Research Article

Artificial intelligence and academic writing in the digital age among university students: Why media literacy matters

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ABSTRACT

The study explored the intersection of artificial intelligence (AI) and academic writing in the digital age among university students, highlighting why media literacy is crucial. The study adopted the descriptive research design and was guided by four research questions. A sample of 310 respondents was selected using a random sampling technique. The data were collected using a questionnaire, the Artificial Intelligence and Academic Writing Questionnaire (AIAWQ). The analysis showed that the utilization of AI for academic writing is prevalent among university students. It was also found that utilizing AI for academic purposes among the students for academic writing has many benefits such as improving quality of students' assignments, creating in them a sense of confidence in writing their assignments/term papers, helping them to beat deadlines in completing and submitting their assignments, improving their academic performance as a result of quality academic writing and helping students to engage more in their studies at their own pace. The study further found that utilizing AI for academic writing poses no challenges for students. Moreover, the study demonstrated that media literacy plays a crucial role in mitigating the challenges posed by AI usage in academic writing. It was recommended, among others, that media literacy on AI ethics should be included in the school curriculum.

Keywords: artificial intelligence; academic writing; media literacy; university students

1. Introduction

Academic writing is a crucial part of students' academic lives[1]. This is because it forms a crucial part of the overt learning processes that students engage in. During classes and in their study sessions, students are expected to take notes and record key points that will aid in their learning and understanding of the

material[2]. Students also face both continuous and cumulative assessments, which test their level of knowledge[3]. These assessments may take the form of tests, quizzes, assignments, term papers, or examinations, requiring extensive writing to demonstrate in-depth knowledge of the subject matter[4]. Before these assessments, students are expected to have consulted relevant materials widely and studied extensively to be thoroughly prepared for achieving good performance in their course of study.

Studies have shown that students primarily consult Artificial Intelligence (AI) tools, such as ChatGPT, Gemini, and Meta AI, among others, for their academic writing[5,6]. A study by Vieriu and Petrea[7] showed that 95.6% of respondents utilize AI tools in their academic activities, indicating its prevalence in the study area. By implication, AI utilization is prevalent among university students. Not only do many students depend on AI for their academic writing, but an abuse of AI use was also reported[8,9]. This dependence on AI raises concerns over ethical issues, given the challenges of misuse of AI-generated content without acquiring media literacy, which can breed academic dishonesty. This paper, therefore, is an attempt to explore the impact of artificial intelligence on students' academic writing, with specific attention to the benefits and challenges posed by AI, while also examining the role of media literacy in addressing these challenges to ensure excellence.

1.1. Artificial intelligence usage

Studies on artificial intelligence have garnered the attention of many scholars in the 21st century, given the transformation and rapid advancements it has brought to all sectors of life, especially in education. Education transforms and prepares every student for self-reliance and effective functioning in society. Different scholars have conceptualized artificial intelligence in various ways, although each definition highlights the fact that AI mimics the human brain. Artificial intelligence is a simulation of the human brain. The term "Artificial Intelligence" was coined by John McCarthy to show that computers behave like humans, mimicking the human brain[10]. Anierobi et al.[11] aver that AI has enabled machines to perform tasks that are akin to human intelligence, such as processing language, solving problems, and recognizing patterns. Its integration in the education system is of immense benefit to students, irrespective of the numerous challenges associated with its dependence. Yavich et al.[12] posited that AI is a way of causing machines to behave like the human brain in performing many functions intelligently. This implies that AI could do what the human brain could do. It has therefore been integrated and applied to work in every sector to improve efficiency and effectiveness when intelligently utilized.

1.2. Artificial intelligence and academic writing

Academic writing is a serious exercise that is part of students' academic life and voyage. Academic writing requires formality and differs from informal ways of writing. Writing is a skill that every student is expected to acquire, given that writing cannot be separated from the academic life of university students[9]. Acquiring this skill is expected to be taken more seriously by students, especially in their undergraduate years, because proficiency in writing is sine qua non to students' ability to fulfil their academic obligations, scale through interviews, and secure a good job[13]. Teachers, especially lecturers, expose students to experiences that would help them develop good writing skill such as allowing them to make personal notes after classes, giving them assignments that would require making discoveries and writing their findings, term papers, and essays, among others. Students equally face project writing, which aims at finding solutions to any academic problem. To provide feedback, get detailed information, ideas, and materials to prepare them for strong academic writing and proficiency, students need to consult both online and offline materials. Furthermore, proficiency and strong academic writing could prepare students for academic success[14].

