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Writing Smarter or Losing Skills? The Impact of AI in Academia

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Abstract

In recent years, AI (Artificial intelligence) tools like ChatGPT, Grammarly, Grok, and others have slowly become a regular part of how students and teachers work in colleges. This study looks into how these tools are being used in academic writing, what benefits they bring, and what problems or concerns come with them. The main goals of this research are to understand how people are using AI in their studies and teaching, how helpful these tools really are, and what ethical questions they raise like fairness, plagiarism, and originality. To explore these questions, a survey with 25 simple and direct questions was shared with 100 people from different academic backgrounds. This included undergraduate and postgraduate students, PhD scholars, and teaching staff from different subjects. Their responses were studied using basic methods to find clear patterns and views. This study doesn't just talk about how AI helps in writing faster or making content better, but also highlights the worries people have like over-dependence on these tools or the lack of rules in colleges about how they should be used. It suggests that while AI can support learning, there needs to be more awareness, training, and proper guidelines to make sure it's being used in the right way.

Keywords

AI tools, academic writing, ChatGPT, plagiarism, ethical concerns, higher education,

Introduction

Education is essential pillar in modern times and growing dependence in technology paved the new ways in the education field the tradition ways no longer engage students and so does faculties, the emergence of AI tools in academic writing drastically transform the academic writings. AI tools such as ChatGPT, Meta, Grok etc. are playing immense role in generating research draft, proposal and generate text and research idea, it helps researcher to enhance their research efficiency.

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However academic and research writing is tough task, writing for academia especially as beginner can be very challenging, academic writing involving a structured method of expressing ideas. It is commonly used by researchers and educators in scholarly works to present data-driven arguments and logical reasoning. This form of writing helps readers to understand a topic thoroughly and deeply. It allows authors to deeply analyse concepts, leading to a well-explained theory or conclusion. Different fields use academic writing for various purposes. For example, scientists use it to explain their research and findings, while literary analysts use it to create fact-based critiques (Khalifa & Albadawy, 2024), further maintaining academic integrity through proper citation and refencing source from literature is crucial, consideration of these things can be very challenging and time-consuming and practically for those who just started to write, it would be so hectic for them. Additionally, the pressure to publish in academia, known as the "publish or perish" ethos, adds stress and can lead to burnout. Writer should balance being informative with keeping the reader engaged. They are also expected to bring originality and creativity to their work, which can be demanding under strict deadlines. Structural coherence, ensuring that ideas flow logically, is essential in academic writing, especially in long documents like theses or dissertations. This need for coherence must be balanced with effective time management, as academic writing often competes with other responsibilities. The process of academic writing often involves revisions based on feedback from peers and advisors. This requires openness to criticism and the ability to integrate feedback effectively. When engaging in interdisciplinary research, writers face the challenge of combining different methodologies, terminologies, and concepts from various fields, adding complexity to their work (Khalifa & Albadawy, 2024). But these challenges have Aid the uses of AI tools in academic writing; therefore, AI-powered writing tools help with grammar, structure, logical flow, citations, and adherence to disciplinary standards. These tools are not just helpful but necessary to improving the efficiency and quality 3 | Page of academic writing. They enable writers to focus on the critical and innovative aspects of their research but over reliance on AI tools can hamper academic integrity and critical thinking and original research works further, AI tools are designed to assist, not replace, the researcher’s critical judgment. However, there is a risk that users might become overly dependent on these systems, assuming that their work is error-free if it passes an AI scan. This reliance can discourage researchers from thoroughly reviewing their work or considering other aspects of quality, such as logical consistency and coherence. Moreover, excessive reliance on AI can create a false sense of security, where researchers believe that passing a plagiarism check equates to maintaining academic integrity. This misconception overlooks the broader ethical responsibilities of originality and intellectual honesty (The Role of AI in Academic Research, 2024).

The study examines through a critical lens following advantages and ethical challenges through a data

analysis approach, both of considerations and recommendations on how to employ best practice in the AI world.

Methodology

This study adopts a mixed-methods research approach. The quantitative component The quantitative aspect of the study involved an online survey administered to 100 participants with diverse academic backgrounds, including undergraduate and postgraduate students, researchers, and faculty members. The survey focused on participants' academic profiles, familiarity with AI tools, frequency of use, and perceptions regarding ethical use, authorship, and plagiarism risks. A purposive sampling technique was employed to ensure that respondents had relevant academic experience and exposure to AI tools in an educational context. The survey consisted of both closed-ended questions and Likert-scale items designed to capture measurable attitudes, behaviours, and awareness levels. Responses were analysed using descriptive statistics to identify key trends and patterns related to AI usage in academic writing.

To complement this, the qualitative aspect draws on existing literature, including peer reviewed journal articles, newspaper reports, and academic books to explore the ethical challenges and perceived benefits of using AI in scholarly work. The study also employs used of mathematical formulas for better data interpretation on some respondents' responses to analyse for a better understanding, especially in Likert rating values.

$$\text{Mean} = \frac{\sum(x_i \times f_i)}{\sum f_i}$$

Where:

- x_i = rating value
- f_i = frequency of that rating

Rationale of the Study

AI tools are increasingly used in academic writing, but their effects are not yet fully understood. Although they contribute to faster and better-quality writing, they also create issues related to plagiarism, originality, and fairness.

The purpose of this study is to investigate:
→ How students and instructors make use of AI tools in academic writing,

→ What advantages these tools provide, and

→ What ethical issues do they create?

Through the synthesis of survey information and academic literature, the study offers a balanced vision of AI's contribution to higher education and proposes the necessity for precise institutional guidelines.

Hypothesis

H1: AI tools have positively impacted the respondent to enhance their academic writing efficiency in terms of clarity, time management, and content organisation.

H2: Over-reliance on AI tools in academic writing negatively correlate with students' development of critical thinking and original argumentation skills.

Literature review

1. Mizumoto (2024) compared ChatGPT with Grammarly and determined that though ChatGPT works well in enhancing sentence fluency and clarity, it over-corrects or alters the meaning at other times. This is both its strength and weakness in academic writing.

2. Aritonang and Toisuta (2025) discovered that students copying AI-produced texts without critical thinking experienced the most severe writing quality declines. Their research indicated problems such as poor coherence, superficial arguments, and 5 | Page mechanical conclusions. They highlighted the importance of AI literacy and ethical standards to avoid skill erosion in academics.

