International Journal of Education, Learning and Development,
Vol. 12, No.6, pp.8-25, 2024
Print ISSN: 2054-6297(Print)
Online ISSN: 2054-6300 (Online)
Website: https://www.eajournals.org/
Publication of the European Centre for Research Training and Development-UK

Sustaining Lecturers' Academic Integrity through the Adoption of Artificial Intelligence in Public Universities in Rivers State

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doi: https://doi.org/10.37745/ijeld.2013/vol12n6825 *Published August 09, 2024*

Citation: Aderuyi P. and Amaewhule E.C. (2024) Sustaining Lecturers' Academic Integrity through the Adoption of Artificial Intelligence in Public Universities in Rivers State, *International Journal of Education, Learning and Development*, Vol. 12, No.6, pp.8-25

Abstract: *The study focused on sustaining lecturers' academic integrity through the adoption of artificial intelligence in public Universities in Rivers State. Four research questions and four corresponding hypotheses were answered and tested in the study. Descriptive survey design was used in the study. The population of the study was 2,874 teaching staff in all the public Universities in Rivers State out of which 351 lecturers were sampled using proportionate stratified random sampling technique. Instrument used for gathering data was a 20 item questionnaire titled "Artificial Intelligence for Sustaining Lecturers Academic Integrity Questionnaire" (AISLAIQ). The questionnaire was face and content validated by an Educational Management expert at University of Port Harcourt while the reliability was estimated using Cronbach Alpha and pronounced an index of 0.82. Out of the 352 copies of questionnaire administered, 336 copies representing 95.7% were retrieved. Research questions raised were answered using mean and standard deviation while the hypotheses were tested using z-test at 0.05 level of significance. The result of the study indicated career progression and lack of competence were the main drivers of academic fraud among the lecturers. The usefulness of AI and the opportunities it provides for personalized learning were among the main factors driving the adoption of AI by the lecturers. Challenges to the adoption of AI and the ways of improving the adoption of AI for sustained academic integrity were identified. The study recommended the need for further AI training for lecturers for sustained academic integrity in the Universities.*

Keywords: lecturers, academic integrity, academic fraud, artificial intelligence, universities

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INTRODUCTION

Lecturers play significant roles in the administration of any University through the process of knowledge generation, processing and dissemination. The key functions of the University which includes teaching, research and community development receive significant contribution from the lecturers who ensure that the goals and objectives of the University are actualized through the execution of their duties. The teaching and research roles carried out by lecturers in the University are not only time consuming but are also rigorous thereby requiring deep reading, analysis of thought and communication of established ideas to target audiences.

However, due to the fact that some of these academics are engaged in other administrative duties, some lecturers prefer to engage in sharp practices in the process of research and teaching knowledge generation and dissemination. This has resulted in several academic sharp practices which have been reported across different higher educational institutions in the country. In fact, Lang (2013) pointed out that the issue of lecturers engaging in academic malpractices dates back to the 6th century when these academics were often examined in China for various professional benefits. The advancement in technology in this dispensation has seen a rise in cases of plagiarism (Eaton, 2021) since lecturers now engage in academic crimes that will better position them for promotion and other benefits.

The advancement in technology has seen several lecturers adopt emerging technologies in the discharge of their duties and this has continued to attract mixed feelings in the academia. One of the current technologies that these lecturers have embraced in recent times in the discharge of their academic duties is Artificial Intelligence (AI). The current flurry of artificial intelligence (AI) has generated a lot of discussion and debate due to the advantages and disadvantages it portends for the education sector. There are many unanswered questions across different scholarly networks and instructors as well as school administrators are still having to deal with AI concerns particularly as it relates to the execution of educational activities by lecturers and students. Amaewhule *et al.,* (2020) further noted that having the right perception is essential for stakeholders such as teachers to maximize any technological tool at their disposal. This is because AI-generated content is widely available and always changing, lecturers need to determine what to adopt and how to adapt in order to avoid falling victim of academic fraud in the process which can override their academic integrity.

