Modeling the Impact of Age, Semester of Study, and their Interaction on Medical Students' Self-Reflection on Competencies

Nrube Ashraf*

Editorial office,Health Economics and Outcome Research , Brussels, Belgium

Corresponding Author*

Nrube Ashraf
Editorial office
Health Economics and Outcome Research
Brussels, Belgium
E-mail:economics@journalinsight.org

Received: 1 July, 2022, Manuscript No. HEOR-22-74487; **Editor Assigned:** 4 July, 2022, PreQC No. HEOR-22-74487 (PQ); **Reviewed**: 15 July, 2022, QC No. HEOR-22-74487 (Q); **Revised**: 22 July, 2022, Manuscript No. HEOR-22-74487(R); **Published**: 27 July,2022, doi:10.37532/heor.22.8.7.2.

Abstract

For all health professions, accurate self-evaluation and competency reflection are essential abilities. Reflection is identified as a non-technical skill and Competency-Based Medical Education (CBME) is cited as an essential strategy in the National Competence-Based Learning Objectives Catalogue (NKLM) that directs medical colleges in Germany. The function and design of curriculum and skill labs changed in this environment. Reflecting on competencies is crucial to enhancing self-regulated learning, particularly in peer-assisted trainings. Traditionally, we've assumed that as learners gain experience, their capacity for self-reflection will likewise increase. This strategy incorporates self-reflection of competencies in clinical skills education and seeks empirical support for the premise. Here, we measure how the concordant self is impacted by age, semester of study, their interactions, and reflection of the abilities of the students. Evaluation data from peer-assisted "first aid" and "physical examination" courses at the skills labs of the medical school at the Ruhr-University Bochum in Germany served as the foundation for this investigation. Before and after the training, participants were asked to self-report their skills. Additionally, after finishing the course, students were asked to retrospectively re-rate their "before" competence (post-pre). In a moderated regression analysis, differences between pre and post-pre-competences were evaluated as the concordant self-reflection. In IBM SPSS Statistics V.28, univariate Analysis of Variance (ANOVA) with posthoc Tukey HSD testing was used to display group means and standard deviation. Age interaction effects were calculated using moderated regression and simple slope analyses.

Keywords: Self-reflection • Peer-assisted learning • Skills labs • Self-assessment • Competency-based learning

Introduction

The ability to deliberately reflect on one's own talents and a complicated metacognitive process are both considered to be components of self-reflection. Personal encounters have an impact. social interactions, personal acts, and underlying neurological elements. It pertains to and corresponds with the use of learning techniques. The ability to accurately appraise one's own abilities and reflect on them is another crucial talent in the medical field. It was hypothesised that one's own competencies in a broader context would have a significant influence on self-corrective behaviours coupled with enhanced professional skills in medicine learning. Accurate self-monitoring was said to improve learning processes and have the potential to enhance medical treatment. This capacity is for introspection and critical thinking [1]. The impacts on self-reflection, critical reflection on competencies, and learning processes in clinical simulation-based medical education have been the focus of several methods [2,3].

Accurate self-assessment is essential for skill acquisition, especially in the absence of a professional teacher. However, research has indicated that many influencing elements are unknown, highlighting the urgent need to evaluate predictors and modulating factors. By conducting meta-analyses and speculating that further research is required to determine the moderators influencing the self-assessment accuracy in medical students, Blanch-Hartigan also addressed this requirement. Competency-Based Medical Education (CBME) has emerged as a key approach in medical education and teaching methods in light of the current National Competence [4,5]. Based Learning Objectives Catalogue (NKLM), which describes competencies and learning objectives as a guideline for German faculties and therewith for curriculum development. Recently, Schrempf et al. offered strategies for integrating this essential and significant instrument within the educational practise since self-reflection is characterised within the NKLM as an integrated aspect of the medical curriculum. Over the past few decades, simulation and skills labs have been created in relation to curricula that are more practical in nature, CBME, and practical teaching approaches.

Conclusion

The ability to deliberately reflect on one's own talents and a complicated metacognitive process are both considered to be components of self-reflection. Personal encounters have an impact. Social interactions, personal acts, and underlying neurological elements. It pertains to and corresponds with the use of learning techniques. The ability to accurately appraise one's own abilities and reflect on them is another crucial talent in the medical field. Vocations in terms of patient safety and the efficiency of learning. It was hypothesised that one's own competencies in a broader context would have a significant influence on self-corrective behaviours coupled with enhanced professional skills in medicine learning. Accurate self-monitoring was said to improve learning processes and have the potential to enhance medical treatment. This capacity for introspection critical thinking. The impacts on self-reflection, critical reflection on competencies, and learning processes in clinical simulation-based medical education have been the focus of several methods. Accurate self-assessment is essential for skill acquisition, especially in the absence of a professional teacher. However, research has indicated that many influencing elements are unknown, highlighting the urgent need to evaluate predictors and modulating factors. By conducting meta-analyses and speculating that further research is required to determine the moderators influencing the self-assessment accuracy in medical students, Blanch-Hartigan also addressed this requirement. Competency-Based Medical Education (CBME) has emerged as a key approach in medical education and teaching methods in light of the current National Competence.

References

1. Desautel, D. "Becoming a thinking thinker: Metacognition, self-reflection, and classroom practice." Teach Coll Rec 111.8(2009): 1997-2020.
2. Johnson, S.C., et al. "Neural correlates of self‐reflection." Brain 125.8(2002):1808-1814.
3. Schei, E., et al. "Reflection in medical education: intellectual humility, discovery, and know-how." Med Health Care Philos 22.2(2019):167-178.
4. Sandars, J. "The use of reflection in medical education: AMEE Guide No. 44." Med Teach 31.8(2009):685-695.
5. Kämmer, J.E., et al. "Self-monitoring accuracy does not increase throughout undergraduate medical education." Med Educ 54.4(2020), 320–327.

Cite this article: Ashraf, N. Modeling the Impact of Age, Semester of Study, and Their Interaction on Medical Students' Self-Reflection on Competencies. Health Econ Outcome Res: Open Access. 2022, 08 (07), 02.