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## Effectiveness of Cultural Competence Education in Baccalaureate Nursing

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EFFECTIVENESS OF CULTURAL COMPETENCE EDUCATION  
IN BACCALAUREATE NURSING

An Evidence-based Practice Capstone Project

Submitted to the Faculty of the

Graduate Program in Nursing

In Partial Fulfillment

of the Requirements for the Degree

Master of Science in Nursing

Sharon Kessler

Messiah College

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2018

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In Baccalaureate Nursing

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## Abstract

Health disparities based on race and socioeconomic status persist despite efforts to improve access to care. Culturally competent nurses play an important role in providing quality care and reducing health disparities. The American Association of Colleges of Nursing (AACN) has asked colleges to develop programs to prepare students to decrease health disparities, resulting in nursing programs working to increase cultural competence among students in response to the changing demographic makeup of this country. This paper reviewed and critically appraised current literature regarding methods baccalaureate programs use to develop culturally competent nurses. The evidence based practice question guiding this project was, “Are pre-licensure baccalaureate nursing students who are exposed to an educational intervention focused on cultural competence influenced in the care provided to clients from other cultures compared to nursing students who are not exposed to a cultural competence educational intervention?” Results indicated that baccalaureate programs are using a variety of methods to teach cultural competence including study abroad, immersion experiences, nursing and non-nursing culture courses, and integrating cultural components into classroom activities. While much of the evidence is based on self-reported data from students, it appears that study abroad and immersion programs, as well as weaving cultural activities throughout a baccalaureate nursing program, are effective means of cultural education in this population.

Keywords: baccalaureate nursing, culture, cultural awareness, cultural competence, culturally responsive, health disparities, transcultural self-efficacy test.

## DEDICATION

I would like to dedicate this capstone project to my family who supported me during my nursing education.

## ACKNOWLEDGEMENTS

I would like to thank the Dr. Louann Zinsmeister, the Messiah College Nursing faculty, and my classmates for their contribution to the completion of this project.



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# CHAPTER I

## INTRODUCTION

Despite heightened awareness of how cultural and socioeconomic factors influence health status and access to health care, disparities among diverse groups continue to exist (AACN, 2008). The American Association of Colleges of Nursing (AACN) proposed the incorporation of cultural competence into baccalaureate nursing education in 2008 to address cultural differences in patients and eliminate health disparities. Nurses also need to be prepared to perform in a global environment in collaboration with other health care professionals (AACN, 2008).

The AACN developed the Cultural Competency Toolkit to provide educational resources for baccalaureate nurse educators. The five essential competencies include: knowledge of social and cultural factors that affect nursing, use of best evidence to provide culturally competent care, promotion of quality care for diverse populations, advocacy for vulnerable populations, and continuous cultural competency development (AACN, 2008).

### **Statement of Problem**

The AACN has asked colleges to develop programs to prepare students to decrease health disparities. In response to this request, cultural competence education has been incorporated in baccalaureate nursing programs as it becomes increasingly important that nurses provide culturally competent care to our nation's diverse populations. However, measurement of the effectiveness of these programs appears to be based on self-reported data (Lonneman, 2015). Encouraging students to discover more about their own culture, including biases and prejudices, is critical in nursing education as unconscious bias on the part of the health care provider is a contributing factor as to why those of low socioeconomic states receive lower quality health care

despite equality in insurance status and access to care (Lonneman, 2015). While colleges are providing courses, study abroad experiences, and clinical rotations to provide a variety of cultural experiences, it is unclear as to which method is best for improving the cultural competence of students (Lonneman, 2015).

### **Background and Need**

Cultural competence education was formally called for by the AACN in 2008 in response to the country's changing social environment. The poorer health and shorter lifespans for tens of millions of Americans can be attributed to disparities along racial and ethnic lines (Lonneman, 2015). According to Govere, Fioravanti, and Tuite (2016), increases in the United States minority populations, and subsequently, their health care needs, make it imperative for health care providers to be culturally competent in order to provide quality care and increase patient satisfaction. By 2044, the U.S. is projected to be a "majority–minority" nation, and the total minority population will increase by 105% from 120 million in 2014 to 235 million by 2060 (Govere, Fioravanti & Tuite, 2016).

Arbour, Karspar and Teall (2015) stated that culture is more than a reference to ethnicity, race, or religion. If there is a misconception or misunderstanding among the healthcare provider, patient or family regarding the client's socioeconomic status, physical capabilities or educational background, cultural barriers may arise. Specifically, Arbour et al. (2015) defined cultural competence as behaviors, attitudes and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations.

**Purpose Statement**

The purpose of this project is to review and critically appraise literature to discern the best practices for developing culturally competent nurses currently used by baccalaureate nursing programs.

**Evidence-based Practice Question**

Culturally competent nurses play an important role in providing quality care and reducing health disparities (Arbour, Kaspar & Teall, 2015). Therefore, the question used to guide this project is, “Are pre-licensure baccalaureate nursing students who are exposed to an educational intervention focused on cultural competence influenced in the care provided to clients from other cultures compared to nursing students who are not exposed to a cultural competence educational intervention?”

**Significance to Nursing Education**

In light of the increasing acuity and diversity of patients cared for by today’s nurses, it is essential for nursing students to be adequately prepared to care for these patients when they enter the work force (Loftin et al., 2013). According to Loftin et al. (2013), individuals’ culture and ethnicity are responsible for their values, beliefs, behavior, emotion and lifestyle. These values and beliefs are based on cultural norms, which impact many areas of health. Additionally, nurses comprise the largest sector of the health care work force and as such, it is likely that clients who access the health care system will be cared for by a nurse. Therefore, it is important that nursing students receive the necessary education to be able to provide care which acknowledges the influence of culture and can provide culturally competent care. (Loftin et al., 2013).

## **Definition of Terms**

**Baccalaureate nursing.** A four-year baccalaureate degree offered at four-year colleges and universities. The baccalaureate degree earned is the Bachelor of Science in Nursing (BSN). The research presented in this paper focused on baccalaureate nursing programs.

**Culture.** The customary beliefs, social forms and material traits of a racial, religious or social group. The characteristic features of everyday existence, such as a way of life shared by people in a place or time (Merriam-Webster, 2018).

**Cultural awareness.** Refers to an individual's understanding of the difference between themselves and others of other countries, backgrounds, races, ethnic or socioeconomic groups. Cultural awareness includes self-awareness, so the nursing student learns more about their own culture, including any biases they may have (Lonneman, 2015).

**Cultural competence.** Cultural competence is defined as behaviors, attitudes and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations (Arbour, Kaspar & Teall, 2015).

**Culturally responsive.** Culturally responsive refers to being cognizant of patients' norms, beliefs, language, and behaviors that not only shape the meaning of their health but also their health-seeking and health-related behaviors.

**Health disparities.** Health disparities are differences in the incidence, prevalence, mortality, and burden of disease and other adverse health conditions that exist among specific population groups in the United States (AACN, 2008). The definition of health disparities assumes not only a difference in health but a difference in which disadvantaged social groups systematically experience worse health or greater health risks than more advantaged social



groups. Consideration of who is considered to be within a health disparity population has policy and resource implications (AACN, 2008).

**Inventory for assessing the process of cultural competence among healthcare professionals (IAPCC).** A tool used to assess cultural competence. This tool is a 25 item Likert scale with a total point scale of 100. The scores indicate cultural proficiency for scores from 91-100, cultural competence from 75-90 and cultural awareness from 51-74.

**Transcultural self-efficacy tool (TSET).** A diagnostic tool designed to evaluate students' perceived self-efficacy in caring for diverse clients. It consists of an 83-item questionnaire which uses a 10-point Likert scale with items for 1 (not confident) to 10 (totally confident) (Loftin et al., 2013).

## **Chapter Summary**

Nursing students should be educated with cultural competence in mind, in order to meet the demands of an increasingly complex patient population. Therefore, cultural competence education is important in order for nurses to provide culturally competent care to our nation's diverse populations (Lonneman, 2015). In this chapter the statement of the problem, background and need and the significance to nursing education were defined. The evidence based practice question that this project will seek to answer was presented, as well as the purpose of the project and its significance to nursing education. Key words used throughout this project were also defined.

## CHAPTER II

### METHODS

The ability to deliver culturally competent nursing care is an expected competency of pre-licensure baccalaureate nursing students (Byrne, 2016). However, the concept of cultural competency varies, as does the best method for integrating and evaluating cultural competency in undergraduate nursing curricula. With the growing number of diverse clients, it is increasingly important that nurses deliver culturally competent care (Byrne, 2016). The purpose of this evidence-synthesizing project was to critically appraise evidence regarding interventions to facilitate nursing students' cultural competence. The evidence based practice question guiding this project is, "Are pre-licensure baccalaureate nursing students who are exposed to an educational intervention focused on cultural competence influenced in the care provided to clients from other cultures compared to nursing students who are not exposed to a cultural competence educational intervention?"

#### **Data Collection of Evidence**

For this evidence synthesizing project, database searches of CINAHL and PubMed were conducted for evidence published from 2013 to 2018 using the key words of *baccalaureate nursing, undergraduate nursing, culture, cultural awareness, cultural competence, health disparities* and *transcultural self-efficacy*. After an initial search using both the terms *baccalaureate nursing* and *undergraduate nursing*, those results pertaining to *undergraduate nursing* were eliminated as they encompassed diploma and associate degree nursing education programs, as well as baccalaureate programs. The focus of this project is intended for baccalaureate nursing programs. Results from the searches using baccalaureate nursing and undergraduate nursing are noted on Table 1.