Vinkoczi et al., (2023) noted that because artificial intelligence (AI) is developing more quickly than humanity can keep up with, it has been the focus of a large body of scientific and popular writing. AI plays a big part in many sectors these days particularly in the education sector as it enables lecturers to do a lot within a short period of time particularly in the management of big data and other complex information. Ai enables both lecturers and students to engage in personalized learning that meets their specific educational needs. Lecturers now have access to a

wide range of educational resource and this comes with the challenge of being able to moderate the activities of these educators to ensure that this tool is used within allowed ethical boundaries. Artificial intelligence (AI) improves information availability by managing intricate jobs, analyzing vast amounts of data, and making judgments with little to no human input. The key is to employ technology while upholding academic integrity; using artificial intelligence (AI) and other technical tools does not necessarily impede learning but how to ensure that the opportunities it provides are used within allowed ambits that still promotes originality and ingenuity in the work of users such as lecturers has been the worry of critical educational stakeholders. Today, Rahimi and Abadi (2023) pointed out that Chat Generative Pre-trained Transformer (ChatGPT) is one of the most advanced AI tools that lecturers use today in their academic work and has quickly amassed over 100 million global users in just a few months following its public launch in November 2022.

Sok and Heng (2024) indicated that the efficacy and efficiency of research writing, which is perhaps one of the most difficult subjects for university lecturers and students can be increased with ChatGPT. With this development, the issue of plagiarism, cheating and academic integrity have grown to be one of the most discussed ethical issues in Universities as the reasonable use of the resources that accompany these AI resources have continued to gain attention for the purpose of maintaining academic integrity in the Universities for targeted goals attainment.

Aim and Objectives of the Study

The aim of the study was to investigate how the adoption of artificial intelligence can assist in the sustenance of lecturers' academic integrity in public Universities in Rivers State. The specific objectives of the study were to:

1. determine the drivers of academic fraud among lecturers in Public Universities in Rivers State
2. ascertain the factors driving the use of AI among lecturers in Public Universities in Rivers State
3. examine the potential challenges of the adoption of artificial intelligence on the sustenance of academic integrity among lecturers in public Universities in Rivers State
4. describe the ways AI can be used to achieve academic integrity among lecturers Intelligence in Public Universities in Rivers State

Research Questions

The following research questions were answered in the study:

1. What are the drivers of academic fraud among lecturers in Public Universities in Rivers State?
2. What are the factors driving the use of AI among lecturers in Public Universities in Rivers State?

3. What are the potential challenges of the adoption of artificial intelligence on the sustenance of academic integrity among lecturers in public Universities in Rivers State?
4. What the ways AI can be used to achieve academic integrity among lecturers Intelligence in Public Universities in Rivers State?

Hypotheses

The following hypotheses were tested at 0.05 level of significance:

1. There is no significant difference between the mean ratings of male and female respondents on the drivers of academic fraud among lecturers in Public Universities in Rivers State
2. There is no significant difference between the mean ratings of male and female respondents on the factors driving the use of AI among lecturers in Public Universities in Rivers State
3. There is no significant difference between the mean ratings of male and female respondents on the potential challenges of the adoption of artificial intelligence on the sustenance of academic integrity among lecturers in public Universities in Rivers State
4. There is no significant difference between the mean ratings of male and female respondents on the ways AI can be used to achieve academic integrity among lecturers Intelligence in Public Universities in Rivers State

LITERATURE REVIEW

Artificial Intelligence

The concept of AI is one that is still metamorphosing given how recent it is. However, as the name implies, it refers to a form of technology that generates an artificial form of intelligence which means that this technology tries to mimic the intelligence of humans. On their part, Chen and Wong (2019) noted that artificial intelligence is the ability of machines to replicate human intelligence as demonstrated by cognitive, memory, learning, and decision-making behaviors. This implies that this concept refers to the process by which machines replicate the intelligence of man in the process of solving a problem. Furthermore, McCarthy as cited in CERASİ and Balcioglu (2023) stated that the science and engineering of creating intelligent systems, especially intelligent computer programs that mimic human intelligence, is known as artificial intelligence (AI).

Academic Integrity

In a lay man's parlance, academic integrity can be said to mean the act of being straightforward and transparent in any academic activity from the input to the process and output of an academic task. However, Bishop (2023) noted that the ethical guidelines and moral code of scholarly work is what is known as academic integrity. Academic integrity necessitates upholding academic standards and embracing educational values in the process of carrying out any academic task. Academic honesty and integrity are used interchangeably and is essential to lecturers and ethical behavior upheld in the discharge of their academic functions which will eventually translate into their professional career. In the University community where knowledge is generated and

distributed, it is important to understand that seeking the truth and teaching same to each other and to do the same makes academic integrity crucial.

