SELF-ESTEEM, LOCUS OF CONTROL, AND FIRST-TIME PASS ON NCLEX-RN® OF BACCALAUREATE NURSING STUDENTS

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Introduction & Background

A shortage of registered nurses jeopardizes public safety as demands for quality health care escalate (American Association of Colleges of Nursing, 2009; Aube, 2010; Boyd, 2011; Buerhaus, 2009; Carrick, 2011; Gorski et al., 2015; HRSA, 2010; U. S. Department of Health, 2006; Villarruel et al. 2015).
Problem Statement

• World wide shortage of registered nurses (RNs).

• Nationally first-time failure rates of one in five on NCLEX-RN® for baccalaureate graduates affect the supply of RNs and patient outcomes (Carrick, 2011; Gorski et al., 2015; Norton et al., 2006).

• Specifically inconsistent first-time pass rates on NCLEX-RN® for graduates of HBCUs ranged from 39% to 97% in 2004-2009 (National Council of State Boards of Nursing, 2009).
Purpose of the Study

Quantitative, descriptive, and correlational research design was used to examine the relationship between self-esteem, locus of control, and first-time pass on National Council Licensure Examination for Registered Nurses (NCLEX-RN)® of senior nursing students enrolled in baccalaureate programs at two Historically Black Colleges and Universities (HBCUs) in the southeastern USA.
Research Questions

1. What is the statistical relationship between self-esteem and first-time NCLEX-RN® pass rate?

2. What is the statistical relationship between locus of control (LOC) and first-time NCLEX-RN® pass rate?

3. What is the statistical relationship between LOC and self-esteem?

4. What is the statistical relationship between self-esteem, LOC, and first-time pass rate on NCLEX-RN®?
Theoretical Framework

![Diagram showing the theoretical framework with nodes for student nurse, self-esteem (high and low), locus of control (internal and external), graduate nurse, and first-time pass on NCLEX-RN®.]

*Figure 1. Theoretical framework*
Research Methods

• Non-experimental, quantitative, correlational design.

• Cross-sectional surveys and archival data
  – Rosenberg’s Self-Esteem Scale
  – Julian B. Rotter’s Internal-External Locus of Control Scale
  – Demographic survey (age, gender, ethnicity)
  – Report of NCLEX-RN pass/fail (coded key)

• Correlation coefficient

• Logistic regression-binary & multiple
### Descriptive Statistics for Participant Demographics

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
</tr>
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<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
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<tr>
<td>Female</td>
<td>74</td>
<td>82.2</td>
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<tr>
<td>Male</td>
<td>16</td>
<td>17.8</td>
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<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
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<tr>
<td>20 – 25</td>
<td>51</td>
<td>56.7</td>
</tr>
<tr>
<td>26 – 31</td>
<td>15</td>
<td>16.7</td>
</tr>
<tr>
<td>32 – 40</td>
<td>20</td>
<td>22.2</td>
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<tr>
<td>41 – 50</td>
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<td>51 or older</td>
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<tr>
<td><strong>Ethnicity</strong></td>
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<td>13.5</td>
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<tr>
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<td>4.5</td>
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<tr>
<td>Other</td>
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Results: First-time Pass on NCLEX-RN

<table>
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<tr>
<th>Observed</th>
<th>Estimated</th>
<th>NCLEX-RN®</th>
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<tbody>
<tr>
<td></td>
<td>First-time failure</td>
<td>First-time pass</td>
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<tr>
<td>First time failure</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>First time pass</td>
<td>0</td>
<td>75</td>
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</table>

Overall Percentage: 83.3
Results: Research Question 1

• Failed to reject the Null Hypothesis. $H_{10}$: There is not a statistically significant relationship between self-esteem and first-time pass on NCLEX-RN®.

• The Sig. value (.839) for self-esteem was statistically insignificant at $p > .05$. Inaccurate estimates of first-time pass on NCLEX-RN® for participants ($N=15, 16.3\%$) who failed to pass NCLEX-RN® indicated that level of self-esteem was not a determinant of first-time failure.
Results: Research Question 2

• Failed to reject $H_{20}$: There is not a significant relationship between locus of control and first-time NCLEX-RN® pass rate. The model indicated that internal locus of control was a statistically insignificant forecaster of first-time passage on NCLEX-RN®, $c^2 (1) = 1.14$, $b = -0.10$, $R^2 = .02$, $p > .05$.

• The regression coefficient ($\beta = -0.10$) was not statistically significant at $p > .05$. 
Results: Research Question 3

• The Null Hypothesis for Research Question 3. H3₀: There will not be a statistically significant relationship between locus of control and self-esteem.

• The Pearson product moment correlation coefficient (see Figure 2.) revealed a significant positive relationship between locus of control and self-esteem, $r = .36, p < .01$. A positive coefficient indicates a positive relationship where high values on self-esteem were related to high values on internal locus of control.
Results: Research Question 4

- Failed to reject Null Hypothesis 4: There was not a statistically significant relationship between self-esteem, locus of control, and first time pass rate on NCLEX-RN®. The model failed to identify the 15 (16.7%) participants who failed to pass the NCLEX-RN® on first attempt.

- The omnibus model was not a significant indication of graduates’ first time success on the NCLEX-RN®, $c^2 (2) = 1.54, R^2 = .03, p > .05$. $R^2$ indicates the percentage of variance in the dependent variable (first time pass on NCLEX-RN®) explained or associated with both independent variables (self-esteem and locus of control) together.
Recommendations

• Replication of the study with larger samples of senior nursing students using random sampling.
• Focus on the graduates who failed the NCLEX-RN®.
• Include other non-academic variables (i.e. marital status, children, work status, & years to graduation.
• Include academic predictors i.e. GPA, science grades, grades in nursing courses, & scores on predictor examinations.
• Include weekly remediation.
References


References continued


References continued


References continued


