ISSN–2278-5655

AMIERJ Aarhat Multidisciplinary International Education Research Journal

Volume–XV, Special Issues– I(c) Jan – Feb, 2026

OPEN ACCESS Original Research Article

A STUDY ON AWARENESS ABOUT ETHICAL USE OF AI IN RESEARCH WRITING

*** Mr. Nikhil Rajendran Nair**

** K S D's Model College (Empowered Autonomous), Dombivli East, Maharashtra, India*

Abstract:

Artificial Intelligence (AI) has completely revolutionised the way we use computer technologies. The rapid integration of Artificial Intelligence (AI) into academic research writing has transformed scholarly communication by enhancing efficiency, accessibility, and linguistic quality. However, this technological advancement raises significant ethical concerns related to authorship, originality, accountability, and academic integrity. This study examines the ethical dimensions of use of AI tools for research writing, focusing on researchers' awareness, perceptions, and responsible usage of AI tools. Using a descriptive and analytical research design, primary data was collected through a structured questionnaire administered to faculty members and research scholars. The findings reveal that AI is widely accepted by researchers as a supportive tool for language refinement and formatting, but there is strong resistance toward its use in generating core intellectual content. The study revealed that researchers are well aware about the risks on extensive use of AI tools and agree that it's use must be limited to only cosmetic aspect of content presentation rather the whole research itself. It also identifies a positive relationship between ethical awareness and responsible AI usage, highlighting the crucial role of institutional guidelines and ethics training.

Key words: *Artificial Intelligence, AI tools, Research writing, Ethical use of AI tools*

Introduction:

Artificial Intelligence (AI) is a branch of computer science that enables computer systems or devices to perform tasks usually associated with human intelligence. Artificial Intelligence (AI) is witnessing unprecedented growth and is the fastest spreading technology in human history. More than 100 million people used ChatGPT in the first two months after its launch in November 2022. It has completely revolutionised the way we use computer technologies. AI has made our lives easier in all aspects of life especially content writing, data mining, animation, etc. (UNESCO, 2023)

The rapid advancement of Artificial Intelligence (AI) has significantly transformed the landscape of academic research and scholarly writing. From automated literature searches and grammar correction tools to sophisticated generative models capable of producing human-like text, AI has become an integral part of the modern research ecosystem. While these technologies offer immense potential to enhance efficiency, accessibility, and quality in research writing, they also raise critical ethical concerns that demand careful examination.

In the context of research writing, AI tools like ChatGPT, Grammarly, Quill Bot, etc. can assist scholars in drafting manuscripts, paraphrasing content, summarizing large volumes of literature, and improving linguistic clarity. This helps in creating a level playing field for scholars with difficulty in language. However, the growing over-reliance on AI has led to ethical challenges related to authorship, originality, transparency, accountability, and academic integrity. The blurred boundaries between human-generated and machine-generated content raise fundamental questions about plagiarism, data