On their part, Tauginien *et al.,* (2018) stated that complying with moral and intellectual values, norms, procedures, and a unified framework of principles that aids in making decisions and carrying out actions in learning, research, and other aspects of academia is known as academic integrity. Academic integrity is a commitment to the fundamental values of truthfulness, fairness, respect, responsibility, and courage in any academic venture (Fishman, 2014) and this cannot be jettisoned among lecturers.

Artificial Intelligence and Academic Integrity

The use of AI among lecturers have been an issue of concern given the number of abuses that have been reported in recent times. This was why Bishop (2023) pointed out that scholars believe that AI should be a supplement not replacement through which they can cite sources, seek guidance from professionals and as such must be transparent in the use of this tool for the purpose of sustaining academic integrity in the line of duty. In fact, despite advancements in AI, academics have emphasized the importance of focusing on humans' capacity for problem-solving, criticism, and inquiry rather than depending on this technology because of the challenges that accompany its use (Eguchi *et al.,* 2021). The standardized use of this tool remains uncertain and this has raised worried on the integrity of some academic output from lecturers in Universities. Scholars such as Michel-Villarreal et al., (2023) mentioned some of the reasons why the adoption of AI remains a challenge in the academic particularly among lecturers and some of these include the lack of accuracy and reliability of the information it generates, the issue of quality assurance among others. There is no doubt that AI has a lot of benefit to lecturers as it promotes expertise and authority among lecturers on their academic activities as well as provide a platform for personalized learning, communication and collaboration. However, the gaps it also creates must be covered and how AI can be used to cover the academic gaps created by itself remains an issue of concern among academics. Numerous concerns about using ChatGPT have been brought to light by recent research, including privacy risks and moral dilemmas, misinformation, inaccuracy of content, biased responses or outputs, a lack of creativity and originality of AI-generated responses, and the restricted use of training data (Chukwuere, 2023; Kitamura, 2023; Liebrenz *et al.,* 2023). It is only when AI can help to checkmate these challenges that its adoption can be very effective in sustaining academic integrity among lecturers in Universities.

Empirical Reviews

Lecturers have continued to investigate the relevance of AI to lecturers and Slimi (2023) conducted an empirical investigation on the Impact of Artificial Intelligence on higher education. A qualitative methodology was used in the study, which was based on an audience survey for higher education. The study's findings showed how important artificial intelligence will be to higher education in the future. The results demonstrate how well and quickly graduates can acquire new

abilities for their future employment thanks to AI. They also stress how crucial it is to take AI's ethical ramifications into account. According to the report, in order to adequately educate graduates for the workforce of the future, higher education institutions must incorporate AI into their curricula on a larger scale. With its ability to automate administrative processes, provide timely feedback, and tailor teaching strategies to each student's needs, artificial intelligence (AI) has the potential to completely transform education. Additionally, technology can help with evaluation and grading, freeing up teachers to concentrate on creating curricula and delivering high-quality instruction. The results of the study indicate that AI improves learning by making it easier to pick up new information and abilities.

Alessio and Messinger (2021) investigated faculty and student perceptions of academic integrity in technology-assisted learning and testing. The survey regarding attitudes toward academic integrity and the usage of proctoring software for online exams was answered by 150 staff members and 78 students. For data analysis, Wilcoxon rank-sum tests were employed. The participants expressed agreement that upholding academic integrity was crucial (93 vs. 94%) and acknowledged that it is simpler to cheat on online assessments (81 vs. 83%). Regarding the effectiveness of online proctoring software in combating academic dishonesty, responses varied: 23% of staff and 42% of students disapproved. 70% of students and 53% of staff thought that online proctoring violated their privacy. When asked whether cheating in an academic setting is likely to be associated with cheating in a work setting (78 vs. 51%), only 7% of students and 49% of staff felt that having a policy about proctoring online tests was important. Additionally, only 2% of students and 46% of staff would choose to use proctoring software if given the option. Responses to unstructured inquiries Students reported feeling stressed and anxious, and staff members expressed worries about privacy.

Stone (2023) conducted a related study on student perceptions of academic integrity focusing on the consequences and impact. Eight students participated in the study and were interviewed to learn how they perceived the procedure for handling AI breaches. The interviews were analyzed using content analysis. The study's findings demonstrated that pupils had intense emotional reactions along with elevated stress and anxiety levels. Some questioned continuing their studies because they perceived the process as intimidating and demotivating, while others adopted more flexible coping mechanisms. Additionally, students went to considerable lengths to clarify that their own and their friends' violations of AI were inadvertent, even as they expressed the opinion that others were intentionally deceiving and need to face consequences.

