

Impact of Digital Media on the Manifestation of Unethical Practice in Research among Graduate Students

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Abstract

Background: Various factors affect the academic research of graduate students. Most studies on these factors, which hinder graduate students from carrying out research with integrity, have been conducted in developed countries. Thus, this study looked at the impact of digital media on the manifestation of unethical practices in research among graduate students in Nigeria.

Objective: The study examined the impact of digital media on the manifestation of unethical practices in research among graduate students.

Methodology: The study employed a survey research design and gathered data from 179 graduate students at Delta State University Abraka. The data for the study were analyzed using ANOVA and an independent t-test and results were presented in tables.

Result: Research integrity among graduate students in Nigerian universities is significantly and jointly affected by the manifestation of unethical practices such as falsification, plagiarism, fabrication, time constraints, artificial intelligence, and institutional pressures.

Conclusion: Research misconduct among graduate students in Nigerian universities is positively and significantly impacted by artificial intelligence, time constraints, plagiarism, fabrication, falsification, and institutional pressures.

Unique Contribution: The study has contributed to a better understanding of the manifestation of unethical practices in research among graduate students in Nigerian Universities.

Key Recommendation: Nigerian universities should establish a stand-alone division or committee dedicated to ethics and integrity in research. This will significantly improve research integrity among graduate students and research institutions in Nigeria.

Keywords: Research integrity, Falsification, Plagiarism, Fabrication, Artificial intelligence, Time constraints and Institutional pressures

Introduction

Research is a creative endeavour that is methodically and scientifically conducted to yield findings that have the potential to advance knowledge and spur novel research. This suggests that fact-finding, confirming the outcomes of earlier experiments, and offering solutions for novel or current problems are the three main purposes of research for society. Various factors that will be covered in this study have an impact on graduate academic research in Nigerian universities. Innovation drives institutions and society at large, and every novel idea originates from research. It is sufficient to say that research misconduct harms society or the institution more than the research itself or the researcher, who may be motivated only by the desire for a better grade or a job promotion. Society is more impacted by the policymakers who will use the research findings. Research needs to be regarded as a valuable academic endeavour with the goal of producing knowledge that can be tested, verified, and trusted, among other qualities, in order to preserve integrity. According to Roux and Céline (2021), research integrity is commonly interpreted as conducting research with the utmost professionalism, rigour, and ethical solidity. In the words of Quintana (2021), a researcher must be able to execute research that maintains confidence in the entire process, findings, or research outcome. The scientific credibility of the research procedure and the ethical conduct of the researchers who participate in it are correlated with each other.

Three vast codes of conduct are included in the definition of research integrity. The first is the researcher's ability to maintain objectivity in methodological choices while proposing, carrying out, and disseminating the study's findings. The second is to ensure that research findings are communicated per institutional policies and established guidelines. The third is that while doing research, researchers are well-positioned to uphold standard and appropriate professional codes and norms (Limongi, 2024). In many professions, research ethics are constituted by professional ethics. Ethics encompasses the communication of research findings and the methodology used in the study. According to Resnik et al. (2017), research tainted by ethical breaches will fail to adhere to the rule of research integrity. Research that is found to be flawed or lacking in integrity cannot be considered void of ethical exploitation.

Research ethics and integrity do not constitute the same, even though they are both impacted by comparable factors. Although most scholars employ the term concurrently due to the interconnection of the factors influencing research integrity, research ethics entails applying basic moral standards to research tasks, such as courtesy to society, the planning and execution of research, the use of assets and research outputs, detesting research misconduct, as well as governing the conduct of research (Williams, 2024). Marušić et al. (2016) assert that research ethics sets the moral standards that guide scholars in the conduct of their research. Institutions, funding organisations, and professional associations establish these requirements. In summary, it is crucial to remember that institutional rules and suggestions govern research ethics. All disciplines adhere to the same general concept of research ethics in spite of this. Respecting ethical guidelines is essential when doing research in order to safeguard participant welfare and maintain the validity of the findings. Nwakpa (2015) asserts that research quality is lower in Nigerian universities than in their counterparts in the advanced nations. He attributes this to a number of factors, including insufficient funding, unreliable electricity, institutional tension, and a misalignment of priorities.

Objective of the Study

This study explored the impact of digital media on the manifestation of unethical research practices among graduate students and suggested strategies for promoting research integrity and averting research misconduct in Nigerian academic institutions.

