

4-2008

Comparing NET and ERI Standardized Exam Scores between Baccalaureate Graduates who Pass or Fail the NCLEX-RN

Mary D. Bondmass

University of Nevada, Las Vegas, mary.bondmass@unlv.edu

Sheniz Moonie

University of Nevada, Las Vegas, sheniz.moonie@unlv.edu

Susan Kowalski

University of Nevada, Las Vegas, susan.kowalski@unlv.edu

Follow this and additional works at: https://digitalscholarship.unlv.edu/env_occ_health_fac_articles

 Part of the [Community-Based Research Commons](#), [Education Commons](#), and the [Nursing Commons](#)

Repository Citation

Bondmass, M. D., Moonie, S., Kowalski, S. (2008). Comparing NET and ERI Standardized Exam Scores between Baccalaureate Graduates who Pass or Fail the NCLEX-RN. *International Journal of Nursing Education Scholarship*, 5(1), 1-15.

https://digitalscholarship.unlv.edu/env_occ_health_fac_articles/119

This Article is protected by copyright and/or related rights. It has been brought to you by Digital Scholarship@UNLV with permission from the rights-holder(s). You are free to use this Article in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/or on the work itself.

This Article has been accepted for inclusion in Environmental & Occupational Health Faculty Publications by an authorized administrator of Digital Scholarship@UNLV. For more information, please contact digitalscholarship@unlv.edu.

International Journal of Nursing Education Scholarship

Volume 5, Issue 1

2008

Article 16

Comparing NETTM and ERI Standardized Exam Scores between Baccalaureate Graduates Who Pass or Fail the NCLEX-RN[©]

Mary D. Bondmass*

Sheniz Moonie[†]

Susan Kowalski[‡]

*University of Nevada Las Vegas, mary.bondmass@unlv.edu

[†]University of Nevada Las Vegas, sheniz.moonie@unlv.edu

[‡]University of Nevada Las Vegas, susan.kowalski@unlv.edu

Comparing NETTM and ERI Standardized Exam Scores between Baccalaureate Graduates Who Pass or Fail the NCLEX-RN[©]

Mary D. Bondmass, Sheniz Moonie, and Susan Kowalski

Abstract

In the United States, nursing programs are commonly evaluated by their graduates success on the National Council Licensure Examination for Registered Nurses (NCLEX-RN[©]). The purpose of this paper is to describe a change in NCLEX-RN[©] success rates following the addition of standardized exams throughout our program's curriculum, and to compare these exam scores between graduates who pass NCLEX-RN[©] and those who do not. Our results indicate an 8.5% change ($p < 0.000$) in the NCLEX-RN[©] pass rate from our previous 5-year mean pass rate, and significant differences in standardized test scores for those who pass the NCLEX-RN[©] compared to those who do not ($p < 0.03$). We conclude that our selected standardized exam scores are able to significantly identify graduates who are more likely to pass NCLEX-RN[©] than not.

KEYWORDS: baccalaureate nursing graduates, NETTM, ERI, NCLEX-RN[©] pass rates

In the United States (U.S.), nursing programs are commonly evaluated by their graduates' success rate on the National Council Licensure Examination for Registered Nurses (NCLEX-RN©). While the ultimate purpose of nursing programs is to prepare safe practitioners, few nurse educators and program administrators would deny the importance of NCLEX-RN© success rate in the accreditation process. In light of the current U.S. nursing shortage, nursing programs are challenged to produce more graduates who can pass the NCLEX-RN© on their first attempt and enter into practice. This paper presents the scores of standardized exams administered to students in our baccalaureate degree nursing program, and compares these scores to graduates' success or failure on the NCLEX-RN©.

Our State legislature mandated the doubling of enrollment in our public University's school of nursing based upon our State's rank of being second to last in the number of U.S. of nurses per capita (Health Resources and Services Administration [HRSA], 2004). To accomplish this mandate with limited nursing faculty, our school developed a shortened four-level curriculum plan that is delivered over four consecutive semesters in 16 months. Students are admitted and graduated three times per year in our current year-round program.

Prior to 2004, our nursing curriculum consisted of five levels, delivered in five semesters with students admitted only in Spring and Fall semesters. Our admission criteria required a minimum 3.0 grade point average (GPA) on a 4-point scale, and at least a 3.0 grade for designated science courses. From 2000-2005 our program's retention rate was between 83-85%, and our mean NCLEX-RN© first-time pass rate was 80.9%. While our retention rate was acceptable, our NCLEX-RN© pass rate clearly needed improvement.

Our State's severe nursing shortage, combined with an admission waiting list of nearly 600 candidates in pre-nursing courses, encouraged faculty to re-examine our admission criteria and curriculum to improve NCLEX-RN© pass rates. We evaluated our admission criteria and new curriculum in a research format using a series of standardized admission and content exams to evaluate their possible relationship to NCLEX-RN© pass rates. Educational Resources, Inc. (ERI) published all standardized tests used in this investigation. These included the Nurse Entrance Test (NET™) and 16 ERI content exams (hereafter simply referred to as the ERI exams).