On the other hand, Hasanein and Sobaih (2023) investigated the drivers and consequences of ChatGPT use in higher education. The primary results of in-depth, in-person interviews with important stakeholders identified 12 primary motivators for faculty and students to use ChatGPT primarily for educational purposes. But the results showed that using ChatGPT for academic purposes has a variety of consequences which were six positive and six negative

Santoso and Cahaya (2019) investigated the factors influencing plagiarism by accounting lecturers in the Special Region of Yogyakarta, a province in Indonesia. The study included 108 respondents in its sample, and a questionnaire was used to collect data. A multiple regression analysis was performed on the gathered data. The study's conclusions showed that unfair competition and work pressure have a big impact on people's intentions to commit plagiarism.

Cukurova et al., (2023) investigated the adoption of Artificial Intelligence in schools. A sample of 792 teachers was selected from a sizable countrywide teacher population. The findings indicate that while product quality, confidence, and knowledge of teachers are all significant factors, they are not the only ones, and they might not even be the most significant ones, influencing teachers' use of AI platforms in the classroom. The adoption of AI in schools also requires minimizing ethical concerns, building support systems for assistance, boosting teacher ownership and trust, and preventing any additional workload. These factors may also better predict teachers' engagement with the platform. Schiebl et al., (2023) conducted a multi-group analysis of acceptance of artificial intelligence among pre-service teachers in Germany. The study included two objectives, and 453 preservice teachers were included in the sample. In the study, a survey design was employed. The data analysis method employed was structural equation modeling. According to the study, teachers' intentions to use AI were predicted by perceived usefulness and ease of use. There were notable differences in AI anxiety and perceived enjoyment between genders. Woodruff et al., (2023) investigated perceptions and barriers to adopting AI in K-12 education in USA. The study's findings demonstrated that differences in age, gender, and geographic distributions exist in terms of technological comfort and access. These studies all point to the various benefits that lecturers can derive from the use of AI and the possible challenges they might encounter.

METHODOLOGY

The study adoptive the descriptive survey design as it focused on examining an ongoing phenomenon. Population of the study consisted of 2,874 teaching staff in all the public Universities in Rivers State from which 351 lecturers (219 males and 132 females) were sampled using proportionate stratified random sampling technique. The sample size was determined using Taro Yamane minimum sample size determination formula. The instrument used for data collection was a 20 item questionnaire tagged “Artificial Intelligence for Sustaining Lecturers Academic Integrity Questionnaire” (AISLAIQ). The questionnaire had two sections with the Section A used for gathering demographic data on the respondents and Section B used for collection of data on the questionnaire items which were responded to on a four point modified Likert scale of Strongly Agree, Agree, Disagree and Strongly Disagree with weights of SA=4, A=3, D=2 and SD=1. These weights were summed up and divided by 4 to arrive at 2.50 which was the criterion mean score for agreeing or disagreeing with each questionnaire item. The questionnaire was face and content validated by an Educational Management expert at University of Port Harcourt while the reliability

was estimated using Cronbach Alpha and yielded an index of 0.82. There were 352 copies of questionnaire administered while 336 copies (207 males and 129 females) which represented 95.7% were retrieved. The research questions were answered using mean and standard deviation while the hypotheses were tested using z-test at 0.05 level of significance.

RESULTS

Answer to Research Questions

Research Question One: What are the drivers of academic fraud among lecturers in Public Universities in Rivers State?

Table 1: Mean and Standard Deviation Scores on the Drivers of Academic Fraud Among Lecturers in Public Universities in Rivers State

S/No	Items	**Male Lecturers n=207**		**Female Lecturers n=129**		**Mean Set**		
		Mean $\bar{X}_1$	**SD**	**Mean $\bar{X}_2$**	**SD**	$\bar{X}$	**Rank**	**Decision**
1	Psychosocial disorder make some lecturers commit academic fraud	2.76	0.68	2.83	0.70	2.80	3rd	Agreed
2	Lack of clarity about the demands of the lecturers job	2.42	0.81	2.60	0.74	2.51	5th	Agreed
3	Lack of competence among lecturers on their academic roles	2.80	0.66	2.90	0.68	2.85	2nd	Agreed
4	Desire for career progression make some lecturers commit academic fraud	2.84	0.63	2.91	0.68	2.88	1st	Agreed
5	External inducement from other educational stakeholders	2.78	0.67	2.66	0.73	2.72	4th	Agreed
	Grand Mean and Standard Deviation	**2.72**	**0.69**	**2.78**	**0.71**	**2.75**		**Agreed**