Table 1

*Results of Database Search*

Key Words	CINAHL (overall)	CINAHL (2013-2018)	PubMed (overall)	PubMed (2013- 2018)
Baccalaureate Nursing (BN)	13,716	2,231	17,390	3,198
Undergraduate Nursing (UN)	6,011	1,930	5,968	2,475
B.N. and culture	451	109	1,162	229
U.N. and culture	239	82	411	146
B.N. and cultural awareness	78	17	122	44
U.N. and cultural awareness	45	17	59	28
B.N. and cultural competence	255	70	380	103
U.N. and cultural competence	122	53	141	52
B.N. and health disparities	74	27	70	30
U.N. and health disparities	35	14	46	24
B.N. and transcultural self- efficacy	19	4	23	5
U.N. and transcultural self- efficacy	10	4	8	0

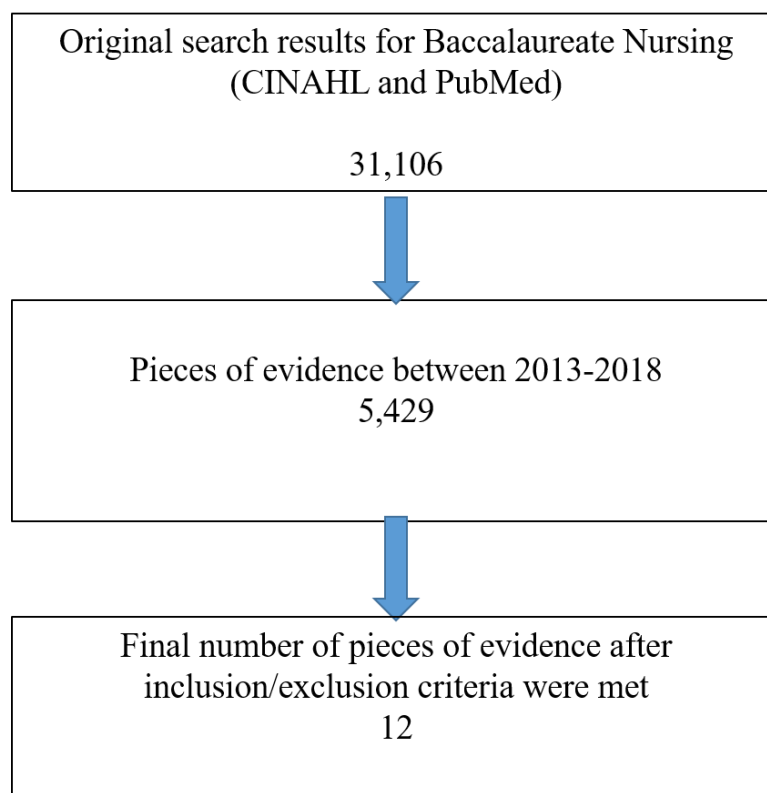
After baccalaureate nursing was determined to be the desired search term, database searches of CINAHL and PubMed were done using the other key words. The initial search yielded over 31,000 pieces of evidence. Application of the inclusion criteria of evidence published between 2013 and 2018 reduced that number to over 5,000 pieces of evidence. Continued searches applying the exclusion criteria resulted in elimination of evidence which

does not pertain to cultural competence resulted in the final number of pieces of evidence for this project, depicted in Figure 1. Criteria for exclusion from this study include evidence that does not pertain to cultural competence, evidence that is published prior to 2013, and is not focused on baccalaureate degree programs, such as diploma, associate degree or graduate programs. No racial or ethnic groups are excluded. Criteria for this inclusion in this project are evidence published 2013-2018, evidence that is deemed good to high quality after it is appraised using the Johns Hopkins Evidence Based Practice model, and is quantitative, qualitative, or literature reviews. Evidence meeting the inclusion and exclusion criteria and pertaining to baccalaureate degree students, regardless of the age of the subjects, will be included.

The 12 pieces of evidence were then evaluated for the levels of evidence and quality using the Johns Hopkins Evidence Based Practice Model tools (Dang & Dearholt, 2018). These pieces of evidence reflect the number of articles that were included after the database searches were complete and the inclusion and exclusion criteria were met. Figure 1 depicts the process for data collection.

### **Evidence-based Practice Model**

The Johns Hopkins Evidence-based Practice Model (Dang & Dearholt, 2018) was used to guide data collection and critically appraise the evidence for this project. This model provides the user with a framework to evaluate each piece of evidence in order to objectively review research and non-research evidence to determine its quality and eligibility for inclusion in the study.



*Figure 1.* Data Collection Procedure

The data collected for this project were measured using the Johns Hopkins Research Evidence Based Practice Appraisal Tool (JHEBP) (Dang & Dearholt, 2018) to determine the level and quality of the evidence. The data were collected using the key words, included only articles that were published between 2013 and 2018, and pertained to cultural competence for baccalaureate nursing students. Each piece of evidence was critically appraised using the JHEBP tool to ensure that evidence included in this project is of good to high quality and is identified for the type of evidence, including quantitative, qualitative or literature reviews.

### **Critical Appraisal of Evidence**

Data in this project were analyzed to determine the quality by using the Johns Hopkins Research Evidence Appraisal Tools (Dang & Dearholt, 2018). There are two major areas for

quality ratings for evidence: research and non-research. Various quality rating guidelines for research evidence including quantitative studies, qualitative studies, and mixed methods reviews were used. The quality rating guidelines for non-research evidence which includes such evidence as clinical practice guidelines, consensus or position statements, organizational experience, literature reviews. The quality rating provides an evidence level and quality guide, providing the user with a framework to determine what type of evidence it is, as well as the quality of that evidence. This tool names various levels of evidence as I through V, and has quality ratings of high quality – grade A, good quality – grade B, and low quality or major flaws – grade C. In order to be included in this project, all of the pieces of evidence were required to be of high to good quality (A or B). Any evidence deemed to be low quality or have major flaws (C) were eliminated. Each piece of evidence was appraised and entered into the Data Summary Table found in Appendix A, indicating the level and grade determined in the critique. These tools were used together to determine the type of evidence and quality for all of the 12 pieces of evidence included in this project. This analysis ensured that evidence appraised in this project were found to be of good to high quality in order to be eligible for inclusion.

### **Chapter Summary**

In this chapter, data collection and analysis procedures were presented. The JHEBP model (Dang & Dearholt, 2018) was explained, including the various types of research and non-research evidence and how they were rated. Inclusion and exclusion criteria were defined, as well as an explanation of the process of finding the pieces of evidence which met the criteria for analysis and inclusion in this project.

### **CHAPTER III**

#### **LITERATURE REVIEW AND ANALYSIS**

Nurses account for the largest sector of health care professionals, however the racial and ethnic makeup of the nursing workforce is not reflective of the greater U.S. population (Loftin, et al., 2013). While the nation's population is comprised of approximately 37% minorities, only 16.8% of nurses are minorities. In addition, individuals from racially and ethnically diverse populations are recognized as having greater incidence of illness and disability, and less access to health care (Loftin, et al, 2013). These factors contribute to the need for nursing education to prepare nurses to be able to deliver culturally competent care to all patients in an effort to close the gaps in quality and access to care (Loftin, et al., 2013). In an effort to evaluate the effect of the cultural education currently provided to baccalaureate nursing students, the review and critique of 12 articles pertaining to cultural awareness in nursing education programs are discussed in this section. A variety of literature reviews, quantitative, qualitative, and mixed methods research studies were evaluated in an attempt to answer the evidence based practice question, "Are pre-licensure baccalaureate nursing students who are exposed to an educational intervention focused on cultural competence influenced in the care provided to clients from other cultures compared to nursing students who are not exposed to a cultural competence educational intervention?"

Lonneman (2015) discussed the current approaches for increasing cultural awareness in nursing students. Cultural awareness creates a foundation for cultural competence, and in order to be culturally aware student must become self-aware, discovering more about their own culture, including biases and prejudices. Lonneman (2015) stated that cultural competence is a

critical element in nursing education, because unconscious bias on the part of health care providers is a factor in why minorities and the poor may receive lower quality health care.

### **Review of Evidence**

Mesler (2014) conducted quantitative exploratory, cross-sectional, between-groups study with a convenience sample of 759 nursing students in six baccalaureate nursing programs. Mesler (2014) evaluated the cultural competence and cultural self –efficacy of baccalaureate nursing students by comparing three different methods of educating students on culture content. The methods evaluated were programs in which cultural content was integrated throughout the nursing program, programs which required a non-nursing culture course, and programs which provided a nursing culture course. The baccalaureate nursing programs were geographically close to one another and had a nursing or a non-nursing culture course (Mesler, 2014). Students completed the Inventory to Assess the Process of Cultural Competence among Healthcare Professionals (IAPCC-R) and the Transcultural Self-Efficacy Tool (TSET) surveys in their freshman, junior and senior years of the programs. The freshman year data provided a baseline; the junior year data were considered post-intervention and the senior year data were the final data. The sophomore year was excluded as it was the year students took the non-nursing culture course (Mesler, 2014).

The IAPCC-R was the instrument used to assess cultural competence, and the TSET was used to measure self-confidence. Both of these instruments have been tested for reliability and validity; the IAPCC-R reliability for this study had a Cronbach's alpha of 0.76 and the TSET reliability for this study had a Cronbach's alpha of 0.986. Additionally, a demographic questionnaire was used, the validity and reliability of which was not measured (Mesler, 2014). The IAPCC-R uses a Likert scale with four major scale ranges up to 100 points: culturally



incompetent (25-50), culturally aware (51-74), culturally competent (75-90), and culturally proficient (91-100). The higher the respondent scores, the more culturally competent they are rated (Mesler, 2014).

A two-way, 3 x 3 analysis of variance (ANOVA) was conducted to compare the results of the IAPCC-R and the TSET scores among the three academic levels of freshman, juniors and seniors, as well as three program types of integrated program, non-nursing culture course and nursing culture course (Mesler, 2014). Distributions to determine frequency were reviewed on the demographic variables, and the correlations were tested using Spearman rho. The Tukey Honest Significant Difference (HSD) test was also used to review differences found on the ANOVA (Mesler, 2014).

The demographics among the various programs were similar, with 90% of respondents being women between the ages of 18 and 27. Most students in the nursing and non-nursing cultural course programs were white, while most of the students in the integrated content programs were African American. Otherwise, the demographics were similar among programs (Mesler, 2014). With regard to the demographics, the IAPCC-R and TSET scores were higher along with the age of the student. Those students who were white had lower scores on the IAPCC-R than the ethnic groups; however the ethnic groups' scores on the TSET were lower than their white counterparts. Mesler (2014) stated this indicated more cultural competence but less self-confidence in this area. Additionally, students who stated that cultural competence was important scored higher on both instruments (Mesler, 2014).

There were 363 students who took a nursing culture course, 237 students who took a non-nursing culture course, and 159 students in the integrated programs. Mesler (2014) found a positive correlation between the total scores for the IAPCC-R and TSET ( $r = 0.46$ ,  $P = .001$ ).

