HESI APRN Standardized Testing Results Guided by Third Voice

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Citation

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Abstract
Standardized testing is an established credible and reliable educational assessment tool that measures Advanced Practice Registered Nurse (APRN) pre-professional certification exam preparedness. While the literature is plentiful related to standardized testing use in undergraduate education, limited evidence related to graduate level (APRN) nursing education can be found. Furthermore, no existing literature explores a strong theoretical underpinning that fits the role that standardized test results play in the educational process. Guided by the concepts of the three voices in the Reconceptualization of Vygotsky’s Theory of the Zone of Proximal Development (ZPD) leading to a specified goal outcome (attainment). The first two voices represent the educator, student, respectively, while standardized test results are conceptualized as the third voice. When the HESI APRN Exam is viewed through the conceptual framework of Third Voice, this strategy provides educators a clear plan to utilize testing results to direct remediation for APRN certification success.

INTRODUCTION
Standardized testing has become an accepted credible and reliable educational tool, used as a familiar strategy by nursing educators in assessing core competencies and clinical knowledge in preparation for licensure and certification.

Several secured, computerized testing products are available specifically for graduate nursing (APRN) faculty to use, such as Elsevier’s HESI Exit Exam, Advanced Practice Education Associates (APEA) Predictor Exams, Barkley & Associates, Inc. and the National League of Nursing (NLN) End of Program Exam (EPE) and Rosh Review Nurse Practitioner (NP) Comprehensive Exam. To understand the influence standardized testing has on nursing knowledge, conceptual frameworks must be identified and established. A review of the literature was completed to identify the conceptual models currently used to underpin how standardized testing is used in graduate nursing (APRN) educational programs.

METHODS
A systematic review was undertaken to identify conceptual models in studies that utilized standardized testing in nursing preparation for licensure and certification. Four evidence sources were searched, including CINAHL complete, Medline complete, Cochrane, and ERIC. Search terms used were computerized educational testing, educational testing, educational assessment, educational policy, exit exam OR exit test. Terms were searched with the Boolean connector “and” producing no results. Using the Boolean connector “or” produced 3,597 articles. The inclusion criteria applied
included publication dates from 2010 to 2018, English language which yielded 21 articles. Duplicates were removed after reading titles and abstracts. Twelve articles were identified after applying the inclusionary criteria of implementation of standardized testing, and report of outcomes. A separate search within the Virginia Henderson Global Nursing Online eRepository produced a Sigma Theta Tau presentation by Willson, and the presentation was included as grey literature. Thirteen reports are displayed in Table 1, showing conceptual frameworks used, types of nursing programs, findings, and discussions.
Note: NCLEX-RN= national council licensure examination; E2 PN HESI= HESI Exit Exam for practical nurses; HESI=Health Education Systems, Inc.; APRN=HESI-standardized test for advanced practice registered nurse; E2 HESI= HESI Exit Exam. Level of evidence: I= Systematic reviews of randomized-controlled trials or non-randomized trials; II=Single randomized- control trial or single non-randomized; III=Systematic review of correlational or observational study; IV= Single correlational or observational study; V=Systematic review of descriptive, qualitative or physiologic studies (adapted from: Politt & Beck, 9th edition, 2012).

FINDINGS

Eighty percent (n=10) of the articles focused on undergraduate nursing standardized testing using HESI NCLEX-RN, while two articles and one presentation
highlighted APRN graduate standardized testing using the HESI APRN Exam. Fifty percent (n=6) of the articles do not make reference to using a conceptual framework, while the other half, described using a specific conceptual framework when relating to standardized testing results and practices. The three commonly mentioned conceptual frameworks related to standardized testing and used in undergraduate nursing education were identified as: 1) the Classical Test Theory by Crocker and Algina, 2) the Critical Thinking Theory by Paul, and 3) the Reconceptualization of Vygotsky’s Theory of the Zone of Proximal Development by Eun, Knotek, and Heining-Boynton. Nibert and Morrison used the Classical Test Theory only. The other studies used a combined Classical Test Theory with the Critical Thinking Theory as a framework. While these theories give foundation to test item construction, development and validity, only two articles were found, in the literature, that address the implementation of standardized testing results for faculty and students. This first article by Barton, Willson, Langford and Schreiner (2015) utilized Eun, Knotek and Heining-Boynton’s Reconceptualization of Vygotsky’s Theory of the Zone of Proximal Development that lead to goal attainment as a conceptual framework, in a sample of diploma, ADN, and BSN nursing programs in relation to a policy for standardized testing. The second article, by Willson, Martinez-Anderson, and Throckmorton (2018) also referenced the work of Eun and colleagues,1 in their longitudinal study exploring HESI APRN predictive validity for national certification success among 114 graduate nursing (APRN) programs to underpin the conceptual framework of standardized testing research for their study. The 13 studies included two Level V systematic reviews and seven Level IV studies which demonstrate a strong quality of research design for evidence-based nursing education.

