

Letter to the Editor

Authors' Reply: Reassessing AI in Medicine: Exploring the Capabilities of AI in Academic Abstract Synthesis

Tien-Wei Hsu^{1,2}, MD; Chih-Sung Liang^{3,4}, MD

¹Department of Psychiatry, E-Da Dachang Hospital, I-Shou University, Kaohsiung, Taiwan

²Department of Psychiatry, E-Da Hospital, I-Shou University, Kaohsiung, Taiwan

³Department of Psychiatry, Tri-service Hospital, Beitou Branch, Taipei, Taiwan

⁴Department of Psychiatry, National Defense Medical Center, Taipei, Taiwan

Corresponding Author:

Chih-Sung Liang, MD

Department of Psychiatry

Tri-service Hospital, Beitou Branch

No. 60, Xinmin Road

Beitou District

Taipei, 112

Taiwan

Phone: 886 2 28959808

Email: lcsyfw@gmail.com

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Abstract

N/A

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KEYWORDS

ChatGPT; AI-generated scientific content; plagiarism; AI; artificial intelligence; NLP; natural language processing; LLM; language model; text; textual; generation; generative; extract; extraction; scientific research; academic research; publication; abstract; comparative analysis; reviewer bias

We appreciate Wang and Zhou's [1] keen interest in our publication [2]. Below are our responses to their comments.

First, Wang and Zhou [1] argued potential biases could arise from the 8 experts' personal preferences, academic or cultural backgrounds, or their familiarity with the subject matter. However, the 30 papers we selected were from 3 different journals and explored various topics (as outlined in Table S3 in Multimedia Appendix 1 of our paper [2]). Therefore, these biases are unlikely to occur, considering the significant variation among the articles.

Second, we did not use ChatGPT 3.5. We used ChatPDF, which is based on ChatGPT 3.5 but can efficiently analyze PDF content.

Third, Wang and Zhou argued that if artificial intelligence (AI) assistance in refining an article does not alter the accuracy of the research and aids in clearer communication of the content, such a practice should be deemed acceptable. However, in our study, we found that 3 of the 30 ChatGPT-generated abstracts contained incorrect conclusions.

Finally, Wang and Zhou are right in cautioning against complete reliance on AI language models for labor-intensive tasks, which may lead to a lack of critical thinking and the production of low-quality or erroneous articles. However, their perspective differs from the purpose of our study. We aimed to assess the applicability of an AI model in generating abstracts for basic preclinical research. We found that the quality of ChatGPT-generated abstracts for basic preclinical research was suboptimal and that accuracy was not 100%.

Conflicts of Interest

None declared.

References

1. Wang Z, Zhou C. Reassessing AI in medicine: exploring the capabilities of AI in academic abstract synthesis. J Med Internet Res. 2024. [FREE Full text] [doi: [10.2196/55920](https://doi.org/10.2196/55920)]
2. Cheng S, Tsai S, Bai Y, Ko C, Hsu C, Yang F, et al. Comparisons of quality, correctness, and similarity between ChatGPT-generated and human-written abstracts for basic research: cross-sectional study. J Med Internet Res. Dec 25, 2023;25:e51229. [FREE Full text] [doi: [10.2196/51229](https://doi.org/10.2196/51229)] [Medline: [38145486](https://pubmed.ncbi.nlm.nih.gov/38145486/)]

Abbreviations

AI: artificial intelligence

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