Cultural Competency of Nursing Faculty

Teaching in Baccalaureate Nursing Programs in the U.S.

A Dissertation Presented By
Nadiah Abdulaziz Baghdadi

To
The School of Nursing in Bouvé College of Health Sciences
In partial fulfillment of the requirements for the degree of
Doctor of Philosophy
In Nursing

Northeastern University
Boston, Massachusetts, USA

February 14, 2014
Copyright (Blank)
DEDICATION

I thank God for giving me faith, trust, and strength in myself to successfully complete this PhD journey.

I dedicate this dissertation to my family: to mother, Abdiah, and my father, Abdulaziz, for their continuous support and prayers, which helped me to overcome many obstacles; to my brothers Wael and Khalid for being there for me when I needed it most. I never could have completed my academic journey without them; to my little angels, Aziz, Ghalia, Ghazi, and Ghazal for their patience and support. They are amazing and deserve to share this success. Last, but not least, I give my deepest expression of love and gratitude to my ceaseless supporter and soul mate, Amer, for the inspiration and sacrifices you have made during this journey. Thank you for giving me your devotion, strength, and courage during the late nights of studying until I reached my goal.
ACKNOWLEDGMENT

I would like to express my deepest appreciation to my advisor and chairperson, Dr. Elizabeth Howard, for her continuous support, guidance, and dedication to my academic work and my research. I would like to thank my committee members, Dr. Lynn Babington and Dr. Jane Aroian, for their encouragement and guidance throughout my graduate studies. I also want to acknowledge the support of the Saudi Arabian Cultural Mission for sponsoring my PhD studies at Northeastern University. Finally, I express my heartfelt gratitude to my PhD friends who stood by me for the past five years and were always willing to offer their assistance and constructive criticism.
# TABLE OF CONTENT

COPYRIGHT .................................................................................................................. 2
DEDICATION .................................................................................................................. 3
ACKNOWLEDGMENTS ................................................................................................. 4
TABLE OF CONTENT ................................................................................................. 5
LIST OF TABLES ............................................................................................................ 6
LIST OF FIGURES ........................................................................................................ 7
ABSTRACT ..................................................................................................................... 8
CHAPTER 1: INTRODUCTION ...................................................................................... 10
CHAPTER 2: LITERATURE REVIEW ............................................................................ 29
CHAPTER 3: RESEARCH DESIGN and METHODS ....................................................... 61
CHAPTER 4: RESULTS .................................................................................................. 75
CHAPTER 5: FINDINGS, CONCLUSION, and IMPLICATIONS .................................... 99
REFERENCES ............................................................................................................... 114
APPENDIXES .............................................................................................................. 119
List of Tables

Table 1. Study Variables.................................................................25
Table 2. Reliability Coefficient for the CDQNE-R and Subscales...........65
Table 3. Cultural Competence Level Based on CDQNE-R Scores..........67
Table 4. Data Collection Timeline....................................................70
Table 5. Study Variables & Level of Measurement.............................71
Table 6. Demographic Characteristics of Sample...............................79
Table 7. Nursing Specialty Area of Participants.................................82
Table 8. Summary of the Internal Consistency Reliability Statistics........85
Table 9. Overall Cultural Competence Level of Participants.................86
Table 10. CDQNE-R Subscales Mean Scores.....................................87
Table 11. LS-Means of Different Measures Adjusting for Gender & Age Group...91
Table 12. Regression Estimate of Cultural Competence Score Contributing Factor......95
Table 13. Regressions Estimate of Transcultural Teaching Behaviors Relation to Cultural Competence Score.................................................97
List of Figures

Figure 1. Process of Cultural Competence in the Delivery of Healthcare Services……..36
Figure 2. Age Group of Participants.................................................................77
Figure 3. Racial & Ethnic Distribution of Participants.......................................78
Figure 4. Teaching Nursing Experience of Participants.....................................81
Figure 5. Highest Degree Attained of Participants...........................................81
Figure 6. Level of cultural content in current teaching program..........................84
Figure 7. Mean Score of CDNQ-R Subscales....................................................88
Figure 8. Mean of CDNQ-R Subscales Related to Possible Minimum and Maximum Answers...............................................................88
ABSTRACT

It has been decades since the concept of cultural competency was introduced in the literature, yet nursing faculty still show low levels of cultural competence. The purpose of this study was to assess the level of cultural competence among nursing faculty teaching in collegiate schools of nursing in the U.S. and to identify and examine demographic factors that are associated with the cultural competence level of nursing faculty. The study design was a descriptive, correlational, non-experimental survey design with a sample of nursing faculty (n=461) teaching in Commission on Collegiate Nursing Education (CCNE) accredited baccalaureate nursing programs in the U.S. Data were collected using “Cultural Diversity Questionnaire for Nurse Educators Revised” CDQNE-R. The guided theoretical framework of this study was Campinha-Bacote’s (2010) Process of Cultural Competence in the Delivery of Healthcare Services Model. Statistical analysis was done with SAS 9.3© (SAS Institute Inc., Cary, NC). The overall cultural competence (OCC) mean score for the study sample =166.3 ± 19.5 indicating that nursing faculty who teach at BSN programs across the U.S. have a moderate level of cultural competence. The highest indexes were for the Cultural Knowledge Subscale M= 43.53 ± 6.2, and the Cultural Teaching Behaviors Subscale M= 42.10 ± 4.98. The low indexes were for the Cultural Skills Subscale M= 31.53 ± 4.41, and the Cultural Encounter Subscale M= 22.50 ± 4.42. Regression analysis found that selected demographic variables were predictive of OCC mean score. These variables included residing in a different country, language other than English, nursing specialty, highest degree attained, cultural continuing education, including cultural content in current nursing program, level of incorporating cultural content in current program, and assessing
student needs and were significantly predictive of OCC mean score after adjusting for race, age group, and gender. The study also found that the transcultural teaching behaviors subscale was significantly associated with the OCC scale, adjusting for all other variables. The explained variance for the models ranged from 39% to 86%. Future studies are needed to identify factors that contribute to cultural competence from faculty and student perspectives; to identify the best-standardized evaluation tool to assess students’ cultural competence levels; and to identify the best educational strategies to teach cultural competency in nursing education programs.
CHAPTER 1: Background and Significance

Introduction

In 2012, the U.S. Census Bureau estimated approximately 37% of the U.S. population belongs to racial/ethnic minority groups; by 2043, they project these groups combined will account for almost half of the U.S. population (U.S. Census Bureau, 2012). As the nation becomes more culturally and ethnically diverse, so does the demand for culturally competent health care, however, the nursing profession does not mirror the diversity of the population it serves. Transcultural nursing has become a key component in healthcare that is responsive to the growing demands of cultural and ethnic diversity of our population. Leininger & McFarland (2002) defined transcultural nursing as “a formal area of study and practice focused on comparative human care differences and similarities of the beliefs, values and patterned life way of cultures to provide culturally congruent and beneficial health care to people” (Leininger & McFarland, 2002).

Delivering culturally competent care is shown to be a powerful tool for closing the health care disparity gap; care that corresponds to the health beliefs, practices, and cultural needs of clients from diverse backgrounds leads to positive health outcomes (The Office of Minority Health, 2013). In order to meet the demands of our diverse society, delivering culturally specific nursing care is no longer a preference, but a requirement. Research demonstrates that the cultural competence level of academic nursing faculty is a major factor in preparing culturally competent students and future nurses (Kardong-Edgren, 2007). Nursing faculty need to demonstrate two aspects of cultural competence: they must be prepared to teach students from diverse backgrounds and have the ability to teach nursing students how to care for diverse patients. (Moyer, & Wittmann-Price,
Ryan, Carlton, and Ali (2000) examined the education and abilities of faculty in the culturally competent nursing care and found a serious shortage of adequately prepared faculty.

The concept of cultural competence has been in the literature since the 1970s, when first introduced by Leininger’s research on culture and its influence on health and named this area of nursing “Transcultural Nursing,” (Leininger, 2002). She defined it as “a formal area of study and practice focused on comparative human care differences and similarities of the beliefs, values and patterned life way of cultures to provide culturally congruent, and beneficial health care to people” (Leininger & McFarland, 2002). For Leininger, “Culture” refers to integrated patterns of human behavior that include the language, thoughts, communications, actions, customs, beliefs, values, and institutions of racial, ethnic, religious, or social groups. In this context, “Competence” means the capacity to function effectively as an individual and an organization within the context of the cultural beliefs, behaviors, and needs presented by consumers and their communities (The Office of Minority Health, 2013).

The present study will use the operational definition of cultural competence as it applies to health care, articulated by Campinha-Bacote (2010). Cultural competence is “the ongoing process in which the healthcare professional continually strives to achieve the ability and availability to work effectively within the cultural context of the patient (family, individual or community)” (Campinha-Bacote, 2010).

**Area of Concern**

The Centers for Disease Control and Prevention’s (CDC) Healthcare Disparities and Inequalities Report (2011) found persistence disparities in mortality, morbidity,
behavioral risk factors, health-care access, preventive health services, and social
determinants of critical health problems in the United States. Clinical conditions such as
cancer, diabetes, end stage renal disease, heart disease, HIV disease, mental health and
substance abuse, and respiratory diseases showed significant disparities. Of the 47,500
new HIV infections in 2011, 44% of were African American (CDC, 2011). Diabetes,
which is largely preventable, also illustrates this gap. When compared to the 7.1% of
non-Hispanic whites diagnosed with diabetes in the US; 8.4% were Asians, 11.8% were
Hispanic, and 12.6% were non-Hispanic blacks (CDC, 2011).

On the other hand The National Sample Survey of Registered Nurses (NSSRN)
Survey results from 2008 revealed that nurses from cultural and ethnic minority
backgrounds represented only 16.8% of the registered nurse (RN) workforce. With a
racial/ethnic background comprised of 5.8% Asian, 5.4% African American, and 3.6%
Hispanic, this discrepancy creates greater health care challenges associated with the
provision of culturally competent care (The National Sample Survey of Registered
Nurses, 2010).

Cultural Competence of Nurses

Specific topics of study include the cultural competence levels of nurses in terms
of patient care, nurses’ perceptions of patients, the need for culturally competent care,
and factors that promote culturally competent nursing care (Mayo, Sherrill,
Sundareswaran, & Crew, 2007; Leishman, 2004; Lampley, Little, Beck-Little, & Xu,
2008; Schim, Doorenbos, & Borse, 2005). Mayo and colleagues (2007) studied the effect
of both health care providers’ (including nurses) perceptions and patients’ perceptions on
the health outcomes for Hispanic patients. These authors found the main barriers from the
patients’ perspectives were communication with providers due to language differences and the providers’ lack of cultural understanding. Provider barriers included limited interactions with Hispanic patients due to language barriers, cultural differences, and problems related to institutional resources, such as limited access to interpreters. These findings confirm the importance of training providers to understand and accept other cultures in order to eliminate barriers from practice (Mayo et al., 2007).

Leishman (2004) identified that a major factor limiting nurses’ cultural competence is self-awareness. Nurses in this study felt a lack of self-awareness allowed feelings towards patients to affect health care delivery. Based on these findings, the author developed a cultural competency framework for nursing education. She stresses this framework demonstrates how a course covering the essential cultural concepts can be established, but warns it should not be the end point in cultural competency education for nurses in programs of study; additional education may be required (Leishman, 2004).

Lampley and colleagues (2008) found that a higher level of education, work experience, and continuing cultural education are the main contributors of cultural competence in nurses. Eighty-seven percent of the respondents reported including cultural content in their nursing education as part of a unit, chapter, or course. Authors found that verbal communication barriers, different religious beliefs, different health beliefs and behaviors, and culturally inappropriate nonverbal communication are major barriers in providing cultural care. Research shows that nurses who received cultural training and attained higher levels of education scored significantly higher on cultural awareness and sensitivity and on cultural competence behaviors (Lampley, et al., 2008,
Schim, et al., 2005). Nurses’ cultural competence develops not only from the practice settings, but also from the primary nursing education.

*Cultural Competence of Nursing Students*

Kardong-Edgren & Campinha-Bacote’s (2008) study evaluated the effectiveness of four different nursing programs’ curricula in developing culturally competent new graduates. Four geographically diverse groups of graduating BSN students in the United States were given the Inventory for Assessing the Process of Cultural Competency Among Healthcare Professionals – Revised (IAPCC-R) prior to graduation and after completion of course work. The IAPCC-R consists of 25 items that measure five cultural constructs: desire, awareness, knowledge, skill, and encounters. Scores range from 25-100 and indicate whether a healthcare professional operates at a level of cultural proficiency, cultural competence, cultural awareness, or cultural incompetence. Four curricular methods for achieving cultural competency were examined in the study. Two of the programs used a model developed by established transcultural expert nurses (Kardong-Edgren & Campinha-Bacote, 2008). One program used an integrated approach, employing no specific model. Another included an elective culture course within the curriculum, taught by nursing faculty with strong cultural training. The survey of 212 graduating nursing students indicated they were in the culturally aware range, regardless of which program they attended (Kardong-Edgren, & Campinha-Bacote, 2008). Cultural awareness, however, is only the first phase of cultural competence, which are cultural proficiency, cultural competence, cultural awareness, and cultural incompetence.

Mills-Wisneski (2005) investigated minority-nursing students’ perceptions concerning the presence of minority nurse educators. Approximately 71% of respondents
stated the importance of cultural and ethnic minority nurse educators in classroom and clinical areas. Lack of minority faculty with similar cultural and ethnic background was perceived as a barrier to successful completion of the nursing program; several participants sought support and role modeling from minority nurses outside the nursing program. Strategies that provide teaching experience for cultural and ethnic minority nurse educators at various levels could increase the number of minority faculty in both the clinical areas and the classroom (Mills-Wisneski, 2005). Further, more minorities in the classroom and clinical areas means more mentors and role models for minority nursing students (Mills-Wisneski, 2005).

Liu, Mao, & Barnes-Willis (2008) found exposure to cultural concepts and to culturally and ethnically diverse populations plays an important role in improving cultural competence levels of graduating baccalaureate nursing students. The authors suggest the need for nurse educators continue to integrate cultural concepts and experiences in the nursing curriculum (Liu, Mao & Barnes-Willis, 2008).