Table 1 indicated that the male and female teachers responded to items 1, 2, 3, 4 and 5 with mean values that were above the criterion mean scores of 2.50 used for decision making and this implied that the respondents agreed with all the items listed except for item 2 which was responded to by the male teachers with mean score of 2.42 which implied that the male teachers disagreed that lack of clarity of their job demands was a reason for engaging in academic fraud. The average mean set scores were also above the criterion mean score and this implied that they agreed to the items listed. Item 4 ranked 1st indicating that desire for career progression was the main reason why lecturers engage in academic fraud. The average mean set scores of 2.72 and 2.78 from the male

and female lecturers agreed with the average mean set score of 2.75 to indicate that the lecturers averagely agreed with the items listed as the drivers of academic fraud among lecturers in Public Universities in Rivers State.

Research Question Two: What are the factors driving the use of AI among lecturers in Public Universities in Rivers State?

Table 2: Mean and Standard Deviation Scores on the Factors Driving the Use of AI Among Lecturers in Public Universities in Rivers State

S/No	Items	**Male Lecturers n=207**		**Female Lecturers n=129**		**Mean Set**		
		Mean $\bar{X}_1$	**SD**	**Mean $\bar{X}_2$**	**SD**	**$\bar{X}$**	**Rank**	**Decision**
6	Growing workload make lecturers adopt AI in their work	2.79	0.66	2.93	0.67	2.86	3rd	Agreed
7	Societal expectation for a digitalized educational system make lecturers to consider the use of AI	2.75	0.69	2.89	0.69	2.82	5th	Agreed
8	Lecturers self-efficacy induces AI adoption	2.81	0.66	2.87	0.70	2.84	4th	Agreed
9	The academic usefulness of AI to the lecturers job	2.88	0.61	2.94	0.66	2.91	2nd	Agreed
10	AI provides lecturers opportunity for personalized learning experience	2.89	0.61	2.96	0.65	2.93	1st	Agreed
	Grand Mean and Standard Deviation	**2.82**	**0.65**	**2.92**	**0.67**	**2.87**		**Agreed**

Table 2 showed that the lecturers responded to items 6, 7, 8, 9 and 10 with mean values of 2.79, 2.75, 2.81, 2.88 and 2.89 from the male lecturers and 2.93, 2.89, 2.87, 2.94 and 2.96. All of these items were above the criterion mean score of 2.50 used for decision making and meant that all the items were agreed by the respondents. Item 10 had the highest mean set score of 2.93 and ranked 1st and indicated that because AI provided lecturers with opportunity for personalized learning experience was the main reason why lecturers use this technology. The grand mean set scores of 2.82 from the male lecturers and 2.92 from the female lecturers align with the mean set score of 2.87 and this indicated that the lecturers averagely agreed with the items listed as the factors driving the use of AI among lecturers in Public Universities in Rivers State.

Research Question Three: What are the potential challenges of the adoption of artificial intelligence on the sustenance of academic integrity among lecturers in public Universities in Rivers State?

Table 3: Mean and Standard Deviation Scores on the Potential Challenges of the Adoption of Artificial Intelligence on the Sustenance of Academic Integrity Among Lecturers in Public Universities in Rivers State

S/No	Items	**Male Lecturers n=207**		**Female Lecturers n=129**		**Mean Set**		
		Mean $\bar{X}_1$	**SD**	**Mean $\bar{X}_2$**	**SD**	**X $\bar{X}$**	**Rank**	**Decision**
11	Academic privacy is eroded when lecturers adopt AI	2.88	0.61	2.92	0.67	2.90	2nd	Agreed
12	Ethical violations such as cheating are possible when AI is used by lecturers	2.91	0.60	2.98	0.64	2.95	1st	Agreed
13	AI reduces removes the human component of academics	2.89	0.61	2.88	0.69	2.89	3rd	Agreed
14	AI widens the existing digital divide among lecturers	2.74	0.70	2.93	0.66	2.84	5th	Agreed
15	AI erode lecturers critical thinking ability	2.90	0.60	2.85	0.69	2.88	4th	Agreed
	Grand Mean and Standard Deviation	**2.86**	**0.62**	**2.91**	**0.67**	**2.89**		**Agreed**

