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

Dr. Pamella Ivey Chavis
Sigma Theta Tau International Research
Congress
July, 2015

## 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 firsttime 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

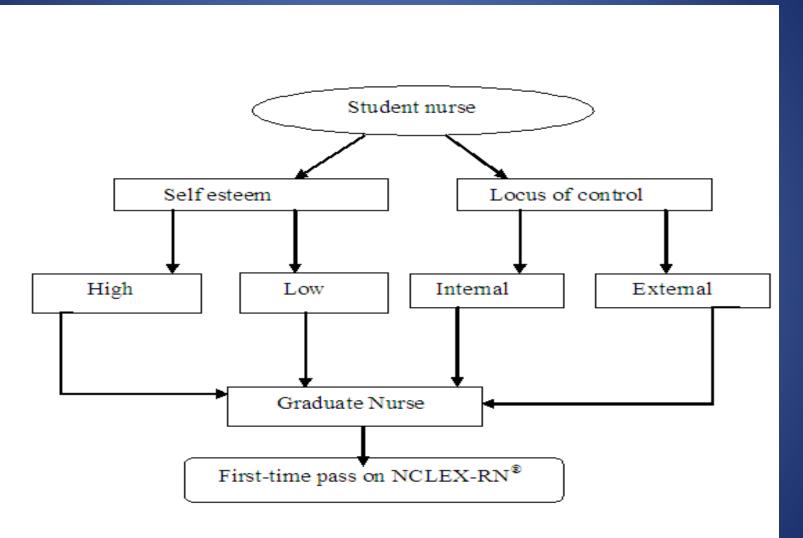


Figure 1. Theoretical framework

#### 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

# Demographics

Descriptive Statistics for Participant Demographics					
Variable		N	%		
Gender					
	Female	74	82.2		
	Male	16	17.8		
Age					
	20-25	51	56.7		
	26 – 31	15	16.7		
	32 - 40	20	22.2		
	41- 50	3	3.3		
	51 or older	1	1.1		
Ethnicity					
	African	3	3.4		
	African American	67	75.3		
	American Indian	1	1.1		
	Caucasian	12	13.5		
	Hispanic	1	1.1		
	Multi-Racial	4	4.5		
	Other	1	1.1		

### Results: First-time Pass on NCLEX-RN

Classification Table for Model 1-4

Classification Table for Model 1-4							
Observed		Estimated NCLEX-RN®					
		First-time failure	First-time pass	Percentage			
				Correct			
NCLEX- RN <sup>®</sup>	First time failure	0	15	0.0			
1011	First time pass	0	75	100.0			
Ov	erall Percentage			83.3			

- Failed to reject the Null Hypothesis. H1<sub>0</sub>: There is not a statistically significant relationship between self-esteem and first-time pass on NCLEX-RN<sup>®</sup>.
- 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.

- Failed to reject  $H2_0$ : 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.

• The Null Hypothesis for Research Question 3. H3<sub>0</sub>: There will not be a statistically significant relationship between locus of control and selfesteem.

• 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.

- 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

- American Association of Colleges of Nursing. (2009). *Nursing shortage fact sheet*. Retrieved from http://www.aacn.nche.edu/Media/FactSheets/NursingShortage.htm
- American Association of Colleges of Nursing. (2014). *Nursing shortage*. Retrieved from http://www.aacn.ncnche.edu/Media/NursingShortage.htm
- American Nurses Association. (2009). Statement of the American Nurses

  Association to the United States Senate Committee on Finance regarding

  workforce issues in health care reform: Assessing the present and preparing for
  the future. Retrieved from <a href="www.Nursingworld">www.Nursingworld</a>.org
- Aube, M. (2010). Students' demographic variables and first-attempt National Council Licensure Examination success: A correlational study. (Doctoral. dissertation). Retrieved from University of Phoenix Dissertations and Theses database. (Order No. 3438385)
- Buerhaus, P., Staiger, D., & Auerbach, D. (2009). The future of nursing workforce in the United States: Data, trends, and implications. Sudbury, MA: Jones & Bartlett.

