An evaluation study on gamified online learning experiences and its acceptance among medical students

ABSTRACT

Objective: The successful application of gamification in different educational settings shows that the use of gamification in medical education may be an effective solution. Even though many studies have been conducted to investigate the efficacy of the integration of gamification to different education curriculums, few studies have examined the reactions, behaviors, and attitudes of learners toward the use of gamification in medical education. Hence, this study aimed to evaluate the medical students' learning experience and acceptance of the use of gamification for the delivery of electrocardiogram lessons.

Materials and methods: A qualitative research method was used to generate findings in this study. The data collection methods included focus group discussions and interviews. Triangulation methods were used to ensure the validity and reliability of the qualitative data analyzed in this study. The thematic analysis of the data collected in this study helped to garner insights into the perception of participants and experts about the use of $GaMed@^{TM}$ for the delivery of ECG lessons.

Results: A total number of 32 medical students and four experts in the fields of user experience, communication, social psychology, and game design participated in this study. The findings showed that in spite of the negative reports about the user experience and application of $GaMed@^{TM}$, the participants and experts affirmed its positive impact on the increased motivation and engagement of users.

Conclusions: The impact of this concept can be maximized by tailoring the game design to foster-positive learning attributes, behaviors, and outcomes in students. However, further research studies must be conducted to investigate the impact of gamification designs on specific learning outcomes in students.