1.3. Media literacy

Information rules the world. The world has been perceived as a global village because of the presence of technologies that enable information dissemination across the globe at the speed of light. In this technology-based era, anyone can access information online from anywhere and at any time[15]. Students, on their part, can assess materials and information about their studies without any delay when needed. The media refers to all the channels through which information is disseminated to users. Media literacy refers to the approach of creating or raising awareness on how to use or engage with the media effectively and responsibly[16]. Contextually, media literacy involves students' ability to critically analyze media information and information sources for credibility and authenticity before use. In other words, media literacy entails students' ability to properly and ethically engage with AI tools in academic writing. Teaching students about fact-checking of AI-generated content, plagiarism checks, how to reference AI materials, and how to use AI materials should make up media literacy for university students[17].

1.4. Benefits of artificial intelligence on students' academic writing

i. **AI and Academic Writing Efficiency and Performance of Students**: The academia has observed that the use of AI boosts students' learning performance and fosters their academic task efficiency[18]. This is to assert that when students utilize artificial intelligence tools for their academic writing, the quality of their work will improve, with a resultant positive impact on their academic outcomes. Guidoum and Saadi[19] reported that AI tools, when engaged by students, improved their academic performance by boosting their creativity, critical thinking, and problem-solving skills, which no doubt will positively impact their academic writing. According to Khampusaen[20], disclosed that the emergence of AI tools, especially ChatGPT, has caused a significant revolution and improvement in academic writing performance among English as a Foreign Language students, especially in the area of creativity and academic integrity.

ii. **AI and Personalized Learning/ Prompt Feedback**: AI was linked with personalized learning, improved academic outcomes, and enhanced students' engagement[7]. Although AI is beneficial in personalized learning, Vieriu and Petrea[7] quickly cautioned that its utilization in this dimension should be taken with caution, while advocating for a balanced, human-centered approach to ensure that AI empowers rather than excludes. Guidoum and Saadi[19] equally observed that engaging AI tools improved independent learning in students. AI offers prompt feedback, which will help students to determine their level of mastery and knowledge. As students engage with AI tools in their learning, they would no doubt improve their style of writing. Youn et al.[21] construed that AI tools have made it easier for students to receive prompt feedback on their academic writing. This position is equally corroborated by Gayed et al.[22] who aver that AI tools provide for automated writing evaluation and feedback as students engage them to write. Feedback is fundamental for developing writing skills and a crucial part of effective teaching. Effective feedback has to do with providing students with detailed, actionable, and timely insights that will help them to refine their writing prowess and skills. Timely feedbacks help students to identify areas of strength and weakness to be improved upon.

iii. **AI and Students' Writing Engagement:** Academic engagement refers to students' ability to be cognitively, affectively, and behaviorally connected, identified, and involved in their academic activities and tasks. Academic engagement has been underscored as a prerequisite for positive academic outcomes of students. Scholars have shown that the utilization of AI tools improved students' level of engagement in their studies[7,11]. AI facilitates personalized learning and prompt

feedback for users. The more students utilize AI tools, the more they engage with their learning content. Apart from facilitating academic engagement among students.

