intelligence can also provide immediate feedback. However, concerns about data privacy, algorithmic biases, and overreliance on technology can hinder the social, spiritual, emotional, and psychological developments of the postulants in Anglican seminaries. The study recommended that the Church of Nigeria (Anglican Communion), through its recently established theological accreditation and regulatory board, establish a subcommittee to evaluate the effects of artificial intelligence (AI) on the spiritual, psychological and mental development of Anglican postulants in Nigeria.



Co-Authors: Oyebanji Israel Temitope Department of Religious Studies and Philosophy, Redeemer's University Ede, Osun State

This subcommittee should create policy documents on AI, take ethical and responsible measures in its implementation, and raise awareness of the effects of AI in society, parishes, and educational institutions.

Keywords: Artificial Intelligence, Sociological, Christian Education, Seminary, Church of Nigeria

Introduction

The Nigerian Anglican authority is addressing concerns about the poor performance of clerics trained in theological institutions, with some lecturers considering reviewing the teaching methods of postulants during their formative years at seminaries. A curriculum in theological education encompasses postulants' experiences during the pastoral and educational process (Wiles, 2008:2), connecting them to theological institutions' learning objectives and the Church of Nigeria's mission. These curricula can be classified as excluded, explicit, implicit, or extracurricular, ensuring students engage with educational resources, methods, and content (Kelly, 2009:1-55). The Church of Nigeria has established the theological accreditation and regulatory board, consisting of clergy, academics, and affiliated institutions, to emphasise the importance of theological education for a strong church and prevent poor performance, growth and development, and service delivery of the great commission (Adewale, 2009:1).

AI's integration into education requires understanding beyond educators' perspectives to understand student interactions. A study of 2.6 million users found that students rate AI's accuracy for school-related work at 7.2 out of 10. This highlights the importance of AI outputs in students' work. Given students' trust in AI, there is an opportunity to provide additional support in their writing journey, ensuring access to factual information. Use cases for AI include general homework questions, research support, inspiration, math problem assistance, clerical work, and coding help. Overall, AI's potential in education is significant, and further support is needed to ensure students have access to factual information (Zhang, 2024: n.p.). AI in education is revolutionizing learning by identifying knowledge gaps and providing targeted feedback. AI-powered chatbots and virtual assistants foster engagement and motivation, identifying struggling students earlier. This shift towards dynamic, interactive approaches is significant, moving away from traditional classroom models. AI-powered virtual and augmented reality tools



make complex concepts more immersive and engaging (Takyar, 2024: n.p.). AI has the potential to revolutionize society through productivity, healthcare, education, and problem-solving. However, ethical implications like privacy, security, job displacement, and reduced mental and intellectual capacity must be addressed. Investing in AI development, research, and responsible policies is crucial for its long-term improvement.

Conceptual Framework on Education

Education is a purposeful activity aimed at transmitting knowledge, skills, and character traits. It can also refer to the academic field studying teaching methods and institutions (Watson, 2016:146). Understanding education is crucial for identifying phenomena, measuring success, and improving practices (Matheson, 2014:15-32). Education is a multifaceted concept, with different theorists arguing for different definitions. Some believe all forms are similar but not essential, while others view it as context-dependent. Prescriptive conceptions define good education and practice, while critical thinking is essential to differentiate it from indoctrination, which focusses solely on beliefs. Education theorists focus on specific features exclusive to certain forms, such as imparting knowledge, ensuring the process is beneficial, and conducting it morally appropriate (Smith, 2020:781-783). The sociological study of education uses functional, conflictual, and symbolic interactionist techniques. Functionalism suggests education serves various tasks, such as socialisation and cultural innovation. Conflict theory suggests education fosters social equality through tracking and standardization, bridging the learning gaps. Symbolic interactionism emphasises classroom social interaction, influencing gender roles and teacher expectations (Ballantine & Hammack, 2009:3).

Philosophically, there are four educational settings in every society, which are essentialism, perennialism, progressivism, and social reconstructionism. Essentialism focusses on teaching essential skills and preparing students for productive society roles. Perennialism supports universal truths and liberal arts curricula, encouraging student-centred instruction. Progressivism emphasises experiential learning and real-life experiences, contrasted by essentialism and perennialism. Social reconstructionism emerged as a response to World War II and the Holocaust, aiming to assuage human cruelty and prepare students for a better world. Critical pedagogy, a student-centred approach, applies critical theory to education, focussing on social critique and political action.



