Letter to Editor

Follow-up of Artificial Intelligence Development and its Controlled Contribution to the Article: Step to the Authorship?

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Dear Editors,

I am excited to see a current discussion in this journal [1]. In another editorial article, the questions and answers directed to Chat Generative Pre-Trained Transformer (ChatGPT), an artificial intelligence (AI) product, about the authorship process contributed to my idea of conducting a similar study [2]. In addition, addressing the editorial question, the second answer partially satisfied me because it was more innovative. Although the answers of ChatGPT in this article are apparent in the text, their contribution is not included in the footnote, explanation, acknowledgment, or reference; in some studies, it is shown in the footnote [3]; in some, it is included in the acknowledgment section [4]. Such contributions or the nature of the support received should also be evaluated and clearly stated. Which section should be included for AI-enabled content such as ChatGPT? Since accessing the previous accesses is impossible, it may be better to copy them to a visual or open access place instead of giving them a reference in the sources.

Although many subjects need to be read further and a detailed examination is required, a brief description of the working mechanism should be made. AI's deep learning is to experiment with a given set of inputs and outputs and make suggestions, and when it encounters a new input, it gives it an appropriate output. As I analyze the book chapters [5] that examine the success of AI programs in the process of inventing, producing art, and doing the work of different professional groups, such as lawyers or doctors in some fields, with appropriate learning algorithms, I think that they may have a promising potential for the future in terms of writing articles. In an environment without prejudice, such as the Turing test, there has been much discussion about the superiority of intelligence only when compared to the machine [5]. In addition, the fact that AI provides a contribution whose authorship cannot be detected by similarity or plagiarism programs, which are different software products, makes this situation difficult to understand.

In one of the studies contributing to this editorial correspondence, various AI examples with different functions and more capabilities are given, apart from ChatGPT. In addition, while drawing attention to the trust problem, margin of error, and differences in the level

of development between programs, it was emphasized that the suitability of using AI applications for general and simple service operations such as article language editing to reduce financial costs should be treated without prejudice [6]. Another article stated that the support to be received from AI after the article was written would be more reliable, controlled, and risk-free [7]. The article that questioned AI's identity on philosophical and ethical grounds was also remarkable [8]. In a different approach, it was stated that with the increase of pseudoscience authors, scientific and unethical situations may be encountered more frequently and different filtering systems should be used as a precaution. Language translation or text editing contributions were seen as an advantage [9]. In these conditions, where ethical problems are not resolved, it is stated that authorship is not correct and that it should be used to increase the quality of the article by making use of its features that facilitate writing [10]. These articles mention general topics about the potential uses of AI in article writing, possible harms, and cautions are mentioned.

The study, which listed suggestions for the practical use of AI in authorship, emphasized the lack of creativity and deep analysis power required for authorship [11]. Another study stated that AI could not be accepted as an author because AI could not take responsibility for its writings, did not comply with research ethics and violated copyright law [12]. As I asked the ChatGPT-3.5 model, another researcher who shared its answer with a similar approach stated that it does not see itself as a researcher and author but that its helpful contributions can be used in the writing and subsequent processes [4]. In another article, which deals with topics such as the areas of use of AI in research, the accuracy of ChatGPT was found to be generally positive [13]. In the article on the opportunities and challenges of AI, which offers comprehensive guidance, the authors expressed their concerns about transparency and explainability of authorship [3]. In a different study, the authorship criteria of The International Committee of Medical Journal Editors (ICMJE) and the Committee on Publication Ethics (COPE) were mentioned and it was explained that AI cannot make a significant contribution with data collection and interpretation, cannot approve the final version of the article, and can only collaborate in writing [14]. Another leading study revealed that AI meets only three of the 14 criteria, namely visualization, drafting, and editing, according to CRediT (Contributor Roles Taxonomy), which is important in terms of authorship criteria. The authors shared the reason why ChatGPT could not meet these criteria and their answers when other criteria were queried

with ChatGPT. In parallel with the study, the ChatGPT-3.5 model gave the same answer to my questions and stated that it would not be accepted as an author [15].

General concerns and criticisms focus on the fact that AI cannot take responsibility because of erroneous information and that there are no sanctions in unethical situations. Although there is no such reality now, the debate seems to continue in the coming period, even if AI contributes more than humans and is accepted as an author who is given responsibility and punished. These may depend on where the process will evolve with the contributions of lawyers and software developers and the regulations to be taken according to new developments. Therefore, for now, studies for controlled and comprehensive planning should be followed by authorities from international multidisciplinary fields such as lawyers, professional organizations, publishers, journal editorial boards, and ethics committees. Even if AI is not accepted as an author due to current conditions, the location of AI applications and general criteria, it quickly stepped into the academic studies environment and its authorship has come to the fore and discussions will be held.

Best Regards,

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