iv. **AI and Students' Writing Self-Efficacy/ Satisfaction:** Writing self-efficacy contextually implies students' ability to have confidence that they can engage in academic writing and accomplish the same. Writing satisfaction in the context of this study implies students' ability to feel impressed after accomplishing academic writing. AI tools have been found to promote students' academic self-efficacy and satisfaction among students. Academic self-efficacy refers to the confidence students develop in their ability to successfully engage in and accomplish an academic task. Utilizing AI tools in academic writing improves this sense of confidence in students since AI has a way of not only providing and making relevant and adequate materials accessible but also arranging them in an easy-to-use format for students. This could be termed writing made easy for students, which could generate a sense of satisfaction among students for a well-written academic task. Buttressing this assertion, Anierobi et al.[11] reported a positive relationship between university students' utilization of AI in Anambra, Nigeria, and their academic self-efficacy and satisfaction, respectively. In another study, Yavich et al.[12] found that utilization of AI tools among university students in Israel has a weak but significant relationship, noting that engaging AI tools in academic writing has a way of boosting students' confidence and self-management. However, a study by Estrada-Araoz et al.[23], showed an inverse significant relationship between academic self-efficacy and dependence on AI, implying that an increase in students' academic self-efficacy results in a decrease in their dependence on AI in their academic writing. In other words, students with high academic self-efficacy depend less on AI for their academic writing.

v. **AI and Time Management**: Time management is essential in academic writing. When a student cannot manage time effectively, procrastination and the inability to meet deadlines are inevitable. One of the benefits of engaging AI in academic writing is that it saves time. AI tools have the capacity to generate content or information on any material requested of them within a few seconds, as opposed to the longer time it would take a student to think and write on his or her own. In other words, with AI tools, completing any academic writing would not be time-consuming, and meeting deadlines becomes assured. This could be one of the reasons some students mostly rely on AI tools for their academic writing. Stokel-Walker[24] observed that ChatGPT, an AI chatbot, makes academic writing both easier and faster, thus assisting students in time management while engaging in academic writing. Similarly, Khalifa and Albadawy[25] found that engaging AI in academic writing not only improve quality of writing but also saves time.

1.5. Challenges of AI utilization in students' academic writing

i. **Dependence on AI Stifles Creativity:** Although AI has many benefits, it also poses lots of challenges for students, especially as it bothers on ethical use of AI. Scholars have buttressed those negative impacts in their studies. For instance, Vieriu and Petrea[7] found that over-dependence on AI diminishes creative thinking, breeds academic dishonesty among students, and poses data privacy risk. Over-dependence on AI tools for academic writing has been shown to stifle creativity and active engagement of students in academic activities, given that AI thinks for them. This position is corroborated by Basha[26], who observed that with AI, students become inactive and lose their creativity and basic foundational skills. This is to assert that overdependence on AI for academic writing has a high tendency to deny students the power of critical thinking since AI tools make ready and organize materials and outlines that students can easily adopt or adapt seamlessly. Solteo[27] revealed that though AI facilitates ideation and provides wonderful analytical content, it

erodes students' power to think critically as they engage in academic writing. This is to assert that although AI assists in improving students' academic writing, there is a big doubt about its impact on students' creativity and critical thinking. Sharing this perspective, Aljuaid[28] reported that AI helps with grammatical construction and style of writing, but its impact on creativity and critical thinking is not guaranteed.

ii. **AI and Plagiarism:** Most users of AI-generated content copy verbatim or engage AI as a ghost-writer. When they copy materials from AI tools, they would fail to reference appropriately. This may be largely because some users, especially students, are ignorant of the fact that when they borrow an idea from AI, they should reference AI. Plagiarism is an academic fraud that should be combated because it connotes stealing another scholar's intellectual property. Plagiarism has to do with the misappropriation of ideas without reference to the originator[1]. Scholars have raised concerns over plagiarizing AI-generated content among users, pointing out the difficulty in detecting plagiarism in most AI content due to the high-tech quality involved. For instance, in their study, Ya'u and Mohammed[29] reported ethical issues concerning plagiarism in students' use of AI in academic writing. Explicitly, Sarwar et al.[30] observed a high level of plagiarism among constant users of AI bots while asserting that it has become more difficult to detect AI generated contents because of the high sophistication of AI technologies. In other words, the more students depend on AI tools for academic writing, the more they are likely to use the information as originating from them without properly citing and referencing the source of the information or idea appropriately. To this, Amjad[18] argues that AI should be properly acknowledged when used for academic writing.