The mean IAPCC-R and TSET scores for freshmen in all 3 types of culture programs were 67.94, which put them in the middle of the culturally aware category. For the IAPCC-R instrument, the nursing culture course students were the only group to attain a level of culturally competent (mean score 75.10) in the junior year, with an increase in their senior year to 75.75, which was the highest score of all three programs (Mesler, 2014). Those students in the non-nursing course reached a higher level of culturally aware, with a mean score 72.32 as juniors and 73.11 as seniors. Those in the integrated group had a mean score as juniors of 72.15, and 73.90 as seniors, bringing them to the higher range of the culturally aware level (Mesler, 2014).

With respect to the TSET scores, the nursing culture course students increased from 6.86 in their freshman year to 7.72 in their junior year, and to 7.82 in the senior year, which indicated moderate to high confidence. Those students in the non-nursing culture course group started with a 6.87 in their freshman year, but finished with the lowest score of the three groups in this study, and saw a decrease between junior and senior years from 7.87 to 7.63. Those students in the integrated group had a mean score of 6.57 in their freshman year, and increased from 7.28 to 8.11 between junior and senior years; they had the highest mean scores for self-efficacy of the three groups (Mesler, 2014).

The Tukey HSD post hoc analysis showed a significant difference between students in nursing and non-nursing culture courses; those in the nursing culture group scored higher on the IAPCC-R than those in the non-nursing culture course. Students in the nursing culture course also showed higher cultural competence than their counterparts in the integrated program. The Tukey HSD post hoc analysis showed significant improvement ( $P < .001$ ) in all three programs between freshman and junior years and freshman and senior years, but showed little change between junior and senior years (Mesler, 2014).

Mesler (2014) stated that as cultural competence increased, self-efficacy increased as well. For the demographic results, increase in age and prior degrees increased cultural competency. Mesler (2014) attributed this to having more life experience. Also noted was that students from non-majority ethnic groups showed higher cultural competence, but lower confidence. Additionally, students who stated they felt education in the area of cultural competence was important scored higher in both competence and confidence. Those students from the nursing culture course reached the level of cultural competence, while those in the non-nursing culture course and the integrated programs did not. Non-nursing culture courses were found to be taught in departments such as anthropology and sociology; Mesler (2014) suggested that these cultural elements needed for baccalaureate nursing may be better taught by nursing faculty who can tailor the course to meet the requirements of cultural competence in a health care setting.

This was a quantitative level II study, grade A. Mesler (2014) stated this study was the first to gather baseline data for freshman students to use as a comparison. Other studies have conducted surveys before and after an intervention, but did not collect baseline data at the beginning of the students' baccalaureate education (Mesler, 2014). Three groups of students were compared at three different points in their baccalaureate nursing programs, and also collected demographic data. Mesler (2014) used two surveys, the IAPCC-R and the TSET, which have been widely used to assess cultural competence and have a high validity and reliability. Additionally, a large sample size was used (Mesler, 2014). Participants were not randomly assigned and no control group was used. No power analysis was done and Mesler (2014) used a convenience sample. Threats to internal validity include testing and maturation. Students may have become accustomed to the questions on the IAPCC and TSET, and

maturation of the students over the course of their baccalaureate programs may have impacted their responses. The threat to external validity is the use of a convenience sample and the generalizability of the results. This study was done in a mid-Atlantic state at baccalaureate nursing programs. The results may be applicable to other programs in a similar location, but, further research would be needed to apply these results to different types of nursing programs in other geographic areas.

Silvestri-Elmore, Alpert, Kawil and Feng (2017) conducted a cross-sectional descriptive design of original research of graduates of baccalaureate nursing programs within 12 months of graduation to determine if cultural immersion experiences, a stand-alone culture course or integration of cultural concepts impacted cultural competence. This study included a national survey of 126 graduate nurses who had graduated from programs accredited by either the American Association of Colleges of Nursing (AACN) or Commission on Collegiate Nursing Education (CCNE), and evaluated graduates' perceived levels of cultural competence. Differences among demographic variables were also measured; demographic data collected included age, gender, race/ethnicity, primary language, number of years lived outside the U.S. and within the U.S., geographical location of the nursing program, type of institution, type of degree program, additional degrees and major subject of study, and participation in a nurse residency program (Sylvestri-Elmore et al., 2017).

All programs nationwide which were accredited by the AACN or CCNE were identified and contacted for inclusion in this project, resulting in a total of 623 programs accredited by CCNE and 197 accredited by ACEN/NLN. Emails were sent to the dean or director of nursing programs to be forwarded to baccalaureate nursing students who had graduated within the past 12 months. After participants were identified, they were sent a 77 item electronic survey, which

included five parts pertaining to demographic data and the Clinical Cultural Competency Questionnaire (CCCQ). The surveys which were returned were evaluated to determine if inclusion and exclusion criteria were met. The final power analysis showed that 126 final surveys to be included in the study was adequate to achieve 0.95 power based on the analysis done prior to the project (Silvestri-Elmore et al., 2017). The Clinical Cultural Competency Questionnaire (CCCQ) was used to measure perceived cultural competence, which is a tool that has been widely used for this purpose and uses a five point Likert scale and 6 subscales. The internal consistency of the CCCQ has a Cronbach's alpha of 0.94 for this study (Silvestri-Elmore et al., 2017).

Silvestri-Elmore, et al. (2017) used descriptive statistics, correlational analyses and multiple regression analysis to evaluate the results. An independent t-test was used to evaluate any differences between nurses who had taken a stand-alone culture class and those who did not; this test also reviewed students who had participated in cultural immersion had a higher perceived level of cultural competence (Silvestri-Elmore et al., 2017). Additionally, a one-way ANOVA between groups was used to explore the differences of degree of integration on perceived level of cultural competence. Silvestri-Elmore et al. (2017) analyzed the mean score differences on the CCCQ, and then did a multiple regression to ascertain the contribution of the variables affecting cultural competence, which were cultural immersion, stand-alone culture courses or integrated cultural content (Silvestri-Elmore et al., 2017).

Silvestri-Elmore et al. (2017) found that the demographic variables that indicated statistical significance were race/ethnicity and length of time practicing as a registered nurse. A one-way ANOVA between racial/ethnic groups was done to determine the effect on cultural competence and it was noted that  $F(5, 120) = 5.357, p = .008, \eta^2 = 0.15$ . Tukey's HSD test

showed a mean score for Caucasian/non-Hispanic/non-Latino respondents to be  $M = 195.400$ , with a standard deviation of  $SD = 25.384$ , while the Hispanic respondents were  $M = 240.000$ ;  $SD = 15.684$ . This revealed that those respondents who identified as Hispanic had a higher level of perceived cultural competence than the Caucasian/non-Hispanic/non-Latino respondents (Silvestri-Elmore et al., 2017). Silvestri-Elmore et al. (2017) also found differences in cultural competence based on the length of time practicing as a graduate nurse. The number of months practicing were grouped from 1 to 3 months, 4 to 6 months, 7 to 9 months and 10 to 12 months and were evaluated using a one-way ANOVA among groups. The mean was 3.950 and a standard deviation of 2.628. Differences were noted:  $F = 2.626$ ,  $p = .05$ ,  $\eta^2 = 0.06$ . The Tukey's HSD test showed the mean score for graduate nurses who practiced 4 to 6 months was significantly different ( $M = 194.020$ ,  $SD = 24.473$ ) from those who reported practicing 10 to 12 months ( $M = 226.170$ ,  $SD = 27.229$ ). Graduate nurses who practiced 1 to 3 months ( $M = 200.500$ ,  $SD = 28.798$ ) and those practicing 7 to 9 months ( $M = 203.200$ ,  $SD = 24.892$ ) did not show any significant differences from the other groups (Silvestri-Elmore et al., 2017). Silvestri-Elmore et al. (2017) noted that the level of perceived cultural competence tended to decline after 3 months of practice, then increase steadily after 7 months of practice (Silvestri-Elmore et al., 2017).

Findings in this study indicated that two of the variables for race and ethnicity as well as the amount of time practicing as a graduate nurse showed significant differences on the CCCQ. Those identifying as Hispanic scored higher than others, and graduate nurses practicing 10 to 12 months scored higher than those practicing 1 to 6 months (Silvestri-Elmore et al., 2017). This may be attributed to the Hispanic students understanding of, or ability to speak, Spanish. Another statistically significant finding was that those students who had taken an immersion

course scored higher than their counterparts who took either a stand-alone culture course or courses with integrated culture concepts (Silvestri-Elmore et al., 2017).

This study received a level II, grade A rating, as it was a quantitative study using original research, and had a large sample size with a power analysis done prior to the study. The authors also used a reliable instrument with a Cronbach's alpha of 0.94 and the results could be generalizable to a larger population. The threats to internal validity for this study were selection bias and maturation. Although this was a national study, the respondents were volunteers who received an email from their alma mater. Alumni who were unable to be contacted via email or those who were not interested in participating were excluded. Those who participated may have had a preexisting interest in cultural competence and this may have skewed the results to indicate greater cultural competency. Maturation may be an internal threat as the respondents may have changed their perceptions over time since the course intervention was completed. Threats to external validity would be generalizability to colleges nationwide. Because a nationwide sample was collected, these results may be generalizable to other settings, but the authors noted that a better method of obtaining the sample could result in a larger sample size.

Govere, Fioravanti and Tuite (2016) conducted a quantitative study used pre and posttest design to evaluate the effectiveness of nursing modules designed by the U.S. Office of Minority Health to improve cultural competence in junior and senior level baccalaureate nursing students. For this study, students completed a survey before and after completing the Culturally Competent Nursing Modules (CCNM). Participants had two weeks to complete the on-line modules, which were entitled *Course I: Delivering Culturally Competent Nursing*, *Course II: Using Language Access Services*, and *Course III: Supporting and Advocating for Culturally Competent Health Care Organizations* (Govere et al., 2016). Each course required the learner to

spend about three hours for completion and were then awarded three continuing education credits. Those students who participated were recruited from one mid-Atlantic university, and all participants were volunteers (Govere et al., 2016).

A sample size of 18, consisting of 13 junior and five senior students, was used, and students provided demographic information using a tool developed by Govere (2016), as well as completion of the Inventory for Assessing the Process of Cultural Competence Among Healthcare Professionals-Revised (IAPCC-R). The IAPCC-R has is a 20 item Likert scale questionnaire, for which respondents are scored as culturally proficient, culturally competent, culturally aware or culturally incompetent. It also measures the following constructs: cultural awareness, cultural knowledge, cultural desire, cultural skill, and cultural encounters. The IAPCC-R has a Cronbach's alpha of 0.78 to 0.96 for reliability (Govere et al., 2016).