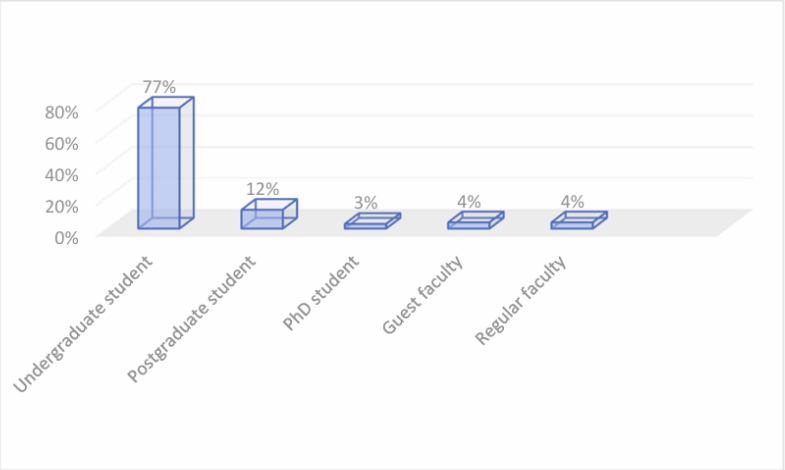
3. Jain and Nawani (2023) discussed current controversies surrounding how AI influences natural human intelligence. They explained concerns regarding excessive dependence on AI lowering critical thinking, decision-making abilities, and causing skill decline. Nevertheless, they also pointed to the strength of AI in augmenting human abilities in healthcare and education sectors. The authors underlined the necessity for ethical control, human monitoring, and equilibrated approaches to make sure that AI helps instead of hindering human welfare.

Findings

1. Demography profile:

1.1 Academic designation

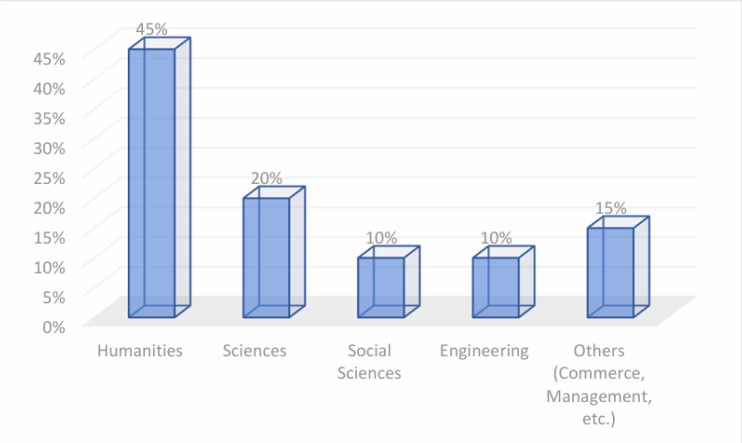
Figure-01



Most respondents are undergraduate students (77%), followed by postgraduate students (12%). There are a few PhD students (3%) and faculty (8% total: 4 guests, 4 regular).

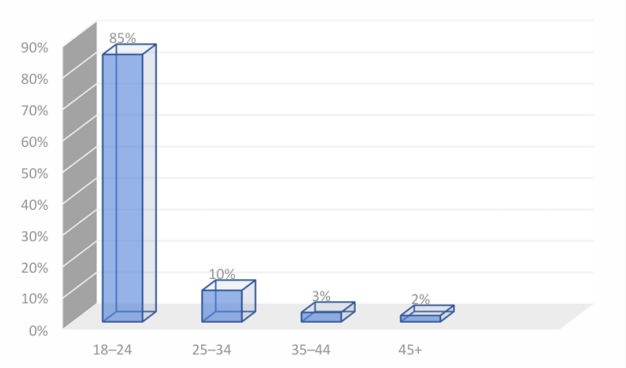
1.2 Academic discipline

Figure-02



1.3 Age group

6.1.3 Figure-03



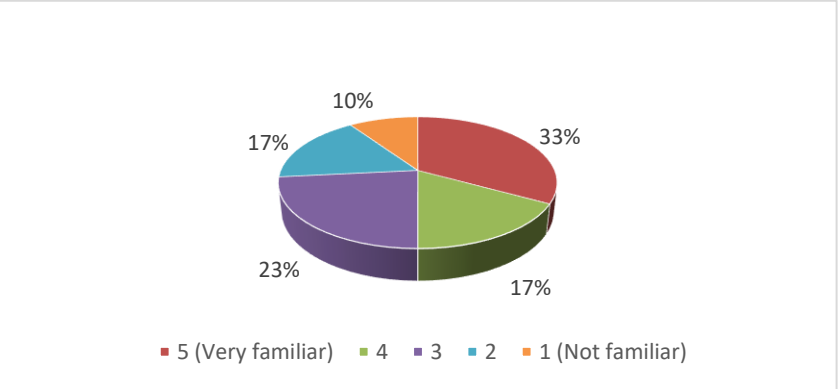
Many are from humanities (45%), then sciences (20%), social sciences (10%), and engineering (10%). Other subjects, like commerce, management, journalism, and law, make up 15%. Most are young, aged 18–24 (85%), with 10% aged 25–34.

2. Artificial intelligence usage pattern

2.1 Respondent familiarity with AI tools in academic writing

A survey was conducted on the basis of rating Likert scale, very familiar(5), not familiar(1).

Fig.4



MEAN VALUE =3.47

The respondents were very familiar with the use of AI tools in academic writing. Over 47% of respondents agreed they were familiar with AI tools, and 22% showed a neutral response. Among the respondents, 9% showed unfamiliarity with AI tools in academic writing. The overall mean of the response is 3.47.

2.2 Frequency of AI Tool Usage in Academic Writing

The respondents demonstrated a moderate to high level of familiarity with the use of AI tools in academic writing. A majority, 44%, reported using AI tools on a **weekly basis**, while 13% indicated **daily use**, reflecting strong engagement with these technologies. Around 22% of the participants mentioned using AI tools on a **monthly basis**, whereas 17% used them **yearly**. Only a small portion, 4%, reported that they **never** used AI tools. The overall **mean score of 3.45** suggests that most respondents engage with AI tools at least monthly, indicating a growing integration of AI in academic practices.

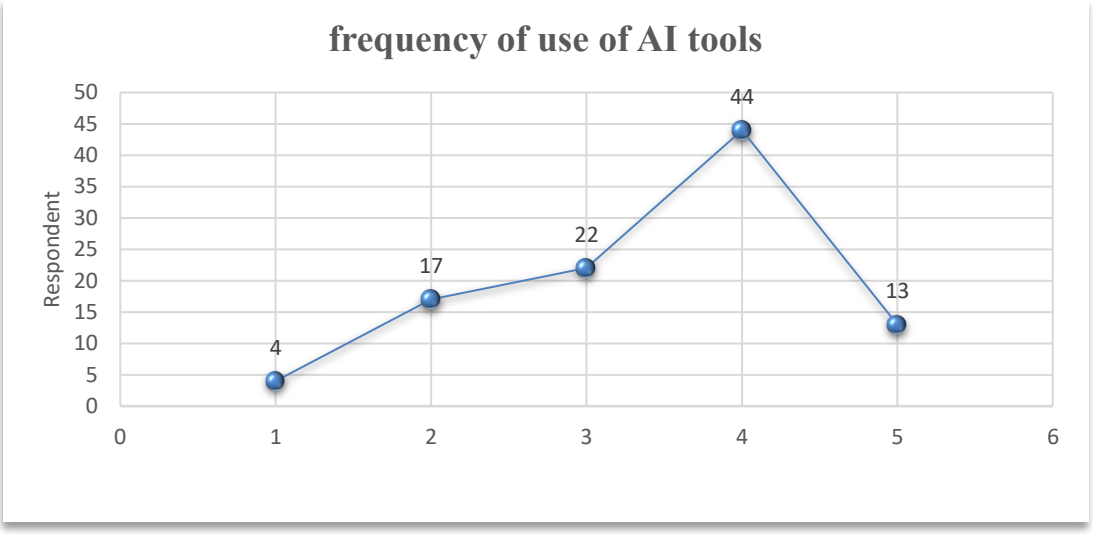


Figure-05

MEAN VALUE - 3.45

2.3 Preferred AI Tools in Academic Writing

ChatGPT is the most popular (91%), followed by Grammarly (32%), Gemini (23%), and Grok AI (19%). Undergraduates use ChatGPT (94%) more than faculty (75%). Faculty use Grammarly (50%) more than undergraduates (30%). Humanities students use ChatGPT (93%) slightly more than science students (90%).