iii. **AI and Misinformation:** Misinformation occurs when information is misleading and false. It refers to erroneous, wrong, flawed, false, and inaccurate information that is shared, disseminated, or passed across intentionally or unintentionally to people, either orally, in print, news outlets, or online. Some AI-generated contents are ridden with wrong information, lacking in authenticity, and therefore, misleading. Many students copy AI-generated content without verifying their correctness. These students assume that once AI generates information, that information is accurate and authentic. Khalifa and Albadawy[25] asserted that AI tends to generate content that is false but convincing, consequently, advocated for adequate training for researchers on the proper use of AI in academic writing. Misinformation is one of the banes of writing success, given that any academic writing ridden with false, erroneous, and misleading information is dangerous and destructive. Sharing this perspective, Mwita[31] observed that ChatGPT tends to give out information that is both inaccurate and false, noting that such misleading information is detrimental to scholars and decision-makers if relied upon.

1.6. Why media literacy matters

In view of the many challenges and risks associated with AI utilization, many strategies suffice for mitigating them. Some of the strategies identified by scholars include providing a structured framework for AI integration supported by ethical guidelines to maximize benefits while mitigating the risks[7]. Media literacy, no doubt, is a viable strategy for combating ignorance about the ethical utilization of AI tools and AI-generated content. Media literacy entails bringing students up to speed and teaching them how to engage AI responsibly, efficiently, and effectively as they write academic papers, be it an assignment, term paper, or their projects. With a proper understanding of how to utilize AI tools, the risks of plagiarism, misinformation, and ghostwriting can be mitigated. Olanipekun[32] construed that since AI has almost become part of, and integrated into digital platforms, there is a need for media literacy skills that would enable students sieve out accurate information out of the many available misleading information for their use. Proper media literacy

skills will go a long way in enlightening students on the need to engage AI as a guide while writing, rather than as a ghostwriter. Olanipekun[32] further posited that media literacy is a good guide towards students' proper interaction with AI tools, which could help them develop academic writing competency. In other words, media literacy for AI utilization will enlighten students on the ethical and unethical practices of AI utilization for their academic writing. By implication, understanding ethical and unethical practices in the use of AI through media literacy will serve as a radar to keep students on the right track in their academic writing journey.

1.7. Research questions

The following research questions guided the current study.

1. Is Artificial Intelligence utilization for academic writing prevalent among university students?

2. What are the benefits of Artificial Intelligence utilization for academic writing among university students?

3. What are the challenges of Artificial Intelligence utilization for academic writing among university students?

4. Why does media literacy on Artificial Intelligence utilization for academic writing matter among university students?

1.8. Research design

This study adopted the descriptive survey design. This is because it sought to describe the phenomena without manipulating the variables under study or delving into cause-and-effect relationships. Moreover, this design is frequently used to collect from a large group of respondents.

1.9. Participants

The study population consisted of all undergraduate students in the Faculty of Education and the Faculty of Technical and Vocational Education at Nnamdi Azikiwe University, Awka. The sample consisted of 310 undergraduates who volunteered to participate in the study. The respondents were drawn through a random sampling technique by sending an online Google Form questionnaire link to the students through their class WhatsApp platforms and requesting them to fill out the questionnaire while assuring them that their identity would be treated confidentially, and their responses would be used purely for academic purposes. The 310 undergraduates who ended up filling out the questionnaire made up the sample size, and their responses were used for the study's analysis.

2. Method and measure

The instrument used for data collection was titled "Artificial Intelligence and Academic Writing Questionnaire (AIAWQ)". The instrument has two sections. Section A elicited information on the biodata of the respondents, while Section B was divided into three clusters, each cluster addressing one of the research questions. The instrument was validated, and its reliability ascertained. The reliability of the instrument was ascertained using the Cronbach Alpha, and alpha coefficients of 0.91, 0.66, and 0.84 were obtained for clusters B, C, and D, respectively, with an overall coefficient of 0.88. The data collected were analyzed using descriptive statistics. Specifically, frequency count and percentages were used to interpret the data and answer the research questions. The sample characteristics are presented in **Table 1**:

Table 1. Students' socio-demographic characteristics.

