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UNETHICAL USE OF ARTIFICIAL INTELLIGENCE AMONG BUSINESS EDUCATION STUDENTS: BEST REGULATORY PRACTICES

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Abstract
The rapid integration of Artificial Intelligence (AI) into education has brought about significant advancements, but it has also introduced challenges, particularly regarding the unethical use of AI especially among students. This prompted this study to identify the strategies for regulating unethical use of AI among Business Education students in tertiary institutions in Anambra State. Four research questions guided the study. The study adopted a descriptive survey research design. The population comprised 135 final year (2023/2024 session) students of Business Education in public Universities in Anambra state. Census Survey sampling technique was adopted; therefore, the entire population were studied. A structured questionnaire of 22 items was developed by the researchers and used to collect data. The questionnaire was validated by three experts. The questionnaire was subjected to trial testing to determine the internal consistency of the instrument. An overall co-efficient value of 0.79 using Cronbach Alpha Method was obtained. Mean and standard deviation were used to answer the four research questions. Findings revealed that awareness, teacher-training, and consequences influences Business Education students' decisions to use AI ethically. Based on the findings, the researchers recommended that school management should promote AI awareness initiatives, such as seminars and workshops, to educate Business Education students on the ethical implications of AI technologies and how to use them responsibly. It was also recommended that academic institutions should establish clear penalties for unethical AI usage, enforcing them consistently to foster responsible AI behavior among students.
Keywords: Artificial Intelligence, Regulation, Unethical Usage, Business Education Students, Strategies

Introduction

In recent years, Artificial Intelligence (AI) has witnessed remarkable growth and integration into various sectors, revolutionizing the way we live, work, and interact. The main goal is to make life easier and more pleasant, promote well-being, and cause no harm or, at least, minimize it (Awad et. al., 2021). Artificial intelligence are machines that have been programmed to mimics human intelligence by replicating cognitive functions such as learning and problem-solving. AI consists of many technologies which include machine learning (ML), deep learning (DL), natural language processing (NLP), robotics, internet of things, robotic process automation, reinforcement learning, computer vision, digital image analysis, canny edge detector, building automation systems, renewable energy systems, and smart water management systems (Thuraka, Ogirri, and Pasupuleti, 2024b). As the science and advancement of AI develops, smart technologies are increasingly being deployed and will have profound ethical, psychological, social, economic, and legal consequences for human society and our planet.

These machines can perform tasks that typically require human intelligence, such as visual perception, speech recognition, decision-making, and language translation. The capabilities of AI systems continue to expand, from voice recognition software to self-driving cars, from medical diagnostics to financial forecasting. These advancements are fundamentally altering the way we work, live, and even think. Among its numerous applications, AI has significantly impacted education, providing innovative solutions, enhancing learning experiences, and expanding the horizons of knowledge acquisition (Brynjolfsson and McAfee, 2018). For business education students, the

introduction of AI into their studies offers new ways to learn and understand complex topics. AI can provide personalized learning experiences, making it easier for students to grasp difficult concepts by giving them extra help where they need it most. These improvements help prepare students for the changing needs of the business world, giving them the skills and knowledge, they need to succeed in a tech-driven environment.

The rapid integration of Artificial Intelligence (AI) into education has brought about significant advancements. With AI technologies, advanced and collaborative learning is possible and made easy and seamless (Deutscher Ethikrat, 2023; Goldberg et al., 2021). While transforming teaching and learning, and improving learning outcomes and teaching practices, AI also poses some risks to the education sector. It has introduced challenges, particularly regarding its unethical use. The unethical use of AI by students of tertiary institutions is raising serious concerns among teachers, school administrators and other stakeholders in the education sector (Anozie-Ibebunjo, Ubi, and Chukwuokoro, 2025). The unethical use of AI includes various activities where AI technologies are used in ways that harm people, and societies, or break moral and legal rules. Many students are not sufficiently educated or aware of the ethical implications of AI usage. This lack of education and awareness often leads to the misuse of AI tools, which can result in plagiarism in assignments and research work, academic dishonesty, privacy violations, and other unethical practices (Nwosu et al, 2024).