Govere et al. (2016) used a paired *t* test analysis to determine variations between the pre and post test results and the statistical significance was set at  $p < .05$ . The demographic information of the participants included: 15 participants were female, 17 were white, one was African American, and the average age was 21. Seventeen participants spoke only English and one spoke both English and Spanish. While only two participants stated they had previous cultural competence training, 13 had visited at least one foreign country (Govere et al., 2016). For the cultural constructs, the responses indicated an increase between pre and post test data, respectively: cultural desire (17.06; 17.83), cultural awareness (14.61; 16.06), cultural knowledge (11.06; 13.89) cultural encounters (12.89; 15.72) and cultural skills (12.83 and 15.61). The *t* test for these constructs showed  $p < .001$  (Govere et al., 2016). For IAPCC-R results, students increased in cultural competence after completing the online modules. Prior to the training, students' responses indicated 89% were culturally aware and 11% were culturally



competent. Post training results indicated 11% were culturally proficient, 67% were culturally competent and 22% remained at the culturally aware level (Govere et al., 2016).

Govere et al. (2016) conducted a level II, grade B study. No power analysis was done, and the study had a small, convenience sample which lacked diversity. However, the results showed a change in cultural competence and constructs following the intervention of on-line module completion. Additionally, the CCNM are free on-line modules which could be incorporated into a nursing program without incurring additional costs (Govere et al., 2016). Threats to internal validity for this study are the selection threat due to the small, homogenous sample. Threats to external validity are the replication and generalizability of this study. The mid-Atlantic nursing program, the small sample size and lack of diversity in the sample may yield different results upon replication with a more varied sample.

Roller and Ballestas (2013) conducted a quantitative comparison study to determine the effects of a study abroad program one year after its conclusion (Roller & Ballestas, 2013). The authors surveyed 15 students who participated in a one credit elective course which included two classes and a one week immersion trip to Costa Rica. While in Costa Rica, these students participated in adult health clinics, home hospice visits and school health screenings. Students completed the Inventory for Assessing the Process of Cultural Competency among Healthcare Professionals-Revised (IAPCC-R) before the course and trip, immediately after the trip, and after one year to determine changes in cultural competence (Roller & Ballestas, 2013).

The IAPCC-R tool used had a Cronbach's alpha of 0.70-0.90 for reliability. This tool is a 25 item Likert scale with a total point scale of 100. The scores indicate cultural proficiency for scores from 91-100, cultural competence from 75-90 and cultural awareness from 51-74. The demographic data for this study included 15 subjects from the original 18 students who took the

course; three were unable to be contacted one year later so they were excluded. The age range was 21 to 41 with the average age at 22 years, the majority of participants were female at 93.3%. Race and ethnicity were self-reported as African-American at 13.3% (n=2), Asian at 6.6% (n=1), Caucasian at 53.3% (n=8) and Hispanic/Latino at 6.6% (n=1) and other at 20% (n=3) (Roller & Ballestas, 2013).

Descriptive statistics were used to present the findings. The greatest improvement was seen in cultural proficiency, with 0 students scoring in this category one month after the trip, and 13.3% scoring in this area after one year. The cultural competence area saw a slight decrease from 77.7% to 60%, and the culturally aware group essentially stayed the same, with an increase of 4.4% from one month to one year. The initial post experience scores were compared to the one year follow up scores and the *t*-test results were  $p = 0.012$  (Roller & Ballestas, 2013). This study indicated that the increased cultural competency gained by the students were maintained over time. Cultural competency scores were found to increase post experience, and were sustained over the year (Roller & Ballestas, 2013).

This study was given a rating of level II, grade B-. Limitations for this study included a small sample size, and a lack of a control group, which may have shown that the scores one year later may have been influenced by other sources, such as life experiences or other courses. Threats to internal validity were selection and testing. Selection threat was present due to the small sample size and use of a convenience sample; testing threat was noted due to repetition of the same tests, specifically the IAPCC-R test. Also, those who voluntarily participate in study abroad programs may already have a greater interest and awareness of other cultures than those who do not pursue these experiences. External threats to validity may be generalizability and the

whether the study could be replication at a larger college or if the length of the study abroad program was longer than one week.

In a study by Curtis, Bultas and Green (2016), the authors evaluated the use of contemporary literature and classroom activities to increase the cultural competency of nursing students in a quasi-experimental pre and post-test research design. A convenience sample of 56 baccalaureate nursing student volunteers were recruited and the Transcultural Self-Efficacy Test (TSET) was used to assess perceptions. The students were enrolled in community health, pediatric and leadership nursing courses concurrently. Demographic information was collected and the TSET was administered at the beginning of the semester, which served as the pre-test. Various cultural activities were required as part of their course content which included lecture, discussion, role playing and the assigned reading of the book *The Spirit Catches You and You Fall Down* (Curtis, Bultas & Green, 2016).

A univariate analysis was performed on questionnaire items, subscales and overall scores in order to compare overall scores for pre and post intervention by demographic variables. Additionally, repeated measures ANOVA compared changes in mean subscales as well as overall scores between pre and posttest scores using demographic variables (Curtis, Bultas & Green, 2016). The TSET has three subscales which define measurements to cognitive, practical and affective learning. Increases were noted in the cognitive and practical pre and post test scores. For the cognitive scores, the pretest  $N = 31$ , mean = 62.7, SD = 1.89 and the p-value =  $<0.001$ . The post test showed a mean of 8.14 and SD of 0.85. The practical subscale noted a pretest mean of 6.30 and a standard deviation of 1.60,  $p = <0.001$ , and the post test showed a mean of 8.07, SD = 1.01 and a p-value of  $< 0.001$ . The affective subscale showed less change between pre and posttest, with a pretest mean of 8.33 and a standard deviation of 1.23. The post

test scores showed a mean of 8.96 and a standard deviation of 0.86 with a  $p$  value of  $< 0.009$  (Curtis, Bultas & Green, 2016). Repeated measures analysis of variance (ANOVA) compared change in mean subscale and overall scores, and a Mann-Whitney U test compared mean item scores by demographic variables. The results of this study concluded that nearly all of the mean subscale and overall scores increased between the pre and post-test surveys in cognitive, practical and affective subscales. Descriptive statistics were used for the demographic information; 87.5% of respondents were female, 65.6% did not speak a second language and 76.9% were Caucasian.

This was a level II study of B quality. A convenience sample of volunteers was used. Threats to internal validity may be testing threat due to participants recalling previous responses between the two surveys. Maturation threat may have also impacted the results (Curtis et al., 2016). Threats to external validity were sample size, the use of a convenience sample and generalizability of results. External validity may also be threatened by the sample size or generalizability of the results. The results from Curtis et al. (2016) indicated there was statistically significant increases in the mean subscale and overall scores, however this could be due to outside influences in addition to the curriculum.

Halter, Grund, Fridline, See, Young and Reece (2015) evaluated the influence of a various cultural educational offerings in a quantitative study using a pre and posttest design. Students were volunteers at a private Midwestern university. Students were exposed to a variety of cultural content items throughout their coursework, including clinical simulations, presentations by a national expert in transcultural nursing, and incorporation of cultural care topics in all nursing coursework. Students completed the Transcultural Self-Efficacy Tool (TSET), which was used to measure undergraduate nursing students' transcultural self-efficacy

(TSE) perceptions. The TSET is an 83-item tool with response choices from 1 (not confident) to 10 (totally confident). Reliability and validity of this tool has a reported Cronbach's alpha of 0.96 (Shattell et al., 2013). Students also completed a survey about their demographic information, which asked about how students' perceived themselves (liberal, conservative, moderate) and asked demographic questions about gender, race, and income level (Halter et al., 2015).

Data were collected at the beginning of the fall semester, then again at the end of the spring semester. A univariate analysis was used and repeated for the fall and spring semester, and the standard parametric two-sample  $t$  test as used to compare any difference between the two population means. Statistical power for the independent  $t$  test exceed .90 (Halter et al., 2015). The TSET scores for fall and spring semesters showed a difference among the group means ( $t = 6.51, p < .001$ ). The Chi-square analysis showed that the percentages from the fall semester varied from the spring semester group ( $p < .001$ ) in that fewer students were rated as having low self-efficacy in the spring than in the fall. Halter et al. (2015) concluded that interventions to improve TSE were effective (Halter et al., 2015).

Although Halter et al. (2015) did not find significant relationships between TSE and most demographic variables, they did find that student perceptions of TSE can be enhanced by learning experiences. The immersion experiences and the use of computer-assisted scenarios were both found to improve TSE (Halter et al., 2015). One finding in this study was that students who identified themselves as being socially liberal to moderate had lower TSE than those who identified as socially conservative. Social orientation is an element often overlooked, but can affect attitudes and behaviors toward cultural issues (Halter et al., 2015). Other variables that influence TSE were family income, previous health care experience, and gender. Nursing

schools may find this information useful in developing cultural competency courses for students who may be at risk for low cultural sensitivity based on this demographic information (Halter et al, 2015). Halter et al. (2015) stated that according to the National Center for Cultural Competence, cultural competence is a developmental process that occurs over time, and when the process is supported, cultural awareness increases, knowledge and skills are heightened, and motivation for further knowledge occurs (Halter et al., 2015).

Halter et al. (2015) performed a quantitative level II study, grade B+ which showed a positive correlation between the total numbers of cultural experiences a student had and total TSET scores. Limits to this study were that the aggregate data showed that the TSET scores were influence by cultural interventions, but not about which interventions provided the most impact. Threats to internal validity include selection, testing and maturation threats. A convenience sample of volunteer participants who were enrolled in the baccalaureate nursing program at a private rural Midwestern university. Testing threat due to pre and post testing using the TSET is also present, as well as maturation threat, as normal growth from the college experience may account for changes in scores. Using a control or comparison group may have provided a way to measure the changes (Halter et al., 2015). A threat to external validity is whether these findings could be generalized to other baccalaureate nursing programs at larger or smaller colleges in other areas of the country.

Lonneman (2015) performed a quasi-experimental study with a nonprobability convenience sample. Six different strategies for increasing cultural competence were included in the study: an exercise on class and privilege, weekly journal entries, personal history reflection paper, viewing video segments about health disparities, interview of a member of a vulnerable population and exploration of topics related to cultural differences (Lonneman, 2015).