ISSN–2278-5655

AMIERJ Aarhat Multidisciplinary International Education Research Journal

Volume–XV, Special Issues– I(c) Jan – Feb, 2026

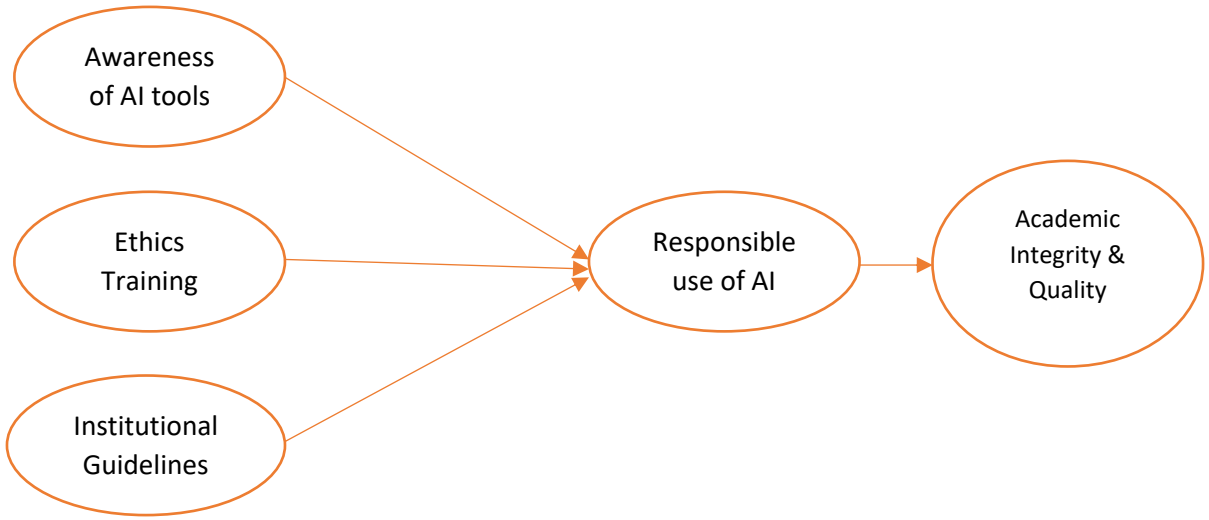
OPEN ACCESS Original Research Article

fabrication, intellectual ownership, and the credibility of scientific knowledge.

Moreover, the use of AI in research writing is not merely a technical issue but a normative one, intersecting with broader ethical principles such as fairness, responsibility, and respect for intellectual labour. Bias embedded in AI systems, lack of explainability, and the risk of reinforcing existing inequalities further complicate its ethical deployment in academia. Without proper guidelines and awareness, AI may inadvertently undermine the very values that academic research seeks to uphold.

Given the increasing integration of AI tools in scholarly practices, it is imperative to establish a clear ethical framework governing their use in research writing. This study seeks to explore the awareness about ethical dimensions of AI-assisted research writing, identify what is acceptable and what is not, and seek the ethical concerns of researchers and institutions, and propose best practices to ensure responsible and transparent use of AI in academic work. By doing so, the paper aims to contribute to the evolving discourse on maintaining academic integrity in the age of artificial intelligence.

Conceptual Framework:



Objective of the Study:

The main objectives of this study are:

1. To examine the extent of awareness and usage of AI tools in research writing among degree teaching researchers.
2. To identify key ethical issues associated with the use of AI in academic writing.
3. To analyze researchers' perceptions regarding authorship, originality, and accountability in AI-assisted writing.
4. To study the need for institutional policies and guidelines governing AI use in research writing.

Review of Literature:

Studies highlight that AI improves efficiency, grammar, and access to scholarly writing but cannot replace human intellectual contribution (Floridi et al., 2018).

Major concerns include plagiarism, lack of transparency, data fabrication, and authorship ambiguity (Resnik & Elliott, 2019).

Research indicates that misuse of AI tools threatens originality and credibility of academic output (Bretag, 2020).

Use of AI in medical and healthcare sector has created new challenges in the areas of data security,

ISSN–2278-5655

AMIERJ Aarhat Multidisciplinary International Education Research Journal

Volume–XV, Special Issues– I(c) Jan – Feb, 2026

OPEN ACCESS Original Research Article

compassionate approach, proper diagnosis, etc. (Dariush Farhud et al., 2021)

UNESCO produced the first-ever global standard on AI ethics – the 'Recommendation on the Ethics of Artificial Intelligence' in November 2021. It is applicable to all 194 member states of UNESCO. Universities globally are developing AI-use policies, emphasizing disclosure and accountability (UNESCO, 2023).

Studies show high acceptance of AI for editing and language refinement, but resistance toward AI-generated content as primary authorship (Dwivedi et al., 2023).

AI has revolutionized the banking sector but the risk of data breaches, unfair treatment of customers and unauthorised access to personal information of clients looms the banking sector. There is also lack of transparency that leads to mistrust and challenges in holding banks accountable for AI-driven decisions (McArthur Fundira & Charles Mbohwa, 2025)

AI has revolutionized the lawyers role, mechanizing mundane tasks and establishing a new focus on distinctly human abilities. The hurdles that come with the change are considerable, but these can be overcome with prudence and fundamental ethical values (Dr. Kumara. N. H. 2025)

Research Methodology:

Universe of Study – Degree college teachers, of all ages, engaged in research, residing within the locality of the suburb of Dombivli in Thane district from Maharashtra.