Table 3 revealed that the male lecturers responded to items 11, 12, 13, 14 and 15 with mean values of 2.88, 2.91, 2.89, 2.74 and 2.90 while the female lecturers responded to the same set of items with mean values of 2.92, 2.98, 2.88, 2.93 and 2.85. Al of these items exceed the mean set score of 2.50 used for decision making and indicated that the items were all agreed. The mean set scores were also above the criterion mean score and implied that they were agreed by the respondents but item 12 ranked 1st with mean set score of 2.95 and this indicated that ethical violations such as cheating was the main challenge lecturers face in the adoption of AI in the sustenance of academic integrity. The grand mean score of 2.86 and 2.91 from the male and female lecturers align with the mean set average score of 2.89 to indicate that the lecturers averagely agreed with the items listed as the potential challenges of the adoption of artificial intelligence on the sustenance of academic integrity among lecturers in public Universities in Rivers State.

Research Question Four: What the ways AI can be used to achieve academic integrity among lecturers Intelligence in Public Universities in Rivers State?

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Publication of the European Centre for Research Training and Development-UK

Table 4: Mean and Standard Deviation Scores on the Ways AI can be Used to Achieve Academic Integrity Among Lecturers Intelligence in Public Universities in Rivers State

S/No	Items	Male Lecturers n=207		Female Lecturers n=129		Mean Set		
		Mean $\bar{X}_1$	SD	Mean $\bar{X}_2$	SD	$\bar{X}$	Rank	Decision
16	Plagiarism detectors should be institutionalized	2.94	0.58	2.92	0.67	2.93	1st	Agreed
17	Repositories should be built in Universities to enforce originality	2.92	0.59	2.92	0.67	2.92	2nd	Agreed
18	Proctoring systems should be enforced in schools	2.78	0.67	2.80	0.72	2.79	5th	Agreed
19	All academic activities involving lecturers should be digitalized	2.84	0.63	2.85	0.69	2.85	3rd	Agreed
20	Electronic peer review process should be established in Universities	2.70	0.72	2.91	0.68	2.81	4th	Agreed
	Grand Mean and Standard Deviation	**2.84**	**0.64**	**2.88**	**0.69**	**2.86**		**Agreed**

Table 4 established that all of the items; 16, 17, 18, 19 and 20 responded to by the male and female lecturers produced mean scores that were above the criterion mean score of 2.50 used for decision making and as such were all agreed by the lecturers. The mean set scores were also above the criterion mean score and implied that the items were all averagely agreed. However, item 16 ranked 1st with the highest mean set score of 2.93 indicating that institutionalizing plagiarism detector was the main way to ensure academic integrity among the lecturers. The grand mean score of 2.84 from the male lecturers and 2.88 from the female lecturers agree with the average mean set score of 2.86 to suggest that the lecturers averagely agreed with the items listed as the ways AI can be used to achieve academic integrity among lecturers Intelligence in Public Universities in Rivers State.

Test of Hypotheses

Hypothesis One: There is no significant difference between the mean ratings of male and female respondents on the drivers of academic fraud among lecturers in Public Universities in Rivers State

Table 5: Summary of z-test Analysis on the Difference in the Mean Ratings of Male and Female Respondents on the Drivers of Academic Fraud Among Lecturers in Public Universities in Rivers State

Variable	n	Mean	SD	df	z-cal.	z-crit.	Level of Significance	Decision
Male Lecturers	207	2.72	0.69	334	0.76	1.96	0.05	Not Rejected
Female Lecturers	129	2.78	0.71					

Table 5 showed that at a significance level of 0.05 and a degree of freedom of 334, the value of z-crit. was 1.96 and since this value was more than the estimated value of z-cal. of 0.76, the null hypothesis was not rejected and this showed that there was no significant difference between the mean ratings of male and female respondents on the drivers of academic fraud among lecturers in Public Universities in Rivers State.