The effectiveness of the study was assessed using a posttest and a self-evaluation. The results indicated that the teaching strategies used in this intervention seemed to be effective for increasing cultural awareness (Lonneman, 2015). The strategies used in this study could be incorporated across a curriculum over several courses, rather than teaching a stand-alone course on cultural competence. This approach is favored by the AACN, and it provides students with multiple encounters with the material (Lonneman, 2015). Lonneman (2015) stated that by spreading out the teaching strategies designed to increase cultural competence over the course of the nursing program it could unite the faculty in accomplishing this goal, decrease the burden on any one course, and highlight the importance of cultural competence to students (Lonneman, 2015).

The interventions were evaluated using two instruments, the Transcultural Self-Efficacy Tool (TSET) and an author-designed survey which used a 10-point Likert scale. Research using the TEST has demonstrated the instrument's construct validity, which has internal consistency scores ranging from .94 to .98. The reliability for the TEST's internal consistency was .92 to .98, and measures of test-retest stability were also good, with a score of 0.63 to 0.75 (Lonneman, 2015). For the Likert scale, students were asked to evaluate their experiences in each of the six teaching strategies, and there was also an area for written comments on each strategy (Lonneman, 2015).

For the TSET instrument, the students in the intervention group (n=34) gained 25.8 (SD = 29.9) points from pre to post test, a change of 8.6 %. The control group had a mean gain of 17.1 (SD 36.6) a change of only 5.7 % with a difference ( $p = 0.54$ ) between the two groups (Lonneman, 2015). For the Likert scale, student rated all of the teaching strategies as effective with score ranging from 6.78 to 8.2 (Lonneman, 2015). In addition, the author retested the

intervention group eight months later when the program concluded, and saw an average increase on the TEST of 2.8 %. This finding indicated that students continued to grow in cultural awareness during the program.

This quasi-experimental study was given a level II rating, B- quality, as the strategies used in this study seemed to be effective in increasing cultural awareness. Limits to the study were the scope, cultural diversity of the students, and sample size (Lonneman, 2015). The use of statistical tests was not noted in the discussion and used only descriptive statistics. Threat to internal validity was selection bias due to the small sample size of 34 participants and because a nonprobability convenience sample was used. Threat to external validity was selection effect. The sample size was taken from a Midwestern Catholic university, and the results may not be replicated at a college with different student demographics.

Kohlbray (2016) used a triangulated methodology to evaluate changes in students' level of cultural competence before and after an international immersion service learning project for baccalaureate nursing students. Kohlbray (2016) conducted quantitative pre and post trip surveys, and then a qualitative questionnaire was used after the trips to measure cultural competence and self-efficacy. A sample size of 121 baccalaureate nursing students was used from three state universities in southern California between 2009 and 2013. Before the trips, students completed demographic and pre-trip surveys; post trip surveys were completed within two weeks of their return. The post trip interviews consisted of six open-ended questions, and the demographic data gathered included information on gender, age, marital and work status, ethnicity, the university the respondent attended, length of the trip and location they visited. The immersion experiences lasted between one day and three weeks, and the countries visited included Mexico, Belize,



Lesotho, Vietnam, Jamaica, Dominican Republic, Swaziland and Ghana. Both the length of trip and location were dependent upon which college the student attended (Kohlby, 2016).

Kohlby (2016) used the Inventory for Assessing the Process of Cultural Competence Among Healthcare Professionals-Student Version (IAPCC-SVC) instrument, which used a 20-item Likert scale with four levels of competency which scores levels of cultural competency at culturally proficient, culturally competent, culturally aware, or culturally incompetent. The IAPCC-SVC has demonstrated a Cronbach's alpha of 0.87 in other studies (Kohlby 2016). The author also used the Cultural Self-Efficacy Scale (CSES), which evaluates the respondent's confidence level in providing care for clients who are African American, Hispanic, Native American or Asian. This tool uses a 30 item, five point Likert scale and has a Cronbach's alpha coefficient range of .86 to .98 (Kohlby, 2016).

Demographic data indicated that 91% of participants were female, and 79% were 21 to 30 years old. The major ethnicity was non-Hispanic white at 54 %. For the IAPCC-SVC, age was found have a significant correlation to cultural competence with a Spearman's rho of 0.18. Likewise, the CSES had a Spearman's rho of  $< .01$ , and a  $p$  value  $< 0.5$ . Kohlby (2016) attributed this correlation that with age would come more opportunities for encounters with other cultures. For both surveys, the pre and posttest means were noted to have increases on cultural competence and cultural self-efficacy. The IAPCC-SV survey results for cultural knowledge were  $F=12.3$ ,  $p = .001$ ; skill  $F = 8.1$ ,  $p = .005$  and  $p = <.01$ . Significant differences in pre and post survey results for CSES means were found for two of the ethnic subscales where  $p < .01$ . They included African American ( $F = 10.2$ ,  $p = .002$ ) and Hispanic ( $F = 3.8$ ,  $p = .05$ ). Additionally, questions pertaining to performing cultural care had results of  $F = 7.6$  and  $p = .00$  (Kohlby, 2016).

Although Kohlbry (2016) did not find a significant difference between pre and post trip cultural competence, most of the students' IAPPC-SVC survey results found them at the culturally competent level for both pre and post trip data. There was a small number of students at the culturally aware and the culturally proficient levels, but none were at the culturally incompetent levels for either pre or post trip data. An unexpected finding was that on numerous questions, students rated themselves higher on the cultural competency scales before the trips than afterward. Kohlbry (2016) attributed this to students' having a specific worldview prior to their immersion experience, and afterward may have found that their view had changed and their pre-trip perceptions were altered.

The qualitative post-trip interview responses contained data which were coded and grouped according to themes; six themes emerged during this analysis. The themes included cultural knowledge, which consisted of students' learning a language, cultural perceptions, customs and beliefs. The second theme encompassed cultural skills, creativity and respect for others' cultural beliefs. The third theme included students' stereotypes and preconceptions about culture. Themes four, five and six were cultural sensitivity, cultural self-efficacy and identification of cultural barriers, respectively (Kohlbry, 2016). According to Kohlbry (2016), the findings showed the impact of the international immersion trips on building cultural competency in nursing students.

Kohlbry (2016) found limitations of this study to be the uncertainty as to what the optimal length of time that an immersion experience should be, as well as any pre trip education or orientation may vary by trip or college that may influence students. This was a level III, grade A study. Although no power analysis was done for the quantitative portion, it did use a large sample from three universities over the course of four years. Threats to internal validity for the

quantitative portions were testing and selection. The respondents may have become accustomed to the questions in pre and post testing and could anticipate desired responses. The selection for inclusion in this study were students who were participating in an immersion program during their baccalaureate nursing program and volunteered to participate and used a convenience sample. An external threat to validity was the study results were geographically restricted to southern California; generalizability may be compromised in a different region. For the qualitative portion of the study, data saturation for the qualitative interviews was achieved and six recurrent themes were identified, and the surveys used reliable instruments. Applicability to a different region or type of immersion program may not be replicated. This study did show acceptable consistency with the use of the IAPPC instrument and the use of interview questions which indicated six recurring themes. The use of triangulation among the quantitative, qualitative and literature review portions of this study enhanced its credibility.

Harkess and Kadourra (2015), conducted a systematic/integrative literature review that included a rigorous appraisal method, and searched the literature for articles in which cultural competence was mentioned in nursing education. A computer assistive search yielded 139 research studies using keywords published in peer-reviewed journals between 2008 and 2013. This number was further pared down to 12 original research studies which were evaluated using Hawker, Payne, Kerry, Hardey and Powell's quality appraisal tool. The authors found cultural immersion programs, most of which involved study abroad, as well as service learning programs. Students reported low scores in response to the prospect of feeling comfortable working with patients of all ethnic groups (Harkess Kaddourra, 2015). Additionally, the authors noted that although most studies claim at least a small increase in cultural awareness, none were able to declare students to be culturally competent. The authors cited common methods for integrating

cultural competency into nursing schools to include group discussion, lectures, case studies, clinical experiences, cultural immersion and presentations by an ethnic minority speaker (Harkess & Kaddourra, 2015). It was noted that while many schools have integrated cultural competence into their curriculum, it is left up to each school to voluntarily implement this education, and choose how it will be included (Harkess & Kaddourra, 2015).

The authors in this study pointed out that it may be more realistic to prepare students to be culturally aware as graduate nursing students rather than be culturally competent. With the primary method of measurement to be self-reporting, students are not actually asked to demonstrate cultural competence in any meaningful way (Harkess & Kaddourra, 2015). They also added that one theory or teaching strategy did not appear to be superior to any other, but that sustained cultural activity is a key to increasing cultural competence (Harkess & Kaddourra, 2015). Study abroad programs were cited as being the most effective means for increasing cultural awareness, however, students who are interested in studying abroad may already have a wider cultural awareness and interest in diversity than their peers who do not pursue those experiences (Harkess & Kaddourra, 2015). This study was rated level III and of grade A as it had meaningful analyses, a systematic review of the literature and made recommendations for future practice.

Shattell, Nemitz, Crosson, Zackeru, Starr, Hu and Gonzales (2013) examined how one baccalaureate nursing program incorporated concepts of culturally competent practice into its curriculum. In this mixed methods study, researchers collected data from three student focus groups, faculty interviews and student surveys. School of nursing documents were also reviewed, including mission statements, minutes from the Race and Gender Committee and

syllabi of all required upper level nursing courses. Data analysis was performed using content analysis and descriptive statistics (Shattell et al., 2013).

In the focus group interviews, students cited two courses in which culture was addressed in the curriculum. One was a prerequisite course taught during the sophomore year in which small groups of students were required to review literature of health customs and practices of an assigned cultural group. The other course was the community nursing clinical course for senior level students; this course provided direct experience in working with people from diverse cultural backgrounds (Shattell et al., 2013).

Students and faculty in the focus groups and interviews both indicated there was a lack of substantive discussion about cultural issues, and both groups cited a demanding curriculum and time constraints. In addition, both groups said a barrier to discussion was a fear of “saying the wrong thing and offending others” (Shattell et al., 2013, p. 387). The lack of diversity in this school of nursing was noted, which also reflected the National League of Nursing/Carnegie National Survey of Nurse Educators, in which 96 % of nurse educators were found to be women and only 7 % were minorities (Shattell et al., 2013).

The data were collected in two using two surveys, the Blueprint for Integration of Cultural Competence in the Curriculum (BICCC) and the TSET. The BICCC has 30 items and uses a Likert scale. Reliability and validity of this tool has a reported Cronbach’s alpha of 0.96 (Shattell et al., 2013).