In African traditional society, learners developed a common spirit, shared ownership of production, and a sense of community. Education was a vital part of culture, focussing on holistic development including cognitive skills and moral, emotional, and social well-being. Music, dance, and storytelling were integral to education, serving as cultural preservation, emotional and spiritual growth, and promoting the sense of identity and belonging (Atiah, 2023:n.p). Psychology is a vital tool in understanding educational methods, as it helps deduce methods from human nature and practical experience. It helps explain why certain methods succeed and provides insights into unresolved questions. Psychology can also suggest ways to test, verify, or refute claims of any method, such as teaching spelling together or apart in time. By understanding changes in human nature, psychology helps determine the results of any teaching method. Overall, psychology helps us understand the means of education and the influence of various factors on learning outcomes. By understanding the changes in human nature, psychology helps us determine the success of any teaching method (Thorndike, 1910:5-12).

Education is a crucial aspect of life, promoting learning, change, and knowledge sharing. Nigeria's education system, governed by the Federal Ministry of Education, includes kindergarten, primary, secondary, and tertiary education. Despite its independence, education faces instability, leading to regional variations in funding, curriculum, and quality. Education reduces illiteracy, improves communication skills, protects child rights, ensures economic growth, reduces poverty, creates jobs, and impacts public health and democracy. Basic education develops a sound standard of conduct, fostering good citizens (Aminu, 1990:581).

Theoretical Framework on Artificial Intelligence

Theory of Mind (ToM) is an essential component of social cognition, enabling individuals to assign mental states to others and engage in successful social interactions. It enables us to recognise other people's distinct knowledge, beliefs, and desires, enabling us to take intentional actions based on these. ToM is a crucial aspect of cognitive development, as children's interactions shape their understanding of meaningful behaviors, rewards, and punishments. Cognitive Theory of Mind abilities are crucial for cognitive development, starting in infants by the end of their first year. These abilities include gaze-following behaviours, acknowledging oneself and others as agents, and subjectively experiencing the world. Research indicates 18-month-olds can interpret and perform actions intended but failed, while adult



measures of Theory of Mind reflect more advanced social-cognitive abilities (Scott & Baillargeon, 2017:237-249; Allen, 2015:63-72; Cuzzolin et al., 2020:1057-1061). The Theory of Mind suggests that artificial intelligence can understand and simulate the emotions and thoughts of other agents, such as humans or other AIs. This is crucial for efficient communication and social engagement and is essential in applications like social robots, virtual assistants, and AI systems that interact with humans. As research progresses, AI-enhanced computers may deduce creatures' intentions, grasp their consciousness, and use machine learning to explain judgements in various languages (Arya, 2024:n.p.).

The Self-determination Theory (SDT) is a theory that helps educators understand their motivations and psychological needs when integrating AI into curriculum creation. It identifies three basic psychological needs: autonomy, relatedness, and competence. Autonomy refers to educators' control and freedom to innovate with AI technologies; relatedness emphasises the importance of community and shared purpose; and competence reflects educators' confidence in using AI tools effectively. SDT suggests that school leaders should adopt autonomy-supportive strategies, allowing teachers to exercise autonomy in making curriculum decisions based on their self-efficacy. Schools can support competence by providing professional training and granting teachers' freedom in professional development. Relatedness, which often manifests in mentorship and collaborative learning experiences, is crucial. Empowering teachers to internalise their curriculum planning experiences is essential for sustaining curriculum development efforts and understanding teachers' motivations alongside curriculum planning approaches (Chiu & Chai, 2020: 5568; Chiu & Churchill, 2016: 1355-1370; Ryan & Deci, 2000:68; Sparks, et al, 2016:71-82; Odunaya, 2023:192-206)

Socio-Philosophical Framework on Artificial Intelligence

Artificial intelligence (AI) is a field influenced by philosophical and logical ideas with the objective of automating human reasoning. AI seeks to construct artefacts that may demonstrate intelligent behaviours in controlled situations over time, raising concerns about intelligence, cognition, and human behaviour. The empirical question is for psychology and cognitive science to address, but understanding the human mind might aid in the development of robots that function similarly. AI and cognitive science have grown in tandem, and AI has affected the philosophical topic of what makes a mental mark (Arkoudas & Bringsjord, 2014:34-63). The philosophical examination of artificial intelligence is a subfield of computer science that explores



the implications of AI on intelligence, ethics, consciousness, epistemology, and free will (Bringsjord, et al, 2018: 23). It focusses on the development of artificial animals or people, aiming to answer questions about whether machines can act intelligently, if human and machine intelligence are equivalent, if the human brain is a computer, and if machines can experience the same mental processes and awareness (Russell & Norvig, 2003:947). AI research focusses on whether machines can solve all human problems with intelligence. Most researchers believe that every aspect of learning and intelligence can be characterised, allowing computers to replicate it. However, arguments against this assumption must show that developing a workable AI system is unfeasible due to practical constraints or unique human mind features. Machine learning, which began with Turing's child machine idea (Turing, 1950:433-460), delivers the desired attribute of intelligence without a clear design-time description (Heder & Paksi, 2012:8-14). According to Turing's theory of intelligence, a computer is intelligent if it can respond to questions in the same way that a human would. Turing's test, on the other hand, has been chastised for judging a machine's "humanness" rather than its "intelligence" (Turing, 1950:433-460). Russell and Norvig contend that aeronautical engineering literature does not identify the purpose of their subject as creating machines that fly so closely to pigeons that they can trick other pigeons, making it impossible to discern whether a machine is clever (Russell & Norvig, 2003:948).