Research Hypotheses

To achieve the purpose of the study, the following hypotheses were investigated in light of the previously mentioned factors:

H1: There is a significant difference in male and female opinions on the manifestation of unethical practice in research among graduate students.

H2: There is a significant contribution of the manifestation of unethical practice in research among graduate students.

Literature Review

On average, integrity is the better attribute that permeates interpersonal and organisational conflict. Its foundation is ethical conduct and the application of ethics to daily deeds. According to Ariff et al. (2021), research integrity is the alignment of one's actions with moral standards, ethical norms, and legal requirements; it is also the harmony of one's interests with those of the public. Maintaining the dependability and credibility of research depends on the capacity of researchers to conduct their work with the utmost professionalism and integrity. Research integrity remains a component of ethical research conduct. Research integrity includes not only abstaining from the well-known research misconduct behaviours of fabrication, falsification, and plagiarism but also being aware of other misconducts referred to as harmful research procedures, such as improper authorship behaviours, improper handling of data, or hiding research findings. Counterproductive research practices are more common, receive less attention than plagiarism, falsification, and fabrication, and compromise the validity and dependability of research.

Furthermore, there is still no universally recognised list of harmful research practices and institutional research reliability policies to address the harmful practices with varying standards and methodologies (Roje et al., 2022). Within the framework of this study, research integrity refers to the researchers' disposition and practice of carrying out their research in compliance with relevant standards, legal obligations, and professional applications. Several stakeholders are thought to have a responsibility to promote research integrity. In order to promote fundamental shifts in how research integrity guidelines are observed and enforced in the scientific setting, these stakeholders - researchers, research organisations, funding organisations, and academic publishers must pool their resources (Roje et al., 2022). Every stakeholder has a specific set of duties to achieve the goal of promoting and putting research integrity standards into practice. Individual researchers must conduct their work following the strict research guidelines provided in the regulations and other suggested materials. These standards or recommendations affect various research-related domains, including the research setting, training, supervision, mentorship, handling of data, ethical concerns, peer review, authorship, and scientific fraud (Roux & Céline, 2021).

According to Khalifa and Ibrahim (2024), research organisations frequently create and enforce rules and guidelines about research integrity. Despite significantly contributing to the promotion of research integrity, research organisations also have other duties. These include educating the

public about research integrity, offering instruction and training, dealing with and punishing unethical behaviour in research, and cultivating an ethical culture within the organisation through dialogue, open communication, inclusivity, support, and equitable incentive programmes. Research funding organisations also significantly influence how researchers individually and research organisations behave. Their contribution to research integrity appears in how funding policies are matched with guidelines regarding research integrity. Finally, but just as importantly, scientific journals and publishers must acknowledge research errors and take corrective action to guarantee that only reliable, high-calibre scientific knowledge is shared (Roje et al., 2022).

Although the stakeholders have outlined their responsibilities and efforts to promote and foster research integrity, there may be times when implementing research integrity guidelines is difficult, fraught with difficulties, or not even entirely successful. This is made clear by the persistence of research misconduct and harmful practices in research, which have more serious repercussions such as sluggish scientific advancement, waste of materials, a decline in the validity of scientific publications, and a decline in public confidence in research findings (Khalifa & Ibrahim, 2024). There are a variety of advantageous or adverse associated factors that could contribute to the practical failure of research integrity guidelines execution. Thus far, studies have indicated that implementation challenges may arise at the individual researcher level from either internal (personality traits, ignorance, unfavourable attitude towards the value of research integrity) or external (financial, work, family, or relationship issues) factors (Satalkar & Shaw, 2019). Implementation of research integrity standards at the organisational level typically depends on the organisational culture and the establishment of steps and frameworks for both encouraging research integrity and dealing with unethical research practices. Research that is tainted by shortcomings with integrity may also have ethical challenges. This is so because research ethics dictate the moral framework within which a given study project is carried out; hence, any project that is carried out with scant or no consideration for research principles will undoubtedly lack integrity (Quintana, 2021). The following elements influence research ethics:

