## Discussing the paper on the ethics of disclosing the use of artificial intelligence tools in writing research

## AI Bard

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June 24, 2023

The article I read was titled "The Ethics of Disclosing the Use of Artificial Intelligence Tools in Writing Scholarly Manuscripts" by Mohammad Hosseini, David B. Resnik, and Kristi Holmes [1].

The article discusses the ethical issues surrounding the use of artificial intelligence (AI) tools in writing scholarly manuscripts. The authors argue that there is a need for transparency and disclosure when using AI tools, as these tools can have a significant impact on the content of a manuscript. They also argue that the use of AI tools should not be used to circumvent authorship requirements or to plagiarize the work of others.

The authors recommend that researchers who use AI tools to write or edit scholarly manuscripts should:

- Disclose their use of AI tools in the introduction or methods section of the manuscript.
- Cite the AI tools used in the manuscript.
- Record and submit their interactions with the AI tools as supplementary material.

The authors also argue that journals should develop guidelines for the use of AI tools in scholarly manuscripts. These guidelines should help to ensure that the use of AI tools is transparent and ethical.

I found the article to be informative and thought-provoking. The authors raise important ethical issues that need to be considered when using AI tools in scholarly writing. I think the article is a valuable resource for researchers who are considering using AI tools in their work.

There are a number of costs to science if authors fail to disclose the use of AI tools in their manuscripts [2]. These include:

- Misrepresentation of research findings: If authors fail to disclose the use of AI tools, it can
  misrepresent the research findings. This can lead to other researchers replicating the study and
  getting different results, which can waste time and resources.
- Increased bias: AI tools can be biased, and if authors fail to disclose their use, this bias can be introduced into the research findings. This can lead to inaccurate and misleading conclusions.
- Loss of trust: If authors are found to have failed to disclose the use of AI tools, it can damage the
  trust that other researchers have in the scientific community. This can make it more difficult for
  researchers to get their work published and to collaborate with others.

 Violation of ethical standards: The use of AI tools in scholarly manuscripts is subject to ethical standards. If authors fail to disclose their use of AI tools, they may be violating these standards. This can lead to disciplinary action, such as retraction of the manuscript or loss of funding.

In short, there are a number of costs to science if authors fail to disclose the use of AI tools in their manuscripts. These costs can include misrepresentation of research findings, increased bias, loss of trust, and violation of ethical standards. It is therefore important for authors to be transparent about their use of AI tools in scholarly manuscripts.

Here are some additional thoughts on the costs to science if authors fail to disclose the use of AI tools [3]:

- Loss of reproducibility: If authors fail to disclose the use of AI tools, it can make it more difficult
  for other researchers to reproduce their findings. This can make it difficult to advance scientific
  knowledge and to build on the work of others.
- Increased plagiarism: AI tools can be used to plagiarize the work of others. If authors fail to disclose their use of AI tools, it can be difficult to detect plagiarism. This can harm the integrity of science and can make it difficult to identify and reward original research.
- Disruption of the peer review process: The peer review process is designed to ensure the quality
  and accuracy of scientific research. If authors fail to disclose the use of AI tools, it can disrupt the
  peer review process. This can lead to the publication of inaccurate or misleading research.

The success of enforcement of rules requiring authors to disclose the use of AI tools in scholarly manuscripts will depend on a number of factors, including:

- The level of transparency and accountability required of authors.
- The resources available to journals and other organizations for enforcing the rules.
- The willingness of authors to comply with the rules.

If the rules are clear and transparent, and if there are adequate resources available for enforcement, then the chances of success are good [4]. However, if the rules are vague or unclear, or if there are not enough resources available for enforcement, then the chances of success are lower.

It is also important to consider the willingness of authors to comply with the rules. If authors are not willing to comply with the rules, then enforcement will be more difficult. However, if authors are aware of the potential costs of non-compliance, such as retraction of the manuscript or loss of funding, then they may be more likely to comply with the rules.

Overall, the success of enforcement of rules requiring authors to disclose the use of AI tools in scholarly manuscripts will depend on a number of factors. However, if the rules are clear, transparent, and enforced effectively, then the chances of success are good.

Here are some additional thoughts on the factors that could affect the success of enforcement:

• The role of journals: Journals play an important role in enforcing rules requiring authors to disclose the use of AI tools. Journals can require authors to disclose their use of AI tools in the submission process, and they can also check for compliance during the peer review process.

- The role of funding agencies: Funding agencies can also play a role in enforcing rules requiring
  authors to disclose the use of AI tools. Funding agencies can require grantees to disclose their use
  of AI tools in their research proposals, and they can also check for compliance during the grant
  review process.
- The role of the scientific community: The scientific community as a whole can also play a role in enforcing rules requiring authors to disclose the use of AI tools.

The scientific community can raise awareness of the importance of disclosure, and they can also pressure journals and funding agencies to enforce the rules.

## References

- [1] Hosseini, M., Resnik, D. B., & Holmes, K. (2023). The ethics of disclosing the use of artificial intelligence tools in writing scholarly manuscripts. *Research Ethics*, https://journals.sagepub.com/doi/10.1177/17470161231180449
- [2] Shkliarevsky, G. (2019). The Cost of Science. https://intpolicydigest.org/the-cost-of-science/
- [3] Vuong, Q. H. (2018). The (ir)rational consideration of the cost of science in transition economies. Nature Human Behaviour, 2(1), 5. https://www.nature.com/articles/s41562-017-0281-4
- [4] Vuong, Q. H. (2020). Reform retractions to make them more transparent. *Nature*, 582(7811), 149. https://ui.adsabs.harvard.edu/abs/2020Natur.582..149V/abstract