The sociology of artificial intelligence (AI) has gained renewed interest due to its social nature, antecedents, and consequences. However, researchers new to this field can find it challenging to navigate existing literature. The literature under the "sociology of AI" can appear diffuse and dated, with some studies analysing AI's implications for social processes and relations, others discussing AI techniques in sociological research, and others appearing in search results because they list "artificial intelligence" and "sociology" as keywords but do not analyse AI in sociological terms. To better understand the diverse literature, researchers can divide it into three categories: scientific AI, technical AI, and cultural AI. Scientific AI research examines AI as a science or research field; technical AI studies AI as a meta-technology and its applications; and cultural AI research views AI development as a social phenomenon and its interactions with the wider social, cultural, economic, and political conditions (Liu, 2020:1-13). AI has significantly impacted various sectors, including healthcare, transportation, finance, and digital assistants. However, ethical implications and developers' responsibility to address bias remain debated. In 2013, Google introduced Word2Vec, a word embedding model that encodes biases. Sociologists use these models to



understand social processes, moral associations, cultural meanings, and gender stereotypes. They also examine AI's social implications in daily life, such as labour markets, surveillance, online communities, political polarisation, healthcare, criminal sentencing, police, crime prediction, and welfare systems (Nelson, 2023:n.p.).

Advancements in AI are expected to significantly impact the field of anthropology, offering insights into sociotechnical phenomena and enabling the exploration of how individuals and institutions design, create, and use AI technologies (Şartori & Theodorou, 2022:3). However, current studies often focus on binary narratives of humans versus algorithms, culture versus technology, or humans versus computers. Recognising the complexity of human-AI relations requires moving beyond stereotypical narratives. AI integration will enhance artefact analysis, reconstruct ancient environments, and identify undiscovered sites (Rebai, 2024:1-2). Anthropology provides vital insights into AI's cultural background, which informs its design and implementation. It may also help uncover and remove biases in AI systems, which might be introduced by the data used to train models or the humans who create them. An interdisciplinary approach that integrates AI and anthropological viewpoints can give a comprehensive understanding of AI's influence on society. It may need collaboration among computer scientists, anthropologists, and other professionals to research AI from many perspectives. Human viewpoints should be integrated in AI development, either through end-user feedback or ethnographic research. Anthropology may also evaluate the ethical implications of AI systems, making recommendations for fair, transparent, and responsible design.

Economically, the IMF predicts that AI will impact over 40% of global employment, with mature countries facing more risks and opportunities. In industrialised economies, AI may affect 60% of employment, with half benefiting from integration. AI is expected to automate 25% of the labour market, potentially impacting up to 300 million jobs worldwide. It is expected to replace humans in 46% of administrative duties, 44% of legal vocations, and 37% of architectural and engineering occupations. AI could raise labour productivity and global GDP by 7% per year over the next ten years (Georgieva, 2024:n.p; Trabelsi, 2024:143). The AI economy has different effects on economic development across industries and geographies, adding \$15,700 billion to global GDP between 2018 and 2030. Until 2030, AI largely contributes to productivity improvements (55%), followed by consumption recovery (45%), but this ratio should reverse due to an ideal productivity threshold. Between 2013 and 2022, the United States invested the most in AI, followed by China (\$95.1 billion). However,



economist Aghion and his colleagues caution that technical maturity, legal data protection, socio-professional consequences, and institutional challenges in AI training might all have a detrimental impact on economic growth (Aghion, et al, 2016:24-51).

AI and psychology work hand in hand since AI is created by imitating human brain networks. Though new societal challenges like AI bias, echo chambers, and improper use of AI technologies have evolved, findings from AI research may be applied to many subfields within psychology. AI schools of thinking that drew extensively on psychology studies include the connectionist, symbolic, and analogist schools of thought. Research on artificial intelligence has been aided by pathologists and neuroscientists, some of whom were motivated by cognitive science or neuroscience (Yu, 2023:n.p.). Artificial intelligence relies heavily on brain cognition but cannot fully replicate human emotions and mental state fluctuations. Research aims to replicate human memory, attention, perception, knowledge retention, and emotions (Shi & Li, 2018: 293-295), but this field is still in its early stages. Cognitive psychology-based artificial intelligence theories are flawed due to disparities in racial, regional, and developmental environments, uneven assessment standards, and random sampling variations (Zhao, et al, 2022:1-9). Personality traits, including the Big Five (openness, conscientiousness, extraversion, agreeableness, and neuroticism), can influence attitudes towards technology, including AI. Introverts tend to have more positive AI attitudes, while extraversion is associated with negative emotions (Bergdahl, et al, 2023:1-15). Park and Woo further classified attitudes into four dimensions, finding introverts have more positive AI attitudes, while neurotic individuals have more negative attitudes (Park & Woo, 2022:68-94).

