I NEED YOUR HELP
(Do you have Data?)

- If your program utilizes standardized assessments of any kind (HESI, ATI, Kaplan, etc.), I need your data!
- YES, for LPN/LVN, ADN, and BSN programs leading to licensure. The study requires 500 datasets. I have about 200.
- WHAT IS IN IT FOR YOU:
  - The results of the study and your program individually if the sample size is large enough.
  - My undying gratitude😊
- WHAT I NEED:
  - Standardized assessment scores from content specific and/or exit exams from the last 10 years for those students failing NCLEX on the first attempt.
  - Please let me know of your interest in participating in this important work to discover predictors of NCLEX failures. Email demory@uark.edu.

Using Standardized Assessments for Determining NCLEX Success
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Session Objectives

- Understand the widespread adoption of Standardized Assessments
- Recognize the best evidence surrounding Standardized Assessments
- Describe factors impacting students taking Standardized Assessments
- Compare and contrast high and low stakes testing
- Interpret the metrics of a Standardized Assessment
- Recognize considerations for policy development for implementing Standard Assessments
- Implement best practices for utilizing Standardized Assessments
Programs of nursing across the country and internationally have adopted Standardized Assessment packages to augment student success on NCLEX. A number of commercial vendors provide such products including; HESI, NLN, ATI, Kaplan and others.

Prevalence of Standardized Assessments

- According to NCSBN in 2014, 2347 programs leading to RN licensure in the US.
- ATI alone claims 2100 programs of nursing – both RN and LPN – utilize their products (atitesting.com).

How did we get here?
The Turn to Standardized Assessments

• US Educated
  • First attempt NCLEX-RN pass rates reported by NCSBN for 2016 is 84.57%;
  • First attempt NCLEX-PN pass rates reported by NCBSN for 2016 is 83.73%
  • First attempt NCLEX-RN pass rates reported by NCSBN for 2015 is 84.53%;
  • First attempt NCLEX-PN pass rates reported by NCBSN for 2015 is 81.89%

Repeat Success Rates

• US Educated
  • 2016 NCLEX-RN is 46.14%
  • 2016 NCLEX-PN is 34.84%
  • 2015 NCLEX-RN is 44.52%
  • 2015 NCLEX-PN is 34.53%

The Math

• Of the 157,882 RN candidates, 15.47% failed leaving 24,424 candidates unsuccessful and not entering the workforce.
• Of the 50,958 PN candidates, 18.21% failed leaving 9,279 candidates unsuccessful and not entering the workforce.
Evidence of Success

• Many studies support the use of standardized assessment to improve pass rates (Harding, 2010; Sosa & Sethares, 2016).

Evidence of Success

• Standardized assessments’ ability to predict NCLEX success is well documented (Adamson & Britt, 2009; Alameida et al., 2011; Bondmass, Moonie, & Kowalski, 2008; Emory, 2013; Harding, 2010; Langford & Young, 2010; Reiter, Young, & Anderson, 2007; Uyehara, Magnusson, Itano, & Zhang, 2007; Vandenhouten, 2008; Zweighaft, 2011).

Evidence of Success

• Exit examinations – also called predictors – have been found to correlate with or predict academic NCLEX-RN success.
• In a national study of 7126 participants taking a comprehensive predictor exit exam, successes were predicted 96% of the time if students scored between 90-100% probability.
• The limitation of end-of-program exit exams is the lack of opportunity for early intervention for students identified as at risk.
Evidence of Failure

• A well established method of remediation to improve NCLEX performance is unclear (Sosa & Sethares, 2016).

Evidence of Failure

• Predicting NCLEX failures has proven to be more difficult.
• Studies show the relationships between standardized comprehensive end-of-program exams and NCLEX-RN failure are not significant and inconclusive. The greatest percentage reported in multiple studies reached 33% (Emory, 2013).
• In one study, 16 at risk students taking NCLEX resulted in 12 passing on the first attempt.

Factors Impacting Performance

• What is the mental or emotional state?
• Did they receive a good night’s sleep?
• Were they distracted by others in the room?
• Do they suffer from test anxiety?
• Are they rushing to complete?
• Is the assessment taken seriously or are the students just filling in the blanks?
• Other?
All these factors have to be considered when looking at the results of student testing. I have seen students who score well everyday perform poorly on the standardized assessments.

Your experiences?

NLN Fair Testing Policy

http://www.nln.org/docs/default-source/about/nln-vision-series-%28position-statements%29/nlnvision_4.pdf?sfvrsn=4

Evidence on High Stakes Assessments

NCLEX is considered a high stakes test of competence with consequences for students, faculty and administration. High stakes assessments are used to make decisions on student progression and have serious consequences for students, teachers and administrators. ACT and SAT are high stakes because the score can determine admission to institutions of higher learning.
• High stakes assessments to determine progression give little feedback for quality improvement in programs of nursing since only those strong students are successful.
• The result of high stakes assessment policies is selection bias.
• Discussion of high stakes testing in nursing programs.