*Cultural Competency of Nursing Faculty*

Research suggests faculty are inadequately prepared to develop cultural competence in nursing students. One standard for the Accreditation of Baccalaureate and Graduate Degree Nursing Programs is that faculty members be academically prepared and experientially prepared for the areas in which they teach (The Commission on Collegiate Nursing Education [CCNE], 2013). In 2005, the National League for Nursing (NLN) published eight core competences for nurse educators: facilitate learning, facilitate learning development and socialization, use assessment and evaluation strategies, participate in curriculum design and evaluation of program outcomes, function as change
agent and leader, pursue continuous quality improvement in the nurse educator role, engage in scholarship, and function within the educational environment (NLN, 2005). Nursing faculty need to have both teaching experiences and academic preparation in order to provide an effective learning environment yet, neither organization explicitly requires cultural competency of faculty. The literature indicates faculty are inadequately prepared to teach or mentor students about cultural competence (Mayo, et al., 2007; Kardong-Edgren, 2007; Yates, 2009). The literature also shows incongruence between the stated goals of nursing programs for preparing students to work in culturally diverse settings and the practice of nursing faculty in the classroom and clinical settings (Campinha-Bacote, 2006). Further, research shows that the cultural competence of nursing faculty is impeded by additional significant factors, including faculty shortages in nursing education, faculty bias and/or lack of commitment to cultural competency training and practice, and under-preparation of faculty to teach culturally competent nursing care. Without proper preparation of faculty and a formal commitment by nursing education institutions to ensure faculty can and will educate nursing students about cultural diversity issues, any cultural competence efforts will be limited.

Faculty Shortages in Nursing Education

At a time when the need for culturally competent registered nurses continues to grow, faculty shortages at nursing schools across the country limit the number of professional nurses who can be trained. Embedded in the overall nursing faculty shortage is a shortage of cultural and ethnic minority faculty members teaching in schools of nursing. According to 2012 data from AACN member schools, only 12.3% of full-time nursing school faculty came from minority backgrounds (American Association of
Colleges of Nursing [AACNE], 2014). The result is a tendency toward a self-perpetuating lack of minority faculty role models in nursing programs (Mills-Wisneski, 2005, AACNE, 2014).

**Faculty Bias and Lack of Commitment**

Biases are likely to affect nurse educators’ perceptions of, attitudes toward, and behaviors with clients, students, and colleagues from diverse backgrounds (Wells, 2000). Educators bring personal experiences, prejudices, and expectations to the classroom. As authority figures, the beliefs and assumptions faculty communicate, wittingly or unwittingly, shape student learning in both explicit and implicit ways, in turn influencing the learner’s long-term attitudes and behaviors. The manner in which faculty present diversity concepts can have far reaching consequences that influence a learner’s stance on and comfort with diversity once they begin professional practice (Leonard, 2006). When faculty present diversity as an important concept, graduates are more likely to respect the diversity they find among their professional colleagues and their clients. Byrne and colleagues (2003) categorized signs of bias that can be observed in teaching when faculty members are not adequately qualified. These included invisibility, stereotyping, imbalance and selectivity, unreality, fragmentation and isolation, and linguistic bias (Byrne, Weddle, Davis, & McGinnis, 2003).

**Under-preparation of Faculty**

Several researchers attribute the low levels of cultural competence among both nursing students and practicing nurses to faulty approaches to teaching cultural competence. Leininger (1995) discussed faculty qualifications to teach culturally competent nursing care as one of the critical issues in adapting nursing curricula to meet
the challenges posed by the diversification of U.S. society. The author found that less than 20% of the nursing faculty who teach culturally competent nursing had any graduate training in this area, and instead taught using a common sense approach (Leininger, 1995). Some faculty reported that they teach cultural competent nursing, but had neither taught theory nor provided appropriate clinical experiences to support knowledge delivered in the classroom. Leininger states faculty need to educate themselves in the field of cultural competency so they can be effective teachers, mentors, and role models (Leininger, 1995).

Byrne and colleagues (2003) identified instructional errors that occur when faculty teaching cultural competence concepts are not appropriately trained. The most common include: (1) faculty generalizations: when only a subgroup of a culture is represented; (2) circular reasoning: when a norm or idea is based on an exclusive category, usually defined from a dominant, white male perspective; (3) mystified concepts: when ideas, notions, and categories are so embedded in cultural norms that they are rarely questioned, and (4) partial knowledge: supports only part of a group of people without representing or including the whole group and is a result the first three errors, (Byrne et al., 2003). Qualified teaching faculty can reduce these types of instructional bias, and help to see they are identified, continually challenged and alleviated (Byrne et al., 2003).

Problem Statement

To date, few studies have assessed cultural competence of nursing faculty. Ruiz (1981) investigated the relationship between nursing faculty’s ethnocentrism and their attitude towards culturally diverse clients. Yoder (1996), investigated how nurse
educators teach students from diverse ethnic groups; Sealey Burnett, & Johnson, (2006), examined the cultural competence of nurse educators in baccalaureate programs in Louisiana; and Kardong-Edgren and colleagues (2005) researched faculty attitudes, perceived cultural knowledge, and cultural skill in caring for clients from four ethnic groups.

In the decades since cultural competency was introduced in research literature, the cultural competence of nursing faculty has remained low. Given the growing diversity in the U.S. and the need for culturally competent nurses to deliver health care, it is imperative that nursing faculty demonstrate the ability to effectively teach these skills.

Studies have found that nurse educators with high levels of cultural competence were more likely to meet the needs of culturally diverse nursing students and to feel more comfortable providing nursing care to clients from diverse cultural backgrounds (Kardong-Edgren et al., 2005; Mayo, et al., 2007; Sealy, Burnett, & Johnson, 2006). However, these studies have not addressed the influence of faculty demographic factors including level of education, exposure to different cultures, and international travel to faculty cultural competence. It is important to consider the association between selected demographic characteristics of nursing faculty and their level of cultural competency.

**Purpose of the Study**

The purpose of the study is to assess the level of cultural competence among nursing faculty teaching in collegiate schools of nursing in the U.S. and to identify and examine demographic factors that may influence the cultural competence level of nursing faculty.
The specific objectives of the study are to:

1. Determine the cultural competence level of nursing faculty as measured by the “Cultural Diversity Questionnaire for Nurse Educators (CDQNE).” This instrument includes an overall measure of cultural competence and six sub-scale scores: cultural awareness, cultural knowledge, cultural skills, cultural encounters, cultural desire, and cultural teaching behaviors.

2. Evaluate the age-and-gender-adjusted-mean of cultural competence scale within different levels of each contributing cultural competence score factors as measured by CDQNE-R.

3. Explore different contributing factors to the overall cultural competence score of BSN faculty, adjusting for age group, gender, and race as measured by CDQNE-R. The selected demographic variables include resided in a different culture, languages spoken other than English, highest degree attained, specialty area, attendance of cultural training, cultural content in current program, and assessing students’ cultural beliefs.

4. Evaluate the impact of transcultural-nursing concepts in teaching on the overall cultural competency level of BSN faculty as measured by CDQNE-R, controlling for gender, age and race.

**Research Questions and Hypothesis**

The research questions and associated hypotheses are as follows:

**Research Question 1:** What is the overall cultural competence level of BSN faculty as measured by The Culturally Diverse Questionnaire for Nurse Educator-Revised
(CDQNE-R) with six subscales of cultural desire, cultural awareness, cultural knowledge, cultural skills, cultural encounter, and transcultural teaching behaviors?

**Hypothesis 1:** The majority of BSN faculty will have low cultural competence level (<130) as measured by CDQNE-R.

**Research Question 2:** What is the age-and-gender-adjusted-means on the cultural competence scale including each contributing cultural competence score factors as measured by CDQNE-R?

**Hypothesis 2:** The different levels/category of each contributing factor will not have a significant difference from the age-and-gender-adjusted-mean cultural competence score of BSN faculty.

**Research Question 3:** What are the different contributing factors to the overall cultural competence score of BSN faculty as measured by CDQNE-R when controlling for gender, age group, and race?

**Hypothesis 3:** The different contributing factors will not have a significantly different effect on the overall cultural competence score of BSN faculty as measured by CDQNE-R controlling for gender, age group, and race.

**Research Question 4:** What is the impact of including transcultural nursing concepts in teaching on the overall cultural competence score of BSN faculty as measured by CDQNE-R after controlling for gender, age group, and race?

**Hypothesis 4:** The inclusion of transcultural nursing concepts in teaching will not have a significant impact on the overall cultural competence score of BSN faculty as measured by the CDQNE-R after controlling for gender, age group, and race.
Definitions of Major Concepts

- Culture: “The learned, shared, and transmitted values, beliefs, norms, and life ways of a particular culture that guides thinking, decisions, and actions in patterned ways and often inter-generationally” (Leininger & McFarland, 2002). Culture also includes social behaviors, values, and attitudes and shared symbols that may be taken for granted by the individual (Schim, et al., 2007).
- Transcultural nursing: “A formal area of study and practice focused on comparative human care differences and similarities of the beliefs, values and patterned life way of cultures to provide culturally congruent, and beneficial health care to people” (Leininger & McFarland, 2002).
- Nursing faculty: Registered nurses, full-time, part-time or adjunct, teaching nursing courses in collegiate schools of nursing in a classroom, in a laboratory, online, or clinical setting.

Assumptions

A key assumption of the study is that participants will respond honestly to the study questionnaire. This study also assumes faculty value cultural competence and that it is important for students to learn. Since cultural competence is included in School of Nursing curriculums, the major assumption is that they believe it will impact the nursing care that nursing students will provide to others. First, in the academic settings, culturally competent nursing faculty will be able to understand and guide nursing students from diverse backgrounds. They will be able to prepare future nurses to meet the demands of the growing and increasingly diverse population. Second, in the practice settings, many nurses would like to learn about their clients’ cultural beliefs, values, and worldviews. To
promote a trusting relationship between nurses and their clients, each client’s cultural beliefs and values should be respected, even if they are not understood. The healthcare environment will be more satisfying to clients if nurses are knowledgeable or open to learning about clients’ cultural values and healthcare practices.

**Theoretical Framework**

Campinha-Bacote’s (2010) Process of Cultural Competence in the Delivery of Healthcare Services Model provides the organizing framework for this study. The model includes the components described in the literature as essential components of cultural competence. According to this model, the process of cultural competence consists of five interrelated constructs that represent an interdependent relationship.

The main construct of the model and the beginning to cultural competence is cultural encounters, that is, face-to-face interactions with clients from culturally diverse backgrounds. Cultural encounter leads to seeking other constructs in the model: cultural desire, cultural awareness; cultural knowledge; and cultural skills (Campinha-Bacote, 2010).

- **Cultural Encounters** is the act of directly interacting with clients from culturally diverse background. This is a continuous process of interacting to validate, refine, or modify existing values, beliefs, and practices about a cultural group and to develop cultural desire, cultural awareness, cultural skill, and cultural knowledge (Campinha-Bacote, 2010).

- **Cultural Desire** is the motivation of the healthcare professional to “want to” engage in the process of becoming culturally competent; not the “have to” (Campinha-Bacote, 2010).
• Cultural Awareness is the deliberate self-examination and in-depth exploration of our biases, stereotypes, prejudices, and assumptions that one holds about individuals and groups who are different from us (Campinha-Bacote, 2010).

• Cultural Knowledge is the process of seeking and obtaining a sound educational base about culturally and ethnically diverse groups (Campinha-Bacote, 2010).

• Cultural Skill is the ability to collect culturally relevant data regarding the patient’s presenting problem, as well as accurately performing a culturally based physical assessment in a culturally sensitive manner (Campinha-Bacote, 2010).

**Operational Definitions of Variables**

Variables of the study will be the total cultural competency score, as well as scores for each of the six cultural constructs (cultural encounters, cultural desire, cultural awareness, cultural skill, and cultural knowledge and transcultural teaching skills), and respondents demographic and professional data. Variables will be measured by the Cultural Diversity Questionnaire for Nurse Educators-Revised [CDQNE-R] (Sealey, 2003, & Yates, 2009). The first part of the instrument measures the five constructs of cultural competence with five subscales and sixth subscale created by Sealey (2003) that measure transcultural teaching behaviors. All subscales consist of Likert-scale items.

Descriptions of each subscale are below:

• Cultural desire: items related to motivation to engage in the process of cultural competence.

• Cultural awareness: items related to person’s beliefs and values related to cultural competence.

• Cultural knowledge: items related to the process of learning about worldview of other
cultures.

- Cultural skill: items related to the ability of using own beliefs and values to interact with other cultures.

- Cultural encounters: items related to the ability of respondents to engage directly with people from diverse cultures.

- Transcultural teaching skills: items specifically related to the respondents’ behaviors and practices with students in the classroom and skills laboratory as well as in the clinical practice areas.

Table 1

*Study Demographic and Professional Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Operational Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Measure in years</td>
</tr>
<tr>
<td>Culture/ethnicity</td>
<td>Ethnic background</td>
</tr>
<tr>
<td>Gender</td>
<td>Male or female</td>
</tr>
<tr>
<td>Experience with another culture</td>
<td>Living within another culture for more than 6 months</td>
</tr>
<tr>
<td>Other language</td>
<td>Ability to read, write and comprehend languages other than English</td>
</tr>
<tr>
<td>Years of teaching experience</td>
<td>Years teaching nursing courses</td>
</tr>
<tr>
<td>Level of education</td>
<td>Measure as highest degree attained</td>
</tr>
<tr>
<td>Nursing specialty</td>
<td>Area of nursing specialization within which faculty teach, e.g. medical-surgical, pediatrics, etc.</td>
</tr>
<tr>
<td>Employment status</td>
<td>Current employment status (e.g. full time, part time, or adjunct).</td>
</tr>
<tr>
<td>State of nursing school</td>
<td>State in which nursing programs is located where faculty currently teach</td>
</tr>
<tr>
<td>Type of institution</td>
<td>Public or private</td>
</tr>
<tr>
<td>Level of teaching</td>
<td>Graduate versus undergraduate or both</td>
</tr>
<tr>
<td>Continuing education in transcultural nursing (TCN)</td>
<td>TCN continuing education taken within last 5 years</td>
</tr>
<tr>
<td>Including cultural content in courses</td>
<td>If faculty teaching Cultural content in their current program</td>
</tr>
</tbody>
</table>
The second part of the CDQNE-R collects respondents’ demographic and professional characteristics. Table 1 lists the operational definition of the demographic and professional variables.