Without a strong foundation in the ethical considerations surrounding AI, students are more likely to engage in behaviours that could have long-term negative consequences. Instances such as utilizing AI for plagiarism, unfair advantage in examinations, or biased data analysis can erode the ethical fabric of education, diminish academic integrity, and undermine the educational goals. These unethical use of AI among students poses a considerable threat. Therefore, education stakeholders need disciplined risk management strategies to effectively address these threats. Research, practice, and urgent policy decisions in an era of rapidly evolving AI technologies require researchers, practitioners, and policymakers to critically build on the strengths of AI, while being aware of its limitations and making serious efforts to improve them, to foster an environment in which generative AI tools are used responsibly and effectively (Kovari, 2025).

Unfortunately, that is not the case, students are using AI to write essays and complete assignments as if they had written them themselves. This practice emphasizes both the circumcision of the learning process and the devaluation of all forms of academic assessment. Above all, it challenges teachers to ensure high standards of academic integrity in their classroom practice. Stakeholders feel bad and express concerns about students' use of AI, because poor performance, low academic achievements and academic irregularities are on the high increase; human knowledge is depreciating and learners' knowledge and skills are getting inhibited; established regulations are being violated; quality assurance is becoming a mirage; and the future of education is being threatened by AI. The unethical use of AI by students is compounding the erstwhile issues arising from management factors confronting the school system.

When used aright, AI has pedagogic relevance to learners, teachers, and school administrators alike. Studies confirm that AI has been transforming the education sector. Such studies include Bellei (2019), Fokides and Mastrokoukou (2018), Obidiebube et al, (2025), Okpeseyi et al, (2024), Oyeyemi et al, (2024), UNESCO (2020), and Vincent-Lancrin and van der (2020). However, Adams et al., (2023) suggested pedagogical appropriateness, AI literacy, developing ethical guidelines, children's rights, and teacher well-being as the solution mechanisms for the mitigation of the matters arising from AI usage in the education sector.

Ethical usage of AI is crucial to make sure artificial intelligence technologies are created, used, and maintained in a fair and beneficial way. Ethical usage help prevent problems like privacy violations, biases, and misuse while promoting transparency, accountability, and respect for human rights (Jobin, 2019). If AI is here to stay, then the only effective means of preventing misuse is to control the use of AI tools. The unethical use of AI has far reached consequences on education and particularly on the students. Hence, there is a pressing need to develop effective strategies to regulate the unethical use of AI among students. However, the current regulatory framework and guidelines governing the use of AI in educational settings may not adequately address the specific challenges

faced in education, especially in Anambra State where the integration of AI is rapidly increasing. In addition, there is a lack of effective strategies to regulate unethical use of AI among business education students in Anambra State. Therefore, there is a need to explore and propose strategies for the regulation of unethical AI use among business education students in Anambra State. This paper offers comprehensive strategies on how educators can regulate unethical use of AI by promoting ethical use and fairness within the academic use of AI tools.

Purpose of the Study

The purpose of the study was to determine:

1. The role of awareness in regulating the unethical AI use among business education students in Anambra State?
2. The role of Teacher-training in regulating the unethical of AI among business education students in Anambra State?
3. The role of consequences in regulating the unethical use of AI among business education students in Anambra State?

Research Questions

The following research questions guided the study:

1. What is the role of awareness in regulating the unethical AI use among business education students in Anambra State?
2. What is the role of Teacher-training in regulating the unethical of AI among business education students in Anambra State?
3. What is the role of consequences in regulating the unethical use of AI among business education students in Anambra State?

Methods

The study adopted a descriptive survey design. The study was carried out in Anambra State, Nigeria. The population comprised 135 final year (2023/2024 session) students of Business Education of Nnamdi Azikiwe University, Awka and Chukwuemeka Odumegwu Ojukwu University, Igbariam, both in Anambra State of Nigeria. Census Survey sampling technique was adopted; therefore, the entire population were studied. A structured questionnaire of 22 items was developed by the researchers and used to collect data. The questionnaire was validated by three experts. The questionnaire was subjected to trial testing to determine the internal consistency of the instrument. An overall co-efficient value of 0.79 using Cronbach Alpha Method was obtained. The data for the study were collected by the researchers with the help of two research assistants. Mean and standard deviation were used to answer the four research questions.

Results

Research Question One

What is the role of awareness in regulating the unethical use of AI among business education students in Anambra State?