A convenience sample of 111 undergraduate nursing student completed the BICC and TSET surveys, with a mean age of 25. Of those students, 88.3 % of students were Caucasian and 91 % were women. The faculty who participated consisted of 14 faculty members, all of whom were white women. All participants in this study were volunteers (Shattell et al., 2013). While

this college had integrated cultural competence into its curriculum, there was a lack of diversity among both faculty and students. Students reported little in-depth discussion about cultural issues, and felt uncomfortable bringing up cultural issues for fear of offending others. Shattell et al., (2013) noted that a lack of diversity in the college may have impacted students' comfort level with open discussion on culture (Shattell et al., 2013).

This non-experimental level III study was given a B rating. Limits to this study were that it examined only one baccalaureate program so the results may not be applicable to other programs. This study took place in a public university in a mid-sized city in the Southeast, which had 180 baccalaureate nursing students in the program. The authors noted a lack of ethnic diversity among the student body. Threats to external validity were that the authors only evaluated one baccalaureate program, so generalizability of these results may not be replicated in a larger study. A power analysis was not performed, so it is not known if the sample size was sufficient.

In a qualitative study by Philips, Bloom, Gainey and Chiocca (2017) senior baccalaureate nursing students were surveyed following a two week study abroad experience to Ghana. Data were analyzed using descriptive statistics. The students responded to open ended writing prompts before and after a trip to Ghana between semesters which was led by the community health nursing faculty and fulfilled the requirement of 90 clinical hours for that course. During the trip, students participated in community health screenings, well child visits, immunization clinics and home visits. Data were collected from six separate groups from 2011 to 2016. The pre and post travel essay prompts were developed by the authors and prepared after a review of literature regarding study abroad programs (Philips et al., 2017). The questions pertained to

students' perceptions about culture, health, trip expectations and how they would apply their experiences to their nursing practice (Philips et al., 2017).

Over the five year period, cohorts of 8 to 12 students participated in the study, resulting in a total number of 62. Of the 62 students, the majority were white (n = 58) and female (n = 60). Themes that were noted in the analysis were Perceptions of Cultural Differences, Relationship with Community, Determinants of Health and Happiness, and Development of Adaptation and Improvisation Skills, and results were grouped into these four areas (Philips et al., 2017).

Findings for this study showed a difference in the responses from the pre and post travel essays. Students typically had negative responses to the conditions and perceptions of the Ghanaian people before the trip, but afterward described Ghana in positive terms. After travel, students mentioned the friendliness, hospitality and strong communities they encountered, and that the people seemed happy despite having few material possessions. They also compared U.S. culture negatively to Ghanaian culture following the trips, citing the Ghanaians' positive outlook, work ethic and sense of community, despite having few financial resources (Philips et al., 2017). Before travel, students wrote about helping the people of Ghana, but did not envision any mutual or personal relationships developing. Post travel, students reported making connections and a desire to return and continue to foster those relationships. Students also had a post travel observation of the good health of the people they encountered, noting that despite their relative poverty, they often ate a healthier diet and were more physically active and stronger than Americans. The authors noted that prior to studying abroad, the students' responses were ethnocentric and described American culture as superior and did not positively perceive Ghanaian culture. Post travel responses indicated a dramatic shift, with students noting

numerous strengths in Ghanaian culture and superiority to American culture in some ways (Philips et al., 2017).

This qualitative study was rated level III, grade A and demonstrated credibility and applicability. Although this study may not be applicable for study abroad program that focused on acute care or clinical skills, it could be applicable to other similar study abroad programs where students participated in community health nursing. The credibility of this study was also noted as the authors had prolonged engagement in this study over five years. The four themes that were noted by the repeated essays indicated that saturation was achieved. The sample size of 62 was appropriate for the setting of this study.

Shen (2015) conducted a literature review in which cultural competence models and assessment instruments were reviewed. Cultural competence models and assessment instruments which were developed and published by nurse researchers since 1982 were evaluated. Two database searches were conducted, which yielded 18 cultural competence models and 15 assessment instruments. Shen (2015) found there are a large number of varying definitions for the terms “cultural competence” and “culture”, making it difficult to define what the instruments are assessing. Specifically, the literature on cultural models revealed that existing models have limitations, as most models only evaluate the health care providers’ cultural competence, not the patient’s outcomes (Shen, 2015). The author added that without considering the measurement of the behavior of the healthcare professional and the patient outcomes, the cultural competence of the care given cannot be validated (Shen, 2015). Furthermore, Shen (2015) suggested that for models to be used in a practical way, quantitative instruments need to be developed.

The assessment tools reviewed by Shen (2015) included self-reported and self-administered tools and scales in the form of questionnaires. All of the tools reviewed were used



to evaluate the cultural competence of nursing professionals, educators, or students. Shen (2015) concluded that the limitations of the existing assessment instruments are due to the fact that most are not tested for psychometric evaluation; those that are may have questionable validity or reliability. Even the few instruments that are tested to have high validity or reliability may still have limitations because of small sample sizes and self-reporting of data. The limits of these assessment instruments make it questionable as to how the results can be generalized to a larger population (Shen, 2015).

According to Shen (2015), cultural competence models in nursing were developed to ensure quality health care for all patients, regardless of cultural background. They have been promoted in response to the rapid increase in diversity in the U.S. over the past 20 years. Cultural competency models have been touted as having potential to help with alleviating health disparities among racial and ethnic groups (Shen, 2015). In spite of these efforts, however, it is estimated that interventions in health care cultural competence may not reduce or eliminate health disparities, due to the fact that they are linked to socioeconomic status (Shen, 2015).

Shen (2015) maintained that although cultural competence alone is not enough to equalize health disparities, nurse researchers have made a significant contribution to advancing cultural competence in the past 30 years (Shen, 2015). The models and assessment tools have raised awareness, understanding, and sensitivity among nurses to strive to improve the quality of care for patients from various cultures. In spite of these efforts, it remains unclear if cultural competence among nurses has improved, due to the models and assessment instruments available. Improved psychometric tests with high reliability and validity are needed to test the outcomes of cultural competence interventions (Shen, 2015). This was a literature review of

good quality, level V and grade B. Shen (2015) provided expertise of good quality, definitive conclusions and a scientific rationale, as the expertise is credible.

### **Chapter Summary**

In this chapter, the evidence was presented which included level II, III and V evidence and found to be of good to high quality after a review using the Johns Hopkins Evidence Based Practice model. Summaries of each piece of evidence, along with a critique and a discussion regarding the threats to internal and external validity for quantitative studies, were presented. The level of rigor and credibility for qualitative studies was also evaluated and presented. A data summary table which includes the author, level of evidence and rating for all of the evidence presented in this chapter can be found in in Appendix A.

## CHAPTER IV

### RESULTS AND SYNTHESIS

Social determinants of health continue to affect the quality and frequency of care provided for many minority and socioeconomically disadvantaged members of society. Nurses are often the first point of contact in the health care system for many clients, and should be prepared to provide quality care for patients from a variety of cultural and socioeconomic backgrounds. In an effort to educate nursing students for this role, the AACN has called on nursing education programs to incorporate cultural education into baccalaureate curricula. This project has presented a variety of pieces of evidence in an attempt to answer the evidence based practice question, "Are pre-licensure baccalaureate nursing students who are exposed to an educational intervention focused on cultural competence influenced in the care provided to clients from other cultures compared to nursing students who are not exposed to a cultural competence educational intervention?"

#### **Results**

Evidence was presented at levels II, III and V, using the Johns Hopkins Evidence Based Practice model as a framework for evaluating the evidence. Level II included quantitative studies, with 7 pieces of evidence presented. Level III encompassed mixed methods and qualitative studies, and 4 pieces of evidence were evaluated to contribute to answering the evidence based practice question. One piece of evidence at Level V was presented, which contained a literature review.

The Level II evidence presented was found to be of A to B- quality. The various pieces of evidence consisted of quantitative studies, but none of these used a randomized control trial or a control group, which resulted in the categorization of Level II. Mesler (2014) performed a

quantitative, exploratory, cross-sectional, between-groups study in which students were found to have scored higher on cultural competence surveys after taking a nursing culture course than their peers who took either a non-nursing culture course or had cultural elements integrated into the nursing program. This study was received an A rating because it used a large sample size, gathered data across the freshman, junior and senior years of baccalaureate nursing students, and used valid and reliable testing instruments. Mesler (2014) found that students showed increased cultural competence over the span between the freshman and junior years and the freshman and senior years. Also of note was that students who took a nursing culture course self-reported higher levels of cultural competence than their peers who took either a non-nursing culture course or were in a program with cultural concepts integrated throughout the curriculum.

Similarly, Silvestri-Elmore et al. (2017) conducted a quantitative, cross-sectional descriptive study to determine if students who had taken an immersion course scored higher than their counterparts who took either a stand-alone culture course or courses with integrated culture concepts. Silvestri-Elmore et al. (2017) found that those in the immersion course group had a higher self-perception of cultural competence than those who took a course with integrated concepts. This study also received an A rating due to use of a national sample and power analysis.

Halter, Grund, Fridline, See, Young and Reece (2015) prepared a quantitative study which found students' perceptions of transcultural self-efficacy (TSE) can be enhanced by learning experiences. The immersion experiences and the use of computer-assisted scenarios were both found to improve TSE, and that demographics such as social orientation, family income, previous health care experience and gender influence TSE. This was a grade B+ study

which showed a positive correlation between the total numbers of cultural experiences a student had and total TSET scores.

Curtis, Baltas and Green used a pre and posttest quasi-experimental design to evaluate the effectiveness of classroom lecture, discussion, role-playing and the assigned reading of a biography on cultural competence among baccalaureate nursing students. Results showed an increase in students' self-efficacy when cultural components were intertwined throughout baccalaureate nursing courses. This was a level II study of B quality due to the convenience sample and small sample size.

Roller and Ballestas (2013) also conducted a quantitative comparison study to determine the effects of a study abroad program one year after its conclusion (Roller & Ballestas, 2013). Students self-reported an improvement in the area of cultural proficiency when they completed the Inventory for Assessing the Process of Cultural Competency among Healthcare Professionals-Revised (IAPCC-R). This study received a rating of B- due to its small sample size, however, the information may be useful in a larger study.

