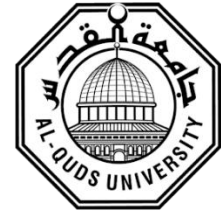




PalStudent Journal
A Palestinian Scientific Journal for the Youth



ABSTRACTS: VOLUME 7, SPECIAL ISSUE {7th Undergraduate Conference}

ABSTRACT

Nursing students' perceptions, satisfaction, and knowledge toward utilizing immersive virtual reality application in human anatomy course: quasi-experimental

Dania Mahmoud Bdah, Israa Natsheh, Lareen Abu Helo, Rasha Muhsen, Younes Shehadeh, Amna Salah, Naeem Froukh.

Al-Quds University

Background: A paradigm shift in nursing education is required to prepare Z generation of nursing students through integrated innovative technologies as teaching strategies, such as immersive virtual reality in several bioscience and main courses, to facilitate and enhance the learning process.

Objective: To examine the effect of utilizing an immersive virtual reality application on students' perceptions, knowledge, and satisfaction in an anatomy course.

Methods: A quasi-experimental (pre-post test, one group) design was conducted among 1st year nursing students (N = 138) enrolled in an anatomy course in the spring semester of 2023-2024 in the nursing program in the health professions faculty at Al-Quds University. The technology acceptance model (TAM) was used for data collection.

Results: The results showed that 96% of participants were satisfied with using the VR application, and it retained their knowledge in the human anatomy course. 92% of the total were under the age of twenty, and 84% were females. 80.1% (2.99±0.58) of those students had more positive perspectives of VR applications in the nursing courses. Additionally, there were significant

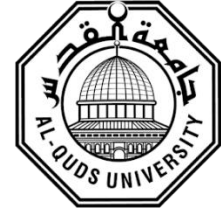
PalStudent Journal

Correspondence concerning this article should be addressed to the mentioned authors at the mentioned institutes.

Copyright © 2025 Al-Quds University, Deanship of Scientific Research. All rights reserved.

E-mail: research@admin.alquds.edu

Palestine, Abu Dis, Al-Quds University



differences in students' satisfaction and knowledge toward using VR applications after the anatomy lecture ($p=0.029$, $p=0.05$, respectively).

Conclusion: Virtual reality is a supplemental innovative tool for promoting learning. Nursing students perceive immersive virtual reality technologies positively and prefer using three-dimensional images in their anatomy courses, which helps them recall their knowledge, understand concepts of educational content, identify learning objectives, and improve learning outcomes. This study found that virtual reality can improve nursing students' understanding, satisfaction, and knowledge of anatomy.

Keywords: Virtual reality, Immersive virtual reality, Nursing education, Anatomy education.