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RESPONSE TO LETTER

Attitude and Understanding of Artificial Intelligence among Saudi Medical Students: An Online Cross-Sectional Study [Response to Letter]

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Dear editor

First, we would like to thank you for your interest in our research entitled' Attitude and Understanding of Artificial Intelligence among Saudi Medical Students: An Online Cross-sectional Study" and we extend our gratitude for giving us a chance to respond. We are happy for the acknowledgement and suggestions for this research in the letter to the editor.

Regarding the limitations of the study as suggested by the letter, the following responses would probably cover the limitations of the study. Firstly, the sample in this study was obtained from medical college students in the Eastern Governorate of Saudi Arabia, so it did not represent the views of medical students from universities in other regions of Saudi Arabia. This could affect the generalizability of the findings.[1,2] We really appreciate this insight. Since, sample for the present study included only medical students from the Eastern Governorate of Saudi Arabia. This sample was not a true representative of all students studying in other medical colleges in the country. Therefore, further study needs representative sample in order to establish the generalizability of the findings on medical students studying in other regions of Saudi Arabia.

Secondly, you mentioned that the data collected in this study were based on self-reported measures, which may introduce reporting bias.[3] Participants may provide answers that do not accurately reflect their true understanding or attitudes toward artificial intelligence (AI). We strongly agree with this point. Actually, relying on self-reported measures does indeed carry the risk of introducing reporting bias.[4] Reporting bias occurs when participants provide responses that are not entirely truthful or accurate, either due to social desirability bias or simply due to misinterpretation of the questions. Additionally, self-reported measures are subjective and rely on participants' self-perception and ability to accurately recall information. Human memory is fallible, and participants may unintentionally provide inaccurate information due to memory lapses or misunderstandings of the questions posed in the study. As a result, the data collected from self-reported measures may not always provide a completely accurate representation of participants' attitudes toward AI. Researchers should be aware of these potential biases when interpreting the results and should consider using additional methods or measures to validate the self-reported data to ensure the reliability and validity of their findings.

Finally, you suggested that the convenience sampling technique used in this study may limit the generalizability of the results to a broader population of medical students.[5] We really appreciate this comment. Using convenience sampling in a study, such as selecting participants based on their ease of availability or proximity, may indeed limit the generalizability of the results to a broader population of medical students. Convenience sampling is often convenient for researchers in terms of cost and time efficiency, but it poses potential limitations in terms of representing the diversity of the target population accurately. When participants are selected based on convenience, it introduces a risk of sampling bias.[6] Those who are easily accessible or willing to participate may not be representative of the entire population of interest. In the case of medical students, those who are readily available or willing to participate may have characteristics, experiences, or attitudes that differ from those who are not included in the sample. This can lead to a skewed sample that does not capture the full range of diversity within the population. As a result, the findings derived from a convenience sample may not be generalizable to all

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medical students beyond those who were included in the study. The limitations imposed by convenience sampling can restrict the external validity of the study, making it challenging to extrapolate the results to a broader population of medical students in different regions or contexts. Researchers should be transparent about the limitations of convenience sampling and acknowledge that the findings may not be applicable to all medical students. When feasible, employing random sampling techniques or ensuring diverse representation in the sample can enhance the generalizability of the study's results.

In conclusion, we are very thankful to the editor of the journal for this opportunity, we also extended our sincere gratitude for both the acknowledgement and valuables comments for the improvements provided in the letter to the editor.

Disclosure

The author declares no conflicts of interest in this communication.

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