Artificial intelligence (AI) is becoming increasingly popular in African society, although adoption is low owing to new problems. These include skill learning, a lack of a structured data environment, ethics, government rules, inadequate infrastructure, network connectivity, uncertainty, and user attitude. These challenges might have a direct influence on Africa's economic progress (Abejide & Okonkwo, 2023:101-117). Artificial intelligence (AI) is gaining popularity in Africa because to its potential uses in a variety of industries, although concerns have been raised concerning technology transfer, selection, and mastering. The 1960s 'technology transfer' model failed to respond to local demands, resulting in global digital empires. African solutions are required, while prevailing narratives about AI are criticised for being male, gendered, white, heteronormative, powerful, and Western. UNESCO advises that effective AI application need the proper skills, legal framework, and infrastructure. Established African



technological hubs such as South Africa, Nigeria, and Kenya may see the most rapid growth of artificial intelligence (Kohnert, 2022:1).

Theological Framework on Education

Education is essential for the survival of any society because it assures the transmission of information, power, and ideological goals to future generations. The Israelites, like other ancient peoples, were influenced by education, as evidenced in the Old Testament and New Testament (Josh. 1:6-8; Deut 6:1-9; John 13:34-35). The Hebrew community's success was based on knowledge and obedience to God's law, while the church of Jesus Christ's success was linked to sound doctrine, highlighting the importance of education in a community's survival and development. The New Testament emphasises the importance of religious education in exposing false teachings and promoting Christian discernment. It teaches sound biblical doctrine, prophecy, and revelation for church growth. Early teaching involved systematic instruction and public reading of Scripture, later becoming a prerequisite for baptism. Christ gifted his church spiritual gifts, including the role of pastor-teacher and teacher. The New Testament teaches pedagogical and theological lessons that apply to contemporary Christian education, including attending to the whole person, instilling learning, fostering mentoring relationships, and emphasising the ethical connection between being or character and doing or practice (Hill, 1996:n.p.).

Theology, often seen as an abstract intellectual discipline, is not just about speculating in abstract matters (Plantinga, 2010:28). It involves studying and understanding God's nature, character, and relation to the world. Christians believe in God's personal nature and meaningful relationship with the world. Christian theology involves growth in knowledge of God revealed in the Bible through study and experience. Theological education aims to clarify, organise, distil, refine, and teach this knowledge (Benson, 2020:n.p.). Theological education aims to develop intellectual, spiritual, and moral virtues in postulants through curricular and extracurricular practices taught by faithful lecturers. However, postulants must bring their own studiousness, docility, and compunction to the process. They must be willing to study for approval and open to being shaped by God's word and Church doctrine (Stamps, 2023:n.p.).

A seminary is an educational institution that prepares students for ordination in clergy, academics, or Christian ministry. Theological education has evolved from the New Testament period to the present, with the catechumenate being the main means for pastoral



preparation. The earliest Christian theological education was passed down by Jesus' disciples, who eagerly shared their understanding and experiences of Jesus of Nazareth's earthly life (teaching, death, burial, resurrection, and ascension) and his significance in God's plan for all of humanity, both among themselves and with a growing number of new converts and seekers. Paul's connections to Athens and Ephesus academies influenced his disciples in Acts 17:18-20 and 19:9-10, whose preaching and teaching focused on salvation, fellowship, and conducting deliverance and healing sessions. In the early second century, Ignatius of Antioch urged the church to study doctrine in line with the Lord's and Apostles' teachings, collaborating with church leadership and bishops to ensure orthodoxy and alignment with Jesus Christ's teachings, ensuring success in all areas. The Alexandria school, a tradition in early Christian education, is believed to have originated with Mark and continued in the Coptic Church in Egypt. Its formation began with missionary scholar Pantenus around 190 AD and others, known for its allegory method. The end of systemic persecution led to the rise of the Christian Church, leadership, and theological education. The most significant period of theological development occurred in the thirteenth century, when the university system emerged as an alternative to cathedral and monastic models (Gonzalez, 2015: 1-155).

