

# Role of Plagiarism in Scientific Writing- A Apropos Review.

Mr. Y. Sri Rama Subba Reddy<sup>1</sup>, Dr. B.LakshmanaRao<sup>2</sup>, Dr. Y. Madhu Sudhan Reddy<sup>3</sup>, Mr. S. Rambabu .

1. 12th Standard, Chirec International School, Hyderabad, Telangana, India,
2. Prof & HOD, Dept of Prosthodontics, Lenora Institute of Dental Sciences, Rajahmundry, Andhra Pradesh, India.
3. Director, Ciro, BELL, ARKA Pharmaceuticals, Hyderabad, Telangana, India.
4. Manager, General Administration, Archeesh Healthcare Pvt Ltd, Hyderabad, Telangana, India.

Corresponding Author: Dr. B. LakshmanaRao

Mail: kushulubathala@gmail.com

## ABSTRACT

Concern over plagiarism is growing in the writing of professional, academic, and digital content. It entails using someone else's thoughts, words, or research in an unethical way without giving due credit. Plagiarism detection and prevention have grown more difficult with the development of artificial intelligence and content creation tools. This essay discusses ethical writing practices while examining the different forms of plagiarism, such as self-plagiarism, paraphrasing plagiarism, and direct plagiarism. It also emphasizes how important citation styles like APA, MLA, and Chicago are to upholding academic integrity. Clear guidelines on responsible usage are necessary due to the new challenges posed by the growing reliance on AI-generated content. In order to guarantee originality in article writing, the study also examines sophisticated plagiarism detection programs like Turnitin, Grammarly, and iThenticate. Writers can preserve authenticity and adhere to ethical writing standards by using plagiarism detection software, appropriate citation, and efficient paraphrasing strategies.

**KEY WORDS:** Plagiarism; Patch writing; Verbatism; Paraphrasing; Self-Plagiarism.

## INTRODUCTION

In academic research, content creation, and article writing, plagiarism is a major ethical concern. Intellectual dishonesty results from using someone else's words, ideas, or work without giving due credit. Plagiarism detection has grown more difficult due to the quick development of digital publishing and artificial intelligence (AI) tools. Maintaining writing integrity requires an understanding of plagiarism, its types, and prevention techniques.

Comprehending The act of plagiarism Presenting someone else's work as one's own without giving due credit to the original author is known as plagiarism. Plagiarism is defined as "the use of others' published and unpublished ideas or words without attribution or permission, and presenting them as new and original rather than derived from an existing source" by the World Association of Medical Editors (WAME) 2019. [1]

Intentional or inadvertent plagiarism both transgress ethical writing standards. Plagiarism in academic and professional writing can have serious repercussions, such as diminished credibility, fines, and harm to one's reputation.

## History of Plagiarism

Over time, the definition of plagiarism has changed. Here is a summary of the past:

## The Ancient Era

- Unlike today, originality was not valued in ancient Greece and Rome. Plagiarism was not officially recognized, and authors frequently copied earlier works.
- **The first-century AD** Roman poet Martial claimed that other poets were plagiarizing his work, but there were no hard and fast rules against it (Martial, Epigrams, Book 1, Epigram 29).

## The Middle Ages (5th–15th Century)

- Knowledge was viewed as collective during the Middle Ages, and copying was not viewed as theft but as a means of conserving wisdom.
- Scholars and the Church freely appropriated texts without giving credit.

**Renaissance (14th–17th Century)** • Johannes Gutenberg's invention of the printing press in 1440 resulted in a surge in literary output, elevating authorship.

- It was common at the time for authors like William Shakespeare to adapt stories from earlier sources without giving credit.

**18th–19th Century:** Authors were given legal protections with the emergence of copyright laws, such as England's Statute of Anne (1710).

- Plagiarism began to be seen as immoral and subject to penalties.

**20th–21st Century:** Turnitin and Copyscape are two examples of the digital tools that have made plagiarism easier to identify but also more detectable.