	Frequency	Percentage (%)
Age		
17-20	80	25.8%
21-24	108	34.4%
25-28	62	20.0%
29>	60	19.4%
Class Level		
100	64	20.6%
200	190	61.3%
300	29	9.4%
400	19	6.1%
500	8	2.6%
Faculty		
Education	273	94.5%
FTVE	17	5.5%
Residence		
On-Campus	82	26.5%
Off-Campus	228	73.5%
Gender		
Male	79	25.50%
Female	231	74.50%
Total	310	100.0

2.1. Research ethics

Informed consent was taken from participants. They were also assured of their anonymity and confidentiality. No questions were asked that could reveal their identity. The data collected from participants were only used in the current study and were not used for any other purpose than this study. The final file was protected using the password option. The participants were also given the right to withdraw from the data collection. However, they maintained their integrity and participated in the study voluntarily.

3. Results

After collecting the data, it was extracted in the Excel sheet. The researchers screened out data for the missing values and outliers. Then, the data were analyzed using the SPSS software. Descriptive analysis, including mean, frequency, and percentage, was used for data analysis. The result for the first research question for exploring the AI utilization for academic writing prevalent among university students is presented in **Table 2**.

Table 2. Frequency and percentage count for AI utilization among university students.

Prevalence	Frequency	Percentage %
Always	49	15.8 %
Occasionally	139	44.8 %
Rarely	103	33.2 %
Never	19	6.1 %

Table 2 shows that the majority of the students engage with AI tools in their academic writing. Specifically, 49 representing 15.8% and 139 representing 44.8% of the respondents always and occasionally utilize AI for academic writing, respectively, as against 103 representing 33.2% and 19 representing 6.1% of the respondents who reported that they rarely and never, respectively, make use of AI tools while engaging

in academic writing. Thus, it could be asserted from the data that there is a prevalence of AI utilization for academic writing among university students.

The data for the second research question were analyzed using descriptive statistics, and the results are presented in **Table 2**.

Table 3. Frequency, percentage, and mean rating of respondents on the benefits of AI utilization among university students.

S/N	Items	SA	A	D	SD	Mean	Decision
1	AI tools improve the quality of my assignments	29.7%	50.6%	12.9%	6.8%	3.03	Agreed
2	With AI tools, I feel confident in writing my assignments or term papers	24.8%	48.7%	19.7%	6.8%	2.92	Agreed
3	AI tools help me to beat deadlines for completing and submitting my assignments	28.4%	45.5%	22.9%	3.2%	3.00	Agreed
4	Using AI tools in writing provides prompt feedback, which has improved my academic performance	35.2%	48.6%	9.7%	6.5%	3.13	Agreed
5	AI tools help me to engage more in my studies at my own pace	29.0%	44.8%	15.8%	10.4%	2.93	Agreed
	Grand Mean				3.00		

Table 3 reveals the frequency, percentages, and mean rating of students of the faculties of Education and Technical and Vocational Education on the benefits of AI utilization for their academic writing. The responses to items 1 to 4 showed a grand mean of 3.00, which indicates the students' agreement that AI tools are beneficial for their academic writing.

The data were also analyzed for the third research question to explore the challenges of Artificial Intelligence utilization for academic writing among university students, and the results are presented in **Table 4**.

Table 4. Frequency, percentage, and mean rating of respondents on challenges of AI utilization among university students.

S/N	Items	SA	A	D	SD	Mean	Decision
1	I often rely on AI tools for my academic writing	18.7%	19.7%	58.4%	3.2%	2.54	Agreed
2	I do not cross-check information I got from AI for authenticity before using it	9.4%	24.2%	40.6%	25.8%	2.17	Disagree
3	I do not reference AI for the materials I lift from it	5.8%	22.9%	58.4%	12.9%	2.22	Disagree
4	With AI tools, I don't have to stress my brain to write my assignments/term papers	20.0%	18.4%	48.7%	12.9%	2.45	Disagree
5	I adhere to AI ethics while using it for my academic writing	19.7%	47.4%	29.7%	3.2%	2.84	Agreed
	Grand Mean				2.44		

Table 4 shows the frequency, percentages, and mean rating of students of the faculties of Education and Technical and Vocational Education on the challenges of AI utilization for their academic writing. From the responses, it could be observed that the respondents agreed that, though they often rely on AI for their academic writing, they adhere to the AI ethics while using it. However, the grand mean of 2.44 indicates that the students disagreed that the challenges associated with utilizing AI tools affect their academic writing.