Research Question Two: There is no significant difference between the mean ratings of male and female respondents on the factors driving the use of AI among lecturers in Public Universities in Rivers State

Table 6: Summary of z-test Analysis on the Difference in the Mean Ratings of Male and Female Respondents on the Factors Driving the Use of AI Among Lecturers in Public Universities in Rivers State

Variable	n	Mean	SD	df	z-cal.	z-crit.	Level of Significance	Decision
Male Lecturers	207	2.82	0.65	334	1.35	1.96	0.05	Not Rejected
Female Lecturers	129	2.92	0.67					

Table 6 revealed that at a significance level of 0.05 and a degree of freedom of 334, the value of z-crit. was 1.96 and since this value was more than the estimated value of z-cal. of 1.35, the null hypothesis was not rejected and this meant that there was no significant difference between the mean ratings of male and female respondents on the factors driving the use of AI among lecturers in Public Universities in Rivers State.

Research Question Three: There is no significant difference between the mean ratings of male and female respondents on the potential challenges of the adoption of artificial intelligence on the sustenance of academic integrity among lecturers in public Universities in Rivers State

Table 7: Summary of z-test Analysis on the Difference in the Mean Ratings of Male and Female Respondents on the Potential Challenges of the Adoption of Artificial Intelligence on the Sustenance of Academic Integrity Among Lecturers in Public Universities in Rivers State

Variable	n	Mean	SD	df	z-cal.	z-crit.	Level of Significance	Decision
Male Lecturers	207	2.86	0.62	334	0.68	1.96	0.05	Not Rejected
Female Lecturers	129	2.91	0.67					

Table 7 indicated that at a significance level of 0.05 and a degree of freedom of 334, the value of z-crit. was 1.96 and since this value was more than the estimated value of z-cal. of 0.68, the null hypothesis was not rejected and this indicated that there was no significant difference between the mean ratings of male and female respondents on the potential challenges of the adoption of artificial intelligence on the sustenance of academic integrity among lecturers in public Universities in Rivers State.

Research Question Four: There is no significant difference between the mean ratings of male and female respondents on the ways AI can be used to achieve academic integrity among lecturers Intelligence in Public Universities in Rivers State

Table 8: Summary of z-test Analysis on the Difference in the Mean Ratings of Male and Female Respondents on the Ways AI Can Be Used to Achieve Academic Integrity Among Lecturers Intelligence in Public Universities in Rivers State

Variable	n	Mean	SD	df	z-cal.	z-crit.	Level of Significance	Decision
Male Lecturers	207	2.84	0.64	334	0.53	1.96	0.05	Not Rejected
Female Lecturers	129	2.88	0.69					

Table 8 indicated that at a significance level of 0.05 and a degree of freedom of 334, the value of z-crit. was 1.96 and since this value was more than the estimated value of z-cal. of 0.76, the null hypothesis was not rejected and this established that there was no significant difference between the mean ratings of male and female respondents on the ways AI can be used to achieve academic integrity among lecturers Intelligence in Public Universities in Rivers State.

DISCUSSION OF FINDINGS

The study showed that the lecturers agreed with the items listed as the factors that drive academic fraud among lecturers. It was also shown that there was no significant difference between the mean ratings of male and female respondents on the drivers of academic fraud among lecturers in Public Universities in Rivers State. This finding differs from the position of the study by Schiebl et al., (2023) which found that differences existed across gender in terms of their experience and challenges in the use of emceeing technologies. In the study, while the male lecturers disagreed that lack of clarity on the demands of their job was a reason why lecturers engaged in academic fraud, the female lecturers agreed with this position. Furthermore, both the male and female lecturers agreed that lecturers experiencing psychosocial challenges are likely to be academically fraudulent. Similarly, it was established that lack of competence among the lecturers and external inducement which may include sorting from parents, students and colleagues also influence academic fraud among the lecturers. This align with the position of Santoso and Cahaya (2019) which sowed that unfair competition among lecturers is a reason why some of them engage in academic fraud. Majorly, the lecturers agreed that the desire for career progression was the main reason why lecturers engage in academic fraud and this imply that these lecturers want to progress in their career by any means and this explains why they engage in academically fraudulent activities.