LITERATURE REVIEW

In their 10-year integrative review and meta-analysis of predictors for baccalaureate level student success, Campbell and Dickson (1996) reported that the quantitative variables most often studied included grade point averages (GPAs) including science, liberal arts, pre-nursing, nursing, college cumulative, and standardized tests; GPAs most consistently demonstrated significant correlation with graduation and NCLEX-RN[®] success. More recent primary research studies found that Scholastic Aptitude Test (SAT) verbal scores, American College Testing (ACT) scores, higher GPAs, higher scores in nursing courses, and above average scores on standardized tests predict NCLEX-RN[®] success for individuals graduated from all levels of degree programs. These tests included the National League for Nursing (NLN) Comprehensive Achievement Test, Mosby Assess Test, RN Entrance Examination, and Health Education Systems, Inc. (HESI) (Alexander & Brophy, 1997; Barkley, Rhodes, & Dufour, 1998; Beeson & Kissling, 2001; Beeman & Waterhouse, 2001; Briscoe & Anema, 1999; Daley, Kirkpatrick, Frazier, Misook, & Moser, 2003; Endres, 1997; Frith, Sewell, & Clark, 2006; Gallagher, Bomba, & Crane, 2001; Swenty, 1998; Wescott, 1997).

Standardized test scores, particularly HESI exams, are reported to be the most consistent predictors of NCLEX-RN[®] success. The type of programs studied included diploma, associate, and baccalaureate (Frith et al., 2006; Lauchner, Newman, & Britt, 1999; Newman, Britt, & Lauchner, 2000; Nibert & Young, 2001).

Despite the numerous predictive standardized test studies, few published reports specifically relate the use of NET[™] and/or ERI exams with NCLEX-RN[®] success in baccalaureate degree programs. In an unpublished dissertation, Rubino (1998) reported significant correlations between NET[™] scores and NCLEX-RN[®] success in an associate degree program. Others report the predictive value of the NET[™] (i.e., composite and/or subscale scores) for academic retention or NCLEX-RN[®] success (Abdur-Rahman, Femea, & Gaines, 1994; Ellis, 2006; Gallagher Bomba, & Crane, 2001; Sayles, Shelton, & Powell, 2003); however, these reports involved graduates from diploma and associate degree programs only.

Sayles et al. (2003) reported using both the NET[™] and ERI content exams for examining NCLEX-RN[®] success in an associate degree program (N= 68). They found that NET[™] math and reading composite scores and the ERI-PreRN overall score correlated with NCLEX-RN[®] success. No reports were found of

programs using ERI content exams exclusively for student evaluation of NCLEX-RN© success at the baccalaureate level.

Based upon the lack of baccalaureate level studies comparing NET™ and ERI scores with NCLEX-RN© success, we undertook this study to examine the relationship of these test scores to our graduates' outcome on the NCLEX-RN©. Indirectly, this research could also indicate whether or not the use of an entrance exam for admission and a standardized testing program throughout our new curriculum would have a positive impact on our school's NCLEX-RN© pass rate.

STUDY AIMS AND RESEARCH QUESTIONS

The specific aims of the study were to determine a) if our curriculum change would positively affect NCLEX-RN© pass rates, and b) whether NET™ (composite and subscale) and composite ERI exam scores differ between baccalaureate graduates who pass the NCLEX-RN© on their first attempt and those who do not.

The following research questions directed our study:

1. Will there be a change in NCLEX-RN© pass rates following our curriculum revision?
2. Are there significant differences in NET™ scores for graduates who pass NCLEX-RN© on their first attempt compared to those who do not?
3. Are there significant differences in ERI composite scores for graduates who pass NCLEX-RN© on their first attempt compared to those who do not?

METHOD

A descriptive design was used with a convenience sample consisting of 4 classes of students entering our consecutive 16-month baccalaureate nursing program during the period between Fall semester 2004 and Fall semester 2005. Subsequent NCLEX-RN© data were collected December, 2005 through May, 2007. The graduation semesters for the classes were Fall, Spring, Summer of 2005, and Fall 2006. The University's Office for Protection of Research Subjects approved this study protocol. All students in each class signed informed consent agreeing to participate; no students declined participation.

Procedure

Demographic data were collected from students and the NET™ was administered during each respective new-student orientation. Specific ERI content

exams were given during the four levels (semesters) of our new curriculum. Certain of the ERI exams were considered critical to progression to the next level in the program and achievement of at least the North American mean score was required. The critical ERI exams included *Fundamentals*, *Maternal-Child*, *Mental Health*, *Medical/Surgical-Adults I & II*, and the *Mock NCLEX*. These exams were chosen because they most resembled the content areas of the NCLEX-RN[®]. Students not achieving a passing score on the critical ERI exams were given two additional opportunities to retake each of the critical exams, but only after appropriate remediation was completed. Table 1 displays the specific exams and the program level in which each ERI exam was given.