Sample size: Data collected from 35 respondents

Method of data collection: Both primary and secondary data were collected. Primary data was collected through survey method by creating and sharing questionnaire with the target respondents using Random sampling method. Secondary data was gathered from websites, newspaper reports, journals, etc.

Research Software: Microsoft Excel is used for calculating Weighted Average Mean and conducting Chi-square test.

Limitations of the Study:

1. The data was collected randomly from individuals who are degree college teachers and showed interest in responding to the questionnaire.
2. The sample size is limited to 35 respondents.
3. Researchers with 10 or more published research papers are considered as experienced for the purpose of study.
4. Respondents bias could not be ruled out in questionnaire method.

Hypothesis:

H_1 – There is significant relationship between educational qualification and awareness about ethical use of AI

H_{o1} – There is no significant relationship between educational qualification and awareness about ethical use of AI

H_2 – There is significant relationship between experience in research and awareness about ethical concerns in misuse of AI

H_{o2} – There is no significant relationship between experience in research and awareness about ethical concerns in misuse of AI

H_3 – There is significant relationship between AI training in research and knowledge about acceptable use of AI

H_{o3} – There is no significant relationship between AI training in research and knowledge about acceptable use of AI

ISSN–2278-5655

AMIERJ Aarhat Multidisciplinary International Education Research Journal

Volume–XV, Special Issues– I(c) Jan – Feb, 2026

OPEN ACCESS Original Research Article

DATA ANALYSIS & INTERPRETATION:

Demographic details:

Table 1: Gender Details

	No. of Respondents	%
Male	20	57.15
Female	15	42.85
Total	35	100

Table 2: Educational qualification of respondents

	No. of Respondents	%
Post Graduation	25	71.43
Ph. D	10	28.57
Total	35	100

Table 3: Number of Research Papers published

		No. of Respondents	%
10 or more papers published	Ph. D	10	28.57
	Others	05	14.29
Less than 10 published	Others	20	57.14
Total		35	100

Table 4: Inferential Analysis between Demographic factors and Awareness about Ethical use of AI Weighted Average Mean:

	WAM	Observation
Perception about Awareness and Understanding of AI Ethics	4.06	Good awareness
Perception about acceptable use of AI in Research Writing	3.83	Fairly agree
Perception about Ethical concerns and misuse	4.37	High level of awareness
Perception about Institutional policy and training	4.74	Highly Agree

Degree teachers have shown good awareness about Ethical use of AI in research writing irrespective of their qualification, training background and research experience.

They also possess fair knowledge on acceptable use of AI in research.

They have shown high level of awareness on ethical concerns and misuse of AI in research

They highly support the view that Institutional policy making and formal training will further enhance the awareness and quality of research

ISSN–2278-5655

AMIERJ Aarhat Multidisciplinary International Education Research Journal

Volume–XV, Special Issues– I(c) Jan – Feb, 2026

OPEN ACCESS Original Research Article

Table 5: CHI-SQUARE Analysis results:

Sr. No.	Hypotheses	p-value	Result
1.	There is no significant relationship between educational qualification and awareness about ethical use of AI	0.630	p > 0.05, Null hypothesis is accepted
2.	There is no significant relationship between experience in research and awareness about ethical concerns in misuse of AI	0.169	p > 0.05, Null hypothesis is accepted
3.	There is no significant relationship between AI training in research and knowledge about acceptable use of AI	0.448	p > 0.05, Null hypothesis is accepted

Results of Chi-square test further supports the conclusion in Table 4 that degree college teachers, engaged in research, are aware about the Ethical use of AI for the purpose of research irrespective of their

- Educational credentials
- Overall research experience
- Not receiving formal training on ethical use AI

Conclusion:

