Reviewer's report

Title: Prediction of Academic Achievement based on Learning Strategies and Outcome Expectations among Medical Students

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Reviewer: Samy Azer

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MEED-D-18-00837

Prediction of Academic Achievement based on Learning Strategies and Outcome Expectations among Medical Students sepideh hajian, PhD; Sakineh Nabizadeh, MSc; Zohreh Sheikhan, MSc; Fatemeh Rafiei, MSc BMC Medical Education

Reviewer Report

I read with great interest the above titled article, however, there are major problems in the manuscript:

1. Introduction: What do the authors mean by "learning strategies" and "academic performance/progress", these two terms should be defined.

2. Introduction: I cannot see any mention/discussion/explanation about learning strategies in the introduction.

3. What is the rationale of the study? What triggered this study? Why do authors think that learning strategy is an important factor? Provide evidence from the literature.

4. Methods: What do the authors mean by "based on quota allocated to each faculty"? Who do decide? Why?

5. It is not clear how sample size was determined.
6. Methods: what do you mean by "questionnaires were provided to them and completed by self..." Which questionnaires? How did you prepare these questionnaires? Give the reference for the MSLQ questionnaire.

7. What are the sources of the SDES and MSLQ questionnaires?

8. Are the 20 minutes to complete 3 questionnaires? How many questions were in each of these questionnaires?

9. What is AMOS?

10. You need to measure the validity and reliability of your tools?

11. There is a need for a more valid measure other than students' views by completing questionnaires. While the students' responses can be part of the answer, they cannot be the only source. The method should include something measurable in addition to questionnaires such as end-point assessment or any similar measures.

12. Results: need to be organised.

13. The study has several limitations and they should be stated. The discussion should include discussion of findings in light of other studies in the literature.

14. The writings should be improved. Several statements have grammatical errors, spelling mistakes or not logical. For example, the conclusion, the first statement, "Knowlede the cognitive and metacognitive strategies in student learning skills on the one hand...". The whole manuscript should be carefully checked.

15. References: The authors is submitting their manuscript to BMC Medical Education, but I cannot see references from any of medical education journals such as BMC Medical Education, Academic Medicine, Medical Education, Medical Teacher, Advances in Health Sciences Education. The references are poorly selected.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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