1. **Informed Consent:** Informed consent is a fundamental ethical concern in the field of research. According to this, research participants have to be made aware of the purpose and goals of the study, as well as the procedure and their part in it. In the past, research participants were recruited for studies without being informed of the study's purpose. This approach has detrimental effects on the participants' psyche. It is a widely accepted norm that participants receive information about the purpose of the study and their involvement in it.
2. **Voluntary Participation:** Participation may be voluntary and cannot be forced or enticed under false pretences according to the tenet of voluntary participation. Participants in this kind of research could opt out at any time without feeling compelled to continue.
3. **Potential Harm:** As a scholar, you must take into account every potential cause of participant injury. There are numerous ways that harm can manifest. For example, because of the Biafra agitations, numerous studies conducted in Nigeria have classified the Igbo ethnic group or the Fulani headers as terrorists (Nwakpa, 2015). Additionally, the general rule of anonymity stipulates that researchers protect study participants' privacy. Their data cannot be published, and neither can information that might establish a connection

between them and the study; maintaining confidentiality entails knowing the participants' identities while eliminating any personally identifying information from your research results (Quintana, 2021).

Factors Affecting Research Integrity

According to Bonn and Pinxten (2019), four major factors affect research integrity globally: falsification, artificial intelligence, fabrication, and plagiarism. The identification of computer programmes that function as research tools, such as QuillBots, Semrush, paraphral.io, and ChatGPT, compromises the integrity of some research as well as its dependability. On November 30, 2022, Open AI unveiled ChatGPT (Chat Generative Pre-Trained Transformer), an AI-powered Chatbot was developed. It stands out for letting users fine-tune and direct a discussion towards the ideal duration, structure, tone, degree of detail, and vocabulary. Every time a prompt or response is given, it is considered as a context for the debate. Despite the fact that its content crosses several fields of study (Roje et al., 2022).

According to Vasconcelos et al. (2015), ChatGTP could write 2500 words on any given topic in three minutes. The ChatGTP is susceptible to producing inaccurate results because it does not consider ethics when gathering content since any source may be used without citing it. Another AI that compromises the integrity of research is the Quillbot. Quillbots assist researchers in rewording or paraphrasing large amounts of text. According to Wang and Li (2020), academics use Quillbot in order to avoid plagiarism. Not only is it illegal to use this software for research purposes, but it can also be used to forge authorship on many paperwork. According to Limongi (2024), many worries have been raised about the application of AI in research, as well as the issues of ethics and integrity that come with integrating it.

Today, ethical governance in the application of AI in research is crucial because it guards against possible dangers and misuses and ensures that AI advancements align with society's ideals and objectives. We can create an atmosphere where AI can flourish as a tool for good research, advancing knowledge and enhancing societal development by establishing and upholding strong ethical governance. To be both practical and ethical, governance needs to be adaptable enough to consider new developments without sacrificing the fundamental values of reliability, openness, and justice (Roux & Céline, 2021). According to Buruk et al. (2020), it might entail establishing specialised ethical panels within research organisations, conducting routine ethical evaluations of AI systems, and encouraging a moral responsibility culture among researchers. Promoting effective moral leadership also requires interdisciplinary discourse and cooperation across borders. AI-related ethical concerns frequently cut across boundaries and academic fields, necessitating an organised and comprehensive approach. Authorities, businesses, academic institutions, and the general public can collaborate and share innovations and harmonise ethical guidelines in various contexts through global conferences and collaborations.

The integrity of academic research is seriously compromised by data fabrication and falsification, according to Resnik et al. (2015). Premeditated deception of research findings is known as data fabrication. In contrast, falsification refers to altering or removing information or

findings to ensure the study's findings are misrepresented in the study's record. For example, if a scientist claimed in a paper to have tested a chemical on 100 rodents, but he used 50 and made up the data for the other 50, then the scientist fabricated that data. A scientist testing a chemical on 100 rodents would be guilty of data falsification if he removed or changed the results to 50 rodents to strengthen his theory (Resnik et al. (2015). Quintana (2021) draws attention to the fact that data fabrication and falsification include lying about the procedures utilised to create, acquire, or analyse the data and lying about the data itself.

Plagiarism is yet another element that compromises research integrity. Academic theft is what plagiarism is, especially when it involves using someone else's words without giving credit. According to Maloshonok and Shmeleva (2019), self-plagiarism is the most common kind of plagiarism committed by graduates. Republishing or resubmitting portions of your papers without first properly attributing the source material is known as self-plagiarism. Multiple submissions of the same publication to various journals overflow the online database. Due to the widespread use of plagiarism detection software in Nigerian universities, plagiarism constitutes one of the most visible factors affecting research integrity. In Nigerian universities, graduate students' academic research quality and integrity are influenced by time and other institutional groundwork promoting research misconduct. Research integrity and ethics in Nigeria are influenced by a number of innate factors, including institutional pressure, the preference for volume over quality in publications, and student pressure to turn in research projects on time. The vast majority of universities in Nigeria are yet to establish any committees in charge of standards of conduct in research. Notably, the majority of Nigerian universities do not have any ethical policies guiding research conduct.

