Social validity of simulation training among nurses

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About This Study

Online learning is rapidly growing in popularity, but more research is needed on learner acceptance of different types of online training. The current study compared differences between traditional online training, computerized simulation training, and a blended learning approach combining both methods. Results suggest that all three types of training increased knowledge equally, but more learners enjoyed the simulation training than the traditional online course or the combination of courses.

> **Relias' simulation training provides enjoyable learning and practice in preventing avoidable re-admissions, with knowledge transfer similar to traditional online learning.**

Introduction

Virtual patient simulations have been shown to improve knowledge, clinical skills, and other skills when compared to no training, and show improvements similar to non-computerized training. However, there is little research comparing the effectiveness of these simulations to traditional e-learning[1]. Nurses generally have positive attitudes towards internet-based learning[2], with such learning improving knowledge and skills across a variety of outcomes, learners, contexts, and topics—similar in effectiveness to traditional classroom-based teaching methods. However, there has been less investigation comparing differing types of online learning[3]. The current study investigated the effectiveness and nurse enjoyment levels of an online simulation course, a traditional online learning courses, and a combination of both.

Intervention

We compared three intervention groups. The first group completed only an online simulation course. The course took the learner through three days on the floor as a nurse. Learners completed such tasks as identifying a change in condition, performing an assessment, performing a medication reconciliation, and communicating with various other health care professionals to treat a patient with heart failure and prevent them from being re-hospitalized. The second group completed two traditional online learning courses. The first covered proper management of heart failure, including an overview of the pathophysiology of heart failure, review of the clinical assessment, and appropriate medications and treatment. The second covered preventing re-hospitalizations in long-term care, including topics such as effective communication, and strategies to prevent re-hospitalizations. The third group completed both the simulation course and the online learning courses.

Study Results

Results indicated that all three groups performed similarly, increasing their knowledge by 10% after training, and maintaining that knowledge gain 40 days later. See Figure 1. Interestingly, the groups differed in their enjoyment in taking the courses and their interest in taking similar courses in the future. Participants who completed the simulation only were significantly more likely to strongly agree with the statement "I enjoyed this course/these courses more than most online learning I have taken." See Figure 2.

Fig. 1 - Knowledge Change over Time between Groups

Fig. 2 - I enjoyed this course/courses more than most online learning I have taken – Strongly Agree
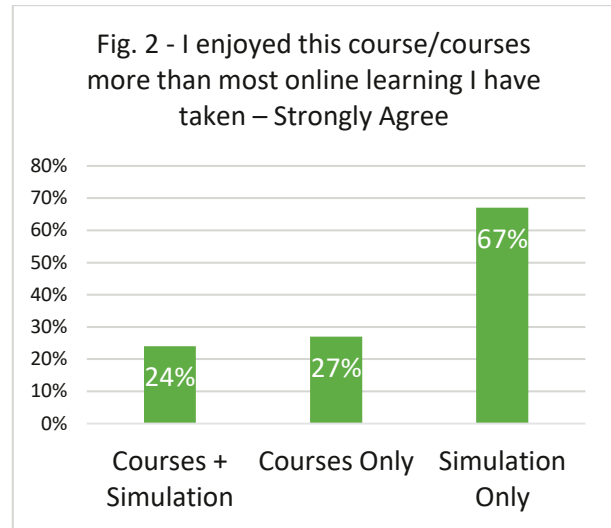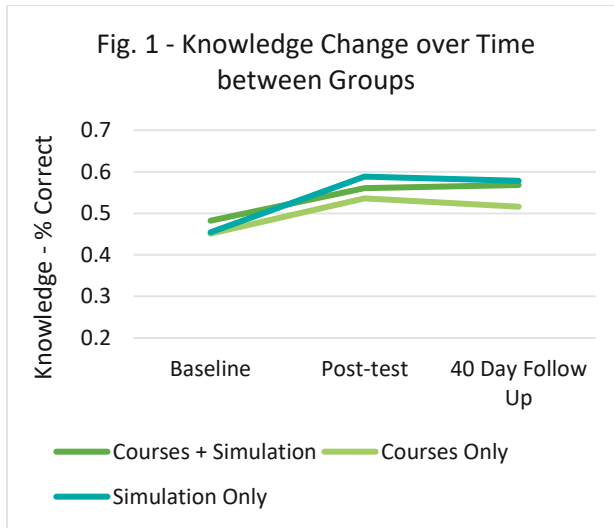
Summary

Results suggest that while there were no differences in knowledge gained between the different types of training, learners significantly enjoyed the simulation course more so than the traditional online learning courses. However, the knowledge assessments were fairly low both before and after training, indicating this measure may not be best suited to either this learner group or these courses. Future research should strive to utilize well validated assessments.

These results could have important implications for learner enjoyment and job satisfaction. As continuing education training is a requirement for all nurses, we should strive to find learning opportunities that are enjoyable for learners, while producing similar knowledge gains. Employee who are satisfied with training at their job also tend to have higher overall job satisfaction[4], and higher job satisfaction is often related to lower turnover[5]. Nurses are already highly accepting of online training in general[2], and finding the specific types of online training that are most enjoyable may be beneficial for job satisfaction and nurse retention.

References

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