The Evaluation of Service-Learning as an Innovative Strategy to Enhance BSN Students' Transcultural Self-Efficacy

Theresa M. Adams, Ph.D., RN

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Introduction

- Fertility and migration rates, demographic patterns, multiracial and multiethnic populations, technological advances have contributed to cultural changes (Jeffreys & Zoucha, 2001).
- Educational models and health care delivery systems have not been responsive to shifting needs (Andrews et al., 2011).
- Nurse educators are challenged to make curricula changes.
- Health care disparities among various ethnic groups still exist (American Association of Colleges of Nursing, 2008a).

Significance to Nursing Profession

- Transcultural nursing (TCN) assists nursing students to become culturally competent.
- TCN promotes health and reduces health care disparities (Douglas & Pacquiao, 2010).
- Nurse educators/researchers should evaluate educational interventions to determine if they have caused changes in nursing students' self-efficacy (Jeffreys, 2010).
- *The Essentials of Baccalaureate Education for Professional Nursing Practice* (AACN 2008b) provided direction for nurse educators/administrators.

Theoretical Framework

- Giger and Davidhizar's Transcultural Assessment Model (Giger & Davidhizar, 2008)
- Bandura's Social Cognitive Theory (Bandura, 1986)
- Jeffreys' Cultural Competence and Confidence (CCC) Model (Jeffreys, 2010)
- Service-Learning (Seifer & Conners, 2007)
- Servant Leadership (Greenleaf, 1970)

Purpose

The purpose of this non-equivalent quasi-experimental study was to evaluate service-learning as an innovative teaching strategy to change generic baccalaureate nursing students' perceived self-efficacy in providing culturally competent nursing care to diverse populations.

Sample

- 133 BSN students enrolled in the study.
- 111 cases were used to answer the 5 research questions.

Instrumentation: TSET (Jeffreys, 2006)

- Measures the students' confidence on a 10-point rating scale
  - 1 = not confident and 10 = confident
- 83 items (three domains)
  - Affective (30 items)
  - Cognitive (25 items)
  - Practical (28 items)
- TSET Reliability for this sample
  - Cronbach's Alpha ranged from 0.94 to 0.98

Descriptive Statistics for SEST Scores (N = 111)

Interview (n = 69)

- 84% under age 30
- 88% English as first language
- 77% White
- 64% Previous healthcare experience
- 75% Prior college-level diversity course

Service-Learning (n = 42)

- 88% under age 30
- 81% English as first language
- 83% White
- 64% Previous healthcare experience
- 83% Prior college-level diversity course

Q 1. Is there a statistically significant change in pre-licensure BSN students' perceived cognitive, practical, and affective dimensions of transcultural self-efficacy as a result of an educational intervention?	Repeated Measures MANOVA	Significant changes occurred from pre- to post- for all 3 SEST subscale scores as well as the composite (p <.001). Relatively high effect sizes (68% - 78%) show the changes from pre- to post- are explained by the intervention (independent of the type of intervention).
	Repeated Measures ANOVA	

Q 2. Are there statistically significant correlations between the cognitive, affective, and practical self-efficacy pre- and post-test scores?	**Pearson Product Moment Correlation**	**High correlations between cognitive SEST post-test scores and the practical SEST scores (r (111) = .725, R^2 = 0.53). Moderate correlations between the affective SEST pre- and practical post-test scores as well as between the affective SEST post- and affective pre-test Pearson Product Moment Correlation scores.**

Q 3. How will selected demographics (age, language, race, and previous educational/work experience) influence pre-licensure BSN students perceived confidence prior to an educational experience?	MANOVA	Pre-test scores were significantly different for language ($p = .001$) and race ($p < .001$). Univariate ANOVAs (with Bonferroni correction): All three pre-test SEST scores were significantly different for race: Affective, $p = .001$, $\eta^2 = .097$; Cognitive, $p = .013$, Practical: $p = .000$.
	ANOVA	Composite Univariate ANOVAs: Scores were significantly different for language, $p < .001$ and for race, $p < .001$.

Q 4. Is there a statistically significant difference in the amount of change in pre-licensure BSN students' perceived transcultural self-efficacy as a result of the type of treatment in the educational intervention (service-learning vs. interview)?	Repeated Measures MANOVA	No significant difference in improvement of SEST scores in any subscale, based on the type of intervention: Wilks' Λ = .993, F (3, 107), $p > .05$, multivariate $\eta^2 = .007$, observed power = 10%.
	Repeated Measures ANOVA	No significant difference for the composite scores $F(1, 109) = .168$, $p > .05$, $\eta^2 = .002$, observed power = 6.9%.

Q5. Is there a statistically significant difference in the amount of change in pre-licensure BSN students' perceived transcultural self-efficacy after an educational intervention, between two levels in each group of selected demographics (age, language, race, and previous educational/work experience)?	**Repeated Measures MANOVA**	**Statistically significant interactive effect (with slight to moderate effect) between intervention and race: Wilks' Λ = .896, *F* (3, 107), *p* < .05, multivariate η^2 = .104, observed power = 84%. Univariate results (with Bonferroni correction) Statistically significant differences (with a slight effect) were found in practical and affective subscales for race (*p* < .05)**
	Repeated Measures ANOVA	**Interactive effect found between the intervention and language and between the intervention and race, both were statistically significant (*p* < .05).**

Additional Findings

- Non-English as a first language and non-White participants had significantly ⇧ pre-test SEST scores.
- Service-Learning participants had the highest post-test SEST scores and the greatest mean difference in 2/3 of the subscales and in the composite.
- Pattern in the sample means suggests a larger sample size may provide a ⇧ observed power and demonstrate more significant difference between the two intervention groups.
- Change in pre- to post affective and practical SEST scores was significantly ⇧ for White participants than non-White.
- Change in pre- to post-test composite SEST scores was significantly ⇧ for the English as a first language participants and the White participants.

Study Results

- Add to the current body of knowledge about TSE.
- Support the assumption that TSE is dynamic and changes after an effective cultural educational intervention (Jeffreys, 2006).
- Revealed that both interventions significantly affected change in the students' TSE.

Implications for Nursing Education

- Evaluate nursing students' TSE and language and race classifications to see if similar results are found with other populations.
- Use a larger target population to Increase the power of the results.
- Design longitudinal studies to determine if exposure to a variety of cultural experiences throughout the program affects TSE changes.
- Add a qualitative component to investigate students' reflection papers after service-learning experiences for common themes.

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