**Rationale and Significance**

Although nursing faculty are expected to adequately prepare all nurses to provide culturally competent care for patients, the literature suggests that nurse educators’ low levels of cultural competence contributes to under-preparation of new nurses to provide culturally competent care (Kardong-Edgren, 2007; Kardong-Edgren et al., 2005; Mayo et al., 2007; Ryan, et al., 2000; Sealey, 2003; Sealey, et al., 2006). Low levels of nursing faculty cultural competence suggests that nursing faculty are not well prepared to respond to issues related to cultural diversity in health care, or to teach culturally competent nursing care (Grant, & Letzring, 2003; Ryan et al., 2000; Wells, 2000). Research strongly suggests that strengthening the cultural competence of nursing faculty is essential to the preparation of culturally competent graduates (Sealey, et al., 2006).

The development of cultural competence among nursing faculty is essential to the preparation of culturally competent graduates (Sealey et al., 2006). Research acknowledges a shortage of nursing faculty with sufficient transcultural nursing knowledge, attitudes, and behaviors that can teach culturally competent nursing care and care for patients from diverse backgrounds (Grant & Letzring, 2003; Ryan et al., 2000; Wells, 2000). Global, national and statewide nursing faculty shortages also negatively

<table>
<thead>
<tr>
<th>Level of including cultural content</th>
<th>Level of integrating cultural content in the course work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessing students’ cultural needs</td>
<td>If faculty assess student learning cultural learning needs</td>
</tr>
</tbody>
</table>
affect the number of faculty qualified to teach cultural competence in nursing education programs presently (American Association of Colleges of Nursing, 2008).

According to 2012 data from AACN member schools, only 12.3% of full-time nursing school faculty come from minority backgrounds, and only 5.4% are male presently (American Association of Colleges of Nursing, 2014). The shortage of minority nursing faculty that represent the racial and ethnic minority groups living in the United States also contributes to the problem (National League for Nursing, 2010). Although it should not be assumed that racially/ethnically diverse faculty members are experts on cultural diversity, minority nurses serve as leaders in the development of models of care that address the unique needs of racially and ethnically diverse populations (Byrne, et. al. 2003). Diverse faculty offers students a rich environment for cultural encounters and role modeling of cultural awareness, knowledge, and skills. Greater diversity among health care professionals is associated with better educational experiences for all students while in training (The Institute of Medicine, 2002). In a qualitative research project, Coffman, Shellman, & Bernal (2004) suggest that nurses lack a level of comfort and ability to perform transcultural skills and tasks when caring for patients from other cultures; many nurses believe they lack the necessary educational background to effectively care for clients from diverse cultural backgrounds (Coffman et. al., 2004).

This study will assess the cultural competence level of nursing faculty and identify demographic factors that influence cultural competence to contribute to a better understanding of the professional development needs in the area of cultural competency.

This work will identify teaching behaviors related to transcultural nursing and provide guidance for curriculum development and design, and guidance for future studies
to improve practice and innovative teaching/learning. Results will inform the
development of continuing education programs that focus on improving both the cultural
competency and the teaching skills of faculty teaching at baccalaureate degree nursing
programs. As suggested by Kardong-Edgren (2007), cultural competency assessments
can be used as a benchmark for faculty competence and identify needs for faculty
development. A comparison of the results of this study with prior research by Sealey
(2003), Yates (2009), and Kardong-Edgren (2007) will provide a deeper understanding of
the factors that influence the cultural competency of nursing faculty who teach at BSN
programs. It is crucial that nurse educators understand the level of culture competence
and teaching behaviors of faculty who teach at BSN programs.
CHAPTER 2: Review of the Literature

Introduction

Racial ethnic minorities face persistent disparities in healthcare access, exposure to hazards, mortality and morbidity, and engagement in high-risk behaviors across the country (CDC, 2011). The causes of these disparities are complex and under studied, however some studies attribute the disparities to that of a lower trust and satisfaction with health care services provided by providers that lack understanding of their clients’ cultures (LaVeist, 2000; LaVeist, & Nuru-Jeter, 2002). Studies show minority patients perceive healthcare services from providers of a similar race and ethnicity as more satisfactory than care from providers of a different race and ethnicity (IOM, 2002) and that among the many factors that contribute to health disparities, cultural competence of health care providers is key. Ethnic minority populations in the U.S. continue to increase, and despite the efforts of several organizations to increase the number of minority health care providers, minority groups remain underrepresented (American Association of Colleges of Nursing, 2013; U. S. Department of Health & Human Services, 2009).

Nurses spend more time with patients than any other health care provider and are in a unique position to assess and identify the cultural needs of patients. In order to meet the health care needs of a culturally diverse population, more minority and culturally competent nurses are needed (Thomas 1991).

Current research proposes several different solutions to resolve lack of cultural competence in nurses including identification of nursing faculty behaviors to support the retention and graduation of ethnic minority nursing students (Ume-Nwagbo, 2009), and
the importance of cultural competence in nursing faculty in preparing culturally competent nurses (Kardong-Edgren, 2007).

This chapter provides an overview of the relevant cultural competency theories in nursing, efforts in education and cultural competency in the nursing curricula, and current research on cultural competency among nursing practitioners in the clinical and academic settings.

Theories examined include: the Leininger Sunrise Model, Transcultural Nursing Model by Giger and Davidhizar’s Model, and the Campinha-Bacote Culturally Competent Model. The reports reviewed include the AACN Essentials of Baccalaureate Nursing Education (AACN, 2008), The National League for Nursing: Nurse Educator Shortage Fact Sheet (NLN, 2010), HRSA-Initial Findings from the 2008 National Sample Survey of Registered Nurses (HRSA, 2010), and the Institute of Medicine report (IOM, 2002).

The Need for Culturally Competent Nursing

The CDC Health Disparities and Inequality Report (2011) provides specific and compelling data on the current health disparities. The highest infant death rates are among non-Hispanic black women, with a rate 2.4 times higher than white women. Death rates due to heart disease are more than 40% higher in African Americans than Caucasians, and death rates from all cancers are 30% higher in African Americans than for Caucasians (Office of Minority Health, 2013). Moreover, the 2009 National Healthcare Disparities Report showed that African Americans experience the highest rates of mortality from heart disease, cancer, and HIV/AIDS than any other U.S. racial and ethnic group (U.S. Department of Health and Human Services, 2009).
IOM Report - Health disparities and provider education

A panel of experts across the U.S. reviewed more than 100 studies that assessed the healthcare services provided to racial and ethnic diverse groups in the U.S. The Institute of Medicine (IOM) report (2002), Unequal Treatment, identified two major factors that contribute to health disparities among those groups. The first involved human response to illness and treatment, and cultural and linguistic barriers in the health care system. The second focused on clinical encounters and healthcare providers related barriers to providing cultural care. The IOM recommended that all healthcare professionals receive cultural competency training as a major strategy to reduce racial and ethnic disparities in healthcare (Institute of Medicine, 2002).

Diversity of population that requires health care

The 2012 U.S. Census estimated 37% of the U.S. population currently belongs to one of the following minority groups: American Indian or Alaska Native, Asian American, Black or African American, Hispanic or Latino, and Native Hawaiian or Other Pacific Islander (U.S. Census Bureau, 2012). It is projected that by 2020 the percentage of ethnic minority residents will rise to 36% of the total U.S. population and that by 2050, the U.S. ethnic minority population will comprise 50% of the total U.S. population (U.S. Census Bureau, 2012). This rise in ethnic minority population is likely to result in increased numbers of minority clients needing health care services.

Thomas (1991) hypothesized that as diversity increases, individuals begin to show pride in their differences and become unwilling to assimilate to the dominant values and healthcare services. In addition, some minority groups do not speak English and have beliefs, values, and practices that differ from those of the dominant culture.
Many reports suggest the health needs of ethnic minority groups in the U.S. have been underserved (IOM, 2002; the Sullivan report, 2004; Office of Minority Health Report, 2013). The Institute of Medicine (IOM, 2002) reported on several studies, which found ethnic minorities receive lower quality health care than Caucasians, even when they live in similar conditions. This report also indicated that U.S. minorities receive fewer preventative health services than Caucasians.

Similarly, the Sullivan report (2004), *Missing Persons: Minorities in the Health Professions*, stressed the need for professional accountability at all levels in education and practice to focus on the problem of racial and ethnic disparities. The report identifies strategies to make education more realistic and affordable for minority students, including scholarships and reducing admission requirements to schools of medicine, nursing, and dentistry. Report recommendations put the lack of diversity among healthcare providers at the forefront of the health disparity crisis, as well as the gap between health care providers and the populations they serve (Sullivan Report, 2004).

**Improving Minority Health**

It is believed that increased numbers of minority health care providers will improve the quality of care for minority populations (American Association of Colleges of Nursing, 2010; IOM, 2002; U. S. Department of Health & Human Services, 2009). To improve the health status of underserved populations, including ethnic minorities, the IOM (2002) report stated that health care providers from diverse backgrounds are needed, as they are more likely to work in underserved communities.

**Nursing Models for Culturally Competent Care**

The first theory related to cultural competence in the nursing profession emerged
in the mid-1950s, with Leininger’s work on cultural care diversity and universality. She was one of the first to introduce and guide the profession to incorporate cultural competency, and build a program of research around this area. Her “Theory of Cultural Care Diversity and Universality” (1978), developed in the mid-1950s, is the only grand theory addressing cultural care in nursing. It maintains its relevance for many reasons. It is the only theory focused on the interrelationships of culture and patient care, as well as the first theory to focus on finding global cultural care diversities. Today it is known for lifting up holistic culturally oriented care and for informing a body of knowledge that continues to support the growing discipline and practice of transcultural nursing (Leininger, 2002).

Leininger (1991) argues that all human lifespan experiences are within a cultural structure that includes cultural beliefs, worldviews, social values, language, ethno-history, environments, and health care systems. One of her most significant contributions is the identification of emic and etic values. Individual culture has its own dynamic made up of local customs, and cultural beliefs, known as “emic” values. Nurses represent the “etic” values of the health care system, which is generalization of human behaviors. When the emic and etic values meet with no conflict it leads to quality nursing care. On the other hand, when values are in conflict, it leads to a negative relationship and poor quality of care. Leininger also hypothesized that the congruence of emic and etic values is necessary to help people interact and survive (Leininger, 1991).

nursing education to include TCN concepts, and comparative cultural care knowledge at all levels of clinical, academic, and policy activities (Leininger, 1997). Leininger (1991) conceptualized three modalities to guide nursing decisions: “(1) culture care where there is no conflict between emic and etic, (2) culture negotiation where the client may demand adjustment to meet their needs, and (3) culture care reformation where the nurse may need to work sensitively with a client to re-pattern a lifestyle known to be harmful or to bring about unintended harm.” She believes nurses must be aware of patient’s cultural beliefs in order to use any of these modalities well (Leininger, 1991).

Since the founding of transcultural nursing concepts, the field of nursing has expanded to include studies and discussions among all levels of managements in the field (Leininger, 2002). The Transcultural Nursing Society (TCNS) was founded by Leininger in 1974 and its current mission is “...to enhance the quality of culturally congruent, competent, and equitable care that results in improved health and well being for people worldwide.” (Transcultural Nursing Society, 2013). The Journal of Transcultural Nursing—the official journal of TCNS—focuses on the impact of culture on nursing care and disseminates research findings internationally. It was published for the first time in 1988 with Leininger as its editor.

**Transcultural Assessment Model**

The Transcultural Assessment Model (Giger and Davidhizar, 2008) applies a transcultural perspective to the assessment and intervention done by nurses in a clinical setting and provides a framework that assists assessment of the individual. It informs the provider on constructs for understanding the influence of culture, ethnicity, and religion by identifying six elements that differentiate individuals from one another:
communication, space (personal and physical), social orientation, time, environmental control, and biological variation (Giger and Davidhizar, 2008).

A set of questions under each of the six areas to generate information is useful in planning culturally congruent care. The model also provides a learning tool to identify issues that would prevent applying the six broad areas in practice and facilitate the partnership of the patient in the cultural assessment process. The model can be used to generate general explanatory models of health and illness (Giger, & Davidhizar, 2008).

**Culturally Competent Model**

Most recently, Campinha-Bacote studied cultural competence in nursing guided by her own evolving model. Introduced in 1991, the “Culturally Competent Model Of Care,” identified four major constructs of cultural competence: cultural awareness, knowledge, skill, and encounters. In 2002, the author reviewed the model and added a new construct of cultural competence, cultural desire. The model was renamed the “Process of Cultural Competence in the Delivery of Healthcare Services,” to emphasize that cultural competence is a process (Campinha-Bacote, 2007). In 2010, Campinha-Bacote presented an updated model that incorporates cultural encounters as a grounding aspect of cultural competence (Campinha-Bacote, 2010).

In 1998, Campinha-Bacote uncovered limitations in this model and revised it to include newly gained knowledge in the field of transcultural nursing (Campinha-Bacote, 2010). The primary model showed cultural competence as a “process,” but its symbolic representation did not express the interdependent relationship of the constructs. The author added the fifth construct, cultural desire (motivation of healthcare providers engaging in the process of cultural competency), and modified the model’s symbolic
representation to reflect the interdependent relationship of the constructs. She additionally modified the definitions of the constructs and renamed the model “The Process of Cultural Competence in the Delivery of Healthcare Services.” In 2002, Campinha-Bacote further revised the model to symbolically represent a volcano like image.

Figure 1

*Process of Cultural Competence in the Delivery of Healthcare Services*

---

Finally, in 2010, the author conducted studies using her model and tool (Inventory for Assessing the Process of Cultural Competence Among Healthcare Professionals-Revised [IAPCC-R]), and identified that the key construct in the process of cultural competence is cultural encounters (motivation of healthcare providers engaging in the
process of interactions with clients from different cultures), and modified the pictorial representation to focus and center around the construct of cultural encounter (Figure 1). Campinha-Bacote continues to identify dynamic changes in this field and remains open to further revision (Campinha-Bacote, 2010).

