Standardized Exam Scores As Predictor for NCLEX-RN Pass Rates in a Second-Degree Accelerated BSN Program

Nancy Haugen, PhD, RN  
School of Nursing, Samuel Merritt University, Oakland, CA, USA  
Nandini Dasgupta, MS  
Department of Institutional Research, Samuel Merritt University, Oakland, CA, USA

Purpose:

The purpose of this retrospective study is to determine what cut score on standardized exams offered within a second degree accelerated BSN program (ABSN) are the best predictors first-time NCLEX-RN pass rates. Second degree accelerated BSN programs is one innovative approach to nursing education (AACN, 2017). This type of program is helping to address the nursing shortage and the Institute of Medicine recommendation of increasing the proportion of US registered nurses with a baccalaureate degree to 80% by 2020 (IOM, 2010).

One measure of a nursing program effectiveness used by State Boards of Nursing and national accrediting bodies are its graduates’ first-time pass rate on the National Council Licensure Examination, Registered Nurse (NCLEX-RN). The emphasis is placed on the first-time pass rate as data shows higher failure rates for repeated NCLEX-RN takers compared to first-time exam takers (NCSBN, 2016). The impact of NCLEX-RN exam failure includes all of the global health care community and has a negative effect on the ongoing nursing shortage.

The impact of NCLEX-RN exam failure on the individual graduate “precipitates feelings of loss and perceptions of social stigma, factors which may interfere with further attempts at success” (Griffiths, Papastrat, Czekanski, & Hagan, 2004, pg. 323), not to mention the financial impact of lost wages. For nursing programs, to maintain professional accreditation, their graduates must achieve a benchmark first-time pass rate on the NCLEX-RN ® licensure examination. (CCNE, 2017). Lastly, for nursing organizations it means a smaller applicant pool from which to fill open positions (Roa, Shipman, Hooten, and Carter, 2011).

Nursing programs have implemented standardized testing requirements as one requirement assist in keeping graduates NCLEX-RN first-time pass rates high. A standardized test as defined by the National Council of Measurement in Education (2012), is an exam that has is the same for all individuals who take it. It is administered using the same testing procedures and method of scoring. Additionally, many nursing programs have implemented high-stakes testing policies for these standardized examinations. For high-stakes testing, students are required to meet certain scores on standardized exams to either continue in the program or to graduate (NLN, 2012: Santo, Frander, & Hawkins, 2013).

Publishers of standardized examinations provide schools with recommendations for what scores predict NCLEX-RN success based on nationwide data. Unfortunately, these studies do not differentiate among the types of entry-level nursing programs in the data (Zweighaft, 2013).

Students in accelerated programs are taught the nursing curriculum in a shortened time period of 12 to 18 months of full-time study (AACN, 2017). Given the rapid pace of ABSN programs and the impact of high stakes testing, it is important to determine appropriate standardized exam cut scores are important to assure program completion and NCLEX-RN success.

A review of the literature found few studies conducted on factors that predict success in second degree accelerated programs (Abbott, Schwartz, Hercinger, Miller, & Foyt, 2008, Penprase & Harris, 2013, and...
Kaddoura, Flint, Van Dyke, Yang, & Chiang, 2017). However, no studies were found that provide the best cut scores on standardized exams for second-degree accelerated BSN programs

**Methods:**

This retrospective study used a convenience sample of Accelerated BSN graduates from a private health sciences university in northern California. The sample for this study includes all graduates of the ABSN program from 2014-2017 who took the NCLEX-RN licensure exam. Data will be collected from a variety of sources. HESI exam scores will be obtained from the faculty access portal for evolve/Elsevier system. NCLEX-RN first-time pass obtained from the NCLEX-RN data sent to the University by the state board of registered nursing. Gender, ethnicity, age, admission, and program final GPA will be obtained from the Student Information System. All identifiers will be eliminated or masked by the director of institutional research to protect student confidentiality. Data will be merged from the different data sources to obtain a working dataset. Linear and binary logistic regression will be conducted to determine the predictors and threshold values for passing the NCLEX at the first attempt. Regression models will be evaluated to determine the best predictor model. This study is currently seeking IRB approval.