Additionally, rather than pulling data from research tools like the questionnaire, the majority of survey data are produced on the researcher's desk. It is impossible to trust the results of data produced using this armchair approach because they are either fabricated or falsified. An online survey is another way that integrity and ethical concerns are contested in Nigerian universities. Most surveys involving online participants negate the concern of educating and debriefing with online participants. Moreover, since most online surveys are shared publicly on Instagram, Facebook, Twitter, etc., it is impossible to keep an eye on age restrictions or anonymity. In recent years, the most common integrity violations in academic research among graduate students in Nigerian universities are plagiarism, falsification, and fabrication of data. The integrity of academic research in Nigerian universities has been compromised by the use of artificially intelligent systems such as ChatGTP and Qullibot paraphraser in most cases.

Theoretical Framework

The study employed two theories: the imperfect environment theory and the bad apple theory. The "bad apple" and "imperfect environment" theories, put forth by Akomolefe (2009) provide a framework for comprehending the variables affecting research integrity in the digital age. According to the "bad apple" theory, the majority of academics are very moral people who only

act unethically when they are desperate or psychologically unstable. The second theory is "imperfect environment". According to this theory, people engage in misconduct during research processes as a result of incentives, various institutional pressures, and limitations. The researchers believed that these theories were appropriate for the study because they can be used to understand the main causes of research misconduct among graduate students in Nigerian universities. This is because a considerable number of factors work together to impede graduate research integrity.

Research Methods

The descriptive survey approach was the method used to gather data for this study. All graduate students in Delta State University Abraka made up the study's population. Consequently, a simple random technique was used to select a sample size of 250 from the population. Out of the 250 copies distributed, we were able to obtain 179 copies of the questionnaire, resulting in a response rate of 71.6%. Out of the 179 respondents, 87 were female graduate students, and 92 were male. A 35-item structured questionnaire with strongly agreed (A) to strongly disagreed (D) options was used, along with biographical data. The first section of the survey asked questions about the respondents' personal details, including their age, sex, department, faculty, and student level of study. The second section investigated the barriers to research integrity faced by graduate students in universities in Nigeria. Before the instrument was used, three (3) experts from the Department of Political Science at Delta State University validated it. The instrument's reliability was also determined through pilot testing, which involved administering it to 25 graduate students at Delta State University Abraka and using the Cronbach Alpha reliability test and the Smart Learning Style Criterion techniques.

Table 1: Reliability Results

Construct	No. of items	Composite Reliability	Cronbach's Alpha	Average Variance Extract
Falsification of data	5	.807	.721	.567
Plagiarism	5	.826	.758	.582
Fabrication of data	5	.819	.733	.600
Artificial intelligence	5	.845	.768	.568
Time constraints	5	.827	.762	.603
Institutional pressures	5	.843	.760	.619

Source: Field Survey, 2024

Table 1 shows that the values of the six constructs range from 0.807 to 0.865 for composite reliability and from 0.721 to 0.768 for Cronbach's alpha. It is implied that all of the constructs are reliable because the composite results and Cronbach's alpha coefficient have values greater than the cutoff of 0.70. The reliability results are backed up by the Average Variance Extract (AVE) discriminant validity numbers above the 0.50 threshold (Hair et al., 2017). As a result, the survey's certified instrument was sufficiently dependable. Before the questionnaire was given out, students underwent a series of awareness-raising exercises to become more receptive to it and prevent rejection. It was noted that students appeared lethargic, perhaps as a result of filling

out so many questionnaires for different researchers. Since the researchers of this work administered the instrument directly and with the help of researcher experts' volunteers, any explanations requested were quickly resolved. The study's hypotheses were tested with version 23.0 of the Statistical Package for Social Sciences (SPSS) software, employing the independent T-test and ANOVA methods.