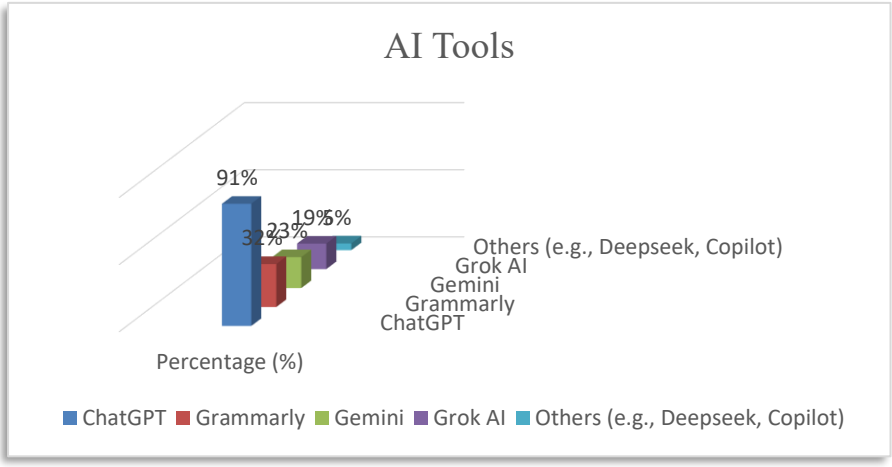


Fig. 6

The Respondents with the majority of 91% can be possible reason as follow by study of the implications of these findings are twofold. First, these findings highlight generative AI's potential, like

ChatGPT, to act as a sophisticated complement in language learning research, enhancing efficiency, objectivity, and replicability. Second, they underscore the necessity for prudent application and human oversight, with further validation required across diverse texts and larger datasets (Mizumoto et al., 2024).ChatGPT is preferable for student due to its advancements in natural language processing (NLP) technologies. The author compares ChatGPT and Grammarly and human to analyse language proficiency how much error they can persist.

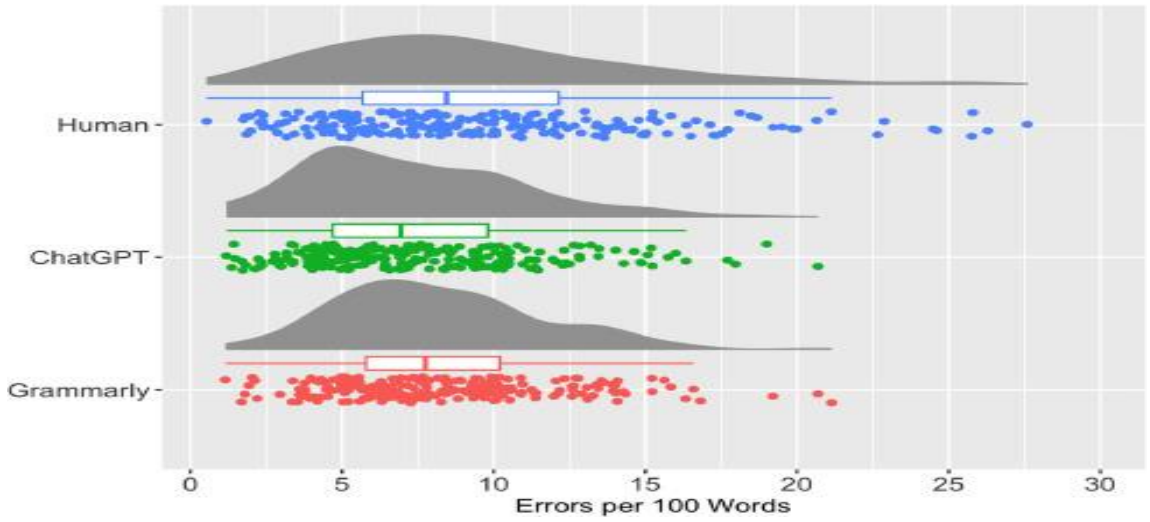


Figure-07 (Distribution of errors per 100 words across Human, ChatGPT, and Grammarly (Rain Cloud Plot)

Figure 7 indicates the number of errors found per 100 words by three different evaluators: Human, ChatGPT, and Grammarly. The author uses rain cloud plots to display the spread and consistency of errors detected. Each point represents one writing sample, and the box plots show the typical range of errors.

The human evaluations show the widest range of error counts, indicating inconsistency while some evaluators found very few errors, while others found many. In while in variation, ChatGPT and Grammarly are more consistent in the number of errors they detect. On average, the finding suggest human tend to more errors per 100 words, while ChatGPT found fewer, and Grammarly reported slightly more than ChatGPT.

These variations suggest that each evaluates on different standards to define what counts as an error. Humans tend to focus more on subjective meaning and context, while ChatGPT and Grammarly prioritize grammar, spelling, and punctuation.

2.4 Academic Tasks Delegated to AI Tools

The primary purpose for which respondents used AI tools was generating text or ideas, as reported by 64% of the participants. This was followed by proofreading and grammar correction, with 47% of users relying on AI tools for this task. A notable 42% of respondents mentioned using AI to summarise research articles, reflecting a growing trend of AI assistance in digesting academic content. Additionally, 24% of participants used AI tools for managing citations and references, indicating their integration into various stages of academic writing.