**Cultural Competency in Nursing Curricula**

Nursing education has acknowledged that cultural competency should be an educational objective of baccalaureate programs. In 2008, the American Association of Colleges of Nursing (AACN) presented a set of competencies crucial for nursing baccalaureate graduates (described below), and provided learning strategies and benchmarks that nurse education programs can use. Research of the past decade examines an array of models that nursing education programs currently use to teach cultural competence. These include formal transcultural nursing (TCN) courses, inclusion of TCN in broader courses, and some innovative interdisciplinary programs.

Despite this, many studies document inconsistent integration of cultural competency into nursing education programs (Ryan, et al. 2000). A variety of quantitative and qualitative studies suggest that programs need to provide not only more consistent, but also deeper and broader cultural competency education to future nurses (Rutledge, et al. 2008, Moffitt and Wuest, 2002, and Ryan, et al. 2000).

Identified barriers to strengthening the presence of cultural competency in nurse education curricula include the faculty’s lack of multicultural experience and the lack of room for new material in an already full educational program (Bagnardi, Bryant, & Colin, 2009).
The American Association of Colleges of Nursing (2008) provides a framework to facilitate baccalaureate-nursing students to attain cultural competence. They define cultural competence as, “the attitudes, knowledge, and skills necessary for providing quality care to diverse populations” (The American Association of Colleges of Nursing, 2008) and includes guidelines, a tool kit and resource materials. These competencies apply to practice in health care settings with patients across the wellness/illness continuum, across the lifespan, and in collaboration with the inter-professional team (The American Association of Colleges of Nursing, 2008).

The AACN approach focuses on five competencies, which incorporate the key elements considered essential for nursing graduates to provide culturally competent care in collaboration with the inter-professional team. It is also serves as a framework for students to integrate suggested content and learning experiences into existing teaching curricula (The American Association of Colleges of Nursing, 2008). These competencies as listed in AACN tool kit are the ability to:

- Apply knowledge of social and cultural factors that affect nursing and health care across multiple contexts;
- Use relevant data sources and best evidence in providing culturally competent care and promote achievement of safe and quality outcomes of care for diverse populations;
- Advocate for social justice, including commitment to the health of vulnerable populations and the elimination of health disparities; and
- Participate in continuous cultural competence development.
The AACN (2008) emphasizes that successful implementation requires a learning environment which facilitates the cultural competence development of faculty and students. Organizations need to encourage faculty obligation and participation by supporting faculty’s ongoing development needs, mentoring faculty and students, providing guided clinical experiences for students, and recruiting diverse faculty and students (American Association of Colleges of Nursing, 2008).

**Curriculum Approaches and Effectiveness**

Studies of the last decade show an array of curriculum approaches for teaching cultural competence in line with the AACN framework. The range includes adding cultural competency topics to existing course curricula to introducing innovative, experiential programs. Rutledge and colleagues (2008) presented an integrative program that utilized simulation to provide baccalaureate-nursing students with experiences they need to become culturally competent. The author-developed case studies based on students interviews, and used them to create scenarios that were loaded into a web-based virtual practice environment. Students conducted interviews with minority patients and the results were used to train students in a simulation lab. All students’ interactions during simulations were videotaped and then viewed in debriefing discussions with the students, both in classroom, and online for distance students. Students responded using a Personal Response System (PRS) a wireless remote that allows students to answer questions and provides faculty information regarding students’ knowledge. Through the culturally enhanced integrated simulation, students addressed the impact of culture on health care status and treatment in the context of a clinical situation, while in a safe environment. (Rutledge, et al. 2008).
Ryan, and Colleges (2000) reviewed strategies in teaching cultural content in BSN and graduate level nursing programs in the U.S: 80% of the nursing programs used informal sessions in teaching TCN concepts, 70% used formal teaching courses, 59% used formal orientation, 76% used formal TCN classes, and 68% used the study of culture as methods to teach TCN.

Another study by Moffitt and Wuest (2002) examined the inclusion of cultural content into nursing programs, both in classes and clinical areas. The author concludes that cultural content must be integrated at all levels of nursing education in order for nurses to incorporate cultural competency into their practice. Similarly, a qualitative study by Cain (2003) examined the incorporation of cultural content in nursing curricula. The author interviewed six nursing faculty members and discussed their assumptions, feelings, and practices as educators implemented cultural content into their course work. Results highlighted that while all the participants acknowledged the importance of cultural education, there was a need for more structured guidelines to help educators systematically implement cultural awareness in the curriculum.

Ryan et al. (2000) and Moffitt and Wuest (2002) also found that cultural education has to be integrated at a greater level in the nursing education, not only as course work but also linked with nursing practice. Cain (2003) suggested the need for specific guidelines for faculty to help implement cultural diversity into nursing education curriculum. The establishment of programs that incorporate all the aspects of cultural teaching in nursing education appears to be a complex process that requires guidance for faculty to implement fully (Cain, 2003).

A study by Bagnardi, and Colleges (2009), identified two common barriers to
including TCN in curricula: difficulty incorporating it into an already full curriculum and under prepared faculty in the area of cultural competency. The authors suggested the Multicultural Education Framework of James Banks be used to incorporate cultural aspects at all levels of nursing education. The framework classifies five constructs in cultural teaching (content integration, knowledge construction, prejudice reduction, equitable pedagogy, and empowering school culture) to assist conceptualization and implementation cultural teaching (Bagnardi, Bryant, & Colin, 2009).

Despite the growing awareness of cultural competency’s importance in nursing education and the growing number of curriculum approaches in practice, studies including work by Ryan and colleagues (2000) show that cultural competence is not consistently incorporated into nursing education curricula. Additional studies highlight gaps in learning that result and suggest ways to enhance curriculum so these gaps can be filled (Bagnardi et al. 2009, Ryan et al. 2000, Cain, 2003).

Nursing Faculty Shortage

HRSA - The Registered Nurse Population: Initial Findings from the 2008 NSSRN

According to the U.S. Department of Health and Human Services Health Resources and Services Administration (HRSA, 2010) report on data from the 2008 National Sample Survey of Registered Nurses (NSSRN), the RN population increased by 5.3% from March 2004. Bachelor’s prepared registered nurses increased from 31% to 34%. However, the percentage of graduate prepared registered nurses was the same at both years 0.5%. The NSSRN data also revealed that minorities represented only 16.8% of the registered nurse (RN) workforce. Minority RN population consisted of 5.4% African American; 3.6% Hispanic; 5.8% Asian/Native Hawaiian; 0.3% American
Indian/Alaskan Native; and 1.7% multiracial nurses (HRSA, 2010).

Lack of Diversity in Faculty

The National League for Nursing and the Carnegie Foundation Preparation for the Professions Program conducted a national study that included 32,000 nurse educators to examine factors contributing to the shortage of nurse educators (The National League for Nursing, 2010). The study showed about 1,900 vacant full-time faculty positions nationwide in 2007, affecting over 36% of nursing programs. The study identified that the factors contributing to the nursing faculty shortage include: recruitment, workload, faculty aging, and most importantly, diversity (The National League for Nursing, 2010).

Diversity: Data from NLN/ Carnegie study indicated that the nurse faculty workforce is not reflective of the diversity of nation’s population or the nursing student population. In the NLN Nursing Data Review 2006-2007, less than 24% of new graduates were from minority groups in 2007 compared with 26% in 2006. These numbers do not mirror minority representation nationwide, where 34% of the U.S. population identifies as racial and ethnic minorities (The National League for Nursing, 2010). The same study showed that the majority of nursing faculty are white 84%, and only 16% of faculty are from minority groups. This under representation of minority nurse faculty puts restraints on nursing programs ability to provide students with the ability to respect the needs and provide care for minority groups (The National League for Nursing, 2010).

Attempts to increase minority representation in the nursing profession have been made through both privately and federally funded projects. The American Nurses Association (ANA) established a Minority Fellowship Program, a grant in 1974 to
increase the number of ethnic minority nurse researchers to improve mental health services for ethnic minority patients (MinorityNurse.Com, 2004). The American Association of Colleges of Nursing (AACN) and the California Endowment established the Minority Nursing Faculty Scholarship Program to provide financial and mentoring services to graduate students in exchange for a commitment to teach in a California nursing school of post graduation (The American Association of Colleges of Nursing, 2013). The AACN also collaborates with national nursing organizations such as the Robert Wood Johnson Foundation to promote an increase in the federal financial support of culturally diverse nurses. The program goal is to increase nursing education opportunities for students from cultural diverse groups who are underrepresented among registered nurses (The American Association of Colleges of Nursing, 2013).

**Research on Cultural Competency**

Current research on cultural competency in the nursing profession focuses on three main areas of nursing: clinical practice, students, and faculty. Across all three disciplines, studies suggest the deficiencies observed in the cultural competency of working nurses may be due to a lack of cultural competency education (Hagman, 2006; Mayo, et al. 2007; Leishman, 2004). Along with documenting best practices, studies of nursing students identify gaps in the cultural competency education student nurses receive in today’s education programs (Kardong-Edgren & Campinha-Bacote, 2008). There is a consensus in the existing research on cultural competency of nursing faculty that concludes cultural competency of teachers must be better assessed in order to ensure the capability to deliver the education students need in order to become culturally competent clinical nurses (Sealey, 2003; Sealey, et al. 2006; Reneau, 2013; Yate, 2009).
Cultural Competency of Nurses

Hagman (2006) examined cultural self-efficacy level of nurses caring for diverse patients in New Mexico and identified influencing demographic variables. The author used the Cultural Self-Efficacy Scale (CSES) instrument created by Bernal and Forman (1987). CSES includes 26 Likert scale items to measure cultural knowledge, patterns, and skills in caring for five ethnic groups: Arab, African American, Hispanic, Native American, and Asian Pacific. The Cultural Self-Efficacy scale ranges from 1 (very little confidence), 2 (little confidence), 3 (non-committal confidence), 4 (moderate confidence) to 5 (quite a lot of confidence). The study sample included 1,000 randomly selected registered nurses, and the response rate was 41%. The study results showed demographic variables (age, nursing working experience) are positively correlated with higher cultural self-efficacy levels. It additionally found that nurses in New Mexico are moderately efficacious in caring for patients/clients from diverse background (Hagman, 2006).

Mayo, Sherrill, Sundareswaran, & Crew’s (2007) qualitative study showed the effect of the providers’ and the patients’ perceptions on the health outcomes in Hispanic patients. The authors found the main barriers for Hispanic patients effective communication with providers includes differences in language, attitudes/perceptions and cultural understanding. The main barriers to effective communication with Hispanic patients were personal barriers and institutional resource barriers, such as limited interpreter services. Results also showed that the level of a providers’ professional experience affects the quality of culturally competent care provided. Less experienced providers expressed concern about communication and cultural differences. These issues demonstrate the importance for preparing health care providers to understand and accept
patients’ cultures in order to eliminate these barriers from practice (Mayo et al., 2007).

Another study examined the effect of nurses’ perspectives on providing culturally competent care. Leishman’s (2004) qualitative study examined a group of nurses’ opinions on the need of cultural awareness in clinical practice. The author interviewed ten nurses from different clinical practice backgrounds in Scotland. All participants showed limited or lack of previous knowledge about caring of clients from other cultures. It also found lack of cultural knowledge among nurses can negatively affect the quality of care for minority patients. The findings highlighted the gap in nursing education and practice that affects quality of care for clients from diverse background. Based on the study findings, the author developed a cultural competency framework for nurse education that uses a lifespan approach to cultural awareness, such as exploring important life transitions and the practices that exist within cultural groups. These key concepts are included in the knowledge and understanding component of the framework and working with health beliefs and developing cultural care in practice is incorporated into the skills section. The last area of the framework, the environment, covers sensitivity to cultural differences in health care practices as a result of diverse health care belief systems and identifies how people view and manage health care needs. However, Leishman (2004) stressed that this framework shows how covering the main aspects of cultural concepts can be developed and must not be the end point in the development of cultural competency in nursing programs. The author believed that cultural concepts have to incorporate at all aspects in teaching, learning, and assessment (Leishman, 2004).

Lampley, Little, Beck-Little, & Xu’s (2008) study assessed cultural competency level of 71 registered nurses in North Carolina using two instruments, the Background
Variables Data Sheet (BVS), and the IAPCC. BVS was developed by the authors and included eight demographic questions. The IAPCC (Campinha-Bacote) is a previously developed instrument that includes 20 items to measure the cultural competence constructs of cultural awareness, cultural knowledge, cultural skill, and cultural encounters. Findings showed that level of education, nursing experience, and continuing cultural education are major factors that influence cultural competence, whereas gender and race/ethnicity have no influence. Moreover, 89% of the participants reported their nursing program included cultural content either as a unit or a chapter or course, and 63.6% reported receiving information on cultural content as part of their work continuing education. Qualitative data from the same study identified four themes of cross-cultural barriers: verbal communication barriers, religious views, different health practices, and culturally inappropriate nonverbal communication (Lampley, et al., 2008).

A study by Schim, Doorenbos, & Borse (2006) study examined variables associated with cultural competence among hospice nurses. The Cultural Competence Assessment (CCA) instrument was used to measure cultural diversity, experience, awareness and sensitivity, and competence behaviors. The sample included 145 hospice healthcare providers, with a response rate of 95%. The authors found that providers with both culturally related education and higher levels of education scored significantly higher level on cultural awareness and sensitivity subscales. The authors also found that the cultural competent behavior subscale is associated with previous cultural training. On the other hand, results showed lack of documentation of cultural assessment and evaluation of clients. This can be related to lack of training regarding ways to integrate cultural appropriate care. The authors identified the important role of nursing education
and continuing education in preparing cultural competent hospice nurses (Schim, Doorenbos, & Borse, 2006).