Table 1

Program Level and Corresponding ERI Exams

Level in Program	ERI Exams
I	Normal Nutrition Fundamentals*
II	Growth & Development Pharmacology Gerontology Maternal-Child*
III	Critical Thinking Therapeutic Communication Mental Health.* Medical/Surgical -Adult I* Medical/Surgical Adult II*
IV	Pre RN Assessment RN Assessment Community Health Critical Care Nursing Mock NCLEX*

ERI = Educational Resources, Inc. *Exams with an asterisk are the critical exams which students must pass (equal to or above the North American mean) to progress; two retakes are allowed

INSTRUMENTS

Nurse Entrance Test (NET™)

The NET™ is a computer-based assessment to evaluate reading comprehension, mathematical skills, social skills, and learning styles. This is a standardized entrance exam used by almost 40% of accredited U.S. nursing programs. The test consists of an overall or composite score and 30 subscales. The North American mean NET™ composite and subscale scores may vary each year. At the time of data collection, the North American mean composite score used for this analysis was 61% (Educational Resources Inc., 2004, 2005, 2006).

Psychometric testing by Educational Resources, Inc., regarding the NET™'s composite score yielded a Cronbach's alpha of .89 (Simmons, Haupt, & Davis, 2004) indicating strong item scale reliability. The overall scores for the *Composite*, *Social Learning Style* and *Solitary Learning Style* scales also demonstrated statistical significance when regressed on the dependent variable of student status ($p < 0.01$). Additional reliability data can be found in the Technical and Developmental Reports from ERI (Simmons et al., 2004).

Simmons et al. (2004) reported on *content, criterion, and diagnostic validity* for the NET™. Content validity was established via a nationwide survey of nursing program directors, criterion validity by comparison with ACT scores, and diagnostic validity by the NET™'s ability to significantly identify expected deficiencies in the skills areas in the NET™ subscales.

Educational Resources Inc. Exams (ERI Exams)

Educational Resources, Inc. provides standardized tests and testing services, content remediation, and licensure examination review for undergraduate nursing and other health occupation students. Specific content exams are available in paper-and-pencil or computer-based format to evaluate students' comprehension of theory and clinical concepts, and assess their requisite knowledge for making accurate judgments in practice. For this discussion, these content exams are simply referred to as the *ERI exams*.

Our 16 selected ERI exams are computer-based. Each exam is divided into four sections including *topical issues*, *nursing process*, *client needs*, and *critical thinking*. Within each section there are additional sub-divisions. As a whole, each ERI exam yields an overall (composite) score as well as several subscales scores related to the four sections' sub-divisions of the exam. Only composite scores are

presented here because of space limitations; in-depth analyses of the multiple subscales for each test may be presented in future publications.

The publisher conducted the initial psychometric testing for the composite scores of the ERI exams to determine instrument reliability coefficients. Chronbach's alpha ranged from .63 (*Therapeutic Communication*) to .92 (*Gerontology*). Acceptable content, construct, and predictive validity are described in the Technical and Developmental Reports from ERI (Simmons, 2001).

Statistical Analysis

Descriptive statistics (e.g., frequencies, percentages, and means/standard deviations) were presented for the total sample, as well as for the two designated groups (those who passed NCLEX-RN[®], and those who did not). Percent change (Research Question 1) was calculated by (new value-original value)/original value) X 100. Independent *t*-tests were used to compare each two-group, univariate NET[™] composite and subscale scores, and composite ERI scores (Research Questions 2 and 3). Chi-Square analysis was used to compare any additional categorical data. A *p* value of ≤ 0.05 was considered statistically significant.

We attempted both univariate and multivariate logistic regression tests for possible predictive value of the NET[™] and ERI scores on NCLEX-RN[®] success. However, these analyses were not possible because the sample size and variance violated the assumptions of predictive statistical modeling (S. Moonie, personal communication, September 19, 2007).

RESULTS

Four classes totaling 187 students were enrolled in the study. Twenty-three students (12.3%) did not graduate from the program. One hundred sixty-one students completed and graduated; three additional students graduated in summer 2007. The retention rate during the collection period was 87.7% (Table 2).