Historical Framework on Selected Theological Institutions in Nigeria

A top-tier theological institution in Nigeria, Immanuel College of Theology, Ibadan, was founded by the Methodist and Anglican churches and offers a four-year degree program in religious studies, theology, and ministry training. The seminary is one of the leading theological institutions in Nigeria, West Africa. Established in 1958, it combines both Anglicans and Methodists to reflect the ecumenical nature of the church and the transcendent nature of God. The college has produced over a thousand church ministers for Anglican and Methodist churches in Nigeria. The University of Ibadan's founding in 1948 expanded opportunities for Nigerians, including theological students, to obtain university education abroad. In 1971, the college secured a special relationship with the University of Ibadan, training students for a Diploma in Religious Studies instead of the London University Diploma in Theology. In 1986, the college partnered with the university to admit and prepare students for the Bachelor of Arts Degree (Christian Studies). In 2024, with the approval of the Governing Council, the seminary graduated its first set of postgraduate students. Located in Akure, Nigeria, Archbishop Vining College of Theology was founded in 1917 as a training ground for young women aspiring to become obedient housewives. In commemoration of Archbishop

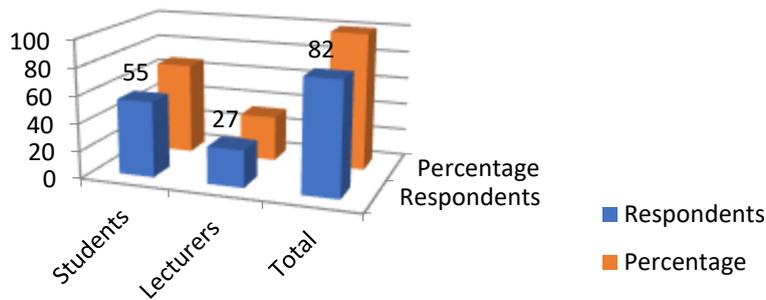


Leslie Gordon Vining, it was renamed the Vining Christian Leadership Centre in 1963 and began serving as a catechist training centre for the Anglican church. It was transformed into a complete theological college in 1983 and began preparing students for the Anglican Church's ordained ministry. It provides B.A. (Hons) degrees from the University of Ibadan, Ibadan, and diplomas in theology, religious studies, and other subjects. It is accredited by the National University of Nigeria (NUC). Additionally, the college offers clergy spouses and women with leadership certifications yearly training in women leadership. Additionally, it has authorised the granting of lay women's certificates in theology and ministry.

Artificial Intelligence and its Effects on Theological Students in Nigeria

Artificial intelligence (AI) can enhance productivity and drive economic growth by performing tasks requiring human intelligence. However, developing economies have seen little investment in AI. Nigeria's tech industry has grown due to internet and mobile technology advancements, attracting startups and established companies like Google, Microsoft, and Facebook. The NGN225 million Nigeria Artificial Intelligence Research Scheme (NAIRS) provides grants to entrepreneurs and researchers to foster AI innovation. To remain competitive, Nigeria should invest in research funding, improve access to reliable energy and internet connectivity, and establish a more favourable regulatory climate. Policymakers can use lessons learnt to create an environment that promotes AI development, such as industry-specific rules, practice standards, and certifications (Okpanum & Omeihe, 2024:n.p). The study explores the effects of artificial intelligence on theological students in Nigeria using Immanuel College of Theology & Christian Education, Samonda, Ibadan, and Archbishop Vining College of Theology, Akure, as a case study. A Google Form-designed questionnaire was used to gather data from the participants. The descriptive sampling approach was used to evaluate the data.

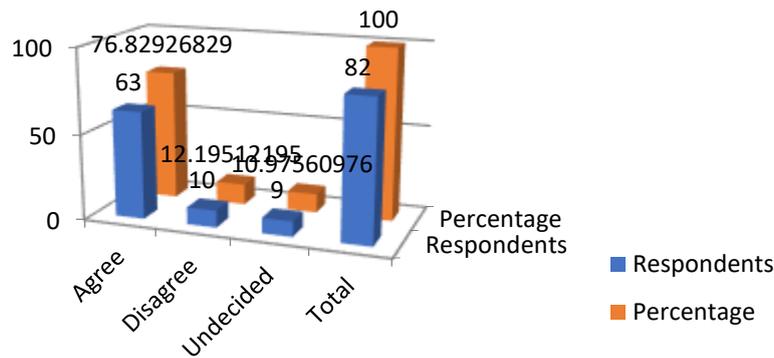
Chart 1: Participant's Classification



	Students	Lecturers	Total
Respondents	55	27	82
Percentage	67.07317073	32.92682927	100