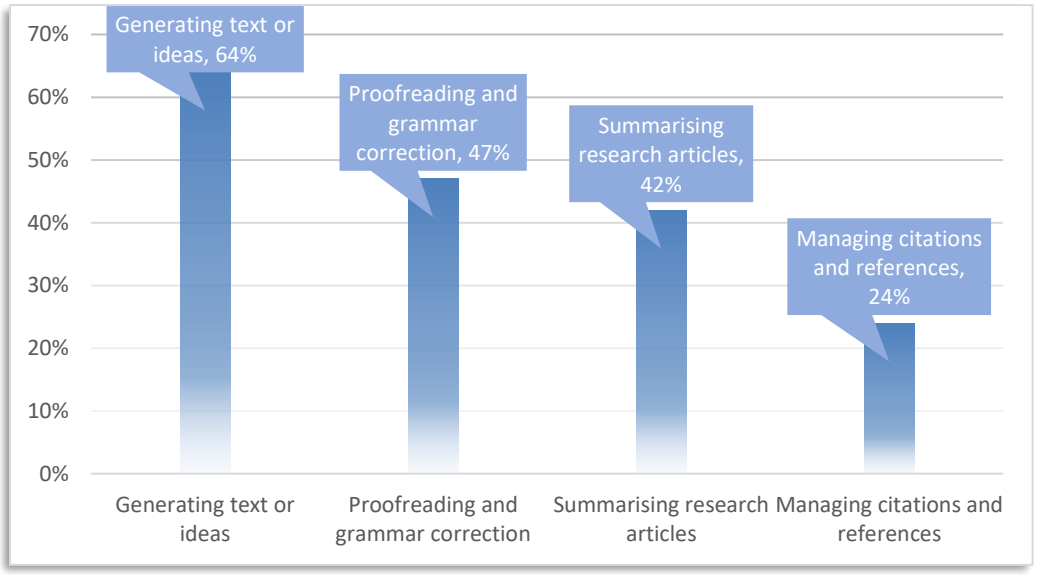


Figure-08

Further, most respondents shared that they turn to AI tools mainly for writing assignments or essays, with 59% using them for this purpose. A good number—46%—also mentioned using AI to help prepare lecture notes or teaching materials, highlighting how these tools are supporting not just students but educators too. When it comes to more serious academic work, like research papers or theses, 44% of participants said they rely on AI assistance. Interestingly, only 16% said they've used AI for grant proposals or reports, showing that while AI is gaining ground in everyday academic tasks, its use in more formal or institutional writing is still growing.

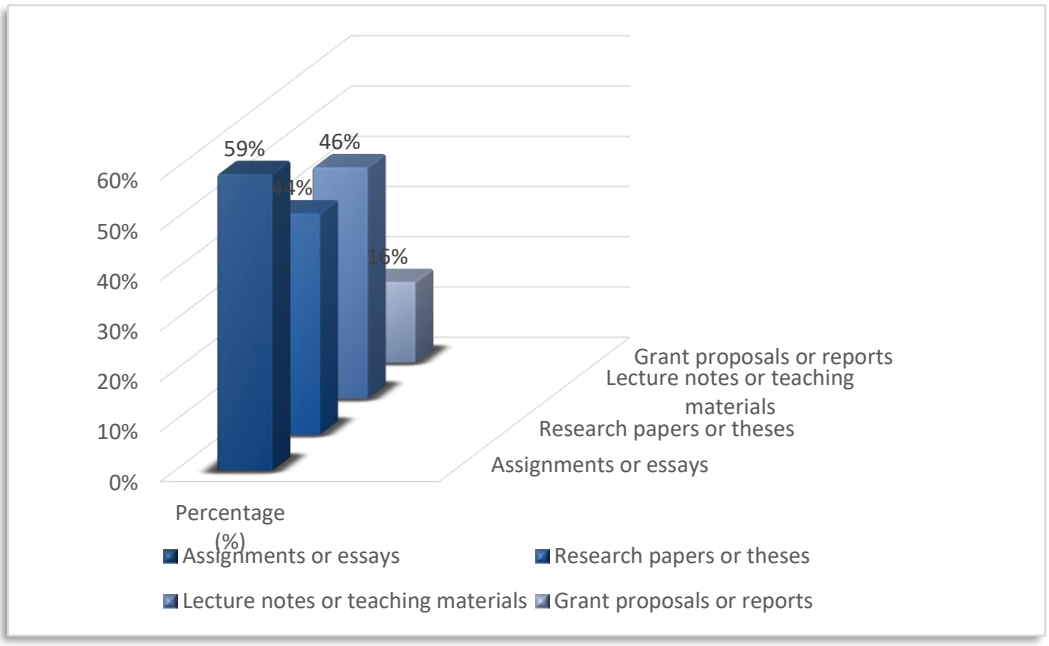


Figure -09

2.5 How much time responded spend on using AI tools in writing?

The information reports significant differences in the amount of time spent using AI tools among different groups of users. In the case of undergraduates, almost half of them (49%) used AI tools for 15–30 minutes, and it was the most prevalent duration among this group of users. A lesser percentage (31%) utilized them for 30–60 minutes, with 10% each spending less than 15 minutes or more than 60 minutes. By contrast, the faculty had a somewhat different profile—38% employed AI tools for under 15 minutes, indicating more time-constrained or task-oriented use. 25% of the faculty indicated use within both the 15–30 minute and 30–60 minute ranges, and 12% used the tools for longer than one hour. Considering the distribution as a whole, 47% of the total respondents utilized AI tools between 15–30 minutes, 31% for 30–60 minutes, 11% for over 60 minutes, and 11% for less than 15 minutes. From this, it can be inferred that undergraduates are more actively involved with AI tools, whereas faculty members utilize them in shorter, targeted segments.

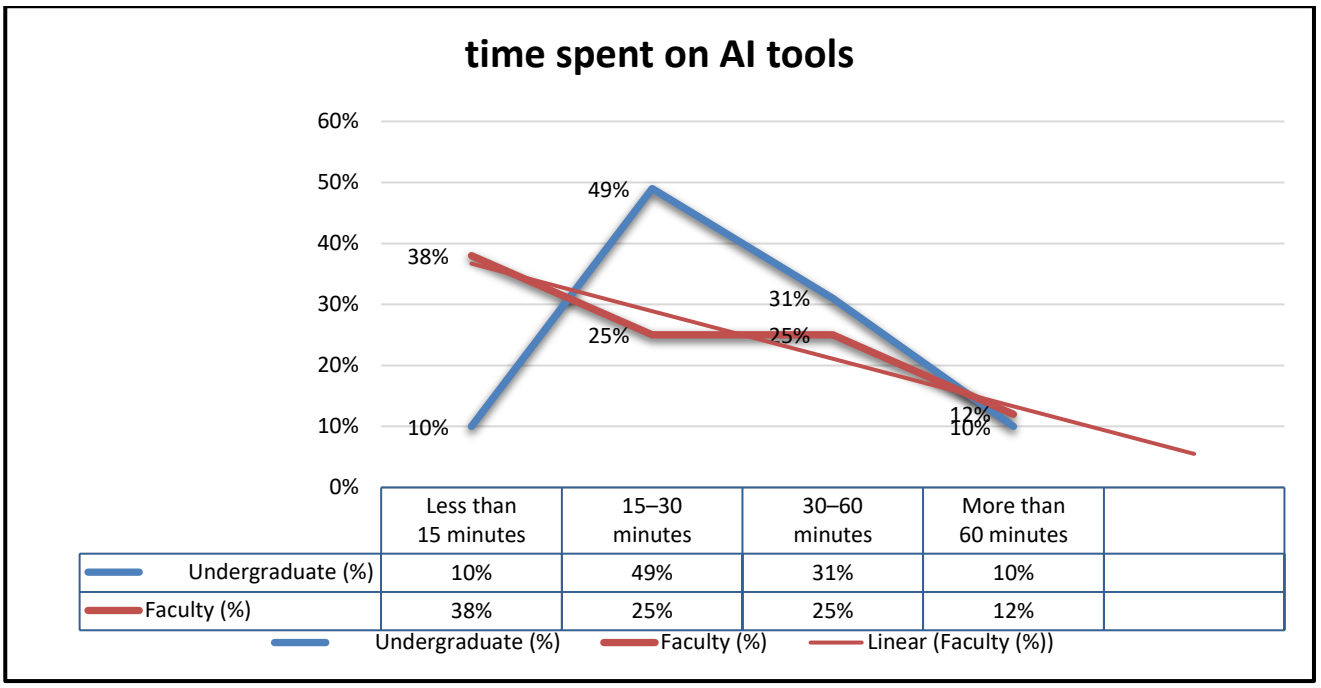


Figure-10

3 Pros of AI

3.1 Perceived Benefits of AI in Enhancing Academic Writing

The research findings reveal that the respondents overwhelmingly view AI tools as useful in improving their academic writing skills.