THIRD VOICE

The defining attributes of the Reconceptualized Theory the Zone of Proximal Development (Goal Attainment) by Eun, Knotek, and Heining-Boynton, include dialogue, development, and evaluation that can occur at any level in a variety of disciplines and circumstances. In this theory, three participants exist as “voices.” First voice represents the more experienced participant, such as the educator, second voice represents the inexperienced participant, such as the student, and third voice is the silent or inaudible participant, representing the objective influencer, conceptualized here, as standardized testing results. In the educational environment, the interaction or dialogue between the first (educator) and second voices (students) is considered active development, that is, where teaching and learning occur. The specified measurable space between attaining understanding and knowledge, defines the student’s transition from novice to mastery or goal attainment is called the Zone of Proximal Development (ZPD). At the time of evaluation, a standardized test is presented to the student by the educator, this is when Third Voice is awakened and manifests as the inaudible educational phenomenon that reveals the objective and authoritative results of the development (i.e., teaching and learning) that occurred or did not occur. The phenomenon of Third Voice expresses its duality in education and speaks to both, the educator and the student through its unbiased mechanism of results. Student outcomes, has been widely accepted as a principle driver for teaching. When applied to teaching, Third Voice offers educators and students a formative evaluation of their investment in the teaching and learning collaboration. Third voice provides a concise and strategic map for educators for guided remediation as they assist students towards their goal of attaining successful APRN certification. Simultaneously, informing the student of specific content strengths and weaknesses they need to address while in the zone of proximal development.

THIRD VOICE APPLIED

The phenomenon of Third Voice, has been experienced for many years, however, it was not clearly identified. The breakthrough work of Eun, Knotek, and Heining-Boynton’s Reconceptualized Theory of Vygotsky’s Zone of Proximal Development (ZPD) now identifies Third Voice and recognizes its role as an active, but invisible, inaudible participant in the educational process. The defining attributes of dialogue, development, and evaluation can occur at any level and in a variety of circumstances along the educational process continuum.
Dialogue between first and second voice reap rewards as teaching-learning occurs in the ZPD. However, dialogue must be tested to verify if development occurred. With standardized testing, objective results (ie, Third Voice) is evidence that development did or did not occur. The behaviors that follow by the educator and student are based on Third Voice. For the educator, Third Voice is the formative evaluation of the status of understanding and development of the student outcomes. Third Voice gives the educator a model that can be a step by step map to successful use of such tools as one-on-one tutoring/remediation, systematic self-study strategies, review books, targeted clinical experiences, and simulation to assist students to succeed. The interaction between Third Voice and first voice (the educator) moves the educator through their own zone of development to enhance their own knowledge and provide a focused approach for student development and goal attainment of passing the APRN certification exam.

For students, Third Voice revealed in the HESI APRN Exam Student Report is an individualized report that identifies APRN national standards of the profession and student’s rank compared to national norms. This report categorizes and highlights areas of need for strategic self-remediation that translates to an overview of student readiness prior to APRN certification. Similarly, the interaction between Third Voice and second voice (the student) moves the student through the ZPD to achieve developmental goal attainment of APRN certification success.

Additionally, Third Voice can be used as a continuous objective, authoritative appraisal of the effectiveness of the nursing program’s curriculum, informing the program administrators through the ZPD where program improvement can be addressed without bias if an objective weakness is found. Third Voice provides a guide or roadmap for educators, students and nursing programs to achieve a final developmental goal of APRN certification success.

DISCUSSION

The primary role of APRN education is to ensure that students meet the National Organization of Nurse Practitioner Faculties (NONPF) and American Association of Colleges of Nursing (AACN) Master’s Essentials criteria to become safe and competent primary care providers. Third Voice contributes objective evidence that acquisition of knowledge, skills, competency, teaching, curriculum, and evaluation of graduate education has been successfully achieved. Using evidence-based theoretical frameworks like Third Voice, empower both the educators in teaching and the students in learning for enhanced development that produces success. The challenge put forth in this article is to recognize, Third Voice as an ever-present partner in the educational process. It serves as an essential source of independent evidence to enhance the use of standardized APRN test results in APRN education and fosters student certification success.

Third Voice’s impact on nursing standardized testing outcomes warrants further exploration. With Third Voice as a guiding framework, evidence-based outcomes for testing products, directed remediation strategies, and timing for predictive testing should be measured not only for the field of nursing but for the various healthcare disciplines requiring licensing and certification testing.

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