Table 1*: Mean responses of Business Education Students on the role of awareness*

S/No	Education and awareness	Mean	SD	Decision
1.	Awareness of the potential risks and consequences of unethical AI usage regulates my usage of AI	3.89	0.75	Agree
2.	Understanding the importance of responsible AI development regulates my usage of AI	4.06	0.53	Agree
3.	Identifying the ethical issues related to AI use in various contexts regulates its usage	4.00	0. 59	Agree

4.	Knowledge of existing AI- related regulations and guidelines regulates my usage of AI.	4.11	0.47	Agree
5.	Adequate education of AI ethics regulates my usage.	3.91	0.65	Agree
6.	Understanding the importance of transparency in AI decision making helps regulate its usage	3.86	0.55	Agree
Cluster Mean		**3.97**	**0.59**	**Agree**

Data in table 1 show that Business Education students in Anambra State are in agreement with all the items 1-6, with mean scores ranging from 3.86 - 4.11. The cluster mean of 3.97 indicates that business education students in public universities in Anambra state agreed that awareness of AI ethics regulates their AI usage, hence ethical consideration mitigates unethical use of AI. The Standard deviations of 0.47 – 0.75 with a cluster of 0.59 are within the same range showing that business education students are not wide apart in their responses.

Research Question Two

What is the role of teacher - training in regulating the unethical use of AI among business education students in Anambra State?

Table 2*: Mean responses of business education students on the role of teacher - training*

S/No	Teacher – training	Mean	SD	Decision
7.	Teacher - training increased my confidence in addressing AI-related concerns.	4.03	0.61	Agree
8.	Teacher - training improved my understanding of AI ethics	4.00	0.64	Agree
9.	Teacher - training reduced my chances of unethical AI use	4.06	0. 63	Agree
10.	Teacher - training helps me integrate AI ethics into my learning.	3.80	0.83	Agree
11.	Teacher - training enhances my use of AI as a tool for learning rather than a shortcut.	3.91	0.89	Agree
Cluster Mean		**3.96**	**0.72**	**Agree**

Data in table 2 show that Business Education students in Anambra State are in agreement with all the items 7-11, with mean scores ranging from 3.80 - 4.06. The cluster mean of 3.96 reflects the effectiveness of teacher -training in promoting ethical AI usage among business education students in public universities in Anambra state. The Standard deviations of 0.61 – 0.89 with a cluster of 0.72 are within the same range showing that business education students are not wide apart in their responses.

Research Question Three

What are the roles of consequences in regulating the unethical use of AI among business education students in Anambra State?

Table 3*: Mean responses of business education students on the role of consequences*

S/No	Consequences and penalties	Mean	SD	Decision
12.	Fear of penalties influence my decision to ethically use AI.	3.97	0.61	Agree
13.	Penalties of AI related misconduct have changed my behaviour.	3.74	0.91	Agree
14.	Penalties for unethical use of AI made me more cautious	4.00	0.72	Agree
15.	Penalties have increased my awareness of AI-related ethics.	3.94	0. 76	Agree
16.	Penalties have reduced my likelihood of engaging in AI-related misconduct.	4.03	0.56	Agree
Cluster Mean		**3.94**	**0.71**	**Agree**

Data in table 3 show that Business Education students in Anambra State are in agreement with all the items 12-16, with mean scores ranging from 3.74 - 4.03. The cluster mean of 3.94 indicates that consequences is an effective strategy for regulating AI use among these students. The Standard deviations of 0.56 – 0.91 with a cluster of 0.71 are within the same range showing that business education students are not wide apart in their responses.

Discussion

The study revealed that business education students in public universities in Anambra state agreed that education and awareness of AI ethical guidelines regulates their usage of AI and prevent unethical usage of AI. This awareness is crucial for fostering ethical AI practices, a conclusion that has been mirrored in several studies. Bryson et al. (2017) argued that awareness of AI's potential risks is foundational in developing ethical AI practices. They highlighted that an informed user base is more likely to avoid ethical pitfalls, as understanding the risks prompts caution and responsible behavior. Students who were more knowledgeable about AI regulations and ethical guidelines reported more regulated usage of AI. This suggests that educational efforts to increase awareness of AI risks and the ethical frameworks surrounding AI can significantly contribute to ethical behavior. Furthermore, Moor (2020) posited that transparency in AI decision-making plays a pivotal role in ensuring ethical AI use. His research found that the lack of transparency in AI systems often leads to misuse, as users fail to grasp the consequences of AI decisions.