The results indicate that respondents strongly perceive AI as a helpful tool improving clarity, efficiency, and the overall quality of their academic work. A large majority 81% believed that AI helps improve the overall quality of their writing with strong satisfied respondent where 44% and least satisfied responded where 19%, and similarly an equal percentage of 81% felt it help them in writing more clearly and concisely with strongly satisfied where 56% while 19% respondents where least satisfied by the role of Ai writing concise and clearly. Further, respondent When it came to reducing the time spent on writing, 89% of participants agreed that AI significantly aids in streamlining the writing process. Similarly, 86% reported that AI tools enhance their academic language, helping them produce more polished and professional content. The most significant area was response in research efficiency, where majority 92% of respondents acknowledged that how AI aids them to to improve their research efficiency. Additionally, 89% stated that AI tools help in organizing research and writing, making the overall academic workflow smoother while 11% where least satisfied with that in organizing research and writing, making the overall academic workflow smoother. An encouraging 87% of respondents felt that AI tools had a positive impact on their academic performance overall. While strong satisfaction levels (ratings of 4 and 5) remained high ranging from 44% to 66% across different categories the percentage of respondents who were least satisfied (ratings of 1 and 2) was

relatively low, with the highest dissatisfaction recorded at 19% and the lowest at just 8%. These findings collectively suggest that AI tools are not only widely adopted but are also valued for their effectiveness in improving clarity, saving time, and enhancing the quality of academic writing.

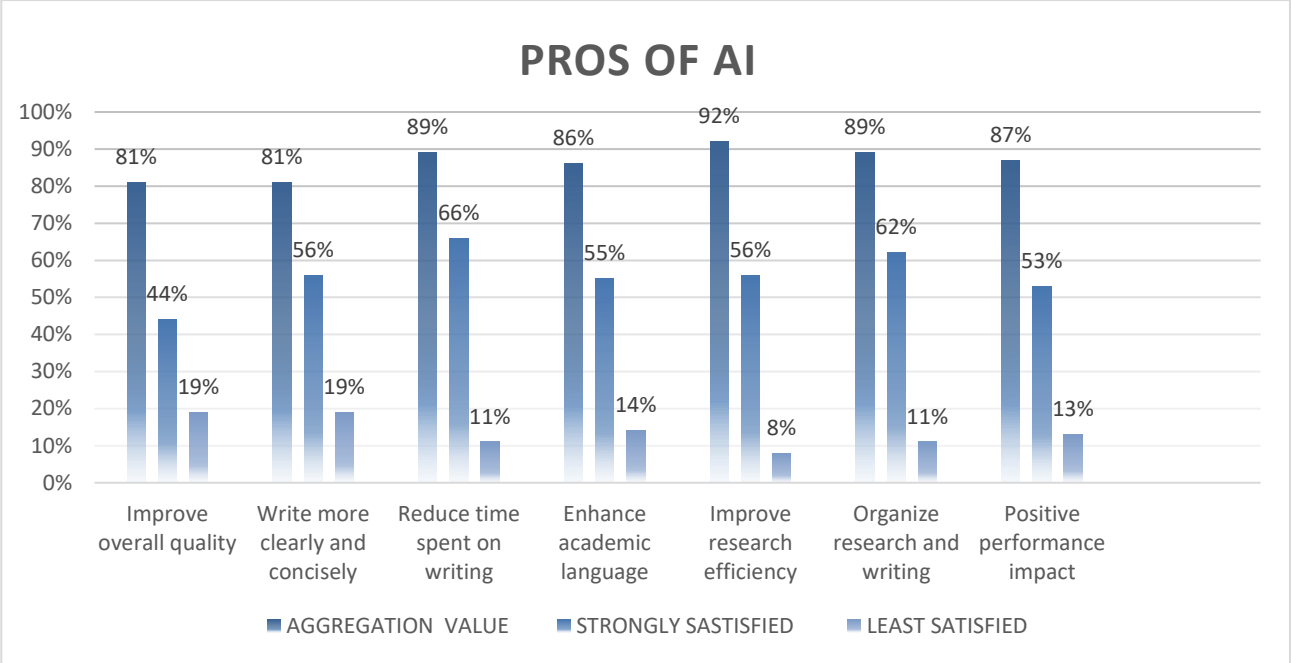


Figure-11

Note:- The analysis was performed by a 5-point Likert scale, under which responses were grouped into aggregate (ratings 3, 4, and 5), strong satisfaction (ratings 4 and 5), and least satisfaction (ratings 1 and 2).

Considering the advancement and benefit of AI respondents and various research across globe have significantly enhance their ability that can't be ignored , further authors comprise systematic reviews of literature to understand how AI helped for enhancement of their productivity tools, Mohmed khalifa and Mona Albadawy have analysed the 6 domain where AI could have enhanced the research productivity.

3.2 Domain 1: Idea Development and Research Design

AI's capability to identify gaps in literature is invaluable. Through advanced natural language processing, it can scrutinize thousands of documents, revealing overlooked or under-researched areas(Khalifa & Albadawy, 2024). AI supports idea generation by identifying research gaps and helping form hypotheses. It guides research design by suggesting methods, sample sizes, and data collection strategies. However, over-reliance can mislead research direction, so human oversight is essential.

3.3 Domain 2: Content Development and Structuring

In the second domain of Content Development and Structuring, AI plays a critical role in enhancing the quality and efficiency of creating and organising research content AI tools assist in writing by expanding text, suggesting outlines, and improving grammar and style. They also help structure content logically and adjust tone for different audiences. Visuals like charts and infographics can also be generated. Yet, ethical use and originality must be ensured.

3.4 Domain 3: Literature Review and Synthesis

AI quickly analyses large volumes of research, extracts key findings, and identifies trends and gaps. It helps in summarizing literature, but accuracy and integrity must be maintained to avoid false or misleading outputs. AI tools, such as ChatGPT, has the capacity to analyse large sets of data and generate high-quality content, albeit with a need for careful oversight to prevent the production of fraudulent material.

3.5 Domain 4: Data Management and Analysis

Data Interpretation, a critical component of this domain, involves AI's ability to provide detailed descriptions and visualizations of data. AI handles large datasets efficiently, offering deep insights through analysis and visualization. It supports fields like radiology and epidemiology, but requires ethical management of data.