_Lack of Awareness to Adapt to Cultural Diversity_

Failure to make practice changes in response to the rapid increase of diversity population or including the belief that changes need to occur in “others – the ones who are not like us” is a major barrier to cultural competence (Robins, Lindsey, Lindsey, & Terrell, 2006). Cultural awareness is the motivation to understand our own culture and stay open to understand other cultures (Campinha-Bacote, 2003). This allows nurses to identify their own culture, be more sensitive to other cultures and recognize their personal biases related to clients from other cultures (Campinha-Bacote, 2003). Cultural awareness is an essential phase in becoming culturally competent and is a continuous process that should be established among those who care for clients from culturally diverse background (Campinha-Bacote, 2003).

**Cultural Competency of Nursing Students**

Studies demonstrate that nursing students from different cultural backgrounds bring different cultural competency behaviors to their profession (Torsvik, & Hedlund, 2008; Mills-Wisneski, 2005). Other research shows how nursing education affects a student nurse’s growth in cultural competence. It also discusses the effectiveness of curricula, while other research highlights other aspects of the nursing education experience that affect students’ learning of cultural competence (Mills-Wisneski, 2005; Kardong-Edgren & Campinha-Bacote, 2008; Reeves, 2006; Liu, et al. 2008). The major theme of this research is faculty’s important role.
Torsvik, & Hedlund’s (2008) work gave an international perspective on cultural competency of nursing students. This qualitative study reviewed clinical reflections related to cultural encounters among students from Tanzania and Norway. Data included participant observation, students’ journals from four weeks of clinical experience, and focus group interviews. Authors found that Norwegian students focused on nurse-patient communication, personalized care, and the psychological aspect of patients, while Tanzanian students documented a holistic approach in nursing care through nurse-patient-family relationships combined with skilled nursing care (Torsvik & Hedlund, 2008). The study also found that sharing thoughts, reflecting on value systems and personal practice through dialogue with students from a different culture offers opportunity to improve cultural competence and student awareness (Torsvik & Hedlund, 2008).

Mills-Wisneski (2005) investigated minority students’ perceptions concerning the presence of minority nurse educators. Analysis of quantitative measures revealed that the absence of minority nurse educators was rated: 51%, very important; 20.2%, important; 10.1%, somewhat important; 5.8%, not important; and 11.6%, not sure. Analysis of the open-ended question revealed that 71.2% of the respondents communicated the importance of having minority nurse educators both in the classroom and in clinical areas. Lack of minority faculty was perceived as a barrier to successfully completing the nursing program; several of the participants sought support and minority role models from outside of their nursing programs. Strategies that provide teaching experiences for minority nurse educators at various levels could increase minority faculty both in teaching and clinical areas, and more minorities in the classroom and clinical areas would
ensure more mentors and role models for minority nursing students (Mills-Wisneski, 2005).

Kardong-Edgren & Campinha-Bacote’s (2008) study examined four nursing program curricula in preparing culturally competent new graduate nurses. The authors used the Inventory for Assessing the Process of Cultural Competency Among Healthcare Professionals-Revised (IAPCCC-R) to assess four student groups from diverse backgrounds before and after completing courses; different curricula were used. The IAPCCC-R tool consists of 25 items that measures the five constructs of cultural competence (desire, awareness, knowledge, skills, and encounter). Scores range from 25–100 and show level of cultural proficiency, cultural competence, cultural awareness or cultural incompetence. Two nursing programs used a theory course developed by transcultural experts, Leininger and Campinha-Bacote, one used an integrated approach to teach cultural competency and another used a two-credit cultural focus course within the degree program, taught by nursing faculty with strong cultural preparation. Results showed that all 212 participants were at the cultural awareness level, as measured by the IAPCC-R, regardless of which program they attended (Kardong-Edgren & Campinha-Bacote, 2008).

Reeves (2006) conducted a qualitative study to explore the perceptions of 13 graduate nursing students from Northeast BSN programs on life experiences with cultural diversity. Information collected included participants’ cultural background, life experiences prior to the nursing program, educational and clinical experiences in the nursing program, knowledge about cultural competence, and reflections on their ability to provide culturally competent care. The author reanalyzed the data to focus on life
experiences related to the cultural diversity theme, and three life patterns emerged: positive, neutral, and conflicted. These patterns influenced the students’ ability to provide culturally competent care. The author noted it is the nurse educators’ role to assess students’ experiences and identify students who may need assistance and prepare them to care for culturally diverse population (Reeves, 2006).

Liu, Mao, & Barnes-Willis (2008) study examined the cultural self-efficacy level of graduating BSN students using Cultural Self-Efficacy Scale (CSES). The instrument includes 26 Likert scale items to measure cultural knowledge, patterns, and skills in caring for five ethnic groups Arab, African American, Hispanic, Native American, and Asian Pacific. Self-Efficacy scale ranges from 1 (very little confidence), 2 (little confidence), 3 (non-committal confidence), 4 (moderate confidence) to 5 (quite a lot of confidence). A convenience sample of 48 culturally diverse nursing students completed an eight-item demographic questionnaire and CSES. The response rate was 84%. Participants reported confidence cultural self-efficacy level. Authors related these findings to exposure to cultural content and exposure to diverse populations. The authors also suggested the need for nurse educators to continue incorporating cultural knowledge in nursing education (Liu, et al. 2008).

Cultural Competency of Faculty

Kardong-Edgren (2007) conducted a study using Campinha-Bacote’s Inventory for Assessing the Process of Cultural Competence Among Healthcare Professionals–Revised (IAPCC-R) to assess the cultural competence of 170 randomly selected BSN program faculty. The IAPCC-R consists of 25 items measuring the five constructs of cultural competency (cultural knowledge, cultural awareness, cultural skills, cultural
Scores 91-100 indicate culturally proficiency; scores of 75-90 indicate cultural competence; scores 51-74 indicate cultural awareness; and scores 25-50 indicate cultural incompetence. The tool also assessed factors that influencing participants’ confidence levels in caring for clients from diverse backgrounds as well as data on faculty cultural preparation and employment programs. Results showed BSN faculty were culturally competent. The study found faculty that teach in states with more diverse populations were more culturally competent than faculty teaching in states with more homogenous populations. Results also showed that exposure to another culture were the most frequently cited methods of increasing cultural competency (Kardong-Edgren, 2007).

Canales & Bowers (2001) conducted a study to understand cultural competence from the perceptions of culturally diverse nurse educators, specifically those with a Latin background. Data was collected through in-depth, face-to-face, individual, tape-recorded interviews. The authors found that Latina faculty did not differentiate between competent care and culturally competent care; for them, cultural competence is part of nursing competence. This result confirms the belief that diversity within nursing faculty affects the quality of cultural competence delivered across a variety of specific courses. The concepts generated from the interviews were used to improve cultural competence and change perceptions of the other; in order to teach students to care for clients from different cultures. The authors strongly recommend that cultural concepts need to be incorporated into existing nursing curriculum.
Barriers to Cultural Competency in Faculty

Proper preparation and commitment by faculty to cultural diversity are crucial to cultural competence efforts. Barriers to cultural competency include faculty shortages in nursing education, aging of nursing faculty, faculty bias, under-preparation of faculty to teach cultural diversity issues, and lack of faculty awareness of the need to adapt to diversity (American Association of Colleges of Nursing, 2013; Sullivan Commission, 2004; Leonard, 2006; Wells, 2000).

Faculty Shortages in Nursing Education

The demand for nurses continues to grow, however a nationwide shortage in nursing programs limits the capacity for programs to admit new students. Budget restraints, aging faculty, and increasing job competition from clinical positions contribute to this crisis (American Association of Colleges of Nursing, 2013). This shortage is one of the major causes for declining applications for baccalaureate and master’s degree nursing programs. According to an AACN report on 2011-2012 Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing, U.S. nursing schools rejected 75,587 qualified applicants from baccalaureate and graduate nursing programs in 2011 due to faculty shortage, clinical sites, classroom space, clinical preceptors, and budget constraints (American Association of Colleges of Nursing, 2013).

Embedded in the overall nursing faculty shortage is a shortage of minority faculty members teaching in schools of nursing. According to 2012 data from AACN member schools, only 12.6% of full-time nursing school faculty came from minority backgrounds (American Association of Colleges of Nursing, 2013). This is result from underrepresentation of minority students in nursing programs. Lack of mentoring also is a
contributing factor to the underrepresentation of minority nursing students (Mills-Wisneski, 2005).

The success of increasing the number of minority nursing faculty is dependent on attracting and retaining nursing students from diverse backgrounds and enabling them to continue on to achieve graduate degrees and pursue careers as faculty. However, there is a severe underrepresentation of nursing students from diverse backgrounds in graduate level nursing programs in the U.S. (American Association of Colleges of Nursing, 2013).

The national shortage of healthcare providers from diverse backgrounds is an ongoing contributor to the nation’s minority health disparities (Sullivan Commission, 2004). An increase in culturally diverse nursing faculty increases the likelihood of providing culturally competent nursing education and contributes to the improvement of healthcare services to culturally diverse populations (American Association of Colleges of Nursing, 2013).

Faculty Bias and Lack of Commitment

Faculty cultural teaching techniques can influence the student’s confidence level when caring for diverse clients in their professional practice (Leonard, 2006). It is demonstrated that the personal biases of faculty are likely to affect opinions, attitudes, and performances toward culturally diverse students and clients (Wells, 2000). The literature illustrates that instructors’ personal experiences, prejudices, and expectations in addition to their influence as authority figures significantly impacts the student learning process. If faculty commit and give priority to cultural education, then students will provide culturally appropriate care to clients from diverse backgrounds (Leonard, 2006).
Byrne, Weddle, Davis, & McGinnis (2003) listed types of bias they found in teaching when faculty members are not adequately culturally prepared; these categories include: invisibility, stereotyping; imbalance and selectivity; unreality; fragmentation and isolation; and linguistic bias.

**Faculty Under-preparation**

Some studies relate the low cultural competency levels found in nursing students and practicing nurses to faculty attitudes towards teaching cultural competence. Leininger (1995) identified the lack of qualified faculty to teach transcultural nursing as a key factor to change in creating nurse education to meet the needs of diverse population. The author found that fewer than 20% are trained in trans-cultural nursing and instead use a personal experience approach. Other groups of nursing faculty report that they teach the general aspects of trans-cultural nursing with no theory or practice experiences to improve students’ understanding (Leininger, 1995). Leininger indicated the need for faculty to be committed and self education in the field of trans-cultural nursing, to prepare nursing students at all levels of education responsibly and “...be effective teachers, mentors and role models.” (Leininger, 1995,).

Byrne, et al. (2003) discussed common mistakes that can occur with under prepared faculty who teach cultural concepts. These mistakes include (1) generalizing specific ideas regarding specific culture on all people in that cultural group; (2) using dominant cultural judgment as standard normal behaviors; (3) limiting knowledge that supports some of a group of people without representing or including the whole group. These teaching styles bias have to be understood and eliminated through the use of culturally qualified faculty.
The Cultural Diversity Questionnaire for Nurse Educators - Revised Tool

The key variables of the current study are the total cultural competency score and six cultural constructs of cultural desire, cultural awareness, cultural knowledge, cultural skill, cultural encounters, and the trans-cultural teaching skills. The variables will be measured by using the Cultural Diversity Questionnaire for Nurse Educators (CDQNE-R) (Sealey, 2003, Yate, 2009). The following is a summary on the previous studies that used CDQNE tool.

Previous Uses of the CDQNE-R

Sealey (2003) examined the cultural competence level of nurse educators in Louisiana BSN programs. The study included 313 BSN faculty members and used CDQNE, a researcher-designed instrument, used to measure cultural competence. The tool included two sections: the first consists of 51 Likert-type items organized into five subscales representing the components of cultural competence according to Campinha-Bacote's model of cultural competence (cultural awareness, cultural knowledge, cultural skills, cultural encounters and cultural desire), and a sixth subscale on the teaching of transcultural nursing concepts. The second section includes questions about the demographic characteristics of the sample. The author developed indexes for the respondents overall cultural competence, and each subscale as well as for the transcultural teaching behaviors subscale. The categories used to interpret the responses were five, ranging from least favorable (i.e., <=1.5 = strongly disagree) to most favorable (>=4.5 = strongly agree). Study findings revealed that transcultural nursing education in the past five years was associated with increased cultural knowledge, skills, desire, and overall competence among respondents. It also showed that presence of minority students
in the program was associated with increased overall cultural competence among nurse educators as was practicing in women’s health, childbearing, and community health. The author recommended that dialogue among nurse educators in the above specialties and those in other specialties to share experiences and develop teaching strategies to promote cultural competence in nursing education. The study also revealed that respondents agreed that they were knowledgeable about transcultural nursing. The author further concluded that respondents trained in transcultural nursing are more competent in teaching cultural concepts (Sealey, 2003).

Another study by Sealey and colleges (2006) determined the cultural competence level of 313 faculty members from baccalaureate nursing programs in Louisiana. The author used the same instrument from her previous study, the CDQNE, as described above. The interpretation of the response categories is as follows: <1.50=strongly disagree, 1.5-2.50 disagree; >2.50-3.50=undecided, >3.50-4.50=agree; >4.50=strongly agree. Study results revealed respondents’ cultural subscales rating as follows: cultural awareness (M=4.14), desire (M=3.67), knowledge (M=3.65), skills (M=3.65), and encounters (M=3.56). Overall cultural competence was rated as 3.73. The author used a regression model between the overall cultural competence index and the index for each of the six subscales. Results showed that the cultural knowledge subscale and the cultural encounter subscale explained 87% of the variance in the model. The results also found that faculty continuing cultural education can improve overall cultural competence. This continuing education and cross-cultural exposure significantly increase the overall cultural competence of faculty (Sealey, et al. 2006).

Yates (2009) examined the cultural competence levels of 503 nursing faculty
teaching in associate degree-nursing programs in Ohio and determined the extent to which transcultural concepts are included in the associate degree-nursing curriculum. Campinha-Bacote’s (2003) Process of Cultural Competence in the Delivery of Healthcare Services Model provided the organizing framework for the study. A revised version of Sealey (2003) Cultural Diversity Questionnaire for Nurse Educators was used however the author removed the negative statements from the original questionnaire. The revised version included 41-item Likert type questionnaire along with eleven questions on demographic and professional characteristics was administered via the Internet over a three-week period. Following Sealey (2003), results indicated the highest indexes were cultural awareness M=4.3, and cultural desire M=4.10. The results also found that the participants “agree” on including transcultural teaching behaviors and they included cultural content in their teaching. This illustrates the need for professional development programs for nursing faculty in the area of cultural diversity and the need for hiring and retaining a culturally diverse nursing faculty (Yates, 2009).