The fourth research question was developed to explore the media literacy on Artificial Intelligence utilization for academic writing matters among university students. After analysis, the results are presented in **Table 5**.

Table 5. Frequency, percentage, and mean rating of respondents on why media literacy on AI utilization matters among university students.

S/N	Items	SA	A	D	SD	Mean	Decision
1	Students should be educated on how to fact-check AI-generated content before use	37.1%	53.2%	9.7%	0%	3.28	Agreed
2	Media literacy on the proper use of AI tools should be included in students' curriculum	39.0%	42.3%	18.7%	0%	3.20	Agreed
3	Plagiarism tools should be freely made available and accessible to students	26.8%	51.3%	15.2%	6.8%	2.98	Agreed
4	Students should be taught critical thinking skills to help them understand how to adapt AI-generated content before use	39.0%	54.8%	6.1%	0%	3.33	Agreed
	Grand Mean					3.20	

Table 5 shows the frequency, percentages, and mean rating of students of the faculties of Education and Technical and Vocational Education on why media literacy on AI utilization for their academic writing matters. The responses to items 1 to 4 revealed a grand mean of 3.20, which indicates the students' agreement that media literacy on AI tools usage for their academic writing matters to them.

4. Discussion

The researcher sought to study the impact of artificial intelligence on university students' academic writing in the digital age and why media literacy matters. It utilized a descriptive study design. The socio-demographic characteristics of the respondents revealed that the majority of them are between age 21 and 24 (108; 34.4%), while a minority of them fall within the age of 29 and above (60; 19.4%). In terms of gender, there were more females (231; 74.50%) than males (79; 25.50%). More respondents were from the faculty of Education (273; 94.5%) than from the faculty of Technical and Vocational Education (17; 5.5%). In terms of class level, the highest number of respondents are in the 200 level (190; 61.3%), with the least number in the 500 level (8; 2.6%). More of the respondents reside off-campus (228; 73.5%) than their counterparts residing on-campus (82; 26.5%).

The study showed that AI utilization for academic writing among students is prevalent. Specifically, 49 representing 15.8% and 139 representing 44.8% of the respondents always and occasionally utilize AI for academic writing, respectively, as against 103 representing 33.2% and 19 representing 6.1% of the respondents who reported that they rarely and never, respectively, make use of AI tools while engaging in academic writing. This could be attributed to the availability and integration of AI in many online media platforms. Another reason for the constant utilization of AI tools for academic writing could be attributed to the many benefits, especially in making writing easy, which students enjoy. This finding aligns with Maqbool et al.[33] and Clark et al[5], who revealed that students mostly consult Artificial Intelligence (AI) tools such as ChatGPT and Meta AI, among others, for their academic writing. It also validates the findings by Vieriu and Petrea[7], who observed a high rate (95.6%) of AI tools usage among university students in their academic activities, indicating its prevalence in the study area.

The findings of the study showed that the utilization of AI tools for academic writing among university students has many benefits. Specifically, it revealed that some of the benefits associated with utilizing AI

tools for academic writing includes improving quality of students' assignments, creating in them a sense of confidence in writing their assignments/term papers, helping them to beat deadlines in completing and submitting their assignments, improving their academic performance as a result of quality academic writing and helping students to engage more in their studies at their own pace. These findings align with Shafqat and Amjad[10] who asserted that the use of AI boosts students' learning performance and bolsters their academic task efficiency, and Guidoum and Saadi[19] who reported that AI tools, when engaged by students, improved their academic performance by boosting their creativity, critical thinking, and problem-solving skills, which no doubt will positively impact their academic writing. In line with this finding, Khampusaen[20] disclosed that the emergence of AI tools, especially ChatGPT, has caused a significant revolution and improvement in academic writing performance among students, especially in the areas of creativity and academic integrity. This study's findings also agree with Guidoum and Saadi[19], who observed that engaging AI tools improved independent learning in students. It also validates that Youn et al.[21] AI tools have made it easier for students to receive prompt feedback on their academic writing. This position is equally corroborated by Gayed et al.[22], who aver that AI tools provide for automated writing evaluation and feedback as students engage them to write. In line with this study, scholars have shown that the utilization of AI tools improved students' level of engagement, self-efficacy, and satisfaction in their studies[7,11] and self-management[12].