3.6 Domain 5: Editing, Review, and Publishing Support

The fifth domain, Editing, Review, and Publishing Support, is integral to the research process, ensuring the clarity, coherence, and quality of academic output. This domain can be broadly categorised into Writing Refinement and Publishing Assistance, each playing a vital role in the journey from manuscript drafting to publication. Writing Refinement involves enhancing the textual quality of manuscripts, where AI tools are increasingly used for proofreading and editing. AI-driven software like ChatGPT, Grammarly, and Paperpal can correct grammatical errors and improve writing style, especially beneficial for non-native English speakers . These tools help refine the language, making manuscripts clearer and more concise, which is crucial for conveying complex scientific ideas effectively. Additionally, AI can assist in drafting abstracts and summaries, ensuring that the key findings and implications of research are communicated succinctly and accurately(Khalifa & Albadawy, 2024)

Domain 6: Communication, Outreach, and Ethics

The sixth domain, focusing on Communication, Outreach, and Ethical Compliance, plays a critical role in both spreading research findings and upholding ethical standards in today's digital world. It covers

two key areas: Dissemination and Outreach, and Ethical and Integrity Assurance. These areas tackle distinct challenges faced in modern research environments. This domain emphasises the need for effective communication of research to a varied audience, maintaining a commitment to ethical principles(Khalifa & Albadawy, 2024).At last AI tools are instrumental in this domain, enhancing outreach and ensuring ethical conduct in research AI helps share research widely and ensures ethical standards like plagiarism detection and disclosure. Still, human values and transparency are key to responsible use.

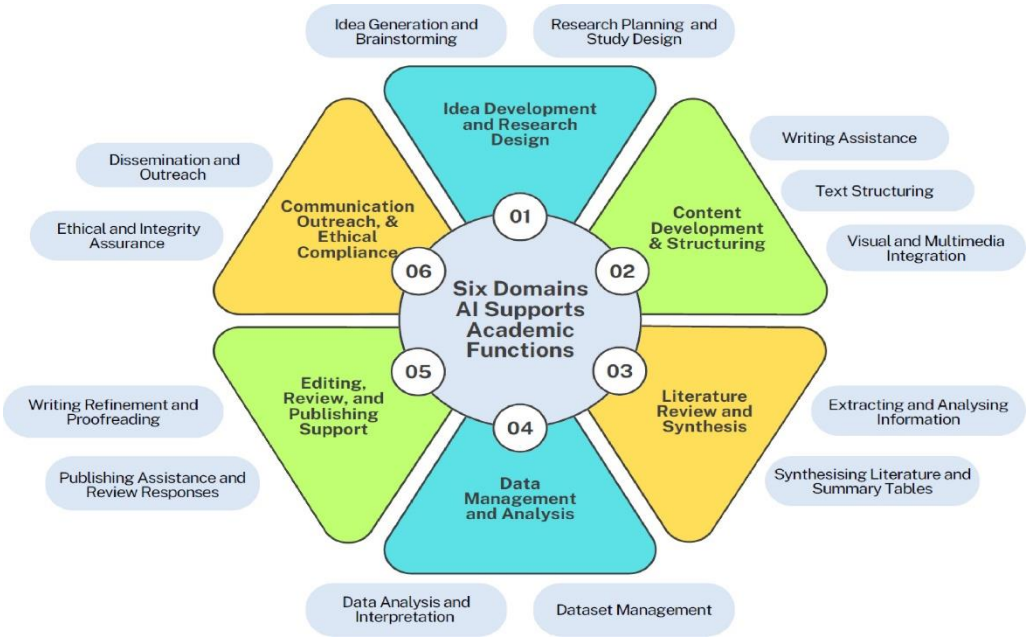


Figure-12

4 Ethical considerations

4.1 Perceived Ethical Concerns of AI in Academic Integrity and Critical Thinking

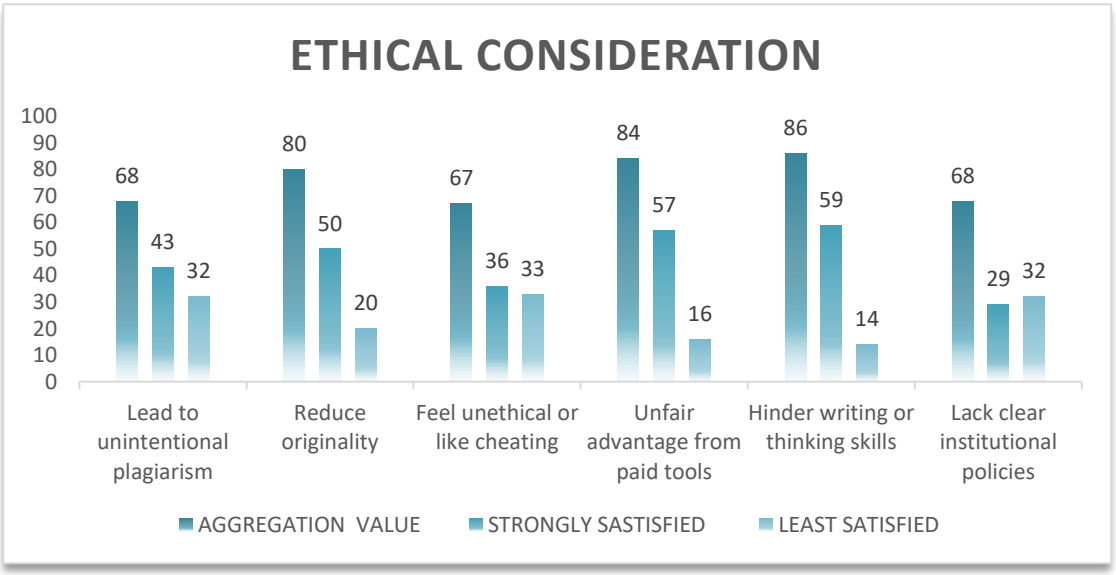


Figure-13

The respondents were asked 6 questions related to ethical consideration, plagiarism, and critical thinking concerns.

Lead to Unintentional Plagiarism

- Aggregation Value: 68
- Strongly Satisfied: 43
- Least Satisfied: 32

Plagiarism is known as presenting someone else's work, including the work of other students, faculty as one's own. Any ideas or materials taken from another source for either written or oral use must be fully acknowledged, unless the information is common knowledge. This graph suggest that a significant majority of respondents believe these tools can accidentally promote plagiarism, even when not intended. The high aggregation value indicates a collective concern. With 43% strongly satisfied with this issue, it's clear that many users are deeply aware of the hazy lines between inspiration and duplication. The 32% who are least satisfied may feel that this concern is overstated or manageable with proper use. Further, Plagiarism is a serious ethical violation in academia, and the use of AI tools presents new challenges in this area. AI systems generate text based on large data sets, and although they aim to produce original content, there is always the risk of unintentional plagiarism if the AI-generated text closely resembles existing works.[3] Academic journals including all of ACG's journals use plagiarism detection software to monitor submissions, and any AI-generated content that overlaps significantly with previously published works could be flagged as plagiarism. To address this, the authors should practice transparency and proper attribution when AI tools are used To ensure the originality of their work and to prevent charges of dishonesty, the authors must disclose the usage of AI. Additionally, because AI might produce information that sounds authoritative but is inaccurate or biased, researchers need to carefully check that the content these technologies produce satisfies academic norms.(Yousaf, 2025).