The present study examined the level of awareness among degree teachers regarding the ethical use of Artificial Intelligence (AI) in research writing and explored whether demographic factors influence such awareness. The findings from the Weighted Average Mean (WAM) analysis reveal that respondents demonstrate an overall positive and responsible orientation toward AI ethics. Specifically, teachers reported good awareness and understanding of AI ethics (WAM = 4.06), indicating that they are familiar with ethical principles and the importance of responsible AI usage in academic writing. Respondents also expressed fair agreement on acceptable use of AI in research writing (WAM = 3.83), suggesting that while teachers possess adequate knowledge, there is scope for greater clarity and standardized guidance on appropriate AI-assisted practices. Furthermore, the study recorded a high level of awareness regarding ethical concerns and misuse (WAM = 4.37), reflecting strong sensitivity toward risks such as plagiarism, bias, misinformation, and lack of originality. Importantly, respondents highly agreed that institutional policies and formal training would enhance ethical awareness and research quality (WAM = 4.74), highlighting the need for structured institutional interventions.

The inferential results using the Chi-square test indicate that demographic factors do not significantly influence awareness levels. The analysis confirmed that there is no significant relationship between educational qualification and awareness about ethical use of AI ($p = 0.630$). Similarly, there is no significant association between research experience and awareness of ethical concerns in AI misuse ($p = 0.169$), and no significant relationship between AI training background and knowledge about acceptable AI use ($p = 0.448$). Thus, all null hypotheses were accepted, suggesting that awareness about ethical AI practices is relatively consistent across different demographic groups.

Overall, the study concludes that degree teachers possess a strong foundational awareness of AI ethics,

ISSN–2278-5655

AMIERJ Aarhat Multidisciplinary International Education Research Journal

Volume–XV, Special Issues– I(c) Jan – Feb, 2026

OPEN ACCESS Original Research Article

recognize ethical risks, and support institutional policy development and training initiatives. Since awareness does not significantly vary across qualification, training background, or research experience, institutional strategies aimed at promoting ethical AI use can be implemented uniformly across faculty members. Developing formal guidelines, capacity-building programs, and periodic training workshops will further strengthen ethical compliance and promote responsible AI integration in academic research writing.

References:

1. *American Psychological Association. APA Guidance for the Use of Artificial Intelligence Tools in Academic Writing. American Psychological Association, 2023.*
2. *Bender, Emily M., et al. "On the Dangers of Stochastic Parrots: Can Language Models Be Too Big?" Proceedings of the 2021 ACM Conference on Fairness, Accountability, and Transparency (FAccT '21), Association for Computing Machinery, 2021, pp. 610–623.*
3. *Dwivedi, Yogesh K., et al. "So What If ChatGPT Wrote It? Multidisciplinary Perspectives on Opportunities, Challenges and Implications of Generative Conversational AI for Research, Practice and Policy." International Journal of Information Management, vol. 71, 2023, p. 102642.*
4. *Floridi, Luciano, and Josh Cowls. "A Unified Framework of Five Principles for AI in Society." Harvard Data Science Review, vol. 1, no. 1, 2019.*
5. *King, Michael R. "The Future of AI in Research and Scientific Publishing." Nature Machine Intelligence, vol. 5, no. 4, 2023, pp. 277–279.*
6. *OECD. OECD Principles on Artificial Intelligence. Organisation for Economic Co-operation and Development, 2019.*
7. *Rahimi, Farhad, et al. "Ethical Challenges of Artificial Intelligence in Academic Writing: A Review." Journal of Academic Ethics, vol. 21, no. 3, 2023, pp. 1–15.*
8. *Resnik, David B. The Ethics of Science: An Introduction. 2nd ed., Routledge, 2020.*
9. *UNESCO. Recommendation on the Ethics of Artificial Intelligence. United Nations Educational, Scientific and Cultural Organization, 2021.*
10. *https://timesofindia.indiatimes.com/education/news/using-ai-in-higher-education-when-does-it-become-plagiarism/articleshow/114776015.cms*

Cite This Article:

Mr. Nair N.R. (2026). *A Study on Awareness About Ethical Use of AI in Research Writing.* **In Aarhat Multidisciplinary International Education Research Journal**: Vol. XV (Number I, pp. 19–24)

Doi: https://doi.org/10.5281/zenodo.18641205