Chart 1 above shows the participant's classification according to the gathered data in this study: 55 respondents, representing 67.1% of the total sampling population, were students, and 27 respondents, representing 32.9%, were lecturers of the two selected theological institutions. The selection conference is a rigorous process for church ministry in the Church of Nigeria (Anglican Communion), commencing at the parish level. Applicants are only assigned to theological institutes for teaching after passing a comprehensive examination. The local church council and vicar may examine them before archdeaconry and diocesan chaplains question them. Following that, these candidates undergo a rigorous training program at diocesan-approved theological institutions. However, the presence of morally and spiritually bankrupt persons among some postulants might be attributed to insufficient auditing and overhauling of the selection process before to sending them to the seminary for training. The Church of Nigeria seminaries demand a school certificate with at least five credits in English, Mathematics, and Christian Religious Studies. The UTME (JAMB) exam involves English language, Christian religious studies, and two additional courses from the arts, social sciences, or sciences. Candidates must present authentic baptism and confirmation certificates. Medical clearance and other test results are also necessary.

Chart 2: Nigeria stands out among African nations in the field of artificial intelligence (AI).

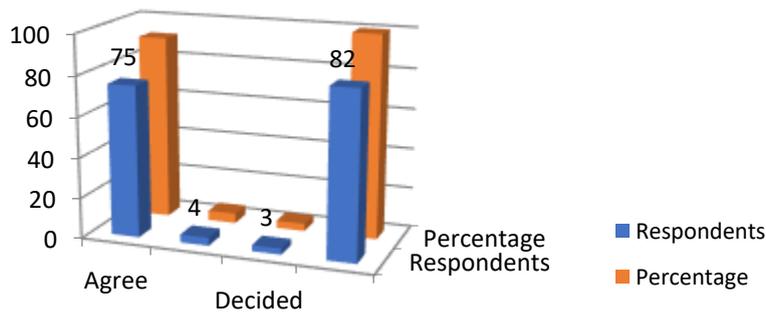


	Agree	Disagree	Undecided	Total
Respondents	63	10	9	82
Percentage	76.82%	12.19%	10.97%	100%

Chart 2 reveals that 63 respondents representing 76.8% of the total sampling population believe that Nigeria stands out among African nations in the field of artificial intelligence (AI), 10 respondents representing 12.1% of the sampling population disagree that Nigeria stands out among other African nations in the usage of artificial intelligence, and 9 respondents representing 11.1% of the total sampling population were undecided. Nigeria, Africa's largest country, is grappling with education system issues like inadequate infrastructure, limited resources, a low teacher-to-student ratio, and low-quality outcomes. To address these issues, the government has introduced AI tools like personalised learning, data analysis, virtual classrooms, and assessments. These tools analyse student data to create tailored learning paths, identify trends, and provide remote learning in underserved areas. Automated assessments ensure timely feedback and reduce bias in grading (Ibrahim, 2023:n.p.). The Nigerian educational system is set to revolutionise with the integration of artificial intelligence (AI). AI can enhance learning, improve student outcomes, and increase access to quality education. It can address the issue of inadequate teachers in rural areas, provide personalised

learning experiences, and offer real-time feedback. Institutions like the University of Lagos are exploring AI applications in education, such as virtual learning environments, grading automation, and student engagement. However, challenges like inadequate infrastructure, limited internet access, and high costs must be addressed for equiChart access. Despite these obstacles, the potential of AI to transform Nigeria's educational landscape is vast and exciting (Nwagbara, 2024:n.p.). Artificial intelligence (AI) tools are revolutionising Nigerian education by improving learning outcomes, enhancing access, teaching methods, saving time and money, and enhancing creativity and critical thinking. AI-powered virtual classrooms can bridge the achievement gap between urban and rural areas, enabling efficient lesson planning and cost savings.

Chart 3: The rise of artificial intelligence has been linked to an increase in technology reliance and a decline in critical thinking among theological students.

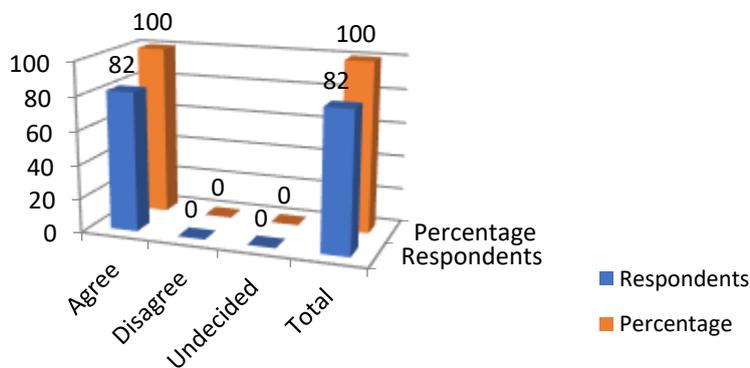


	Agree	Disagree	Decided	Total
Respondents	75	4	3	82
Percentage	91.4634146	4.87804878	3.65853659	100