Based on the challenges associated with engaging AI for academic writing, this study recorded that the respondents denied experiencing them. The students acknowledged that, though they often use AI for their academic writing, they adhere to AI ethics. They further denied that AI stifles their creativity, given that they engage their brains as they use AI-generated content. Again, the students reported that they both reference AI materials accordingly and fact-check those materials before use. These are surprising to the researcher, though, given that she had observed plagiarized materials among some of the students while marking their assignments. The findings of this study are in discordance with Vieriu and Petrea[7], who found that over-dependence on AI diminishes creative thinking, breeds academic dishonesty among students, and poses a data privacy risk. This position conflicts with Basha[26], who observed that with AI, students become inactive and lose their creativity and basic foundational skills. This is to assert that overdependence on AI for academic writing has a high tendency to deny students the power of critical thinking since AI tools make ready and organize materials and outlines that students can easily adopt or adapt seamlessly. The finding also disagrees with Solteo[27], who revealed that though AI facilitates ideation and provides wonderful analytical content, it erodes students' power to think critically as they engage in academic writing. Again, the finding fails to align with Sarwar et al.[30], who observed a high level of plagiarism among constant users of AI bots, while asserting that it has become more difficult to detect AI generated contents because of the high sophistication of AI technologies.

In terms of why media literacy matters in combating the challenges posed by AI when engaged in academic writing, this study found that the respondents agreed that there is a need for it. Specifically, the students agreed that they should not only be taught how to fact-check information from AI before use, but that media literacy on proper utilization of AI should be included in their curriculum. This finding aligns with Olanipekun[32] who observed that since AI has almost become part of, and integrated into digital platforms, there is a need for media literacy skills that would enable students sieve out accurate information out of the many available misleading information for their use. Teaching students about fact-checking of AI-generated content, plagiarism checks, how to reference AI materials, and how to use AI materials should make up media literacy for university students.

5. Conclusion

Based on the findings of this study, it was concluded that the utilization of AI tools for academic writing among university students is prevalent. Engaging AI in academic writing has some benefits, which include improving quality of students' assignments, creating in them a sense of confidence in writing their assignments/term papers, helping them to beat deadlines in completing and submitting their assignments, improving their academic performance as a result of quality academic writing and helping students to engage more in their studies at their own pace. Challenges supposedly associated with engaging AI were not a factor in university students' academic writing; however, there is a need for media literacy on proper AI usage for academic writing among the students.

6. Implications / Limitations of the study

The findings of the study have some educational implications. Though students could leverage AI for their academic writing for improved writing quality, there is a need to properly educate them on AI ethics to mitigate the risks associated with over-dependence on AI. AI should serve as a guide but not be relied on as a ghost-writer. The study has some obvious limitations, such as adopting only a descriptive design. A mixed-method design would improve and make the study more robust. The sample size and relying only on 2 faculties out of the many faculties in the university are also limiting factors. In view of these limitations, caution should be taken in generalizing the findings of this study as representing the view of all students in the university.

7. Recommendations

Based on the findings of the study, the researcher recommends the following:

1. The federal government, through its policy makers and curriculum planners, should include media literacy on ethics AI in school curriculum, especially at the tertiary level of education.

2. The federal government should properly fund universities to provide free access to AI tools for plagiarism checks.

3. School Authorities should ensure the implementation of media literacy on AI ethics in their schools

4. Students should be taught creative thinking so that they depend less on AI for academic writing.

Conflict of interest

The authors declare no conflict of interest.

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