- Carrick, J. A. (2011). Student Achievement and NCLEX-RN success: Problems that persist. *Nursing Education Perspectives*, 32(2), 78-83. doi: 10.5480/1536-5026-32.2.78
- Center of Excellence for the Elimination of Health Disparities. (2010). *National Strategy: Building environments for NCLEX success*. Retrieved on from http://www.ceehd.com/content/view/14/21/
- Chesney, A. M. (2010). *NCLEX-RN examination performance by BSN graduates of four historically black colleges and universities* (Doctorial dissertation). Retrieved from ProQuest Dissertations and Theses database. (Order No. 3413098)
- Giddens, J. F. (2009). Changing paradigms and challenging assumptions: Redefining quality and NCLEX-RN pass rates. *Journal of Nursing Education*, 48(3), 123-124.
- Gorski, M., Geraldi, T., Giddens, J., Meyer, D., & Peters-Lewis, A. (2015).

  Nursing education transformation: Building an infrastructure for the future. *American Journal of Nursing*, 115(4), 53-57.

- National Council of State Boards of Nursing. (2009). *NCLEX-RN statistics from NCSBSN*. Retrieved from https://www.ncsbn.org/Table\_of\_Pass\_Rates\_2009.pdf
- National Council of State Boards of Nursing. (2009). *Policy Position Statement*. Retrieved from https://www.ncsbn.org/Nurse\_Shortage\_July\_2009.pdf
- National Council of State Boards of Nursing. (2010). 2010 NCLEX-RN Detailed *Test Plan*. Retrieved from https://www.ncsbn.org/2010\_NCLEX\_RN\_Detailed\_Test\_Plan\_Educator.pdf
- National Council of State Boards of Nursing. (2015). *NCLEX Statistics from NCSBN*. Retrieved from https://www.ncsbn.org/3826.htm
- North Carolina Board of Nursing. (2009). *Statistics*. Retrieved from http://www.ncbon.org/licensureStats/licStat-RNWSTAT.asp
- North Carolina Center for Nursing. (2006). *RN supply and demand forecast for North Carolina:* 2000-2020. Retrieved from http://www.nccenterfornursing.org/research/quickfacts/Supply%20Demand%2 0Forecast%20QF.pdf

- North Carolina Institute of Medicine. (2007). *Task force on the North Carolina Nursing Workforce Report: Update 2007*. Retrieved from http://www.nciom.org/docs/nursing\_workforce\_update.pdf
- Norton, C., Relf, M., Cox, C., Farley, J., Lachat, M., Tucker, M., & Murray, M. (2005). Ensuring NCLEX-RN success for first-time test-takers. *Journal of Professional Nursing*, 22(5), 322-326. doi:10.10106/j.profnurs.2005.11.004
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Rotter, J. B. (1965). Internal versus external control of reinforcement and decision time. *Journal of Personality and Social Psychology*, 2(4), 598-604.
- Silvestri, L. A. (2010). *Self-efficacy and the predictors for NCLEX-RN success for baccalaureate nursing* students(Doctoral dissertation, University of Nevada, Las Vegas. Retrieved from ProQuest Dissertation and Theses database. (Order No. 3412401)

- U. S. Department of Health and Human Services Health Resources and Services Administration Bureau of Health Professions (2006). *What's behind the shortage*? Retrieved from ftp://ftp.hrsa.gov/bhpr/workforce/behindshortage.pdf
- U. S. Department of Health and Human Services Health Resources and Services Administration. (2007). *Toward a model for identifying facilities and communities with shortages of nurses*. Retrieved from ftp://ftp.hrsa.gov/bhpr/nursing/nurptsummary.pdf
- U. S. Department of Health and Human Services Office of Minority Health. (2010). *African American Profile*. Retrieved from http://minorityhealth.hhs.gov/templates/browse.aspx?lvl=2&lvlID=51
- University of Maryland Department of Sociology. (n. d.). The Rosenberg Selfesteem scale. Wood, A., Saylor, C., & Co.
- Villarruel, A., Washington, D., Lecher, G. & Nefertari, A. (2015). A Mors diverse workforce. American Journal of Nursing, 115(9), 57-62.