Results and Discussion of Findings

The results presented in Table 2 indicated that artificial intelligence (AI), institutional pressures, time constraints, and data falsification were the main obstacles to research integrity among graduate students in Nigerian universities. This outcome makes it clear that AI has developed into a vital tool for researchers, speeding up discoveries and streamlining procedures. However, bias, accountability, and transparency are issues in the use of AI in academic research. Integrity and ethics are under increased scrutiny as a result of the patterns of authorship and reputation being challenged by machines' capacity for learning and knowledge creation. Ethics and integrity in research conducted using AI are serious issues with practical applications; they are profound issues. Biased data or models used to inform decisions can result in incorrect conclusions, wasted materials, and, in the worst situations, real harm to people and societies (Williams, 2024).

According to Khalifa and Ibrahim (2024), upholding the integrity and dependability of research requires the application of an ethical framework as well as a safeguard principle. Maintaining ethical standards and making sure AI is used prudently and fairly require cooperation between various stakeholders and continual training. Furthermore, the use of AI agents raises new concerns regarding accountability and control while also providing novel resources for quality assurance and oversight. Ultimately, the routes towards ethical incorporation of AI into research indicate that accountability, transparency, and teamwork will be more important permanently in the realm of possibility. An ethical route for scientific progress is suggested via the use of open-source AI models, which facilitate increased researcher collaboration and adequate reviewing (Stahl & Eke, 2024).

Additionally, graduate orientation programmes and training can assist in addressing institutional pressures and time constraints among graduate students in Nigerian universities. These programmes and training must mediate the positive impacts of regulative and normative pressures on academic research.

Table 2: Observe Major Factors Hindering Research Integrity among Graduate Students in Nigerian Universities

S/N	Variables	Frequency	Percentage (%)	Cumulative percentage
1	Falsification of data	28	15.6	15.6
2	Plagiarism	21	11.7	27.3
3	Fabrication of data	23	12.8	40.1
4	Artificial intelligence	43	24.0	64.1
5	Time constraints	29	16.2	80.3
6	Institutional pressures	35	19.7	100
Total		179	100	

Source: Field Survey, 2024

Testing of Hypotheses

Finding out if female and male graduate students at Delta State University have different opinions about what they believe to be barriers to research integrity in Nigerian universities is crucial at this point. The outcome is shown in Table 3 down below.

H1: There is a significant difference in male and female opinions on the manifestation of unethical practice in research among graduate students.

Table 3: Opinion of Female and Male Graduate Students on Manifestation of Unethical Practice in Research.

S/N	Variables	Group	N	Mean	SD	Cat.T	Crit.T
1	Falsification of data	Female	87	5.357	.412	1.639	1.900
		Male	92	5.280	.395		
2	Plagiarism	Female	87	5.633	.327	1.632	1.923
		Male	92	5.542	.380		
3	Fabrication of data	Female	87	5.419	.339	1.584	1.918
		Male	92	5.286	.376		
4	Artificial intelligence	Female	87	5.965	.431	1.693	1.905
		Male	92	5.804	.309		
5	Time constraints	Female	87	4.871	.447	1.624	1.947
		Male	92	4.699	.474		
6	Institutional pressures	Female	87	4.570	.423	1.645	1.934
		Male	92	3.385	.439		

Source: SPSS Output, 2024

In keeping with the outcomes displayed in Table 3 above, all of the computed "t" values (1.639, 1.632, 1.584, 1.693, 1.624, and 1.645) are less than the crucial "t" value (1.900). This suggests that there is no difference in the ways that female and male graduate students in Nigerian universities perceive the obstacles to research integrity. Consequently, the first hypothesis was refuted, and it was reaffirmed that graduate students in Nigerian universities have similar perceptions of the manifestation of unethical practice in research, regardless of whether they are male or female.

H2: There is a significant contribution of the manifestation of unethical practice in research among graduate students.

