

**Nursing Education Research Conference 2020**  
**Predicting Certification Success for the Family Nurse Practitioner**  
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**Purpose:**

High-stakes licensure or certification examinations are required for many health professions disciplines to ensure safe entry-level practice. Accrediting agencies set a benchmark for graduate first-time licensure or certification success as a measure of program effectiveness. Failures of graduates on licensure or certification examinations may directly affect the school's recruitment and retention of qualified students and faculty, as well as institutional financial viability. A health science university has added Health Education System, Inc. (HESI) standardized examinations using computer adaptive testing into the family nurse practitioner (FNP) master's program to support certification success. The literature at the undergraduate/prelicensure level was significant for correlation between first-time NCLEX-RN success and performance of HESI examinations. A gap was noted in the research on these advanced practice examinations as related to certification outcomes. Also noted, was that few graduate programs set a benchmark or included the examinations as part of a course.

**Methods:**

Guided by classical test theory, this study was an investigation of whether a relationship existed between students' performance on 4 HESI standardized examinations (Advanced Pathophysiology, Advanced Pharmacotherapeutics, Advanced Health Assessment, and the APRN/FNP Exit exam) and first-time FNP certification success.

**Results:**

Binary logistic regression analysis of data from 117 students who graduated between 2013–2016 indicated that none of the 4 standardized HESI examinations significantly predicted FNP certification success, perhaps due to the examinations not carrying any evaluative weight within the program. However, the advanced pathophysiology examination indicated a higher accuracy of prediction than the other 3 examinations.

**Conclusion:**

The outcomes of the study supported a recommendation for a standardized testing policy and progression standards for the graduate program. The policy provides a testing plan across the curriculum with requisite remediation to support future FNP certification success. The results of this project study may be used to promote positive social change by providing a means to improve first-time certification success and increasing the availability of primary care providers in the role of FNP.

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**Title:**

Predicting Certification Success for the Family Nurse Practitioner

**Keywords:**

Certification Success for FNP, Curriculum Assessment and Evaluation and Standardized Testing

**Abstract Summary:**

High-stakes licensure or certification examinations are required of many health professionals for disciplines to ensure safe entry-level practice. Guided by classical test theory, this study considered whether a relationship existed between students' performance on 4 HESI examinations and first-time FNP certification success.

**References:**

- APRN Joint Dialogue Group. (2008). Consensus model for APRN regulation: Licensure, accreditation, certification & education. Retrieved from [www.aacn.nche.edu/education-resources/APRNReport.pdf](http://www.aacn.nche.edu/education-resources/APRNReport.pdf)
- Attali, Y. (2016). Effort in low-stakes assessments: What does it take to perform as well as in high stakes testing? *Education and Psychological Measurement*, 76(6), 1045-1058. doi:10.1177/00131164416634789
- Crocker, L., & Algina, J. (1986). *Introduction to classical and modern test theory*. Belmont, CA: Wadsworth/Thomson.
- Lauer, M., & Yoho, M. (2013). HESI Exams: Consequences and remediation. *Journal of Professional Nursing*, 29(2S), S22-S27. doi:10.1016/j.profnurs.2013.01.001
- Morrison, S., Adamson, C., Nibert, A., & Hsia, S. (2008). HESI Exams: An overview of reliability and validity. *CIN: Computers, Informatics Nursing*, September/October, 39S-45S. doi:10.1097/01.nch0000336442.01671c6
- Willson, P., & Goodman, J. (2015). Standardized testing to predict APRN credentialing success: What is the science? *The Internet Journal of Advanced Nursing Practice*, 14(1). doi:10.3380/IJANP.32179

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**Author Summary:** I have been in the academic setting for many years. I am presently the Senior Associate Dean for Outcomes and Assessment. The integration of standardized testing across our programs are relevant to enhance our student and programmatic outcomes.