Table 2

Demographics: Total Sample and Graduation Data

	Total Sample <i>n</i> = 187		Graduated* <i>n</i> = 164, 87.7%		Did Not Graduate <i>n</i> = 23, 12.3%	
Age						
Mean (<i>SD</i>)	25.8(7.5)		25.9(7.6)		25.1(7.3)	
Range	18-55		18-55		20-48	
Mode/Median	21/22		21/22		21/22	
	#	%	#	%	#	%
Classes						
Fall 2004	45	24.1	38	23.2	7	30.4
Spring 2005	50	26.7	42	25.6	8	34.8
Summer 2005	46	24.6	42	25.6	4	17.4
Fall 2005	46	24.6	42	25.6	4	17.4
Gender						
Male	25	13.4	18	11.0	7	30.4
Female	162	86.6	146	89.0	16	69.6
Ethnic Group						
White	89	47.5	82	50.0	7	30.4
Asian	62	33.2	52	31.7	10	43.5
Hispanic	16	8.6	15	9.1	1	4.3
Black or AA	10	5.3	8	4.9	2	8.7
Native American	2	1.1	2	1.2		
NA	8	4.3	5	3.0	3	13.0
Admission GPA						
3.00 - 3.24	55	29.4	44	26.8	11	47.8
3.25 - 3.49	41	21.9	38	23.2	3	13.0
3.50 - 3.74	38	20.3	36	22.0	2	8.7
3.75 - 4.00	45	24.1	41	25.0	4	17.4
NA	8	4.3	5	3.0	3	13.0

AA = African American; GPA = grade point average; NA = not available. *graduated group (*n* = 164) includes 3 current students in their final semester who are expected to graduate in Summer 2007)

Of the 161 students who completed the program, NCLEX-RN[©] data are available for 147 (3 students graduated in the spring 2007 and had not taken the NCLEX-RN[©] at the time of this analysis; NCLEX-RN[©] data cannot be found for the other 11 graduates). One hundred twenty-nine (87.8%) graduates passed the NCLEX-RN[©] on their first attempt; 18 graduates did not (12.2%) (Table 3).

Table 3

Demographics: Graduates with Available First Attempt NCLEX-RN[®] Data (n = 147)

	Total Available Data n = 147		Pass NCLEX n = 129, 87.8%		Did Not Pass NCLEX n = 18, 12.2%	
Age						
Mean (SD)	23 (7.79)		23 (8.07)		23.3 (4.57)	
Range	18-55		18-55		20-36	
Mode/Median	21/23		21/23		22/22	
	#	%	#	%	#	%
Classes						
Fall 2004	36	24.5	31	24.0	5	27.8
Spring 2005	40	27.2	33	25.6	7	38.9
Summer 2005	38	25.9	35	27.1	3	16.7
Fall 2005	33	22.4	30	23.3	3	16.7
Gender						
Male	17	11.6	15	11.6	2	11.1
Female	130	88.4	114	88.4	16	88.9
Ethnic Group						
White	76	51.7	69	53.5	7	38.9
Asian	46	31.3	39	30.2	7	38.9
Hispanic	12	8.2	8	6.2	4	22.2
Black or AA	8	5.4	8	6.2	0	
Native American	2	1.4	2	1.6	0	
NA	3	2.0	3	2.3	0	
Admission GPA						
3.00 - 3.24	36	24.5	28	21.7	8	44.4
3.25 - 3.49	33	22.4	30	23.3	3	16.7
3.50 - 3.74	34	23.1	28	21.7	6	33.3
3.75 - 4.00	41	27.9	40	31.0	1	5.6
NA			3	2.3	0	

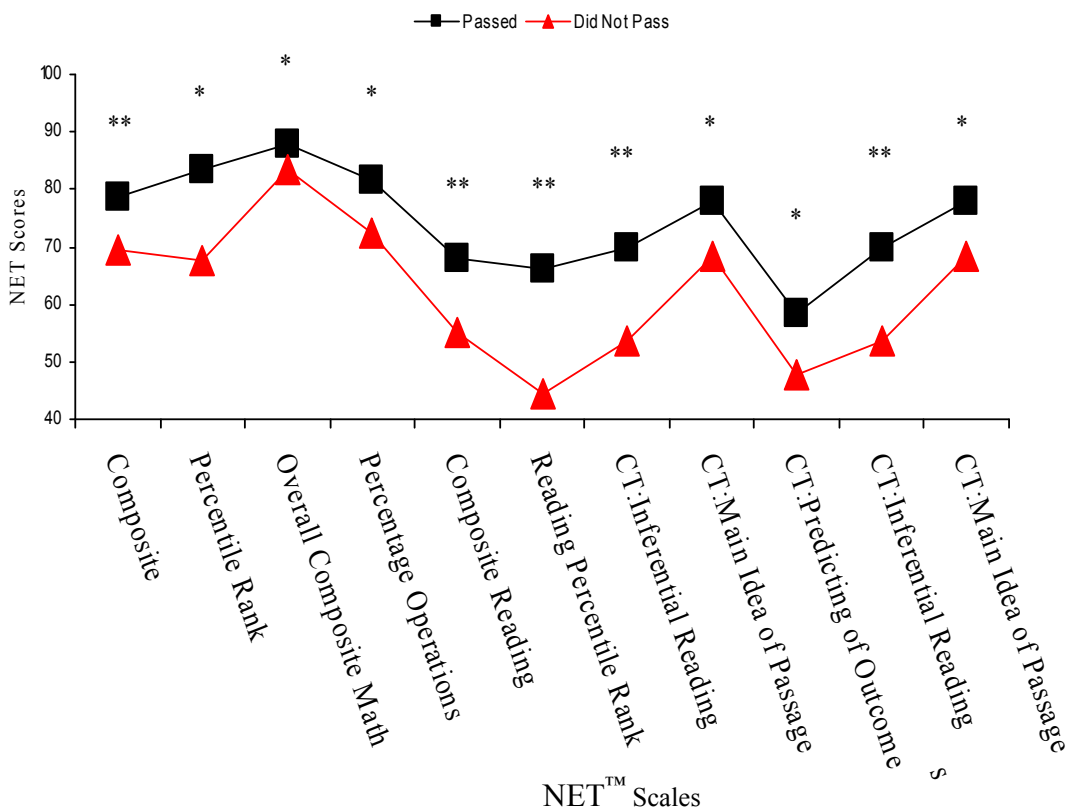
AA = African American; GPA = grade point average; NA = not available.