Ume-Nwagbo (2009) conducted an exploratory study to measure the cultural competence of nurse educators in accredited baccalaureate (BSN) nursing programs in Tennessee and investigate the relationship, if any, between nurse educators’ cultural competence and the percentage of minority nursing students recruited into and graduating from those schools over five years. Seventy-three nurse educators in nine accredited colleges of nursing in Tennessee completed the Cultural Diversity Questionnaire for Nurse Educators (previously described). Some of the participating schools and the American Association of Colleges of Nursing Research Data Center provided information about students recruited and graduated in each school by ethnicity. The over
all cultural score and its six subscales scores were computed by adding the assigned value of each response; the higher the number, the more culturally competent the person: 55 – 130 = low level, 131 – 201 = moderate level, 202 – 275 = high level. The findings revealed that the majority of respondents were at least moderately culturally competent. The findings also showed that there was no relationship between Tennessee schools’ mean cultural competence scores and percentages of minority students recruited into BSN programs in the five-year time span reviewed by the authors. However, there was a significant statistical relationship between Tennessee schools’ mean cultural competence scores and the percentages of minority students graduating from BSN programs \( (p = .015) \). There was also a statistically significant difference between the mean cultural competence scores of respondents who had lived in a culture outside the United States and those who had not \( (p = .01) \). The difference between the mean cultural competence scores of respondents who had attended multicultural education seminars in the previous five years and those who had not was also statistically significant \( (p = .0005) \). The researcher recommended that nursing faculty engage in activities that would improve their cultural competence to allow them to guide and retain students from diverse cultural backgrounds \( (Ume-Nwagbo, 2009) \).

Burke (2011) examined the level of cultural competency associated with transcultural teaching behaviors and demographic characteristics among faculty in associate degree nursing programs in the New York metropolitan area. The Cultural Diversity Questionnaire for Nurse Educators was administered via the Internet over a 4-week period. The author compared the demographic results of this study with those of New York State nursing population and the national nursing population. A multiple regression
analysis of each cultural competence subscale related to demographics, professional characteristics, and cultural teaching practices. The results showed that the overall cultural competence level was higher among minority participants ($\beta = -.26, p = .002$) and for full-time employed participants ($\beta = .17, p = .04$). Compared with previous studies examining the cultural competency of nursing faculty teaching at the associate and baccalaureate levels, these findings showed that associate degree nursing faculty scored significantly higher on the overall cultural competence level, but not consistently higher on the transcultural teaching subscale. The study results revealed that the majority of the 138 respondents were culturally proficient (76%) or cultural experts (14.5%) in all of the 5 subscales of the CDQNE and 93.5% stated they include transcultural teaching behaviors in the courses they teach (Burke, 2011).

Another study by Reneau (2013) compared cultural competence levels between three groups: on-campus BSN degree nursing faculty, online faculty members, and faculty teaching both online and on-campus. The Cultural Diversity Questionnaire for Nurse Educators by Sealey (2003) was e-mailed to 500 BSN faculty members teaching at five research sites. Results showed that on-campus faculty group had the lowest cultural competence level of 3.95; online BSN faculty cultural competence levels were 3.96. Moreover, faculty teaching in both online and on-campus environments had the highest cultural competence level of 4.0. The Cultural knowledge subscale was the strongest predictor of overall cultural competency level. The author suggested the need to mandate cultural competency training BSN degree nursing faculty, whether it occurs during their orientations or as part of nurse-educator curricula at the graduate levels (Reneau, 2013).
Summary

The challenge of increasing cultural competency in nursing requires changes to training faculty and developing a comprehensive curriculum responsive to global cultural changes. A critical goal must be the transformation in health care providers' perceptions and behaviors towards diverse populations. To achieve this milestone, nursing faculty must not only be culturally oriented in their perceptions, attitudes, behaviors, knowledge, and skills in themselves, but also perform as role models that have the capability to build this attitude in students. This study addresses the level of cultural competence of nursing faculty teaching in BSN nursing programs in the U.S. and examines the contributors to the faculty cultural competence level. This will provide suggestions for education and identify the training needs of nursing faculty in the area of cultural competence.
CHAPTER 3: Research Design and Methodology

This study examines cultural competency levels of nursing faculty teaching in U.S baccalaureate schools of nursing (BSN), and identifies demographic factors that may inform these levels. The following chapter describes the demographic and professional characteristics of study participants, including descriptions of the educational institutions and the accessible population. Procedures for data collection, human rights protection, the data collection instrument, and the method of data analysis also are detailed. Below are the research questions that guided this work:

Research Question 1: What is the BSN faculty overall cultural competence level as measured by CDQNE-R and its six subscales?

Research Question 2: What is the age-and-gender-adjusted-means on the overall cultural competence scale including each contributing cultural competence score factor as measured by CDQNE-R?

Research Question 3: What are the different contributing factors to the overall cultural competence score of BSN faculty as measured by CDQNE-R when controlling for gender, age group, and race?

Research Question 4: What is the impact of including transcultural nursing concepts in teaching on the overall cultural competence score of BSN faculty as measured by CDQNE-R after controlling for gender, age group, and race?

Research Design

A descriptive, correlational, non-experimental, survey design was used to collect data to answer the research questions and test the study hypotheses. Faculty
cultural competence level was assessed using an existing data collection tool and administered through an electronic survey.

Previous studies of cultural competency levels in nursing faculty also used descriptive survey designs. Sealy (2003), and Sealey et al. (2006), used this approach in two studies in Louisiana that examined the cultural competence of nurse educators and the faculty of baccalaureate nursing programs. Yates (2009) used a similar survey design to examine the cultural competence levels of nursing faculty in associate degree-nursing programs in Ohio that specifically sought to determine the extent to which trans-cultural concepts are included in the associate degree nursing curricula. Ume-Nwagbo (2009) measured the cultural competence of nurse educators in accredited baccalaureate (BSN) nursing programs in Tennessee, and the relationship between nurse educators, cultural competence and its potential effect on the number of minority nursing students recruited into and graduating from these schools.

Yates (2009) and Ume-Nwagbo (2009) concluded that more complex research is required to test the relationship between faculty cultural competency levels and faculty demographic and professional variables. The descriptive, correlational survey design is, therefore, appropriate for this study because it examined the relationships that exist using an established instrument. This design also facilitates identification of the interrelationship between variables without controlling the situation (Burns & Grove, 2009).
Methodology

Population and Selection of Sample

The population of interest was nursing faculty in BSN programs in the United States; the target population for this study was any nursing faculty teaching in a Commission on Collegiate Nursing Education (CCNE) accredited baccalaureate nursing program. The CCNE is part of the American Association of Colleges of Nursing (AACN), and is an accrediting agency that ensures the quality and integrity of baccalaureate, graduate, and residency programs in nursing in the United States (AACN, 2012). The inclusion criteria for the study sample were: 1) Nursing faculty members actively teaching in CCNE baccalaureate nursing programs; 2) Nursing faculty teaching in class, clinical, online, or laboratory settings; 3) Nursing faculty teaching in generic (entry-level) baccalaureate nursing programs; and 4) Nursing faculty teaching as full time, part time, or as adjunct staff. Exclusion criteria were: 1) Nursing faculty teaching non-generic forms of BSN programs; and 2) Nursing faculty that only held administrative, non-teaching positions.

Sampling Procedures

A list of nursing education programs in the U.S. that offer a B.S. degree in nursing (BSN) was obtained from the Research and Data Services office via the AACN website (American Association of Colleges of Nursing, 2012). The AACN provided a list of generic (entry-level) baccalaureate nursing programs names organized by state within two weeks of the request.

A number was assigned to each program and two schools/colleges per state were randomly selected using a computerized random number generator. Utilizing
computers for random selection is a common technique of researchers (Burns & Grove, 2009). Following randomization, faculty names and email addresses from both programs in each state were obtained from the online directories of the official university websites. All nursing faculty that were currently active in teaching in either full-time, part-time, or online in the nursing education programs, regardless of age, gender, or educational level, were included in the e-mail distribution list for this study.

This survey design is without an intervention, and therefore the target sample size was based on a small effect size of 0.25. The study aimed to have 179 respondents; the probability for a type 1 error is .05, yielding a power of 0.8.

**Ethical Considerations**

Northeastern University Institutional Review Board (IRB) approved this project prior to its initiation (See appendix J & K). Potential respondents were e-mailed a cover letter that explained the overall goals of the study and stated that the data collected will remain confidential, and used strictly for research purposes. The Northeastern University consent form for online surveys was uploaded as a prerequisite to initiating the survey. Individuals that opted to participate must read it prior to beginning the survey. Specifically, at the end of the consent page, participants were asked, “if you wish to continue and take the survey, please press NEXT” (See appendix M). Since researchers have the obligation to protect the confidentiality of participants (Burns & Grove, 2005), all information and records that linked participants to code numbers was destroyed at the completion of data analysis. All information and records from the study is locked in a file cabinet and will be kept by the researcher for two years following the defense of the final...
report. At the end of this two-year period, all the data will be destroyed. A copy of the study results is available to each participating school as requested.

**Instrumentation**

The primary instrument for this study was the, “Cultural Diversity Questionnaire for Nurse Educators Revised” CDQNE-R (Sealey, 2003; Yates, 2009). The researcher obtained permission from the authors to use the instrument and to publish it in the dissertation document (See Appendix A, B). The instrument is designed specifically to measure the cultural competence of nurse educators and encompasses six constructs. Five of the constructs are based on Campinha-Bacote (1998) Culturally Competent Model of Care: cultural awareness, cultural knowledge, cultural skills, cultural encounters, and cultural desire. The sixth construct, transcultural teaching behaviors subscale, was added by Sealey in 2003. The reliability coefficient for the constructs ranged from 0.63 – 0.93 respectively (Sealey, 2003; Yates, 2009). Below is Table 2 listing the Cronbach’s Alpha Coefficients for all the subscales (Sealey, 2003, Yates, 2009).

Table 2

*Reliability Coefficient for the CDQNE-R and its Subscales*

<table>
<thead>
<tr>
<th>Scales</th>
<th>Cronbach’s Alpha Coefficient</th>
<th>Cronbach’s Alpha Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Awareness Subscale</td>
<td>.77</td>
<td>.63</td>
</tr>
<tr>
<td>Cultural Knowledge Subscale</td>
<td>.85</td>
<td>.82</td>
</tr>
<tr>
<td>Cultural Skills Subscale</td>
<td>.77</td>
<td>.69</td>
</tr>
<tr>
<td>Cultural Encounters Subscale</td>
<td>.66</td>
<td>.68</td>
</tr>
<tr>
<td>Cultural Desire Subscale</td>
<td>.74</td>
<td>.76</td>
</tr>
<tr>
<td>Cultural Teaching Behaviors</td>
<td>.84</td>
<td>.79</td>
</tr>
<tr>
<td>Subscale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Cultural Competence</td>
<td>.93</td>
<td>.83</td>
</tr>
</tbody>
</table>

To ensure the instrument’s content validity, Sealey (2003) submitted the tool for review to a panel of four experts: a nurse practitioner and former nurse educator with a focus on cultural diversity; an education professor whose specialty area includes cultural diversity in the classroom; a retired nurse educator with research interest in higher education administration and minority retention; and an anthropologist with research experience in the area of cultural competence (Sealey, 2003). Items were deemed appropriate to the content they were intended to address according to the blueprint. Those items identified as repetitive were eliminated and other items were re-worded and re-ordered to improve the clarity and overall flow of the questionnaire (Sealey, 2003).

The first section of the CDQNE-R is forty-one questions organized into five subscales according to the component of cultural competence that is addressed. The cultural awareness subscale includes eight items; the cultural knowledge subscale includes eleven items; the cultural skills subscale includes eight items; the cultural encounters subscale includes six items; and the cultural desire subscale includes eight items.

Eleven items on the CDQNE-R were selected by Sealey (2003) from the five subscales to form the transcultural teaching behaviors subscale. These relate specifically to the respondents’ behaviors and practices with students in the classroom and skills laboratory as well as clinical practice areas. Items that form the transcultural teaching behaviors subscale are embedded within the other five subscales. Appendix C presents the individual questionnaire items for each subscale of the instrument.

The second section of the instrument created by Sealey (2003) includes 14 questions on the demographic and professional characteristics. These questions were
modified from the original survey to meet the current study needs. The modified section includes 18 questions; four additional questions address participants’ exposure to other cultures, fluency in language other than English, getting cultural competence training, and level of cultural content in their current teaching programs. Appendix D contains the CDQNE-R part one, and appendix E the CDQNE-R part two as presented in the study.

In the first section, data is collected via Likert scale questions. Respondents are asked to indicate a degree of agreement or disagreement, and a numerical value is assigned to each response: 5 = strongly agree, 4 = agree, 3 = undecided, 2 = disagree, and 1 = strongly disagree. Scores were computed by adding the assigned value of each response: the higher the number, the more culturally competent the person. Following is the metric for classifying the level of cultural competence based on survey results: 55 – 130 = low level; 131 – 201 = moderate level; 202 – 275 = high level (Table 3) (Ume-Nwagbo, 2009).

Table 3

Cultural Competence Level Based on CDQNE-R Scores

<table>
<thead>
<tr>
<th>Cultural Competence Level</th>
<th>CDQNE-R Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low level</td>
<td>55-130</td>
</tr>
<tr>
<td>Moderate level</td>
<td>131-201</td>
</tr>
<tr>
<td>High level</td>
<td>202 - 275</td>
</tr>
</tbody>
</table>

Note: Ume-Nwagbo, P. N. (2009). Relationship between nurse educators' cultural competence and ethnic minority nursing students' recruitment and graduation. Unpublished doctoral dissertation, ProQuest Information & Learning, US.

