Innovations in Health Sciences Education Journal

Volume 1
Issue 3 *Spotlight on Scholarship 2023*

Article 3

3-29-2023

Immediate vs Delayed Feedback in a Progressive Musculoskeletal E-module Case for Clinical Reasoning Development

Keywords

Recommended Citation

Frazee, Megan; Gipson, Krista; Lyden, Elizabeth; and Langel, Stephanie (2023) "Immediate vs Delayed Feedback in a Progressive Musculoskeletal E-module Case for Clinical Reasoning Development," *Innovations in Health Sciences Education Journal*: Vol. 1 : Iss. 3 , Article 3.
Available at: https://doi.org/https://doi.org/10.32873/unmc.dc.ihsej.0020

Conference Proceedings: Spotlight on Scholarship 2023 *Innovations in Health Science Education Journal*
5

https://doi.org/10.32873/unmc.dc.ihsej.0020
https://digitalcommons.unmc.edu/ihsej/

Immediate vs Delayed Feedback in a Progressive Musculoskeletal E-module Case for Clinical Reasoning Development

Megan Frazee[1], Krista Gipson[1], Elizabeth Lyden[1], and Stephanie Langel[1]

Poster presented at the 2023 Spotlight on Scholarship at the University of Nebraska Medical Center, Omaha, Nebraska.

Outstanding Presentation Winner

Abstract

Purpose: Educators are responsible for developing clinical reasoning skills in Physical Therapy (PT) students. Simulated virtual experiences allow specific skills, such as clinical reasoning, to be learned and tested. Feedback is a critical component for consolidated learning; however, there is no consensus on the best timing of feedback. The purpose was to evaluate the impact of immediate versus delayed feedback through an e-module in PT students' accuracy in identifying the primary hypothesis, severity and irritability level for a virtual patient case. The secondary aim was to examine the longitudinal impact of the e-module by looking at the same outcome measures after a standardized patient (SP) simulation in addition to overall course grade Methods: Second year entry-level PT students were randomized to either receive immediate feedback throughout the case, or delayed feedback at the conclusion of the e-module. Fisher's exact test was utilized to detect any difference between feedback groups' performance on the e-module, SP simulation, or course grade, as well as any student demographic differences between groups. Students rated and qualitatively commented on satisfaction on learning activity. Results: 53 students gave consent and participated in the study. There was no statistical association for identifying the correct hypothesis, severity, or irritability ratings between feedback groups for the e-module and SP simulation or between course grade performance and feedback group assignment. ($p>.05$). The average student evaluation score was 8.59/10 (1 "not helpful at all" and 10 "incredibly helpful") and qualitative comments were positive regardless of feedback timing. Conclusions: Based on the results, the timing of feedback had no effect on outcomes in 2nd year PT students. As students prepare for clinical practice, reducing the frequency of feedback allows students to test their knowledge, in a low-stakes environment, to help prepare for situations where they will not have immediate feedback available.

[1]University of Nebraska Medical Center

Corresponding Author: Megan Frazee
Email: mfrazee@unmc.edu