Research Question 1: Will there be a change in NCLEX-RN[®] pass rates following our curriculum revision?

There was a significant change in the first attempt NCLEX-RN[®] pass rate following our curriculum revision. The NCLEX-RN[®] pass rate for the study sample was 87.8%. This represents an 8.5% increase from the past 5-year mean pass rate of graduates from our previous curriculum ($p \leq 0.000$).

Research Question 2: Are there significant differences in NET™ scores for graduates who pass NCLEX-RN© on their first attempt compared to those who do not?

There were significant differences in the composite and several subscale scores for the NET™ (Figure 1 depicts the significant differences in NET™ scores). Graduates who passed NCLEX-RN© on their first attempt scored higher when compared to those who graduated but did not pass the NCLEX-RN©. The most notable scores were found in the overall *Composite*, *Composite Reading*, *Reading Percentile Rank*, and *Critical Thinking-Inferential Reading* scores (all $p \leq 0.000$). No significant differences were found in *Math (whole numbers, decimal, fractions, conversions, and algebra)*, *Reading Rate-words per minute*, the 2 *social interaction*, the 7 *stress level profiles*, or the 6 *learning styles* subscale scores.



CT = Critical thinking; NET™ = Nurse Entrance Test; * $p < 0.05$; ** $p \leq 0.000$

Figure 1. Significant Differences in NET™ Scores: Graduates Who Passed NCLEX-RN© Compared to Those Who Did Not Pass

The North American mean for the NET™ Composite score during the data collection period was 61%; however, only three graduates who did not pass NCLEX-RN® had NET™ Composite scores less than 61%. The mean [SD] NET™ composite scores were 78.4[7.9] for those who passed NCLEX-RN® compared to 69.5[9.6] for those who did not pass. We conducted a Chi-Square test comparing a cut off score of 70%, which was just above the mean of those who did not pass the NCLEX-RN®. The results indicated that 87.4% of the graduates who passed NCLEX-RN® had NET™ composite scores higher than 70%, compared to 55.6% for those who did not pass ($X^2 = 11.57, p = 0.001$) (Figure 2). The most recent North American means for the NET™ range from 69 to 71% (ERI, NET™ Instructor's Manual 2007).