The findings of the study identified teacher training as a key factor in regulating unethical AI use among students. Students who participated in teacher-led training sessions on AI ethics and usage reported increased confidence in addressing AI-related concerns, a reduced likelihood of unethical AI use, and a greater ability to integrate AI ethics into their academic work. Zawacki-Richter et al. (2019) explored the role of teacher training in AI ethics education and found that teacher training programs equip educators with the skills and knowledge to guide students in responsible AI use. This parallels the findings of our study, where teacher training improved students' understanding of AI ethics and empowered them to regulate their AI usage effectively. Zawacki-Richter et al.'s research also highlighted the need for ongoing professional development for teachers, ensuring that they remain knowledgeable about emerging AI technologies and their ethical implications. Coeckelbergh (2020) further examined how teacher training can enhance students' ethical use of AI by incorporating AI ethics into the curriculum. He argued that educators who are well-versed in AI ethics are better able to guide students toward responsible AI practices, reducing the likelihood of unethical behavior. Our findings echo this, as students exposed to teacher-led training reported greater awareness of AI ethics and a lower propensity for unethical AI use. Coeckelbergh's research underscores the role of teachers as gatekeepers of ethical AI education, which was evident in the students' responses to teacher training strategies. Also, Greig et al. (2021) found that teacher training significantly impacts how students approach AI usage. Their study showed that educators trained in AI ethics were better equipped to provide practical guidelines to students, promoting ethical AI use. This supports the findings of our research, where teacher training was linked to improved student behavior and a reduction in unethical AI use. By fostering an environment where ethical AI practices are emphasized through teacher training, institutions can significantly reduce the potential for AI misuse. These findings underscore the importance of teacher training as a strategy to regulate AI use, ensuring that students are not only knowledgeable but also ethically responsible in their AI engagements.

Furthermore, the findings of the study indicated that consequences and penalties serve as an effective regulatory strategy for ensuring ethical AI usage among Business Education students. Fear of penalties, coupled with actual disciplinary actions for AI-related misconduct, significantly influenced students' behavior, making them more cautious and aware of ethical AI principles. This finding is supported by Fjeld et al. (2020), who argued that penalties for unethical AI use act as a deterrent, preventing misconduct by emphasizing the consequences of unethical behavior. Their

research suggests that a clear set of penalties, consistently enforced, helps create a culture of accountability, where students are more likely to adhere to ethical standards. Our findings reflect this, as students who were aware of penalties were more likely to use AI ethically. Greene et al. (2020) expanded on this by examining how penalties influence long-term behavior in AI usage. Their study found that students who faced or feared penalties were more likely to engage in ethical practices, as the consequences of misconduct were clearly outlined. This mirrors our findings, where students indicated that penalties helped change their behavior, increasing their awareness of AI ethics. Greene's research highlights that the mere existence of penalties can be enough to prompt ethical reflection and responsible AI use. Binns (2018) also found that penalties for unethical AI behavior increased students' engagement with AI-related ethical discussions, prompting them to consider the broader implications of their actions. Binns argued that penalties serve not only as a deterrent but also as a motivator for students to explore and understand AI ethics more deeply, a point corroborated by our findings. This suggests that penalties, when effectively enforced, can promote a more reflective and ethical approach to AI usage among students.

Conclusion

The findings of this study demonstrate that education and awareness of AI ethical guidelines, teacher – training and consequences and penalties are critical strategies for regulating the unethical use of AI among Business Education students. Education and awareness of AI ethical guidelines increases students' understanding of AI misconduct risks, teacher-training encourage them to adopt ethical practices by fostering an environment where ethical AI practices are emphasized and consequences and penalties act as a deterrent, promoting accountability in AI use. Together, these strategies create a comprehensive framework for ensuring that students engage with AI responsibly and ethically.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. School management should promote AI awareness initiatives, such as seminars and workshops, to educate Business Education students on the ethical implications of AI technologies and how to use them responsibly.
2. Academic institutions should establish clear penalties for unethical AI usage, enforcing them consistently to foster responsible AI behavior among students.

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