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Development and Psychometric Evaluation of an Instrument to Measure Nursing Students' Attitudes Toward Pedagogical Research

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Purpose: While students' attitudes about nursing research are generally positive^{1,2,3,4} little is known about nursing students' attitudes toward pedagogical research. Several valid and reliable instruments exist to measure nursing students' attitudes toward research in professional practice^{1,5,6}; however, there are currently no instruments that measure students' attitudes specifically toward nursing education research in the published literature. An important step in addressing these gaps in knowledge is to develop and psychometrically test an instrument to measure students' attitudes toward nursing education research. The purpose of this study was to develop and psychometrically test the content and construct validity, and internal consistency and test re-test reliability of the Nursing Students' Attitudes towards Nursing Education Research Questionnaire (NSANERQ).

Methods: The 25-item NSANERQ was adapted from Nursing Students' Attitudes and Awareness of Research and Development in Nursing Scale that measured nursing students' attitudes toward nursing research in general.¹ The psychometric properties of the NSANERQ were assessed in three phases. In phase one, the tool was initially assessed for content validity through evaluation by a panel of three experts in instrument development and nursing education research. Each expert individually rated each item's relevance to nursing education research on a four-point scale. Changes were made to the NSANERQ based on expert feedback. The final 25-item version of the NSANERQ was again evaluated by a panel of five experts. In phase two and three, psychometric testing of the NSANERQ took place at a mid-sized private university in the Northeastern United States. A total of 205 baccalaureate nursing students participated in this prospective quantitative study: 156 participated in internal consistency reliability and construct validity testing (phase two), and 49 participated in test-retest evaluation (phase three). For test-retest reliability, data were collected two weeks apart. Data were analyzed using Cronbach's alpha for internal consistency reliability; exploratory and confirmatory factor analysis for construct validity; and Pearson's correlations for test-retest reliability.

Results: Initial scale-content validity (S-CVI) of the NSANERQ was low at 0.76. After revision, the final 25-item version of the NSANERQ demonstrated excellent S-CVI (0.92) with all individual items demonstrating excellent content validity (item-content validity index [I-CVI] ranging from 0.8 to 1.0). The NSANERQ also demonstrated evidence of construct validity; high internal consistency reliability ($\alpha=0.88$); and acceptable test-retest reliability over a two-week period ($r=0.71$).

Conclusions: The NSANERQ is a valid and reliable instrument that can be used to describe and evaluate changes in nursing students' attitudes toward pedagogical

research. Additional psychometric testing is warranted to evaluate validity and reliability in larger, more diverse samples of undergraduate nursing students.

Title:

Development and Psychometric Evaluation of an Instrument to Measure Nursing Students' Attitudes Toward Pedagogical Research

Keywords:

Instrument Development, Nursing Education Research and Student Attitudes

Abstract Summary:

This presentation will discuss the development and psychometric testing of a newly developed instrument designed to measure nursing students' attitudes toward nursing education research. Implications for future nursing education research will be presented.

References:

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