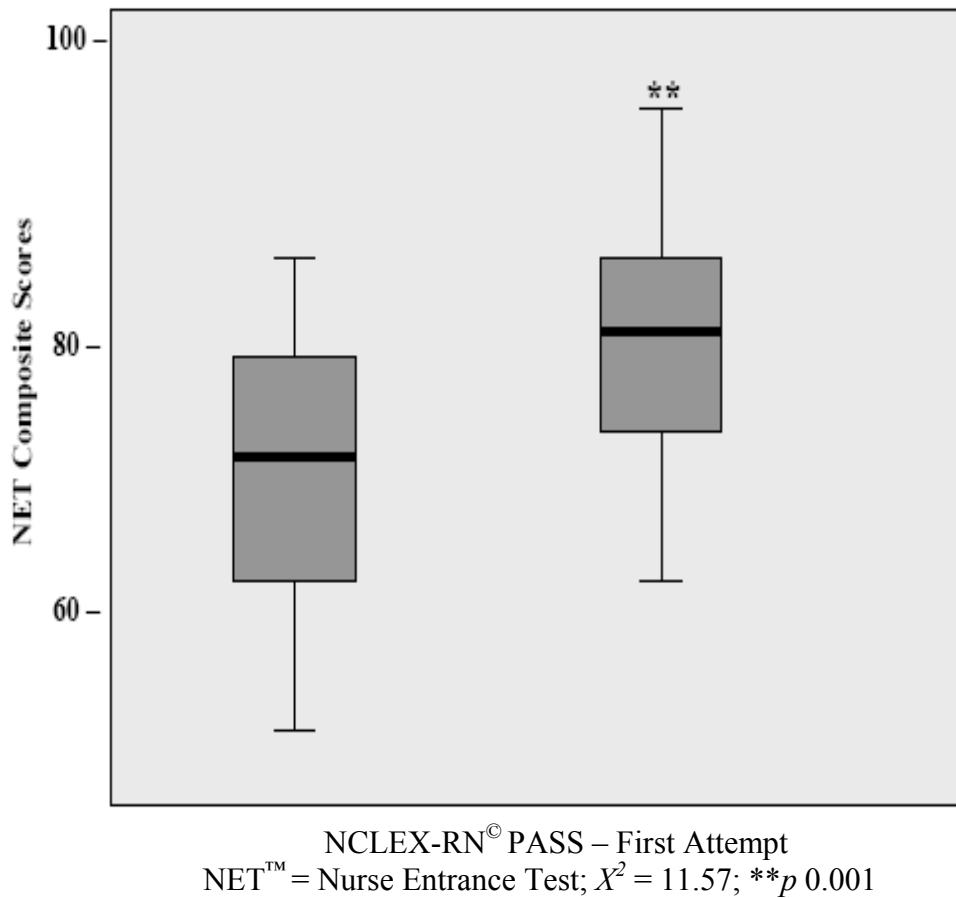
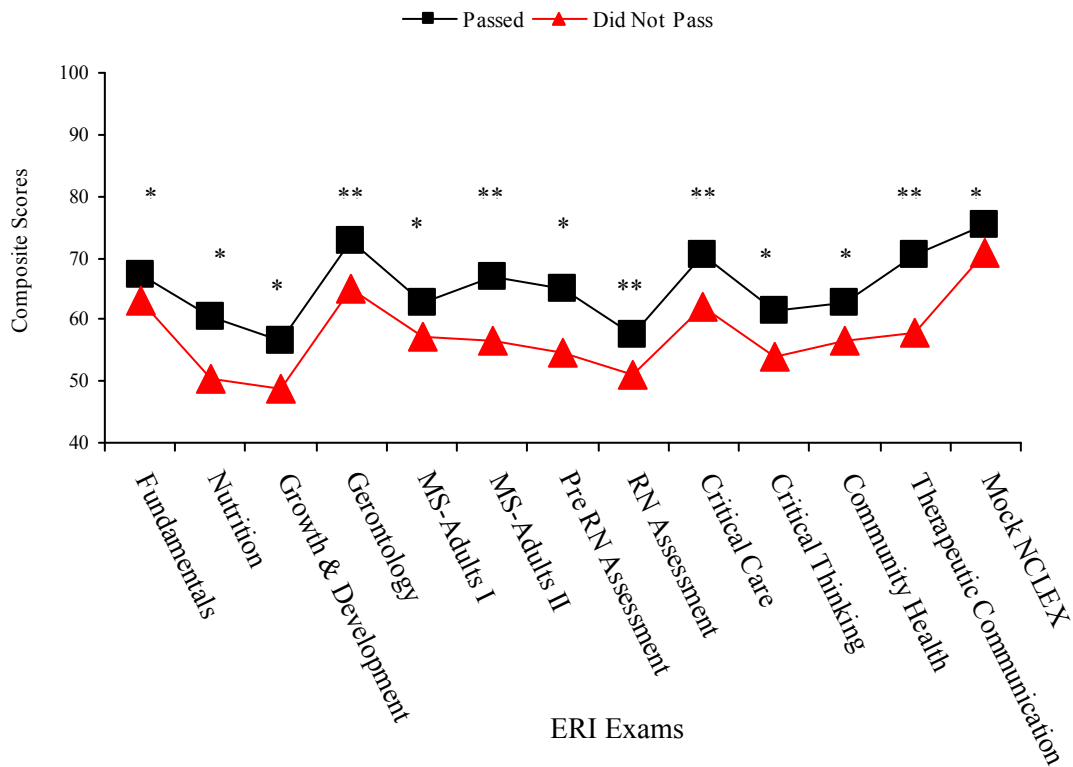


Figure 2. Comparison of Mean NET™ Scores for Graduates Who Passed NCLEX-RN® Compared to Those Who Did Not Pass

Research Question #3: Are there significant differences in ERI composite scores for graduates who pass NCLEX-RN® on their first attempt compared to those who do not?

The composite scores on 13 of the 16 ERI exams were significantly higher for graduates who passed NCLEX-RN® compared to those who did not pass ($p \leq 0.000 - 0.03$). Differences in scores for *Gerontology*, *Adult Care II* (medical-surgical), *Therapeutic Communication*, *Critical Care*, and *RN Assessment* were highly statistically significant ($p \leq 0.000$) (Figure 3 displays significant differences in ERI exam scores). Composite ERI scores for *Pharmacology*, *Anatomy and Physiology*, *Mental Health*, and *Maternal-Child* were all higher for the graduates who passed NCLEX-RN®, although statistical significance was not reached.



