

Nursing Education Research Conference 2020

Evidence-Based Testing Practices in Nursing Education: Does Faculty Experience Count?

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Purpose:

The purpose of this research was to identify if there were statistically significant differences in the implementation of evidence-based testing practices between faculty of different levels of teaching experience, teaching at Baccalaureate nursing programs. Nurse educators must make important decisions regarding student progression and success in the nursing program. Faculty-developed written exams remain the most important assessment strategy to determine student progression used by nursing programs (McDonald, 2014; Oermann, Saewert, Charasika, & Yarbrough, 2009). Because these high stakes exams are used to make decisions about progression, it is essential that they are valid, reliable, and evidence-based (National League for Nursing [NLN], 2012; Oermann, et al., 2009; Spurlock, 2013). Evidence-based nursing tests promote critical thinking and enhance student learning and teaching practices (NLN, 2012; Spurlock, 2013). However, the majority of nurse educators have no formal training regarding construction of test items and are not implementing evidence-based methods of test construction (Grassley & Lambe, 2015; Halstead, 2013; McDonald, 2014; Ramsburg & Childress, 2012). Because evidence-based testing practices are not being implemented, a significant number of faculty-developed nursing test questions contain critical flaws, and the majority of these questions are written at low cognitive levels (Schroeder, 2013; Nedeau-Cayo, Laughlin, Rus & Hall, 2013; Tarrant & Ware, 2008). Flawed exams affect student performance on the exam and therefore, lead to false assumptions about student achievement (McDonald, 2014; Nedeau-Cayo et al., 2013; Tarrant & Ware, 2008).

Methods:

A causal comparative study using a convenience sample of 177 nurse educators teaching at Baccalaureate nursing programs across the United States was used to answer the research question. Faculty participants were grouped according to their level of teaching experience in years, based on Patricia Benner's (1984) from novice to expert theory (novice < 1 year, advanced beginner 1-2 years, competent 3 years, proficient 4-5 years, and expert > 5 years). All participants completed the best practices in test development survey, developed by Dr. Killingsworth to determine the frequency of the use of evidence-based testing practices by nursing faculty (Killingsworth, Kimble, & Studia, 2015). Individual and group means were calculated and a one-way Analysis of Variance (ANOVA) was used to identify significant differences between groups. Post Hoc analysis using the Tukey method was conducted to determine between which groups the significant differences occurred.

Results:

The expert group of nursing faculty had higher overall mean survey scores than the other four groups. In addition, the expert group had significantly higher mean survey scores than both the advanced beginner and proficient groups.

Conclusion:

As expected, the expert nurse educators had a higher incidence of implementation of evidence-based testing practices than the less experienced groups. This information can be used in nursing education programs to guide the decision-making regarding faculty development and mentoring programs regarding test item writing, analysis, and revision, as well as peer-review of faculty-developed test items.

Title:

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Keywords:

Education, Faculty and Testing

Abstract Summary:

Nurse faculty make important decisions about student academic performance and progression. Faculty-developed written exams remain the most important assessment strategy in nursing programs. Given the high-stakes nature of nursing exams, it is imperative that they are evidence-based. However, little is known about faculty who implement evidence-based testing practices most often.

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Author Summary: I have been a nurse educator since 2010 and I am currently the Director of a second-degree, accelerated Bachelor's of Science in Nursing program. My MS and PhD are in Nursing Education and I am a CNE. I have researched evidence-based testing in nursing education for the past 3 years.