Data Collection

Pre-data collection occurred from September 2012 through December 2012. Data for analysis was collected form January 2013 through June 2013.
Pre Data Collection Procedures

The online subscription service, Survey Monkey, was used for survey creation and provided comprehensive data analysis for an unlimited sample size. Survey-Monkey is a web based survey designer and feedback system used to administer the CDQNE-R in the study. The CDQNE-R was entered into the software as well as the start and end dates. Four procedures took place prior to administering the CDQNE-R, and included (a) development of the databases; (b) input of the CDQNE-R into Survey Monkey; (c) evaluation of the online survey procedures; and (d) generation of communication letters.

After creating the sample database as described in the sample plan section, another Excel workbook was created that included the names deans/directors of selected BSN nursing programs in the U.S. along with campus mailing addresses, email lists and telephone numbers. Following this, the CDQNE-R and Northeastern consent form for online surveys was entered into the Survey Monkey web site. The third step involved evaluation of the online format of the questionnaire completion process. Three nursing faculty members from Northeastern University, School of Nursing completed the survey as a preliminary test. The goal was to identify any technical issues that might affect accessing and completing the survey, as well as to identify the average time to complete the survey. Each participant reported no difficulties with the survey access, directions, or completion. They also reported the survey completion times of 20 – 30 minutes. These three faculty members were excluded from the main sample of the study.

The final step prior to data collection was the development of notification letters sent to the deans/directors of the BSN nursing programs, and to the targeted BSN nursing faculty members. The first letter to the deans/directors was sent via the postal service
(Appendix F). This letter introduced the researcher, discussed the nature and purpose of the research study, and requested assistance in encouraging their nursing faculty to participate in the study. The second communication was an email notice that a request for participation in the study would be forthcoming (Appendix G). The third communication was an email letter for official invitation to complete the study and was sent to faculty members (Appendix H). It introduced the researcher, explained the nature and purpose of the research study, and invited them to complete the upcoming online survey. The letter also provided them information regarding the confidentiality of the study participants, the benefits of participating in the study, estimated completion time, the Northeastern University IRB approval and, and researcher contact information. Four follow up letters to urge participants to complete the survey were emailed to the non-respondents (Appendix I, J, L). Due to low response rate, an email follow up was sent to the deans/directors of the BSN nursing programs urging them to encourage faculty participation (Appendix K).

Data Collection Procedures

Data collection officially began by sending deans/directors of the BSN programs an invitation letter by mail two weeks prior to data collection that encouraged the respective nursing faculty to participate in the study (Appendix E). A total of 100 invitation letters were sent; three deans responded by email requesting that IRB approval from their schools was needed to participate in the study. Due to the time restrictions of the project, those three schools were excluded from the study. Another three schools were then randomly selected and added to the study.
Table 4

Data Collection Timeline

<table>
<thead>
<tr>
<th>Time</th>
<th>Action</th>
<th>Method</th>
<th>Appendices</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 weeks prior to data collection</td>
<td>Deans/Directors invitation letter</td>
<td>Postal Mail</td>
<td>F</td>
</tr>
<tr>
<td>1 week prior to data collection</td>
<td>Faculty notice letter</td>
<td>Email</td>
<td>G</td>
</tr>
<tr>
<td>Data collection</td>
<td>Faculty invitation letter of participation</td>
<td>Email</td>
<td>H</td>
</tr>
<tr>
<td>1 week after data collection date</td>
<td>Follow up reminder 1 to participants</td>
<td>Email</td>
<td>I</td>
</tr>
<tr>
<td>2 weeks after first follow up date</td>
<td>Follow up reminder 2 to participants</td>
<td>Email</td>
<td>J</td>
</tr>
<tr>
<td>4 weeks deans follow up</td>
<td>Follow up reminder to deans/directors</td>
<td>Email</td>
<td>K</td>
</tr>
<tr>
<td>After spring recess reminder</td>
<td>Reminder to participants</td>
<td>Email</td>
<td>J</td>
</tr>
<tr>
<td>4 weeks after spring recess reminder</td>
<td>Last Reminder</td>
<td>Email</td>
<td>L</td>
</tr>
</tbody>
</table>

Then study invitations and reminders were sent to faculty email addresses as described in Table 4. Due to a low response rate that may be attributed to national holidays that occurred during data collection, three more reminders were sent: 1) an email reminder to deans/directors of nursing program sent one month after the second participants’ reminder email; 2) a third email reminder was sent to participants after spring recess. 3) The last reminder was sent one month following the spring recess reminder. Table 4 summaries the data collection timeline.

Data Analysis

Data Entry and Quality Control:

Data was exported from the Survey Monkey website into a Microsoft Excel file. All data were crossed checked electronically for missing responses prior to exporting. Of 461 participants that completed the survey the website identified 25 respondents that did not answer at least half questions and were excluded from the data analysis. A total of 436 are included in the analysis. The data files were backed up on a hard drive, which is
kept password secure with the researcher; additional back up of the data is stored on a secure website (DropBox).

**Reliability Assessment**

Internal consistency of the overall cultural competence scale and each subscale was measured by calculating Cronbach’s alpha. Results were then compared with previous study results (Yates, 2009; Sealey, 2003).

**Statistical Analyses:**

Statistical analysis was done with SAS 9.3© (SAS Institute Inc., Cary, NC). All tests were 2-sided, with $P < 0.05$ as statistically significant. Demographic characteristics, as well as scale analysis were compared using two-tailed $t$-tests for two independent samples, and $\chi^2$ test for differences in proportion. Means and standard deviation were calculated for all continuous variables. Graphs summarized the distributions of primary variables and other descriptive data (Table 5). For all aims, results were summarized using regression estimates, $p$-values, and 95% confidence interval (CI %). Table 5 describes the study variables and levels of measurement.

**Table 5**

**Study Variables & Level of Measurement**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level of measurement</th>
<th>Technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall cultural competence scale</td>
<td>Continuous</td>
<td>41 Likert-scale items</td>
</tr>
<tr>
<td>Cultural awareness subscale</td>
<td>Continuous</td>
<td>8 Likert-scale items</td>
</tr>
<tr>
<td>Cultural skills subscale</td>
<td>Continuous</td>
<td>8 Likert-scale items</td>
</tr>
<tr>
<td>Cultural encounters subscale</td>
<td>Continuous</td>
<td>6 Likert-scale items</td>
</tr>
<tr>
<td>Cultural desire subscale</td>
<td>Continuous</td>
<td>8 Likert-scale items</td>
</tr>
<tr>
<td>Cultural knowledge subscale</td>
<td>Continuous</td>
<td>11 Likert-scale items</td>
</tr>
<tr>
<td>Cultural/ethnicity</td>
<td>Categorical:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Caucasian</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Others</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>Categorical: Male, Female, Decline</td>
<td></td>
</tr>
<tr>
<td>Experience with another culture</td>
<td>Categorical (Y/N)</td>
<td></td>
</tr>
<tr>
<td>Other language</td>
<td>Categorical (Y/N)</td>
<td></td>
</tr>
<tr>
<td>Years of teaching experience</td>
<td>Categorical:</td>
<td></td>
</tr>
<tr>
<td>Level of education</td>
<td>Categorical:</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>• &lt; 1 year</td>
<td>• BS/MS</td>
<td></td>
</tr>
<tr>
<td>• 1-5 years</td>
<td>• PhD/DNP/Ed.D</td>
<td></td>
</tr>
<tr>
<td>• 6-10 years</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>• 10-15 years</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>• &gt;15 years</td>
<td>•</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nursing specialty</th>
<th>Categorical:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Adult Health, Community Health, Child Health, Maternity, Psychiatric, Women’s Health, Administration, TCN, Gerontology</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employment status</th>
<th>Categorical:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Full-time</td>
<td>•</td>
</tr>
<tr>
<td>• Part-time</td>
<td>•</td>
</tr>
<tr>
<td>• Adjunct</td>
<td>•</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State of nursing school</th>
<th>Categorical</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Type of institution</th>
<th>Categorical:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Public</td>
<td>•</td>
</tr>
<tr>
<td>• Private</td>
<td>•</td>
</tr>
<tr>
<td>• Both</td>
<td>•</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level of program teaching</th>
<th>Categorical:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Undergraduate</td>
<td>•</td>
</tr>
<tr>
<td>• Graduate</td>
<td>•</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Continuing education in TCN nursing</th>
<th>Categorical: (Y/N)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Including cultural content in courses</th>
<th>Categorical: (Y/N)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Level of cultural content in courses</th>
<th>Categorical:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fully integrated/ required course.</td>
<td>•</td>
</tr>
<tr>
<td>• Occasionally/ elective course</td>
<td>•</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessing students cultural needs</th>
<th>Categorical: (Y/N)</th>
</tr>
</thead>
</table>

**Hypothesis 1:** The majority of BSN faculty will have low level of overall cultural competence level (<130) as measured by (CDQNE-R).

**Analysis Plan 1:** Descriptive analysis was conducted for all variables. For the categorical variables, frequency analysis was performed to determine the percentage of participants within each category for each factor. Chi square tests ($\chi^2$) for equal proportions, with 2 degrees of freedom were used. For continuous variables, mean and standard deviation were calculated. Graphs were utilized to summarize data from scales.
**Hypothesis 2:** The different levels/category of each contributing factor will not have a significant difference from the age-and-gender-adjusted-mean cultural competence score of BSN faculty.

**Analytical Plan 2:** Multiple linear regressions (PROC GLM) were used to assess the age-and-gender-adjusted-of cultural competence scale for each variable, to calculate the age-and-gender-adjusted-least squares means (LS-means) and standard errors, as well as to test for linear trend. Within each factor, the different levels/categories were compared to a reference group using DUNNETT adjustments for multiple comparisons.

**Hypothesis 3:** The different contributing factors will not have a significant effect on overall cultural competence scores of BSN faculty after controlling for gender, age, and race as measured by the CDQNE-R.

**Analytical Plan 3:** To evaluate different contributing factors, multiple linear regressions (PROC GLM) were used to calculate regression coefficients, standard error and p-value controlling for gender, age, and race. Below is the equation used for analyzing research question three:

\[
CC \text{ Scale} = \beta_0 + \beta_1 (\text{Age group}) + \beta_2 (\text{race}) + \beta_3 (\text{gender}) + \beta_4 (\text{Reside in another country}) \\
+ \beta_5 (\text{Language other than English}) + \beta_6 (\text{Highest degree attained}) + \beta_7 (\text{Teaching cultural content}) + \beta_8 (\text{Specialty}) + \beta_9 (\text{Continue cultural education}) + \beta_{10} (\text{Assess students cultural needs})
\]

**Hypothesis 4:** The inclusion of transcultural nursing concepts in teaching will not have a significant impact on the overall cultural competence of BSN faculty as measured by the CDQNE-R.

**Analytical Plan 4:** To evaluate the effects of transcultural nursing concepts in teaching on the overall cultural competency levels, multiple linear regressions models were used.
to calculate regression coefficients, standard error and \( p \)-value controlling for gender, age group, and race. Below is the equation used for analyzing research question four:

\[
CC\ Scale = \beta_0 + \beta_1\ (Teaching\ scale) + \beta_2\ (Age\ group) + \beta_3\ (race) + \beta_4\ (gender) + \beta_5
\]

(Reside in another country) + \beta_6\ (Language\ other\ than\ English) + \beta_7\ (Highest\ degree\ attained) + \beta_8\ (Specialty) + \beta_9\ (Continue\ cultural\ education) + \beta_{10}\ (Teaching\ cultural\ concepts) + \beta_{11}\ (Assessing\ students\ cultural\ needs)

The difference in mean in the overall cultural competence scale, as well as its subscales, was stratified with the cultural content within the nursing teaching programs, using Student \( t \)-tests.

**Summary**

Findings from this study provide data and trends in the levels of cultural competence among nursing faculty in the U.S., and also identifies strengths and professional development needs. The demographics of the sample are described using data from each respondent’s survey. Additionally, this chapter provides details of the preliminary research procedures, data collection procedures, the instrument, the procedure to protect human rights, and the data analysis plan that used for this study.
CHAPTER 4: Results

This study was designed to examine the cultural competence level of nursing faculty teaching in collegiate schools of nursing in the United States. It was also designed to demonstrate whether faculty’s demographic characteristics influenced their cultural competency levels. A total of 461 nursing faculty across the country responded to the online survey of this study. The primary instrument for this study was the “Cultural Diversity Questionnaire for Nurse Educators Revised” CDQNE-R (Sealey, 2003, Yates, 2009). The first section of the CDQNE-R consists of 41 items that measure the participants’ cultural competence level. The second section includes 18 questions regarding the demographic and professional characteristics of the respondents.

Organization of Data Analysis

The data analysis includes three sections. The first section presents an overview on the data collection process. The second and third sections provide descriptive analyses of the study variables, and reliability analyses for the instruments used in the study. The final section presents data analyses guided by research questions and hypotheses. The test statistics used to analyze the data are descriptive statistics, reliability analysis, and regression analysis. A summary of the results is provided.

Data Collection

Permission to conduct the study was obtained from Northeastern University Institutional Review Board. Data were collected using the CDQNE-R online survey through the SurveyMonkey website. The study invitation was sent to 2,404 potential participants’ email accounts that were obtained from the selected schools websites. A total of 400 emails were undeliverable, and 61 potential participants were not nursing
faculty members. These email addresses were deleted from the primary email list. Eighty-five participants were excluded from the study because they declined participation for reasons including: “no reason”, “do not meet the inclusion criteria”, “no time”, and “illness”. After the deletions and exclusions, study reminders were resent to the remaining 2,092 email addresses. All email communications were done using a Northeastern email address to avoid being filtered into “junk email”. The researcher did not track non-respondents. To maximize response rate, the researcher sent three additional email reminders. The first reminder was sent to deans and directors of nursing programs urging them to encourage their faculty’s participation in the study. The second email reminder was sent to participants after spring break. The final email reminder was sent four weeks after spring break. This increased the response rate by 5%. A total of 461 questionnaires were completed, for a 23% response rate. However, of the 461 participants who completed the survey the website identified 25 respondents who did not answer at least half of the questions and had to be excluded from the data analysis. A total of 436 participants were included in the final analysis.