Chart 3 shows that 75 respondents representing 91.5% of the total sampling population believe that the rise of artificial intelligence has been linked to an increase in technology reliance and a decline in critical thinking among theological students; 4 respondents representing 4.9% disagreed, while 3 respondents representing 3.6%

were undecided. Critical thinking is the process of examining facts, evidence, and arguments in order to generate reasonable, sceptical, and unbiased conclusions. Critical thinkers use their intellectual talents and personality attributes to adhere to rigorous standards, effectively communicate and solve problems, and strive to eliminate egocentrism and sociocentrism, all of which stem from John Dewey's reflective thinking (Piergiovanni, 2014:86-93; Clarke, 2019:6). The excessive use of AI technology among theology students may negatively impact their critical thinking, cognitive abilities, and independence (Zhai, et al, 2024:1-37). In fact, there is a growing concern that theological students may overrely on artificial intelligence (AI) for academic purposes. AI can handle large amounts of data, affecting information retrieval, assessment, and problem-solving abilities (Jun, et al, 2024:478-487). A recent poll found that over half of students believe using AI for homework and projects is cheating. However, most students use AI for personal projects or entertainment. To prevent these issues, students should adopt a critical mindset, demonstrate diverse perspectives, and take responsibility for their decisions.

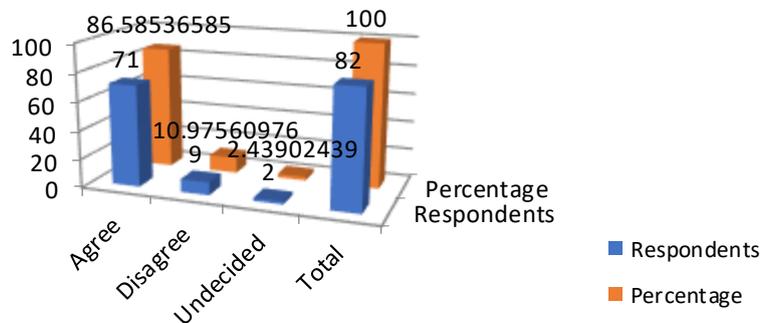
Chart 4: The use of artificial intelligence among theological students is posing significant privacy and security risks.



	Agree	Disagree	Undecided	Total
Respondents	82	0	0	82
Percentage	100	0	0	100

Chart 4 shows that all respondents felt that the utilisation of artificial intelligence among theology students poses major privacy and security issues to both the individual and the institutions as a whole. AI technology, including virtual assistants like Siri and Alexa, self-driving cars, and face recognition systems, is gaining popularity due to privacy concerns recently. Generative AI can create bogus profiles and edit photos, and cybercrime affects 80% of global firms. As AI evolves, it can gather and analyze large amounts of data on individuals, allowing for anticipating, targeting, and monitoring them.

Chart 5: Artificial intelligence diminishes the contact and interaction between lecturers and theological students in the classroom.

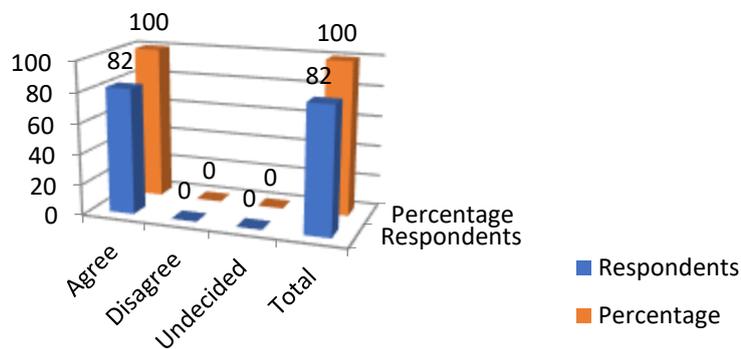


	Agree	Disagree	Undecided	Total
Respondents	71	9	2	82
Percentage	86.58536585	10.97560976	2.43902439	100

Chart 5 shows that 71 respondents, representing 86.6% of the total sampling population, believe that artificial intelligence diminishes the academic contact and interaction between lecturers and theological students in the classroom; 9 respondents, representing 11%, disagreed, while 2 respondents, representing 2.4%, were undecided. The advent of online courses has had a huge influence on Nigeria's education system, especially during the Covid-19 epidemic. Since the 1990s, governments throughout the world have prioritised the development of online courses at colleges and universities, giving

resources and funds to ensure continuity with traditional face-to-face teaching. Online platforms such as OpenLearn and the National Open University in Nigeria have been built to help with this transformation. However, the quick change to distant learning has had a severe influence on theological students' learning, involvement, and mental health. According to studies, online education can cause boredom, emotional shifts, poor time management, isolation, and a misunderstanding of the lecturer's explanation (Xiao, et al, 2023:14669-14691). The study reveals that lecturer and postulant connections enhance classroom well-being, suggesting that online education should cater to students' emotional needs, use flexible communication strategies, and increase learning interest. Sound richness and enjoyment positively impact classroom well-being, including health and attitudes. Seminaries and universities should establish noise levels and silence standards. The perceived ease of use of online education technologies also improves students' well-being. Sound richness moderates the impact of lecturer-postulant interaction, but sound enjoyment directly impacts the classroom environment.