MS = Medical Surgical; * $p < 0.005$; ** $p \leq 0.000$; ERI = Educational Resources, Inc.

Figure 3. Significant Differences in ERI Composite Scores: Graduates Who Passed NCLEX-RN® Compared to Those Who Did Not Pass

DISCUSSION

There was a positive impact following our program's curriculum change from five to four semesters and the inclusion of a standardized testing program. A statistical improvement in NCLEX-RN[®] pass rates was demonstrated when compared to graduate pass rates in the 5 previous years. Additionally, our results indicate that graduates who passed the NCLEX-RN[®] had statistically higher NET[™] scores upon admission, and scored significantly higher on 13 out of 16 ERI exams.

Only three students who did not pass NCLEX-RN[®] received scores below the North American NET[™] mean of 61%. Comparing our students to the North American mean was of little value when our graduating sample mean ($n = 147$) was 77.5 ± 8.73 (range 52 - 95, median 79, mode 83). When our students were divided by NCLEX-RN[®] *pass* versus *not pass* and compared by the sample mean instead of the traditional benchmark of the North American mean, significant differences were found. This finding suggests a large variance between the North American and the sample's mean. The sample mean (or median if the distribution is skewed) may be more useful than the North American mean in identifying cut-off scores for 'at-risk' students. This finding may have critical implications for the weighting of future program admission cut-off scores. In addition to the composite cut-off score, the NET[™]'s subscale mean scores for the sample may require more attention and research rather than just arbitrarily using the North American means for each.

While we did not specifically plan to examine GPAs between those who passed NCLEX-RN[®] and those who did not, these data were analyzed. Higher GPAs were not noted to be significantly correlated with students' NCLEX-RN[®] success, nor were there significant differences between those who passed NCLEX-RN[®] and those who did not pass. Our data were therefore not consistent with those of Campbell and Dickson (1996), who noted in their 10-year integrative review and meta-analysis that GPAs most consistently demonstrated significant correlation with graduation and NCLEX-RN[®] success. A possible explanation for this discrepancy is that our students are required to have at least a 3.0/4.0 prior to entering our program which may dilute the GPA effect (Table 2).

With the exception of SAT/ACT scores and GPAs, the results of our study were consistent with some of the more recent primary research studies indicating that above average scores on standardized tests correlate with NCLEX-RN[®] success for individuals graduated from all levels of degree programs (Alexander & Brophy, 1997; Barkley et al., 1998; Beeson & Kissling 2001;

Beeman & Waterhouse, 2001; Briscoe & Anema, 1999; Daley, et al., 2003; Endres, 1997; Frith et al. 2006; Gallagher et al., 2001; Swenty, 1998; Wescott, 1997).

Standardized test scores, particularly HESI exams, were the most consistent predictors of NCLEX success (Frith et al., 2006; Lauchner, et al., 1999; Newman et al., 2000; Nibert & Young, 2001). It is difficult to definitively compare our study results with those of the HESI researchers because the type of programs studied by the latter included diploma, associate, as well as baccalaureate; we found no published data regarding NET™ and/or ERI exams with NCLEX-RN© success exclusively in baccalaureate degree programs.

It is our faculty's belief that students with lower standardized exam scores may require interventions to increase their knowledge level to a point where they can achieve higher scores on selected standardized tests. However, further research is needed to determine what interventions may increase their knowledge.

A variable of interest, which may be a limitation and/or strength of this study, is found in the ethnic distribution of the sample. Tables 2 and 3 depict approximately one-third of the total sample as Asian (includes Hawaiian and Pacific Islanders) and includes very low percentages of Hispanics and African Americans. This ethnic distribution, while similar to our previous student populations, does not reflect the student population of our University as a whole, the general population of our County, State, or the U.S. When divided by ethnic groups, we did not find any significant differences in NET™ and ERI scores for graduates who passed NCLEX-RN©. However, the possibility of a Type II statistical error exists because of the small numbers involved in our analyses. Research with larger sample sizes may be needed to determine if ethnic affiliation impacts nursing education and the successful passage into practice.

The sample size limited our ability to conduct predictive modeling statistics. Because predictive analyses were not possible and no prior studies utilized both the NET™ and ERI exams in baccalaureate programs for NCLEX-RN© success, the results of this study cannot be directly compared to studies presented in the literature review.

CONCLUSION

Students with higher scores on ERI standardized tests have a greater likelihood of passing the NCLEX-RN© than students with lower scores. Changing the curriculum plan of our program from five to four semesters with the inclusion

of the ERI standardized testing program has positively impacted our NCLEX-RN[®] pass rates. Additionally, we believe these data represent the first report in the nursing education literature of a baccalaureate program's research utilizing both the NET[™] and ERI exams as measures of potential NCLEX-RN[®] success.