• DAYTONA BEACH -- Julia Brewer expected to be a nurse in the Navy by now. Brewer earned As and Bs for four years in Bethune-Cookman College's registered nursing program. The 21-year-old woman from Fresno, Calif., completed hundreds of hours of clinical training at local hospitals and felt well-prepared to pass a national nursing licensing exam. She never got the chance. Three weeks before graduation in May, Brewer and 14 of her 18 classmates found out they wouldn't get their degree because they hadn't done well on an exit exam the nursing school requires of all its seniors. That requirement has helped Bethune-Cookman to achieve a perfect record: 100 percent of its graduates from the past three years passed the national licensing exam for registered nurses on their first attempt.

The Other Side of the Coin

• Facing pressure from its accrediting body because too many graduates are failing the board exam and can't get their license, the school is fighting to stay alive.
Low Stakes Assessments

• Carry no significance and scores are not used to make decisions about course or program grades.
• The primary use is for assessing areas of weakness for improvement.
• Discussion of implications in low stakes use of standardized assessments.

Standardized Assessment Metrics

• Standardized Assessments are norm-referenced.
• Norm-referencing is the process of evaluating (and scoring) the learning of students by judging (and ranking) them against the performance of their peers (qualityresearchinternational.com).

Standardized Assessment Metrics

• Contrast with Criterion-referenced assessments.
• Criteria-referencing is the process of evaluating (and scoring) the learning of students against a set of pre-specified criteria. An example is unit or course exams. The test scores relate to a grade which compared to a standard for making judgements about performance or knowledge – grading scale.
Standardized Assessment Metrics

• When evaluating individuals and groups, comparisons should be made to the same program types. For example baccalaureate programs should be compared to other baccalaureate programs.

Standardized Assessment Metrics: What can be learned?
The assessment is both criterion and norm referenced!

What is known....

• Exit examinations or predictors can be very accurate to 96.4% to 98.5% on first attempts. What does this mean?
• Percentages decrease as student attempts approach 2nd, 3rd or more. First attempts at any standardized test is the best indicator of performance. In work by Carr (2011) standardized assessments were high stakes but allowed multiple attempts to pass. The result – 70% pass rate and warning status for the program.
Implementation of standardized packages across the curriculum can lead to higher NCLEX pass rates (Homard, 2013) and identification of at risk students earlier in programs of nursing (Emory, 2013).

What is Known.....

• Students failing NCLEX on the first attempt are 50% more likely to fail the second attempt as well.
• Predicting success seems to be the focus of standardized assessments. However, faculty use these scores to predict failure.

Considerations for Implementation

• Standardized assessments are not good predictors of failure (Emory, 2013; Spurlock, 2006; Yoem, 2013).
• Utilization of standardized assessments as the gatekeeper to graduation and NCLEX is not recommended (Spurlock, 2013).
  • Selection bias-only the strongest students are allowed to test
  • Questions about limitations for diverse students
  • Economic implications for students
Considerations continued....

- The exit examination or predictor alone should not determine progression to graduation and is considered to border on unethical educational practices. Instead, multiple ways of assessment should determine success or failure (Oermann & Gaberson, 2014).
- Content Mastery Assessment scores to consistently predict passing or failing lacks evidence (Emory, 2013).
- “Standardized tests are more appropriate for evaluation of groups than individuals” (Oermann & Gaberson, 2014, p. 337)

Best Practices for Utilization

- Standardized assessment packages implemented throughout the curriculum have resulted in better outcomes than exit examinations.
- Remediation plans are a key component for at-risk students. Early identification of students at-risk can allow programs of nursing to intervene with individualized plans for success (Oermann & Gaberson, 2014).

Best Practices for Utilization

- Inform students regarding the uses of standardized assessment scores in programs of nursing with associated policies.
- Standardized assessments can assist faculty in identifying areas of weakness for curriculum quality improvement.
- Standardized assessments can be a resource for determining the next step in teaching and learning strategies.
The Best Evidence to Predict NCLEX outcomes is......

• A meta-analysis revealed ACT, SAT and grades in the second year were found to be the best predictors of performance on NCLEX – passing or failing (Grossbach & Kuncel, 2011).
• These practices have been in place for a number of years.

Pearls of Wisdom

• No one assessment or test at one point in time should determine the success or failure of students. A pattern of performance across multiple assessments and multiple methods are the best indicators.
• Create medium stakes policies to utilize standardized assessments scores.

• How are standardized assessments used in your institutions?

? Thank You for Attending

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References—complete list upon request


