Academic journals should rethink the concept of originality before permitting the use of ChatGPT

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While computer programs such as Grammarly and Quillbot have incorporated automated text-editing features for many years, they are not designed to create content. However, ChatGPT can generate content based on large language models, making the academic publishing industry uneasy. An editorial in *Nature* pointed out that ChatGPT could threaten transparent science. Some academic journals have updated their editorial policies in response to ChatGPT, but most of these policies are ambiguous. Currently, editorial policies for ChatGPT fall into two categories: one prohibits authors from using ChatGPT altogether, while the other permits authors to use ChatGPT under certain conditions, such as requiring a declaration. While these two policies agree that ChatGPT cannot be an author, academic journals that permit its use do not clarify the proportion of ChatGPT-generated content or for which parts of a paper ChatGPT-generated content is permitted.

To address these issues, we need to rethink the concept of ‘the originality of research’. Dirk categorised originality based on hypothesis, methods, and results (eight combinations). In a mail survey, 301 experienced scientists reported that the most frequent combination among the 209 papers they had written was ‘new hypothesis/previousy-reported methods/new results’. The use of ChatGPT raises three questions.

1. The originality of writing: Can ChatGPT help authors embellish their papers, and if it is used as a writing tool, which sections of a paper can academic journals permit it to write?
2. The originality of ideas: Should academic journals permit authors to use research ideas proposed by ChatGPT directly or permit authors to propose their own research ideas based on suggestions made by ChatGPT?
3. The originality of the analysis process: Can authors use ChatGPT to design their research and collect and analyse data?

Providing clear answers to these questions will enable academic journals to take a significant step forward in their editorial policies regarding ChatGPT or other AI tools. This, in turn, will reshape the academic publishing industry and prompt us to reconsider some fundamental questions of research. To achieve this, academic journals should collaborate with the scholarly community to devise new guidelines and face a brave new world.

References

2. Tools such as ChatGPT threaten transparent science; here are our ground rules for their use. *Nature*. 2023;613(7945):612. [CrossRef]
3. Tang G. Letter to editor: academic journals should clarify the proportion of NLP-generated content in papers. *Account Res*. 2023:1-2. [CrossRef]
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