Table 4: Model Summary on the Manifestation of Unethical Practice in research among Graduate Students

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.805	.785	.723	.328

a. Predictors: (Constant), Unethical practice

b. Dependent variable: Research integrity

Source: SPSS Output, 2024

Table 5: Multiple Regression Analysis on the Manifestation of Unethical Practice in Research among Graduate Students

Model	Sum of Square	Df	Mean	F	Sig.
Regression	31.450	1	3.654		
Residual	13.603	178	0.300	57.628	.000 ^b
Total	45.053	179			

a. Dependent variable: Research integrity

b. Predictors: (constant), Unethical practice

Source: SPSS Output, 2024

Table 4 demonstrates that the combination of artificial intelligence, time restraints, institutional pressures, plagiarism, fabrication, and falsification accounts for 78.5% of the variability in research integrity among graduate students at Delta State University, Abraka. The 0.785 R² value supports this. In Table 5, F. statistics of 57.628 for the model showed that, at 0.05 significant levels, it is statistically significant. Accordingly, the analysis showed that the research integrity of graduate students in Nigerian universities is impacted by a combination of AI, time constraints, institutional pressures, plagiarism, fabrication, and falsification. As a result of the substantial and combined contributions of artificial intelligence, falsification, plagiarism, fabrication, time constraints, and institutional pressures to research misconduct among graduate students in Nigerian universities, hypothesis two was accepted. This result is in line with the study carried out by Roje et al. (2022), which found that the primary factors influencing research integrity are falsification, plagiarism, fabrication, and artificial intelligence.

Additionally, Marušić et al. (2016) discovered that time constraints, institutional pressures, artificial intelligence, fabrication, plagiarism, and falsification all have an impact on research integrity in today's society. They also outline interventions to promote integrity in research, publication, and prevention of misconduct. The trustworthiness and societal value of research findings are contingent upon their reliability. Moreover, the public's confidence in scholarly research is contingent upon the rigorous observance of ethical guidelines; in the absence of faith, the cornerstone of research - the joint quest for knowledge - will suffer grave repercussions.

Thus, in order to ensure integrity and ethics as we explore this new era of AI-driven research, developers, researchers, and regulators must work together to establish guidelines and standards. Some of these guidelines may include the creation of transparent and auditable algorithms, the application of stringent ethical reviews, and the promotion of continuous interaction between the general public and the scientific community. The primary goal is twofold: to maximise AI's potential for further research and to ensure that this advancement is made in Nigerian universities ethically and consciously. Maintaining moral standards is not the only reason why ethical AI integration into research is crucial; it is also a basic requirement for guaranteeing the validity, social acceptability and reliability of scientific understanding. As a result, we need to be ever-vigilant and dedicated to advancing and maintaining these moral standards. Moreover, the study findings are consistent with the bad apple and imperfect environment theories because a considerable number of factors work together to impede graduate research integrity.

Conclusion and Recommendations

This study addressed the impact of digital media on the manifestation of unethical practices in research among graduate students. The results of the study showed that the primary barriers to research integrity among graduate students in Nigerian universities consisted of deception, plagiarism, fabrication, artificial intelligence, time constraints, and institutional pressures. According to the study findings, artificial intelligence has a stronger detrimental impact on research integrity. This indicates that artificial intelligence is a crucial concern for survey research in Nigerian universities. In today's fast-paced digital world, Chatbots driven by artificial intelligence are quickly replacing human-generated scholarly work. This calls for graduate students in Nigerian universities to reevaluate existing conventional research and publication values.

This study, however, highlights how crucial it is to use AI tools in accordance with academic and research guidelines. In order to maintain the integrity of scholarly work and make sure that AI tools are used effectively, ethically, and responsibly in academic research, the aforementioned issues must be addressed. By using this approach, the use of AI tools would result in constructive social change. In conclusion, there is a positive and statistical impact on research misconduct among graduate students in Nigerian universities due to factors such as falsification, plagiarism, fabrication, artificial intelligence, time constraints, and institutional pressures. The following suggestions are given in light of the findings and conclusion of the study:

- i. Nigerian universities should establish Independent departments or committees on research ethics and integrity. This will significantly improve graduate students' research integrity in Nigeria.
- ii. Integrating AI ethically into academic research is a difficult process calls for a multifaceted and cooperative strategy. In Nigerian universities, it is crucial to implement strategies that support education, accountability, transparency, and the active involvement of numerous stakeholders in order to guarantee that AI is integrated ethically and responsibly.
- iii. Before graduate students publish any research, the research findings must receive integrity and ethical approval. The university should set up an approval committee to vet survey questions in order to ensure that moral principles are followed. Nigerian universities must have software that can identify artificial intelligence inputs in research projects.

- iv. Due to the fact that the scope of this study is restricted to Delta State University, Abraka, limitation arises because it was not representative enough, and the selected participants and results of this study may not be generalised to Universities in other states or countries. With this background, future researchers should conduct an insightful study of this magnitude to fill the gaps that have been noticed.

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