REFERENCES

- Abdur-Rahman, V., Femea, P. L., & Gaines, C. (1994). The nurse entrance test (NET): An early predictor of academic success. *ABNF Journal*. (Winter), 10-14.
- Alexander, J. E., & Brophy, G. H. (1997). A five-year study of graduates' performance on NCLEX-RN. *Journal of Nursing Education*, 36, 443-445.
- Barkley, T. W., Rhodes, R. S., & Dufour, C. A. (1998). Predictors of success on the NCLX-RN among baccalaureate nursing students. *Nursing and Health Care Perspectives*, 9, 132-137.
- Beeman, P., & Waterhouse, J. (2001). NCLEX-RN performance: Predicting success on the computerized examination. *Journal of Professional Nursing*, 17, 158-165.
- Beeson, V. J. & Kissling, G. (2001). Predicting success for baccalaureate graduates on the NCLEX. *Journal of Professional Nursing*, 17, 121-127.
- Briscoe V., & Anema, M. (1999). The relationship of academic variables as predictors of success on the National Council Licensure Examination for Registered Nurses (NCLEX-RN) in a selected associate degree program. *ABNF Journal*, 10(4), 80-83.
- Campbell, A., & Dickson, C. (1996). Predicting student success: A 10-year review using integrative review and meta-analysis. *Journal of Professional Nursing*, 1247-59.
- Daley, I., Kirkpatrick, B., Frazier, S., Misook, C., & Moser, D. (2003). Predictors of NCLEX-RN success in a baccalaureate nursing program as a foundation for remediation. *Journal of Nursing Education*, 42, 390-393
- Educational Resources, Inc. (2004). NET[™] Instructor's Manual: Forms A. Shawnee Mission: KA.
- Educational Resources, Inc. (2005). NET[™] Instructor's Manual: Forms A. Shawnee Mission: KA.
- Educational Resources, Inc. (2006). NET[™] Instructor's Manual: Forms A and B. Shawnee Mission: KA.
- Ellis, S. O. (2006). Nurse Entrance Test scores: A predictor of success. *Nurse Educator*, 31, 259-263.
- Endres, D. (1997). A comparison of predictors of success on NCLEX-RN for African American, foreign-born, and white baccalaureate graduates. *Journal of Nursing Education*, 36, 365-371.

- Frith, K. H., Sewell, J. P., & Clark, D. J. (2006). Best practices in NCLEX-RN readiness preparation for baccalaureate student success. *Computers in Nursing, 23*, 322-329.
- Gallagher, P., Bomba, C., & Crane, L. (2001). Using an admissions exam to predict student success in an ADN program. *Nurse Educator 26*, 132-135.
- Health Resources and Services Administration (HRSA). 2004 Preliminary Findings: 2004 National Sample Survey of Registered Nurses <http://www.bhpr.hrsa.gov/healthworkforce/reports/rnpopulation/preliminaryfindings.htm#tablea>. Retrieved January 18, 2008.
- Lauchner, K. A., Newman, M., & Britt, R. B. (1999). Predicting licensure success with a computerized comprehensive nursing exam: The HESI exit exam. *Computers in Nursing, 17*, 120-125.
- Newman, M., Britt, R. B., & Lauchner, K. A. (2000). Predictive accuracy of the HESI exit exam. *Computers in Nursing, 18*, 132-136.
- Nibert, A. T., & Young, A. (2001). The third study on predicting NCLEX success with the HESI exit exam. *Computers in Nursing, 19*, 172-178.
- Rubino, N. D. (1998). An analysis of pre-admission test scores and their relationship to successful outcomes for students in an associate degree-nursing program at Wesley College. Unpublished dissertation. Wilmington College.
- Sayles, S., Shelton, D., & Powell, H. (2003). Predictors of success in nursing education. *ABNF Journal 14*, 116-121.
- Simmons, L. E. (2001). Reliability and validity technical status report. *Technical and Developmental Report*. Research Department, Educational Resources, Inc. Shawnee Mission: KA
- Simmons, L. E., Haupt, G., & Davis, L. (2004). The usefulness of the Nurse Entrance Test (NET) for prediction of successful completion in a nursing program. *Technical and Developmental Report*. Educational Resources, Inc. Shawnee Mission: KA
- Swenty, C. F. (1998). Use of the RNEE, ACT, and grades as predictors of success in associate degree nursing programs. *Dissertation Abstracts International. 36*(05), 1333. University Microfilms No. 1389177
- Wescott, C. L. (1997). The effectiveness of admission criteria in predicting academic success for baccalaureate nursing students. *Dissertation Abstracts International. 58*(08B), 4151, University Microfilms No. 9805076.