**Results:** This study is a work in progress. No results are currently available.

**Conclusion:** Conclusions will be reported at the meeting.

---

**Title:**

Standardized Exam Scores As Predictor for NCLEX-RN Pass Rates in a Second-Degree Accelerated BSN Program

**Keywords:**

High stakes testing, NCLEX-RN success and Standardized exams

**References:**


Abstract Summary:
This poster presents the development of a model for standardized exam scores as predictor for NCLEX-RN first-time pass rates in a second-degree accelerated BSN program.

Content Outline:
Introduction: One measure of a nursing program effectiveness used by State Boards of Nursing and national accrediting bodies are its graduates' first-time pass rate on the National Council Licensure Examination, Registered Nurse (NCLEX-RN). Many Nursing schools have implemented standardized examinations as method to assess student readiness for passing the NCLEX-RN examination. Additionally, many nursing programs have implemented high-stakes criteria for these standardized exams that impact student progression and graduation.

Body: One innovative nursing education model is the second-degree accelerated BSN program. Studies have shown that standardized exams are effective in evaluating students’ knowledge and ability to be successful on the first attempt taking the NCLEX-RN. These studies were conducted in generic BSN programs. No studies have been conducted to determine standardized exam cut scores that predict NCLEX-RN first-time pass rates in an accelerated second-degree program.

Conclusion: The proposed study is being conducted to determine the best predictor model for second-degree accelerated BSN programs.
Nancy Haugen, PhD, RN
Samuel Merritt University
School of Nursing
Associate Professor and Associate Dean, Prelicensure & RN to BSN Programs
Oakland CA
USA

Professional Experience: Recent Professional Experience: 2014-present- Associate Dean, Prelicensure & RN to BSN programs, Samuel Merritt University, Oakland, CA. 2007-2014 - Associate Professor and ABSN Program Chair, Samuel Merritt University, Oakland, CA. Responsible for development and implementation of program curricula. Co-author of a Nursing care plan textbook. Author and co-author of numerous presentations on multiple areas of nursing education relating to program development, transition, and diversity. Author of computer assisted instruction for multiple pharmacology textbooks. Education: PhD, 2000 - University of Florida, Gainesville, FL.- Physiological Nursing; MN-1985- Louisiana State University, New Orleans, LA. Cardiovascular Nursing and Nursing Education; BSN-1981 and ASN 1980 - Southern Adventist University, Collegedale, TN. Author Summary: Dr. Haugen is a nurse educator whose research interest is in nursing program development, diversity and indicators of student success.

Author Summary: Dr. Nancy Haugen has more than 25 years of experience in nursing and nursing education. Her areas of teaching include medical-surgical nursing, health assessment, pharmacology, and pathophysiology. Research interests include nursing program development, diversity, and indicators of student success. This poster is the initial project in determining indicators for student success on NCLEX-RN exam for second-degree accelerated BSN programs.

Any relevant financial relationships? Yes

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Description of Potential Conflict</th>
</tr>
</thead>
<tbody>
<tr>
<td>Royalty</td>
<td>Textbook and computer assisted instruction I author are published by Elsevier, owner of HESI - the publisher of the standardized exams utilized for this study.</td>
</tr>
</tbody>
</table>

Signed on 12/11/2017 by Nancy Haugen, PhD, RN

Second Author

Nandini Dasgupta, MS
Samuel Merritt University
Department of Institutional Research
Director of Institutional Research and Evaluation
Oakland CA
USA

student success metrics and processes. She has already implemented NCLEX predictor models in her current workplace which are used to determine applicant admission scores.

**Author Summary:** Nandini Dasgupta is a program evaluator and educational researcher. Her interest lies in assessment and evaluation of student success metrics and processes. She has already implemented NCLEX predictor models in her current workplace which are used to determine applicant admission scores.