Govere, Fioravanti and Tuite (2016) conducted a quantitative pre/posttest design which evaluated culture competence levels after students completed online learning modules, and results showed an increase in self-reported cultural competence following the on-line module completion. This study received a B rating, due to the use of a small convenience sample, no power analysis and limited potential for generalizability.

Lonneman (2015) conducted a quasi-experimental study to evaluate the effect of six different cultural elements in a course to determine which produced an increase in self-reported cultural competence. The effectiveness of the study was assessed using a posttest and a self-evaluation using the TSET. This study received a B- rating due to its sample size and

generalizability of results. The author found that integrating cultural activities throughout courses positively impacted cultural competence.

Level III evidence included four pieces of evidence, rated to be of A to B quality. Phillips et al. (2017) provided a qualitative pre and posttest study which followed students over four years. Essay prompts provided feedback on students' perceptions following a study abroad trip to Ghana. This study was given an A rating due to the amount of time spent with various student groups and that data saturation was achieved.

Harkess and Kaddourra (2015) conducted a systematic review of the literature and found that although no single cultural education strategy appeared to be superior, sustained cultural activities throughout a program appeared to increase cultural competence among baccalaureate nursing students. This study received an A rating due to its analysis of the findings, a systematic review of the literature and recommendations made for future practice.

Kohlbray (2016) presented a mixed methods study using a triangulated methodology to determine if international service learning impacted the development of cultural competency in nursing students. For the quantitative portion of this evidence, differences were noted between pre and posttest surveys for two of the five constructs of cultural competence, while the qualitative analysis supported the quantitative findings in cultural competency. This was an A rated study as the quantitative portion used a large sample from three universities over the course of four years. The qualitative portion of the study was credible and achieved data saturation as evidenced by the six recurrent themes among respondents which supported the quantitative findings.

Shattell, Nemitz, Crosson, Zackeru, Starr, Hu and Gonzales (2013) reviewed data from students, faculty and baccalaureate nursing program documents in a mixed methods, non-experimental study. Shattell et al. found that there was a lack of discussion in courses about culture issues among both students and faculty, and both groups cited a demanding curriculum and time constraints as barriers to providing cultural education. This study received a B rating due to the authors' evaluation of only one baccalaureate program, therefore replication in a different settings may be limited.

Shen (2015) performed a literature review of the instruments used to assess cultural competence. This was the only piece of evidence presented from level V. The research indicated that the varying definitions of culture and cultural competence made it difficult to determine what the instruments actually assessed. Shen found that many instruments used small sample sizes and self-reported data. This evidence was given a B+ rating, as the author provided definitive conclusions and scientific recommendations.

### **Synthesis of Results**

Nursing culture courses had a greater impact on non-nursing culture courses or integrated cultural elements, and immersion and study abroad experiences resulted in higher cultural competence than either stand-alone culture courses or courses with cultural elements integrated into the course. Study abroad programs showed an increase in cultural competence, which was sustained one year afterward. Additionally, the demographics of the students impacted cultural competence in that minority nursing students showed higher levels of competence than their non-minority peers. Students' perceptions of transcultural self-efficacy (TSE) can be enhanced by learning experiences, particularly immersion experiences and computer computer-assisted scenarios. Increases in students' self-perceptions of TSE were noted by threading cultural

elements throughout courses which included case studies, lectures, and a book club which focused on literature about a foreign culture, role playing, cultural assessments and accessing language interpretation services. Teaching cultural competence via online modules was also found to show an increase in cultural competence.

Responses to essay prompts were found to show an increase in cultural competence, as well as a change in perception of one's own culture following a study abroad trip. Literature reviews indicated that although no single educational strategy appeared to be superior in increasing cultural competence among baccalaureate nursing students, sustained cultural activities throughout a program appeared to increase cultural competence.

Important themes noted were that the various instruments available to assess cultural competence seemed to vary as to what they were actually assessing. A solid definition of culture and cultural competence which is accepted across all baccalaureate programs, as well as a standardized method of assessing cultural competence may be needed. The instruments available rely on self-reporting of one's own perceptions of their cultural competency. Recurrent themes noted in the evidence were that even in a quantitative study, the authors used instruments that asked the respondent to provide their opinion on how their level of cultural competence had been affected by the course, immersion experience or intervention. The most commonly used instruments were the Transcultural Self-efficacy Tool (TSET) and the Inventory for Assessing the Process of Cultural Competency among Healthcare Professionals-Revised (IAPCC-R). Both of these instruments use a Likert scale for the respondent to evaluate their own experiences and are given a numerical value.

The IAPCC-R was developed by Campinha-Bacote (2015), and is a written, self-assessment tool which measures five constructs of culture. These constructs include desire,



awareness, knowledge, skill and encounters. The instrument uses a four-point Likert scale and takes approximately 10 to 15 minutes to complete. The scores range from 25-100, with higher scores indicating higher levels of cultural competence. Cultural proficiency is scored 91 to 100, cultural competence is scored 75 to 90, culturally aware is scored 51 to 74 and culturally incompetent is scored 25 to 50 (Transcultural C.A.R.E., 2015).

The TSET was developed by Jeffreys (2006), which was designed to measure students' self-confidence in their ability to provide nursing care to diverse clients. The 83-item questionnaire has three subscales in the cognitive, practical and affective domains, and uses a 10 item Likert scale (Jeffreys, 2006). Both of these instruments have undergone extensive testing for reliability and validity, and are commonly used and accepted in evaluating cultural competence in nursing education and health care professions.

In multiple pieces of evidence presented in this project, the evidence included pre and posttest design in which the author used a survey instruments such as the TSET or the IAPPC, then had an intervention, followed by another survey using the same instrument. Authors reported increase in cultural competence following the intervention. In critiquing the evidence, it was noted that the respondent may have recalled the previous survey questions which could impact results. The pieces of evidence reviewed which focused on study abroad and immersion programs seemed to have the greatest impact on cultural competence. One observation is that those students who volunteer to study abroad or participate in an immersion experience may have a preexisting interest in exploring other cultural experiences, which may also impact their survey responses. All of the participants for the study abroad and immersion experiences in the evidence found for this project were volunteers; none of the baccalaureate nursing programs required students to travel as a degree requirement, perhaps due to cost and time constraints.

The evidentiary pieces which did not include study abroad programs evaluated other cultural activities used in baccalaureate nursing programs. The evidence included evaluations of nursing and non-nursing culture courses, programs which integrated cultural components across the curricula, online cultural modules, role playing, assigned readings and journal reflections, to name a few. Through the use of pre and post intervention surveys, interviews and essay prompts, students self-evaluated their cultural competence and confidence to determine a change following the exposure to the intervention. Results shown in the evidence presented indicated an increase in cultural competence following the interventions. The methods used to evaluate cultural competence for all of the evidence presented relied on the student's perception of cultural competence and asked the student to respond to a written survey, verbal interview questions or written essay prompts. The pieces of evidence which used surveys to determine change in students' cultural competence relied on established instruments, primarily the TSET or the IAPPC.

### **Chapter Summary**

This section of the project presented a synopsis of the pieces of evidence found at Levels II, III and V. Twelve pieces of evidence were found to be of high to good quality, with ratings ranging from A to B- based on the Johns Hopkins Evidence Based Practice rating tools. In addition, a synthesis of the recurrent themes found in the evidence was also presented. The two main instruments used to evaluate cultural competence, the TSET and the IAPPC, were also discussed in this section. A data synthesis table which includes the author, level of evidence and rating and a brief summary of each piece of evidence is found in Appendix B.

## CHAPTER V

### DISCUSSION AND CONCLUSION

Loftin et al. (2013) stated that an individual's culture and ethnicity are responsible for their beliefs, values, behavior, emotion and lifestyle. These values and beliefs play an important role in cultural norms, which impact many areas of health. Providing culturally competent care is appropriate to reduce disparities in health care, which persist even when insurance and access to health care are comparable (Loftin et al., 2013). According to Jeffreys (2006), culture can have an important impact on promoting wellness, restoring health and improving illness. In light of the multicultural and global society of the 21<sup>st</sup> century, the AACN has called upon nursing education programs to incorporate cultural competence education into curricula. This project has reviewed and presented 12 pieces of evidence in an attempt to answer the evidence-based practice question, "Are pre-licensure baccalaureate nursing students who are exposed to an educational intervention focused on cultural competence influenced in the care provided to clients from other cultures compared to nursing students who are not exposed to a cultural competence educational intervention?"

#### **Discussion of Findings**

In this project, 12 pieces of evidence have been presented which encompassed quantitative, qualitative, mixed methods studies and a literature review. Several themes were noted. Cultural elements have been incorporated into baccalaureate nursing programs in a variety of ways. Colleges have used nursing and non-nursing culture courses, or integrated cultural elements throughout the program without requiring a specific course on culture. Study abroad programs which ranged from one week to entire semesters have been evaluated as to whether any gains in cultural competence were noted after the experience, and whether the

changes were sustainable one year afterward. In addition, nursing courses which integrated cultural elements throughout the program were also evaluated to see which interventions had the greatest effect, such as online modules, assigned readings, role playing, and journaling or group projects. While immersion and study abroad programs appeared to have the greatest impact on cultural competence, other interventions also appeared to be effective. Cultural competency educational offerings which were threaded throughout a baccalaureate nursing programs appeared to have a greater impact than one single course or educational element.

### **Implications of Findings**

Implications of the findings in this project indicates that there is a need for additional cultural competence education in baccalaureate programs, but perhaps equally important, a need for an effective method of measurement. Nearly all of the studies found for this project used surveys in which the respondent completed a written questionnaire prior to an intervention, then completed the same questionnaire following the intervention and the results were compared. In some of the evidence presented, the same survey was also completed one year after the intervention, such as one year following a study abroad experience. The most commonly used instruments employed a Likert scale questionnaire, in which the respondent indicates “agree”, “strongly agree”, “disagree”, “strongly disagree”, etc., and the response was quantified with an accompanying score. The results were scored and the scores were then grouped into different levels of cultural competence. While the measurement tools available have been tested for reliability and validity, perhaps further research could determine an effective method of determining a student’s cultural competence in a more objective way, rather than the self-reporting methods currently used.