Reduce Originality

- Aggregation Value: 80
- Strongly Satisfied: 50
- Largest Satisfied: 20

This group indicates an even higher level of ethical concern. An overwhelming 80% aggregation indicates that the respondents largely perceive these tools as reducing creativity and originality. Fifty percent of the participants strongly agree, perhaps indicating fears that users will overly rely on

technology instead of developing their own concepts. The comparatively low percentage of least satisfied individuals (20%) indicates fewer people reject this issue. Further, A study found that amongst 30 short medical papers generated by ChatGPT, nearly half of the references were fabricated, while 46% of the references were authentic but inaccurate. Amongst the inaccurate references, 48% were errors with the title, 52% represented errors with authorship, and 93% of these references had the wrong PMID. Only 7% of all the references generated by ChatGPT were completely authentic and accurate, (Cheng et al., 2025).

Feel Unethical or Like Cheating

•Aggregation Value: 67
• Strongly Satisfied: 36
• Least Satisfied: 33

The issue of concern here is over the moral unease in adopting such tools. The very close division between those strongly satisfied and least satisfied indicates that public opinion is divided. While some obviously feel that it violates academic or professional ethics, others are perhaps more at ease with the changing times of tool usage and might view it as a valid resource. Further, unethical AI use in academic writing constitutes a fundamental violation of academic integrity, undermining the core principles of honesty, originality, and responsible scholarship. Beyond this ethical breach, however, lies a more insidious and pedagogically damaging consequence: the systematic corrosion of foundational writing skills essential for critical thinking and effective communication. When students habitually substitute AI-generated content for their own intellectual labour through verbatim copying, minimally altered paraphrasing, or uncritical submission of AI outputs—they deprive themselves of the deliberate practice necessary to develop and maintain core competencies. This dependency creates a cycle of skill atrophy, where the very abilities academic writing seeks to cultivate weaken through disuse(Aritonang & Toisuta, 2025).

Unfair Advantage from Paid Tools

• Aggregation Value: 84
• Strongly Satisfied: 57
• Least Satisfied: 16

This category points to economic inequality and access issues. The strong 84% aggregation shows there is a general consensus that paid tools give unfair advantages. The 57% who strongly agree emphasize that cost barriers can lead to uneven playing fields, especially in the educational sphere. The extremely low least satisfied percentage (16%) indicates this is one of the least disputed ethical issues

in the dataset.

Hinder Writing or Thinking Ability

- Aggregation Value: 86
- Strongly Satisfied: 59
- Least Satisfied: 14

It is the strongest concern in all categories. An overwhelming 86% feel that excessive dependency on electronic tools can deteriorate cognitive powers, particularly writing and thinking. A massive 59% strongly agree with this concern, reflecting that most feel there is a real threat to mental development. The very low least satisfied rate of 14% ensures that this is an issue that has been largely agreed on. Students using AI to generate content may miss out on essential writing and critical thinking skills, though depending on how it is used(*The Role of AI in Academic Research*, 2024).Moreover , The over-reliance on ai tools can hamper cognitive and logical ability A study conducted on this theme finds over-reliance on AI for content generation. Firstly, argumentation suffers significantly. Students exhibit a reduced capacity to formulate nuanced, defensible claims and support them with relevant, well-integrated, and critically evaluated evidence The process of constructing a logical argument identifying a stance, anticipating counterpoints, selecting and synthesizing sources is bypassed, leading to superficial or ill-supported assertions. Secondly, cohesion deteriorates. Research indicates a weakened ability to create logical flow within and between sentences and paragraphs. This manifests as a reduced or inaccurate use of transitional phrases and conjunctions, alongside underdeveloped lexical chains (repetition of key concepts using synonyms or related terms), resulting in disjointed and difficult-to-follow text The AI might provide transitions, but the student fails to understand or replicate the underlying logical connections they represent. Thirdly, originality diminishes markedly. Over-dependence on AI tools leads to homogenized syntax (repetitive, simplistic, or formulaic sentence structures) and idea expression (generic, unoriginal content lacking unique perspective or critical analysis). Students lose their authentic voice and the ability to generate novel insights or articulate complex thoughts in distinctive ways(Aritonang & Toisuta, 2025).

Table -01 source-(Aritonang & Toisuta, 2025)

Rationale	*Count*	*Percentage*	*Representative Quote*
Efficiency	15	75%	*"Why spend 3 hours writing when AI gives a draft in 5 minutes?"*
Language Insecurity	12	60%	*"My English isn't strong enough for academic essays."*
Grade Pressure	10	50%	*"Everyone uses it. I can't compete without AI."*
Topic Complexity	8	40%	*"I don't understand the theory well enough to write."*

Analysis: Efficiency dominated justifications, though linguistic anxiety and competitive pressure revealed systemic stressors. 65% cited ≥2 rationales.

While AI is capable of performing certain tasks more efficiently than humans, such as data processing and analysis, human intelligence remains superior in many areas. Humans, for example, have emotional intelligence and creativity that are currently beyond the capabilities of AI. Furthermore, AI technology development is not a zero-sum game in which AI gains must necessarily come at the expense of human intelligence. Rather, the two can co-exist and complement each other, with AI performing tasks better suited to machines and humans concentrating on areas where our unique abilities are most valuable. Overall, the advancement of AI is unlikely to result in a loss of natural intelligence in humans. Instead, we should focus on harnessing the potential of AI to augment our own abilities and create a better future for all(Jain & Nawani, 2023).

Lack Clear Institutional Policies

- Aggregation Value: 68
- Strongly Satisfied: 29
- Least Satisfied: 32

Further, there is a common complaint about the lack of well-defined policies or guidelines within institutions concerning the use of tools. Though the value of aggregation is quite satisfactory at 68, the very low strongly satisfied (29%) and similar least satisfied (32%) indicators hint towards a state of confusion or indecision among users. It can be an indication of uneven policy implementation or inadequate communication and policy-making by institutions. Various institution and publications has implemented the clear policy guideline to what extent AI can be used in academic papers. Further, Ms. Laher, based on her analysis of different publication and institutions she conveyed that AI can be used for routine tasks like improving grammar, revising sentence structure, or assisting with literature searches. These applications do not require specific acknowledgement, but can't be used for content generation unless until clear reason should referenced in manuscript further Sage and the Committee on Publication Ethics emphasise that authors must disclose when AI-generated content is used by citing this appropriately(Laher, 2025).

5 Policy recommendation

The research investigates mainly two policy frameworks for recommendations

1. Proposition for the OTHA Framework
2. General recommendation for institutional policies

5.1 Openness

Openness in AI implies that creative, participatory and inclusive process. This philosophy requires

universities to involve all stakeholders, such as faculty, students, IT professionals, and administrative staff, during the planning and implementation phases. By including different points of view, institutions are able to ascertain better the likely applications and counter the issues associated with using AI.

In addition, promoting local innovations and the research and development of AI applications that are suited to the unique educational environments is important. (costa & Pat Ntsobi, 2024)

5.2 Transparency

Transparency is a crucial aspect for sustaining confidence and ensuring ethical AI utilization. Building and sharing detailed policies regarding AI use in education, as proposed by Imran and Almusharraf (2023), is important. The policies need to cover data privacy, ethical application, and handling of AI-content, making sure that all the stakeholders understand the expectations and guidelines. Disclosure is another essential feature of transparency. Users have to disclose the level of involvement of AI in their academic activities, including uniform disclosure statements for all submissions with AI content. outputs, institutions can ensure the values of honesty and accountability (costa & Pat Ntsobi, 2024).

