Using a Combined Model of the Theory of Planned Behavior and the Technology Acceptance Model to Assess Radiologic Technology Educators' Intentions Toward Virtual Technology Use as a Result of the COVID-19 Pandemic

- Taylor C. Ward, Ph.D., R.T.(R)(CT)(MR)
- Leane B. Skinner, Ed.D.
- Elisha C. Wohleb, Ph.D.
- Chadwick A. Springer, Ph.D.

Abstract

A quantitative cross-sectional survey design was utilized to evaluate a combined model utilizing the theory of planned behavior and the technology acceptance model to investigate continuance intentions for virtual technology use (CITU) by United States radiologic science educators as a result of the COVID-19 pandemic. A total of 255 participants completed an online survey through Qualtrics. Results found that the overall regression model was statistically significant ($F5, 230 = 59.167$, $p < .001$) and explained about 56% of the variance in CITU ($R2 = .563$, Adj. $R2 = .553$). Attitude was the strongest predictor and mediated the effects of other predictors on CITU. Radiologic sciences educators with more positive attitudes toward using virtual technology, higher actual utilization, and more perceived usefulness were more likely to report higher intentions to continue technology use. The combined model was found to be an effective tool for measuring educators' CITU.

Academic Dishonesty Among Virtual Radiologic Technology Students During the COVID-19 Pandemic

- Kristin Beinschroth, M.P.H., R.T.(R), CHES®
- Jennifer Little, Ed.D., R.T.(R)(MR)
- Grishma Bhavsar, Ph.D.

Abstract

Education became complex for teachers who had to rapidly replace face-to-face radiologic sciences courses with virtual learning during the COVID-19 pandemic. This cross-sectional study sampled 170 radiology students in California using an online survey and investigated academically dishonest behaviors in virtual courses during the pandemic. Students are more likely to engage in academically dishonest behaviors in virtual courses than in face-to- face courses. Digital tracking software, like lockdown browsers, discouraged dishonest behaviors, whereas online access and increased stress/anxiety made students more likely to cheat. The findings of this study inform radiologic science educators of factors that affect students' cheating likelihood.

Model Manipulation and Learning in Higher Education: Evaluation of a Novel Method of Instruction for Magnetic Resonance Imaging Concepts

- Taryn Talbott, Ed.D., R.T.(R)(CT)(MR), MRSO(MRSC)
- Lynda Tierney Konecny, D.H.Ed., D.H.Sc., MCHES®

Abstract

This quasi-experimental non-equivalent research examined whether master-level physician assistant students improved their learning with a unique teaching methodology, defined as a memory maker, connecting advanced physics concepts to familiar objects. The memory maker cohort (2021) was compared to data from a historical control group (2020) taught using a traditional lecture format. Two instruments were used: an initial knowledge quiz and an attitude survey, with repeat testing at five months. Both groups had better comprehension at the initial quiz compared to repeat testing, where both
groups had a decrease in scores; the memory maker cohort had a larger decrease. The initial collection of
the memory maker group had improved scores, with repeat testing declining in both groups ($p<0.001$) and
significantly so for the memory maker ($p = .003$). Further research is recommended to explore unique teaching methodologies, duration, and repetition of instruction.