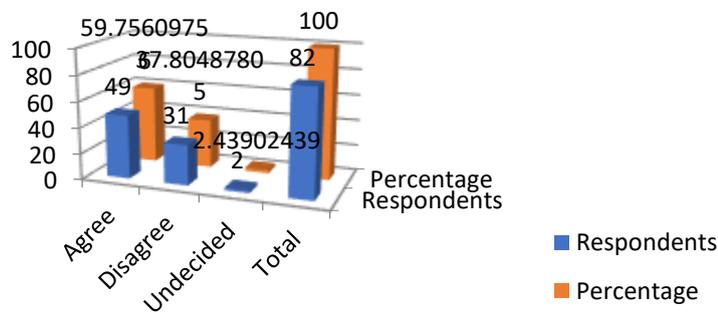
Chart 6: Artificial intelligence also poses a threat to lecturer's job security in theological institutions.



	Agree	Disagree	Undecided	Total
Respondents	82	0	0	82
Percentage	100	0	0	100

Chart 6 reveals that 82 respondents, representing 100%—that is, all the respondents believe that artificial intelligence will significantly impact the job security of lecturers in theological institutions in the near future. Workplace Artificial Intelligence (AI) improves operational efficiency, enables informed decision-making, and promotes product and service innovation. However, research on worker-AI coexistence in the workplace is still in its early stages (Zirar, et al, 2023:102747). AI is already handling classroom and administrative activities at certain seminaries, offering real-time feedback on student data to help students create individualised study programs and grade essays and exercises. This lowers the need for costly remedial courses and gives teachers more time to prepare and investigate. Although robots have not been fully adopted, AI is already being employed at some institutions. Fleming believes that the worry of robots replacing humans in all activities is exaggerated. He contends that the cost of labour is critical in this new era of robots, as hiring humans is cheaper. Employers will examine the economic value of a job, as mechanisation incurs significant expenditures that must be spent in AI equipment. Power dynamics inside organisations impede the advancement of professional artificial intelligence, rendering insecure positions unsuitable for automation ((Fleming, 2019:29-31).

Chart 7: Postulants' use of artificial intelligence in sermon note compilation negatively impacts spiritual impartation during the ministration, leading to a lack of spiritual conviction and conversion.



	Agree	Disagree	Undecided	Total
Respondents	49	31	2	82
Percentage	59.7560975	37.8048780	2.43902439	100



Chart 7 shows that 59.8% of respondents believe that artificial intelligence in sermon notes negatively affects spiritual impartation during ministry, leading to a lack of conversion in some churches. However, 37.8% disagree, stating that preachers' charismatic skills are more important than AI use during sermon preparation. Additionally, 2.4% of the sample population was undecided about the impact of AI on the issue of the sermon's preparation and delivery. Traditionally, clergymen believe the Holy Spirit inspires the Word of God and guides sermon preparation. Paul states that only those with the Spirit can understand the Holy Spirit's revelation. Preachers should be confident in the Holy Spirit as it reveals the Word, educates the audience, and influences their hearts. They should pray for the Holy Spirit's active presence before asking Him to move in the church (Kwon, 2020:n.p). Today, AI is a versatile technology capable of performing various tasks, outperforming humans in their limited time. It can create Bible stories, create sermon titles, outline Advent and Lent reflects, write content for parish magazines, comment on current topics, and gather data for sermon illustrations (Cressman & Taylor, 2023:n.p).

Conclusion and Recommendation

The future of AI-related work in poor nations requires integrating technology into school curriculums and connecting them to higher education programs. This will help young people learn ICT skills, encourage ethical technology usage, and develop African AI enterprises. Connecting AI programs to infrastructure and community centers can also create opportunities for younger Africans to lead in AI applications. Policies and resources for accessible digital literacy programs and IT skill training are also crucial. To ensure ethical AI use, organisations should implement encryption, regular updates, and robust algorithms. They should also back up important data, segment data based on sensitivity, apply robust security measures, implement account lockout policies, install antivirus and anti-malware software, and monitor user behavior. Ethical guidelines should outline acceptable and unacceptable AI uses, covering fairness, transparency, accountability, and respect for human rights. Training and education should help employees understand responsible AI use, while transparency builds trust with users and stakeholders. Organisations should be accountable for their AI tools' actions and rectify any negative impacts.



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