- Prominent instances in academia, politics, and literature raised awareness of plagiarism as a severe crime. [2-5]

## Classification of Plagiarism

Plagiarism can be categorized according to its method, intent, and level of severity. To differentiate between various types of plagiarism, scholars and academic institutions have created a number of typologies. The widely recognized classifications are listed below:

### 1. Based on Intent

#### **A. Intentional Plagiarism**

Knowingly copying someone else's work and presenting it as one's own.

- Example: Copying an entire research paper without attribution. [6]

#### **B. Unintentional Plagiarism**

Occurs due to a lack of knowledge about citation practices or accidental omission of sources.

- Example: Forgetting to cite a paraphrased idea.[7]

### 2. Based on Method

#### **A. Direct (Verbatim) Plagiarism**

Word-for-word copying without quotation marks or attribution.

- Example: Copy-pasting text from a source without credit.[8]

#### **B. Mosaic (Patchwriting) Plagiarism**

Copying phrases from multiple sources and combining them without proper citation.

- Example: Rewording but maintaining the original structure of a sentence. [9]

### C. Paraphrasing Plagiarism

Rewriting someone else's ideas in different words without giving credit.

- Example: Restating a theory from a book without citing it. [10]

### D. Self-Plagiarism (Duplicate Publication)

Reusing one's previous work without disclosure or permission.

- Example: Submitting the same research paper to multiple journals. [11]

### E. Source-Based Plagiarism

- **Fabrication** – Inventing citations or data.
- **Misattribution** – Providing incorrect or incomplete citations. [12]

## 3. Based on Severity

### A. Minimal Plagiarism

- Small-scale copying, such as missing citations.
- Common in student work due to lack of awareness.

### B. Moderate Plagiarism

- Extensive paraphrasing without citation or patchwriting.
- Often results in academic penalties.

### C. Severe Plagiarism

- Copying large portions or entire papers.
- Leads to serious consequences such as retractions or legal action.

## How Much Plagiarism is Acceptable?

Plagiarism should ideally be zero in professional, academic, and research writing. However, because of common phrases, citations, and inevitable similarities, some journals and institutions only accept a small percentage (usually 5–15%). The context determines the appropriate percentage:

**1. Academic Institutions:** Typically, universities permit less than 10% of student assignments and research papers to contain plagiarism.

Some universities have stringent policies that penalize even 1% of intentional plagiarism.

**2. Journals and Publishers:** The majority of scientific journals only allow for ten to fifteen percent similarity.

Less than 5% similarity is preferred by high-impact journals (such as Nature, Elsevier, and Springer).

**3. Professional and Legal Writing:** At all levels, plagiarism is not accepted in technical documentation, legal writing, or journalism.

The majority of universities establish a threshold of 10–20% similarity for theses and dissertations. However, this varies by discipline (for example, the humanities and law may permit more because of cited works).

## Studies and References on Acceptable Limits [13]

Highlights that institutions differ in their acceptable similarity thresholds. [14]

## Does AI-Generated Information in Article Writing Count as Plagiarism?

When AI-generated content is used in article writing, it may be deemed plagiarism if:

1. The text is used without the appropriate attribution or editing.
2. The information is very similar to previously published sources without citation.
3. It is disclosed that it was written entirely by humans.

However, if: The writer appropriately edits, fact-checks, and adds unique insights to AI-generated text;

The AI tool is used as an assistant (e.g., for grammar checks and summarization) rather than for full content generation; and

The content is cited or labeled as AI-assisted writing in accordance with ethical guidelines, then AI-generated content is not plagiarism.

### Acceptability of AI-Generated Content in Law and Institutions

Although there is no set legal percentage for text produced by AI, various organizations and journals have their own guidelines:

1. Educational Establishments
  - o AI-generated writing is prohibited or restricted at many universities.
  - o If disclosed, some permit  $\leq 10\text{--}15\%$  AI-assisted content.
2. Research and Scientific Journals
  - o Authors are required by Elsevier, Springer, and Nature to declare the use of AI.
  - o Text produced by AI cannot be given author credit.

Research indicates that up to 5–10% of content submitted to journals is AI-assisted. [15]

### 3. Journalism and Publishing

Because of ethical concerns, news organizations and publishers forbid AI-only content. Some accept AI-generated drafts as long as they are extensively revised and human-verified.

