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LETTER

# The Use of Peer Teaching in the Online Clinical PBL: The Medical Students' Perspectives [Letter]

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## Dear editor

We sincerely thank Romão et al and the Department of Medicine at the University of Ribeirão Preto for their innovative study.[1] Being medical students in the United Kingdom who have experienced ample online teaching at various stages of our academic careers, we found this particularly impactful and would like to share our perspectives on this study.

Of its many strengths, this study has a sufficient sample size of 378, enhancing its statistical power and the high response rate of 67.5% maintains the sample's representativeness. The homogenous distribution across the different stages increases this study's applicability across all stages of medical school. Statistically, the study exhibited high internal consistency and reliability, with a Cronbach's alpha of 0.815. Ultimately, the strength of the study is its success, with students reporting benefits such as: improved intrinsic motivation and satisfactory knowledge acquisition, amongst others.

One limitation is that being an observational study, it is subject to several confounders, warranting caution when interpreting these results. All participants were recruited from a single university in Brazil, reducing the generalizability of findings to the wider population. Technological proficiency, tutors' expertise, and stable internet access are subject to location and institutional status – whilst these were possible in this study, it may not be in others. Exploring this across a plethora of universities worldwide can help understand this further. Recruitment relied on the acceptance of a WhatsApp invite, introducing self-selection bias. Although some measures were implemented to balance participant demographics, the majority were younger populations (22 ± 3) and females (67.5%). Incorporating parametric tests, like chi-squared, can explore the impact of these potentially confounding variables.

Another concern is the methodology, which relies on a self-reported 5-point Likert Questionnaire. This introduces response and interpretation bias as it relies on the participants' personal understandings of the given categories, which both undermine the study's internal validity. Moreover, a study displayed a lack of correlation between self-reported confidence and measured competencies in junior doctors, suggesting this method is particularly problematic among medical students.[2]

The results exhibit a negatively skewed distribution, suggesting a role for acquiescence or social desirability bias.[3] Inflation of positive experiences can increase the risk of type 1 errors. These could be improved by considering a 10-point scale where options are not as limited and incorporating open-ended questions to fully capitulate the participant's experiences.

The study lacks a control group that would assist in minimizing bias and determining the relative effectiveness of this teaching method. Implementing a randomized control trial could address these issues.

As acknowledged by the authors, this study only utilizes the first level of Kirkpatrick's model, reaction. This cross-sectional study explores perceptions at a single point of time. Incorporating the other levels can explore the long-term effects of this teaching method. Preference to using the lower levels of the model has been addressed as a limitation, particularly in higher education.[4]

In conclusion, we thank Romão et al for their insightful evaluations of the Online Clinical CBL and we hope our suggestions can support this study further.

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## Disclosure

No conflicts of interest were declared in the making of this correspondence.

## References

1. Romão G, Rocha S, Faria Junior M, Durand M, Bestetti R. The use of peer teaching in the online clinical PBL: the medical students' perspectives. *Adv Med Educ Pract*. 2024;15:1141–1148. doi:10.2147/amep.s466697
2. Barnsley L, Lyon PM, Ralston SJ, et al. Clinical skills in junior medical officers: a comparison of self-reported confidence and observed competence. *Med Educ*. 2004;38(4):358–367. doi:10.1046/j.1365-2923.2004.01773.x
3. Jamieson S. Likert scales: how to (ab)use them. *Med Educ*. 2004;38(12):1217–1218. doi:10.1111/j.1365-2929.2004.02012.x
4. CAHAPAY M. Kirkpatrick model: its limitations as used in higher education evaluation. *Int J Assess Tools Edu*. 2021;8(1):135–144. doi:10.21449/ijate.856143



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