5.3 Honesty

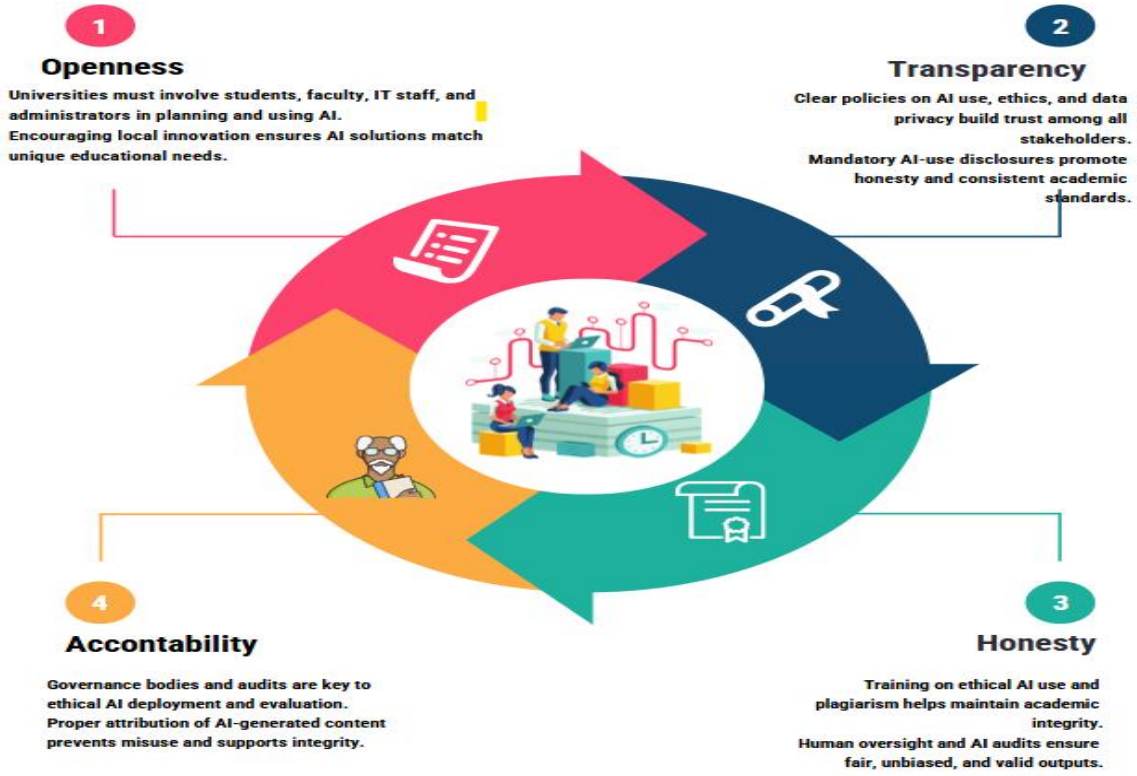
Honesty in AI integration is all about ethical training and quality assurance. The provision of training on the ethical use of AI tools, focusing on academic integrity, and the dangers of plagiarism are essential elements of this principle. Quality assurance entails having a strict review process that incorporates human oversight to guarantee the reliability and validity of AI outputs. Lew (2023) highlights the need for human monitoring to ensure the quality and integrity of AI-created content. Automated audits of AI-created content can detect and minimize biases, facilitating fairness and inclusivity in scholarly work. Institutionally facilitating the use of AI tools in an ethical and responsible manner can enable institutions to uphold high academic standards while embracing a culture of integrity. (costa & Pat Ntsobi, 2024)

5.4 Accountability

Accountability is way more essential to putting in place governance frameworks to regulate the deployment of AI, including committees or working groups tasked with tracking AI adoption and adherence to ethical standards, is crucial. Nazer et al. (2023) posit that periodical audits and checks can guarantee that AI-generated content is equitable and non-discriminatory. Processes of monitoring and evaluation are required to gauge the effect of AI adoption. Carrying out regular evaluations, as

advised by Johnston et al. (2024), may give important feedback regarding the efficacy of AI solutions and guide choices about how to enhance their utilisation. Explicit attribution of the content created by AI is another important element of accountability. That authorship should be clear and rightly attributed has the effect of inhibiting misuse and encouraging scholarly integrity. The OTHA Framework, founded on the values of Openness, Transparency, Honesty, and Accountability, offers a paradigm for ethical and successful integration of ChatGPT and associated AI tools in higher education. (costa & Pat Ntsobi, 2024).

Figure-14



OTHA framework

5.6 General recommendation for institutional policies

i. *Mandatory Disclosure of AI Use*: Institutions must make it mandatory for researchers and students to explicitly disclose when they use AI tools in their research work. This entails mentioning the tools used and how they impacted the final product via through a additional manuscript. Where the author discloses and declare the contribution of AI and how it has been used in research.

ii. *Guidelines for Citing AI Contributions:* Policies need to give clear guidelines on how to attribute AI-generated content just as we cite the human authors—by adhering to proper citation formats.

iii. *Openness Regarding AI Weaknesses:* Policies should foster publicity concerning the vulnerabilities of AI tools, including the potential for bias, inaccuracy, or absence of context in the output.

iv. *Accuracy through Peer Review:* Policies should mandate extensive proofreading and fact-checking of content generated with AI to ensure it is reliable and correct according to academic requirements(So, 2025).

v. *Respecting Copyright Laws:* The institutions must ensure that AI-generated content is in accordance with intellectual property laws and does not infringe on copyright protection.

vi. Refining Definitions of Plagiarism: Policies against plagiarism must be updated to account for differences between appropriate use of AI for assistance and inappropriate usage that includes presenting AI work as one's own.

vii. *Establishing Acceptable Use Parameters:* Proper boundaries must be established on what is considered acceptable usage of AI such as enabling AI to assist with clarifying grammar or organisation but not to create new ideas or analysis.

viii. *Protecting Human Authorship*: Protocols must safeguard the integrity of authorship by ensuring that the fundamental intellectual contributions are provided by the human author rather than AI.

ix. *Promoting Critical Thinking:* Students must be made to critically evaluate the products generated by AI, such as checking facts and arguments against authentic primary sources.

x. *Transparent Punishments for Offences:* Institutions must establish clear consequences for the abuse of AI or refusal to reveal its use, including penalties in grades, resubmission, or

scholastic disciplinary measures (So, 2025).

Conclusion

The advanced generation of computer science and data science has led to the Emergence of AI. Using AI in education can significantly transform our education system and produce more advanced results. Similarly, using AI in academic research writing is very crucial to improve research efficiency, generating of idea and structuring and improving content, this research shows that people who use AI for their writing they have witnessed that using AI hampers their critical thinking and they feel like cheating, unethical practice, and lead to erosion for their original content further various research also indicate that over reliance on AI for academic writing threaten the academic integrity. Further, this study suggests policy recommendations for institutions and publishing houses and how academicians and researchers can use AI to enhance their ability and enhance their research efficiency without hampering academic integrity.

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