

Title:

Stress, Performance, and Video-Assisted Debriefing

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References:

Cheng, A., Eppich, W., Grant, V., Sherbino, J., Zendejas, B., & Cook, D. A. (2014). Debriefing for technology-enhanced simulation: a systematic review and meta-analysis. *Medical Education*, 48(7), 657–666. <https://doi.org/10.1111/medu.12432>

Judd, B. K., Alison, J. A., Waters, D., & Gordon, C. J. (2016). Comparison of Psychophysiological Stress in Physiotherapy Students Undertaking Simulation and Hospital-Based Clinical Education: Simulation in Healthcare: *The Journal of the Society for Simulation in Healthcare*, 11(4), 271–277. <https://doi.org/10.1097/SIH.000000000000155>

Rossignol, M. (in press). Stress, Performance and Video-Assisted Debriefings. *Clinical Simulation in Nursing*.

Abstract Summary:

Experts frequently recommend use of video playback during debriefing, however, it is unclear if incorporation of video review increases stress and inhibits performance of trainees. Video recording of simulations did not negatively impact stress or performance in a randomized controlled trial.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner will be able to describe the current research in stress and performance and debriefing formats.	Discuss how the biopsychosocial model of challenge/threat can help explain the influence of stress on student performance. Describe potential benefits and barriers for use of video-assisted debriefings and the limited evidence for its use.
The learner will be able to discuss what the findings of the study add to the literature.	Students benefit from simulation-based learning opportunities that include motivated performances, repetitive practice, and facilitator-led debriefings.

Abstract Text:

Introduction:

Simulation instructors strive to create a learning environment that closely represents reality because recreating realistic health care situations can more substantially promote encoding and learning that prompts the acquisition of clinical knowledge and skills. Experts frequently recommend use of video playback during debriefing in order to add to learning, however, it is unclear if the incorporation of video review in the facilitated debriefing session increases stress and inhibits performance of trainees.

Methods

An overview of the theoretical and research literature in simulation with a focus on stress, performance and debriefing practices will be presented. Recommended features and types of debriefings held after simulation exercises will be reviewed. In particular, benefits and barriers of video-assisted debriefing will be discussed along with identification of outcomes that have been studied. Research findings will be described that measured stress responses and performance of nursing students in a repeat simulation and compared effects of two types of debriefing (Rossignol, in press, "Effects of Video-Assisted Debriefing"). In addition, implications of the published research such as what faculty can do to optimize the learning conditions of simulation experiences will be explored.

Results

Simulation experiences can be more stressful than actual clinical experiences with real patients (Judd et al., 2016). The conditions that may elevate stress and anxiety of learners in the simulation laboratory will be described. Research has demonstrated evidence in support of the effectiveness of debriefing, compared to no debriefing (Hamad, Brown, & Clavijo-Alvarez, 2007), whereas the question whether there is added or meaningful benefits with video review remains unclear (Cheng et al., 2014). Findings from a randomized controlled trial of facilitator-led debriefing groups: with and without video review, suggested that the video recording of simulations did not elevate anxiety or lower performance of participants (Rossignol, in press, "Effects of Video-Assisted Debriefing").

Conclusions

Video recording of simulation performances did not negatively impact learning conditions. Students benefit from simulation-based learning opportunities that involve motivated performances and feedback in debriefings. Facilitator-led debriefings, with or without video, can shape future performance.