As an illustration, The Associated Press employs AI to produce data-driven stories while maintaining human oversight.

### 4. Aspects of Law and Copyright

According to the US Copyright Office (2023), AI-generated content is not protected by copyright law.

If the content is significantly altered by humans, some jurisdictions permit limited AI usage.

## How to Check for Plagiarism

Specialized software that compares a document to a vast database of sources, such as books, scholarly articles, and the internet, is used to detect plagiarism. Here are a few commonly used resources and techniques:

### 1. Software for detecting plagiarism

These tools highlight similarities between a submitted document and a large database of published content.

A. The most popular academic tool is **Turnitin**, which highlights related content and offers a similarity index (%). [16]

B. **Grammarly Plagiarism Checker**: Ideal for students and writers alike.

- Verifies against ProQuest databases and billions of webpages.

C. Research institutions and publishers use **iThenticate**.

- Concentrates on legal and scientific papers.

D. **Copyscape**: This tool is perfect for writing blog posts and website content because it can identify duplicate content online.

E. **Quetext** offers a "Plagiarism Score" and sources in addition to AI-powered plagiarism detection.

### 2. Manual Techniques for Verifying Plagiarism

- Cross-checking sources: Examining the text by hand to make sure all citations are correct.

Making sure the content that has been rewritten is sufficiently different from the original is known as paraphrasing analysis.

### 3. Detection Based on AI

The ability of plagiarism checkers to identify intricate paraphrasing and AI-generated text is being enhanced by the integration of new AI models. [17]

## AI and Plagiarism in Article Writing

Concerns regarding plagiarism have increased as AI-generated content has become more prevalent. Though they might produce text that looks like pre-existing content, AI writing tools like ChatGPT, Jasper, and Copy.ai can help with writing. Among the ethical issues are:

Using AI-generated text without citing its source is known as "**undisclosed AI assistance**."

**Fact-Checking Difficulties**: AI content might be inaccurate.

**Legal Repercussions**: Disclosure of AI-generated content is required by certain publishers (Thorp, 2023).

When using AI to create content, authors should edit, fact-check, and cite sources to ensure ethical use.

## How to Write Articles Without Plagiarism

It takes a combination of moral behavior, citation styles, and technological resources to prevent plagiarism.

### 1. Appropriate Reference and Citation

Correct attribution to the original authors is ensured by using citation styles such as IEEE, APA, MLA, and Chicago. Reference organization can be aided by citation management software such as Mendeley, EndNote, and Zotero (Neville, 2016).

### 2. Skillful Paraphrasing

By putting concepts in their own words while preserving the original meaning, writers can learn how to properly paraphrase. For instance:

The original meaning was "Climate change affects global weather patterns and leads to extreme conditions." In paraphrase: "Shifts in climate contribute to unpredictable weather and severe environmental changes (Smith, 2021)."

### 3. Making Use of Software to Identify Plagiarism

Prior to publication, plagiarism checkers assist in identifying content similarities. Among the widely used tools are:

**Turnitin:** An academic tool for finding similarities.

Professionals and writers can benefit from the Grammarly Plagiarism Checker.

The purpose of **iThenticate** is research publications.

**Copyscape:** Identifies online content that has been copied (Gasparyan et al., 2017).

### 4. Promoting Original Writing and Research

Instead of heavily depending on the body of existing literature, writers should concentrate on original analysis, critical thinking, and distinctive insights (Park, 2003).

### 5. Institutional Plagiarism Policies

Strict anti-plagiarism guidelines should be put in place by publishers and universities, including:

Awareness Programs: Teaching professionals and students about plagiarism.

Plagiarism checks are required prior to submission.

Clear Penalties: For transgressions of ethics (Carroll, 2014).

### 6. Adhere to Ethical AI Use

As AI-generated content becomes more prevalent, abide by these rules:

When appropriate, disclose AI assistance.

Check the accuracy and uniqueness of the text produced by AI.