The lecturers indicated from their response that they agreed with the items listed as factors driving their adoption of AI in their academic works and that there was no significant difference between the mean ratings of male and female respondents on the factors driving the use of AI among lecturers in Public Universities in Rivers State. This finding agree with the outcome of the study by Hasanein and Sobaih (2023) which indicated that there are positive and negative effects of lecturers' adoption of AI in their educational activities. The lecturers agreed that AI provides them with opportunity for personalized learning and this informs why they adopt this technology in their academic roles. This aligns with the result of Cukurova et al., (2023) which also found that access to better knowledge explains why some lecturers adopt the use of AI in their academic activities. Similarly, there was an agreement between the male and female lecturers that increased workload and societal expectations also drive why they adopt AI. This means that as the work demand of the lecturers' increase, they consider AI as a way out of this demand while they also understand that the society expects them to upscale their technological exposure and this may explain why they use AI. This societal expectation may include expectation from parents, students, colleagues, the government and members of the public who expect these lecturers to be more technologically inclined. The lecturers also indicated that their self-efficacy and the usefulness of AI is a major factor that drives their adoption of AI among the lecturers.

Lecturers sampled for the study agreed from their responses that the items listed were challenges to their adoption of AI for sustainable academic integrity and that there was no significant difference between the mean ratings of male and female respondents on the potential challenges of the adoption of artificial intelligence on the sustenance of academic integrity among lecturers in public Universities in Rivers State. The lecturers agreed that AI erodes their academic privacy and that it results to ethical violations which was a challenge to their adoption of this technology. This finding agree with the finding of Alessio and Messinger (2021) where staff and students agree that AI is responsible for several cases of academic cheating. Similarly, Stone (2023) revealed that some of these violations are done deliberately which is one of the flaws of AI which these lecturers also identified as a challenge. The lecturers also agreed that AI reduces their ability to gather human support to their academic activities which is a challenge in the adoption of this technology. The male and female lecturers equally agree that AI widens existing digital divided which means that it increases the gap between those who known and those who do not know how to use emerging technologies in their academic activities and this poses a threat to lecturers. The lecturers equally agree that critical thinking is affected negatively as a result of lecturers' adoption of AI which affects their academic integrity and these are issues that relevant academic stakeholders need to address for sustained academic integrity among lecturers.

Responses from the lecturers indicated that they agreed with the items listed as ways AI can be used to achieve academic integrity among lecturers. The lecturers also indicated from their responses that there was no significant difference between the mean ratings of male and female respondents on the ways AI can be used to achieve academic integrity among lecturers Intelligence in Public Universities in Rivers State. The lecturers indicated that plagiarism detectors can be institutionalized and used to address issues of academic fraud among lecturers. Similarly, the lecturers both agreed that building a repository will make it easy for lecturers to sustain academic integrity among the lecturers. This means that when an information base is built for all lecturers' activities, AI can be used to trace when fraudulent academic activities take place. The lecturers also indicated that with proctoring, it because easy for institutions to address issues of academic fraud among lecturers. Similarly, digitalizing lecturers' academic activities and electronic peer review systems were identified by the lecturers as ways AI can be used to sustain academic integrity among lecturers and this is essential to improve on the academic excellence of lecturers in these Universities. This aligns with the opinion of Slimi (2023) who identified that automating educational activities is a way that AI can be effectively used and this will provide useful and timely feedback both for the lecturers and other educational stakeholders.

CONCLUSION

The study concluded that there was no difference in the opinion of the male and female lecturers on the factors driving their use of AI for academic integrity as well as the challenges faced in the usage and ways of improving the adoption of AI. It was indicated that there are factors driving

academic fraud among the lecturers but with the right interventions in place, AI can be adopted more responsibly to achieve sustainable academic integrity among the lecturers.

Recommendations

The following recommendations were proffered based on the findings of the study:

1. There is need for lecturers in the Universities to be trained on the healthy use of AI in their various academic activities. These lecturers need to be oriented on what constitutes academic fraud in the use of AI for their academic works and how to avoid such.
2. Universities need to digitalize lecturers' academic activities as this will provide an opportunity for the issue of academic fraud to be easily tracked and addressed. Digitalizing lecturers' duties will make it easy to trace academic fraud and provide sanctions or assistance based on the lecturers need.
3. Academic fraud should be discouraged among lecturers through adequate sensitization. Universities should establish extent laws and regulations that will guide lecturers in their academic activities and the carrot and stick approach should be put in place to promote academic integrity in these institutions.
4. University lecturers should be informed by their institutions the AI tools that are acceptable and prohibited in the course of carrying out their academic activities. This will enable these lecturers to be informed on AI tools that are acceptable and prohibited in their academic activities for sustainable academic integrity.

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