### **Limitations for Consideration**

This capstone project focused on 12 research articles found after database searches using key words which captured published articles on cultural competence in baccalaureate nursing education. After evaluating the evidence, it appeared that cultural competence is difficult to measure and determine if the interventions and efforts to educate students in this area have been effective. Some of the evidence presented was from qualitative studies, while others were from quantitative studies. In the study of cultural competence, it seemed that qualitative data may be the most reliable, as students are not being asked to demonstrate cultural competence, but rather provide self-evaluations as to their level of competence. Perhaps by using different key words or conducting searches of additional databases beyond CINAHL and PubMed could have yielded different results and evidence for this project. Future research could focus on capturing different evidence on the subject of cultural competence in baccalaureate nursing education for comparison.

### **Identified Gaps in Findings**

Limitations to cultural competence education were noted in the evidence authored by Shattell et al. (2013). Baccalaureate nursing educators stated a lack of time due to the already full curriculum. Educators could make minor changes to current course elements to incorporate cultural elements, rather than adding additional requirements. Simulation exercises could include elements of culture for nursing students to address in addition to the existing patient concerns. Harkess & Kaddoura (2015) cited study abroad as an effective way to add cultural awareness, but study abroad may not be practical to require of all students due to cost and time constraints. Instead of requiring foreign study abroad or immersion programs, baccalaureate programs could use cultural elements in their own communities as clinical sites, such as

homeless shelters, prisons, migrant worker housing, or places of worship which have predominantly foreign congregations. Perhaps the definition of “culture” needs to be clarified to nursing programs so that educational opportunities in this area do not seem to be an added burden on an already full curriculum.

### **Chapter and Project Summary**

The review of the literature cited in this paper appears to indicate that cultural competence can be increased during a baccalaureate nursing program, but not solely from taking a single course. A variety of cultural interactions woven throughout a nursing program appears to increase cultural competence most effectively. While study abroad and immersion programs also appeared to be effective in increasing cultural competence, there may be a misconception that experiences with other cultures must include interactions with a person from another country, whereas one could have experiences working across cultures without studying outside of the local community. Students could interact with members of their own community, such as veterans, the elderly, the homeless, or persons from different racial or socioeconomic backgrounds.

The evidence reviewed in this paper also indicate that cultural competence is difficult to measure for a variety of reasons. The method of evaluating cultural competence primarily consists of students completing a survey evaluating themselves on their level of cultural competency. Students are not asked to demonstrate cultural competency; rather it is their perception of their own level of competence which is measured. In answer to the original question posed at the beginning of this paper, “Are pre-licensure baccalaureate nursing students who are exposed to an educational intervention focused on cultural competence influenced in the care provided to clients from other cultures compared to nursing students who are not exposed to

a cultural competence educational intervention?”, review of the literature indicated that a single course or intervention would not prepare a student to be culturally competent, but instead a variety of experiences integrated into the baccalaureate program would increase cultural competence in the nursing student. The evidence suggested that integrating study abroad and immersion experiences, as well as cultural education across all aspects of a baccalaureate nursing program were the most effective methods of increasing cultural competence among baccalaureate nursing students. There appeared to be a need for further research as to whether there could be a more objective assessment of determining a student’s cultural competence, as the current methods are subjective and based on the student’s self-perception. Becoming culturally competent should be viewed as a continuous process and would extend throughout and beyond nursing school.

## References

- American Association of Colleges of Nursing. (2008). *The essentials of baccalaureate education for professional nursing practice*. Washington, D.C.
- American Association of Colleges of Nursing (2008). *Tool kit of resources for cultural competent education for baccalaureate nurses*. Retrieved from <http://www.aacnnursing.org/Portals/42/AcademicNursing/CurriculumGuidelines/Cultural-Competency-Bacc-Tool-Kit.pdf?ver=2017-05-18-143552-023>
- Arbour, M., Kaspar, R., & Teall, A. (2016). Strategies to promote cultural competence in distance education. *Journal of Transcultural Nursing*, 26(4), 436-440.
- Byrne, D. (2016). Cultural competency in baccalaureate nursing education: A conceptual analysis. *International Journal for Human Caring*, 20(2), 114-119.
- Curtis, M., Bultas, M., & Green, L. (2016). Enhancing cultural competency. *Online Journal of Cultural Competence in Nursing & Healthcare*, 6(1), 1–13.
- Culture. (n.d.). Retrieved from <https://www.merriam-webster.com/dictionary/culture>
- Dang, D., & Dearholt, S. L. (2018). *Johns Hopkins nursing evidence-based practice: model and guidelines* (3<sup>rd</sup> ed). Indianapolis, IN: Sigma Theta Tau International.
- Govere, L., Fioravanti, M. & Tuite, P. (2016). Increasing the cultural competence level of undergraduate nursing students. *Journal of Nursing Education*, 55(3), 155-159.
- Halter, M., Grund, F., Fridline, M., See, S., Young, L. & Reece, C. (2015). Transcultural self-efficacy perceptions of baccalaureate nursing students. *Journal of Transcultural Nursing*, 26(3), 327–335.
- Harkess, L., & Kaddoura, M. (2015). Culture and cultural competence in nursing education and practice: the state of the art. *Nursing Forum*, (51)3, 211-222.



- Jeffreys, M. (2006). *Teaching cultural competence in nursing and health care: inquiry, action, and innovation*. New York, NY: Springer.
- Kohlbray, P. (2016). The impact of international service-learning on nursing students' cultural competency. *Journal of Nursing Scholarship*, (48)3, 303–311.
- Loftin, C., Hartin, V., Branson, M. & Reyes, H. (2013). Measures of cultural competence in nurses: an integrative review. *The Scientific World Journal*.
- Lonneman, W. (2015). Teaching strategies to increase cultural awareness in nursing students. *Nurse Educator*, 40(6), 285-288.
- Mesler, D. (2014). A comparative study of cultural competence curricula in baccalaureate nursing programs. *Nurse Educator* 39(4), 193-198.
- Philips, L., Bloom, T., Gainey, T. & Chiocca, E. (2017). Influence of short-term study abroad experiences on community health baccalaureate students. *Journal of Nursing Education*, 56(9), 528–533.
- Roller, M. C., & Ballestas, H. C. (2017). Cultural competency: measuring the sustainability following an immersion program for undergraduate students. *Journal of the New York State Nurses Association*, 45(1), 21–28.
- Shattell, M., Nemitz, E., Crosson, N., Zackeru, A., Starr, S., Hu, J. & Gonzales, C. (2013). Culturally competent practice in a pre-licensure baccalaureate nursing program in the United States: a mixed-methods study. *Nursing Education Perspectives*, 34(6), 383-389.
- Shen, Z. (2015). Cultural competence models and cultural competence assessment instruments in nursing: a literature review. *Journal of Transcultural Nursing*, 26(3), 308-321.

Silvestri-Elmore, A., Alpert, P., Kawi, J., & Feng, D. (2017). The predictors of cultural competence among new baccalaureate degree nursing graduates: implications for nursing education. *Journal of Nursing Education & Practice*, 7(5), 33–44.

Transcultural C.A.R.E Associates. (2015). Inventory for the process of cultural competence among healthcare professionals. Retrieved from <http://transculturalcare.net/>

## Appendix A

### Data Summary Table

Level of evidence	Name of authors	Quality level/grade	Number of pieces
Level II – quantitative	Mesler Silvestri-Elmore et al. Govere et al. Lonneman Curtis et al. Roller & Ballestas Halter et al.	High/A High/A Good/B Good/B- Good/B Good/B- Good/B+	7
Level III - qualitative	Kohlby Shattell et al. Harkess & Kaddourra Phillips et al.	High/A Good/B High/A High/A	4
Level V – literature review	Shen	High/A	1
Total		High = 7 Good = 5	12

**Appendix B  
Data Synthesis Table**

<b>Level/ Quality</b>	<b>Author/year</b>	<b>Type of evidence</b>	<b>Information applicable to EBP Question</b>
II/B-	Lonneman, 2015	Quasi-experimental	This study evaluated students' cultural competence before and after six different teaching strategies were implemented by using a post test and self-evaluation. The teaching strategies were effective for increasing cultural awareness and could be incorporated across a curriculum over several courses.
II/A	Mesler, 2014	Quantitative, exploratory, cross-sectional, between-groups study	Students in the nursing culture group scored higher than the non-nursing culture course group, those in the nursing culture course also scored higher than those in the integrated programs.
II/A	Silvestri-Elmore	Quantitative, cross-sectional descriptive	Students who had taken an immersion course scored higher than their counterparts who took either a stand-alone culture course or courses with integrated culture concepts.
II/B	Govere, Fioravanti and Tuite (2016)	Quantitative pre/posttest design	Results showed a change in cultural competence and constructs following the intervention of on-line module completion.
II/B+	Halter, Grund, Fridline, See, Young and Reece, 2015	Quantitative	Found students' perceptions of transcultural self-efficacy (TSE) can be enhanced by learning experiences. Also found social orientation, family income, previous health experience and gender influence TSE.
II/B	Curtis, Bultas and Green	Quasi-experimental design, pre and posttest	Students showed an increase in cognitive, practical and affective subscales on the TSET after interventions were integrated into classroom teaching.
II/B-	Roller & Ballestas	Quantitative comparison	The greatest improvement was seen in cultural proficiency, with 0 students scoring in this category one month after the trip, and 13.3% scoring in this area after one year.
III/A	Phillips et al., 2017	Qualitative pre/post test	Pre and post travel essay prompts over four years following a study abroad trip to Ghana indicated participants gained respect for another culture, as well as viewed American culture more critically.

<b>Level/ Quality</b>	<b>Author/year</b>	<b>Type of evidence</b>	<b>Information applicable to EBP Question</b>
III/A	Kohlbray, 2016	Mixed methods, triangulated methodology	International service-learning impacted building cultural competency in nursing students. Quantitative findings showed differences between pre and posttest surveys for two of the five constructs of cultural competence. Qualitative analysis supported the quantitative findings in cultural competency.
III/A	Harkess and Kaddourra, 2015	Systematic literature review	Researchers found that no single strategy appeared to be superior, but rather sustained cultural activities throughout a program increased cultural competence.
III/B	Shattell, Nemitz, Crosson, Zackeru, Starr, Hu, & Gonzales, 2013	Mixed methods study, non-experimental	This study reviewed data from students, faculty and program documents. A lack of diversity among nursing students and faculty, indicative of national averages, were noted. May lead to lack of in-depth discussion on cultural issues. Time constraints and a demanding curriculum which limited additional cultural experiences were noted.
V/A	Shen, 2015	Literature review	Research indicated varying definitions of culture and cultural competence made it difficult to determine what the instruments assessed. Many instruments use small sample sizes and self-reported data.