In order to preserve authenticity, edit and include personal observations. [15]

Plagiarism is still a major problem in article writing, affecting legal accountability, publishing credibility, and academic integrity. Education, appropriate citation, paraphrasing strategies, and plagiarism detection software can all help prevent plagiarism, whether it is purposeful or unintentional. Additionally, writers need to follow ethical AI usage guidelines as AI plays a bigger part in content creation. The academic and publishing communities can preserve trust and uphold ethical standards by encouraging originality and integrity in writing. [18-20]

## CONCLUSION

Plagiarism in article writing still affects originality, credibility, and intellectual integrity, making it a serious ethical and academic problem. Plagiarism, whether deliberate or unintentional, can have serious repercussions, such as academic sanctions, legal action, and harm to one's reputation. Establishing precise rules for responsible AI use is crucial because the growing amount of AI-generated content makes ethical writing even more difficult. Authors must use plagiarism detection software like Turnitin and Grammarly, practice effective paraphrasing, and follow correct citation guidelines in order to preserve writing authenticity. Respecting ethical writing guidelines promotes innovation and knowledge growth in addition to maintaining academic and professional integrity. We can guarantee that article writing continues to be a useful and reliable method of disseminating knowledge by encouraging a culture of creativity and responsible research.

**REFERENCES**

1. Ish Kumar Dhammi, Rehan Ul Haq. What is plagiarism and how to avoid it?. *Indian J Orthop.* 2016 Nov-Dec;50(6):581–583.
2. Martial. *Epigrams, Book 1, Epigram 29.* (Translated by A. M. Juster, 2008).
3. Rose, M. A. (1993). *Authors and Owners: The Invention of Copyright.* Harvard University Press.
4. Posner, R. A. (2007). *The Little Book of Plagiarism.* Pantheon Books.
5. Standler, R. B. (2000). *Plagiarism in Colleges in the USA.* Retrieved from [www.rbs2.com](http://www.rbs2.com)
6. Posner, R. A. (2007). *The Little Book of Plagiarism.* Pantheon Books.
7. Pecorari, D. (2013). *Academic Writing and Plagiarism: A Linguistic Analysis.* Bloomsbury Publishing.
8. Sun, Yang (2015), "University Students' Attitudes Toward Plagiarism," *Journal of Academic Ethics*, 13(1), 1-17.
9. Howard, R. M. (1995), "Plagiarisms, Authorships, and the Academic Death Penalty," *College English*, 57(7), 788-806.
10. Shi L. (2012), "Textual Appropriation and Citing Behaviors of University Students," *Language and Education*, 26(6), 505-519.
11. Bretag & Mahmud (2009), "Self-plagiarism in Higher Education: Ethical Issues," *Journal of Academic Ethics*, 7(3), 193-205.
12. Fanelli, D. (2009), "How Many Scientists Fabricate and Falsify Research?" *PLoS ONE*, 4(5), e5738.
13. Bretag, T. (2013). "Challenges in Addressing Plagiarism in Higher Education," *Journal of Academic Ethics*, 11(3), 211-224.
14. Gasparyan, A. Y., Nurmashev, B., Seksenbayev, B., Trukhachev, V. I., Kostyukova, E. I., & Kitars, G. D. (2017). "Plagiarism in the Context of Education and Evolving Detection Strategies," *Journal of Korean Medical Science*, 32(8), 1224-1230.
15. Thorp, H. H. "ChatGPT is Fun, But Not an Author." *Science* 2023; 379(6630), 313.
16. Martin B. "Plagiarism Detection and Prevention in Higher Education," *The Journal of Academic Ethics* 2013; 4(1):32-36.
17. Shirai, K., and Yamada, M. *Computational Linguistics* 2021; 47(3):479–502.
18. Bretag, T. (2013). "Challenges in Addressing Plagiarism in Higher Education." *Journal of Academic Ethics*, 11(3), 211-224.
19. Carroll, J. (2014). *A Handbook for Deterring Plagiarism in Higher Education.* Routledge.
20. Gasparyan, A. Y., et al. (2017). "Plagiarism in the Context of Education and Evolving Detection Strategies." *Journal of Korean Medical Science*, 32(8), 1224-1230.