**Description of the Sample**

Demographic Characteristics

Table 6 provides a summary of the participants’ demographic characteristics.

*Age Group*

The majority of the participants were between the ages of 51 and 60 (n = 162, 36.99%), followed by 41-50 years (n= 123, 28.08%) and more than 61 years (n = 101, 23.06%). Ten percent of participants were between 31 and 40, and the smallest cohort
(1.83%) was between 20 and 30 years (Figure 2). Additionally, Chi-Square $P$-value < .0001 indicates that the distribution of nursing faculty by age differ significantly.

**Figure 2**

*Age Group of Participants*

<table>
<thead>
<tr>
<th>Age Group of Participants</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 to 30 years</td>
<td>23.06%</td>
</tr>
<tr>
<td>31 to 40 years</td>
<td>36.99%</td>
</tr>
<tr>
<td>41 to 50 years</td>
<td>9.82%</td>
</tr>
<tr>
<td>51 to 60 years</td>
<td>28.08%</td>
</tr>
<tr>
<td>61 and above</td>
<td>1.83%</td>
</tr>
</tbody>
</table>

**Gender**

The majority of the participants were female (n=402, 91.78%). Approximately 7% of the respondents were male (n=30, 6.85%), and 1.37% of the respondents’ declined to report their gender (n=6). Chi-Square $P$-value < .0001 indicates that the distribution of nursing faculty by gender differ significantly.

**Race and Ethnicity**

The majority of the participants identified themselves as Caucasian (n=383, 87.44%). Followed by African American (n=14, 3.2%), Hispanic (n=11, 2.51%), Asian (n=7, 1.6%), American Indian/Alaskan Native (n=3, .68%), Native Hawaiians/Pacific Islander (n=1, .23%). Eight participants declined to state their race (1.83%), and 11 participants identified their race as “other” (2.51%) (Figure 3). Additionally, Chi-Square
\( P\)-value < .0001 indicates that the distribution of nursing faculty by racial/ethnicity differs significantly.

Figure 3

**Racial & Ethnic Distribution of Participants**

![Bar Chart: Racial & Ethnic Distribution of Participants](chart.png)

**Resided in a Country with Different Culture for More than Six Months**

The majority of the participants (n=336, 76.71%) have not lived outside of the U.S. for more than 6 months. Only 23.29\% of the participants had lived in another country for more than 6 months (n=102). Additionally, Chi-Square \( P\)-value < .0001 indicates that the distribution of nursing faculty by participants who resided in a country with a different culture differs significantly.

**Fluent in Language Other than English**

The majority of the participants (n=372, 84.93\%) were fluent only in English; 15.07\% of the participants were fluent in a language other than English (n=66).
Additionally, Chi-Square $P$-value < .0001 indicates that the distribution of nursing faculty by fluency in other languages differs significantly.

Table 6

*Demographic Characteristics of the Sample*

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N</th>
<th>%</th>
<th>$P$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age group</strong></td>
<td></td>
<td></td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>20 to 30 years</td>
<td>8</td>
<td>1.83</td>
<td></td>
</tr>
<tr>
<td>31 to 40 years</td>
<td>43</td>
<td>9.82</td>
<td></td>
</tr>
<tr>
<td>41 to 50 years</td>
<td>123</td>
<td>28.08</td>
<td></td>
</tr>
<tr>
<td>51 to 60 years</td>
<td>162</td>
<td>36.99</td>
<td></td>
</tr>
<tr>
<td>61 and above</td>
<td>101</td>
<td>23.06</td>
<td></td>
</tr>
<tr>
<td>Decline</td>
<td>1</td>
<td>0.23</td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>Male</td>
<td>30</td>
<td>6.85</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>402</td>
<td>91.78</td>
<td></td>
</tr>
<tr>
<td>Decline</td>
<td>6</td>
<td>1.37</td>
<td></td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>Caucasian</td>
<td>383</td>
<td>87.44</td>
<td></td>
</tr>
<tr>
<td>African American/African</td>
<td>14</td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>11</td>
<td>2.51</td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>7</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>3</td>
<td>0.68</td>
<td></td>
</tr>
<tr>
<td>Native Hawaiian/Pacific Islander</td>
<td>1</td>
<td>0.23</td>
<td></td>
</tr>
<tr>
<td>Decline to state</td>
<td>8</td>
<td>1.83</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>2.51</td>
<td></td>
</tr>
<tr>
<td><strong>Resided in different Culture &gt;6months</strong></td>
<td></td>
<td></td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>No</td>
<td>336</td>
<td>76.71</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>102</td>
<td>23.29</td>
<td></td>
</tr>
<tr>
<td><strong>Language other than English</strong></td>
<td></td>
<td></td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>No</td>
<td>372</td>
<td>84.93</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>66</td>
<td>15.07</td>
<td></td>
</tr>
<tr>
<td><strong>Teaching Nursing Experience</strong></td>
<td></td>
<td></td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>Less than one year</td>
<td>16</td>
<td>3.65</td>
<td></td>
</tr>
<tr>
<td>1-5 years</td>
<td>94</td>
<td>21.46</td>
<td></td>
</tr>
<tr>
<td>6-10 years</td>
<td>130</td>
<td>29.68</td>
<td></td>
</tr>
<tr>
<td>10-15 years</td>
<td>55</td>
<td>12.56</td>
<td></td>
</tr>
<tr>
<td>More than 15 years</td>
<td>143</td>
<td>32.65</td>
<td></td>
</tr>
<tr>
<td><strong>Highest Degree Attained</strong></td>
<td></td>
<td></td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>Bachelors</td>
<td>6</td>
<td>1.37</td>
<td></td>
</tr>
<tr>
<td>Masters</td>
<td>242</td>
<td>55.25</td>
<td></td>
</tr>
<tr>
<td>DNP</td>
<td>27</td>
<td>6.16</td>
<td></td>
</tr>
<tr>
<td>PhD</td>
<td>145</td>
<td>33.11</td>
<td></td>
</tr>
<tr>
<td>Ed.D.</td>
<td>18</td>
<td>4.11</td>
<td></td>
</tr>
<tr>
<td><strong>Employment Status</strong></td>
<td></td>
<td></td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>Full-time</td>
<td>397</td>
<td>91.47</td>
<td></td>
</tr>
<tr>
<td>Part-time</td>
<td>22</td>
<td>5.07</td>
<td></td>
</tr>
<tr>
<td>Adjunct</td>
<td>10</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>1.15</td>
<td></td>
</tr>
<tr>
<td><strong>Type of Institution</strong></td>
<td></td>
<td></td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>Public College</td>
<td>240</td>
<td>87.59</td>
<td></td>
</tr>
<tr>
<td>Private College</td>
<td>22</td>
<td>8.03</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>----</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>Both</td>
<td>12</td>
<td>4.38</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level of Nursing Program Teach.</th>
<th>&lt; .0001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate</td>
<td>2.3</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>97.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cultural Continuing Education</th>
<th>0.0004</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>180</td>
</tr>
<tr>
<td>Yes</td>
<td>254</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Including Cultural Content in Current Program</th>
<th>&lt; .0001</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>11</td>
</tr>
<tr>
<td>Yes</td>
<td>423</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level of Cultural Content in Current Program</th>
<th>&lt; .0001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully Integrated</td>
<td>246</td>
</tr>
<tr>
<td>Occasionally mentioned</td>
<td>133</td>
</tr>
<tr>
<td>Required course</td>
<td>44</td>
</tr>
<tr>
<td>Elective course</td>
<td>11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assess Students’ Cultural Beliefs</th>
<th>0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>197</td>
</tr>
<tr>
<td>Yes</td>
<td>237</td>
</tr>
</tbody>
</table>

Data were presented as N=total, %= percentage, p-values were compared using chi-square test

**Teaching Experience**

Participants were asked about their years of teaching experience. More than 32.65% of the participants have been teaching for over 15 years (n= 143); 29.68% have taught for 6-10 years (n=130); and 21.46% have taught for 1-5 years (n=94). Only 12.56% have been teaching for 10-15 years (n=55); about 3% have been teaching for less than one year (n=16) (Figure 4). Additionally, Chi-Square P-value < .0001 indicates that the distribution of nursing faculty by experience differs significantly.

**Highest Degree Attained**

More than half of the participants (n=242, 55.25%) listed master degree as their highest degree earned. Followed by 33.11% reported having doctoral degree (n=145), 6.16% reported having doctorate in nursing practice DNP (n=27), and 4.11% reported having Ed.D (n=18). Only 6 participants reported bachelor as their highest degree attained (1.37%) (Figure 5). Additionally, Chi-Square P-value < .0001 indicates that the distribution of nursing faculty by highest degree attained differs significantly.
Figure 4

*Teaching Experience of Participants*

![Pie chart showing teaching experience of participants]

- Less than one year: 3.65%
- 1-5 years: 21.46%
- 6-10 years: 32.65%
- 10-15 years: 33.11%
- More than 15 years: 0%

Figure 5

*Highest Degree Attained of Participants*

![Pie chart showing highest degree attained of participants]

- Bachelors: 55.25%
- Masters: 33.11%
- DNP: 6.16%
- PhD: 4.11%
- Ed.D.: 1.37%
- Other or less than one year: 0%
Nursing Specialty

When participants were asked about their nursing specialty, the majority reported adult health nursing as their specialty area (n=106, 26.24%). 49 participants reported gerontology (12.13%), 46 participants selected child health (11.39%). 43 participants reported community health (10.64%), equally 43 participants reported women health (10.64%). In the remaining cohorts, 38 reported psychiatric nursing specialty (n=38, 9.41%), 31 participants reported maternity nursing (7.67%); and 25 participants reported nursing administration as their specialty. Only 23 participants listed transcultural nursing as their specialty (5.69%) (Table 7). Additionally, Chi-Square test $P$-value < .0001 indicates that the distribution of nursing faculty by specialty differs significantly.

Table 7

Nursing Specialty Area of Participants

<table>
<thead>
<tr>
<th>Nurse Specialty Area</th>
<th>Percentage %</th>
<th>Frequency N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Health Nursing</td>
<td>26.24</td>
<td>106</td>
</tr>
<tr>
<td>Community Health Nursing</td>
<td>10.64</td>
<td>43</td>
</tr>
<tr>
<td>Child Health Nursing</td>
<td>11.39</td>
<td>46</td>
</tr>
<tr>
<td>Maternity Nursing</td>
<td>7.67</td>
<td>31</td>
</tr>
<tr>
<td>Psychiatric Nursing</td>
<td>9.41</td>
<td>38</td>
</tr>
<tr>
<td>Women Health Nursing</td>
<td>10.64</td>
<td>43</td>
</tr>
<tr>
<td>Nursing Administration</td>
<td>6.19</td>
<td>25</td>
</tr>
<tr>
<td>Trans-Cultural Nursing</td>
<td>5.69</td>
<td>23</td>
</tr>
<tr>
<td>Gerontology Nursing</td>
<td>12.13</td>
<td>49</td>
</tr>
</tbody>
</table>

Employment Status

The majority of the participants were full-time faculty (n =397, 91.47%), with a total of 22 participants who were part-time (5.07%) and 10 participants who were adjunct faculty (2.3%). Five participants reported their employment status as “other” (1.15%).
Additionally, Chi-Square test $P$-value < .0001 indicates that the distribution of nursing faculty by employment status differs significantly.

**Type of Institution**

Two hundred forty participants reported that they are working at public institutions (87.59%); 22 participants were working at private institutions (8.03%); and 4.38% of participants reported working at both public and private institutions (n=12). Additionally, Chi-Square $P$-value < .0001 indicates that the distribution of nursing faculty by type of institution differs significantly.

**Type of nursing program**

The majority of participants indicated they currently teach in undergraduate nursing programs (n=424, 97.7%). Only 2.3% of the participants indicated they currently teach in graduate nursing programs (n=10). Additionally, Chi-Square $P$-value < .0001 indicates that the distribution of nursing faculty by level of nursing program teaching differs significantly.

**Continuing education in Transcultural nursing**

Two-hundred fifty-four participants reported that they had attended a continuing education program on Transcultural nursing/cultural competence in the past 5 years (58.53%); 180 had not attended any continuing education related to that subject (41.47%). Additionally, Chi-Square $P$-value 0.0004 indicates that the distribution of nursing faculty by cultural continuing education differs significantly.

**Inclusion of cultural content in teaching program**

The majority of participants included cultural content in their current teaching program (n=423, 97.47%). Additionally, Chi-Square $P$-value < .0001 indicates that the
distribution of nursing faculty by including cultural content in current teaching differs significantly.

**Level of cultural content in current teaching program**

More than half of the participants reported that they fully integrate cultural content in their current program (n=246, 56.68%), and 133 of the participants reported that cultural content is occasionally mentioned in their teaching program (30.65%). Only 44 participants reported that they are teaching cultural content as a required course in their nursing program (10.14%). There were 11 participants who reported having an elective cultural course in their program (2.53%) (Figure 6). Additionally, Chi-Square P-value < .0001 indicates that the distribution of nursing faculty by level of including cultural content in current program differ significantly.

**Figure 6**

**Level of cultural content in current teaching program**

[Bar chart showing distribution of cultural content levels]

**Assessing students’ cultural beliefs and values towards educational learning**

More than half of the participants assessed students’ cultural beliefs and values towards educational learning (n=237, 54.61%). The remaining 197 participants reported
that they do not assess their students’ cultural needs (45.39%). Additionally, Chi-Square
$P$-value $\approx 0.05$ indicates that the distribution of nursing faculty by assessing students’
cultural beliefs in current program differ significantly.

**Reliability Assessment**

Cronbach alpha coefficient was used to determine the internal consistency of the
subscales and the overall CDQNE-R. Table 8 compares the reliability assessment of the
CDQNE-R for the current study with previous studies. The reliability coefficient for the
subscales ranged from $\alpha = 0.75 - 0.87$ respectfully. All values indicate a good level of
reliability. The reliability coefficient for the overall CDQNE-R scale was $\alpha = 0.94$, this
value indicates a high level of internal consistency. Internal consistency reliability for
CDQNE-R in this study was higher than Sealey (2003) the original author of this
instrument. It is also higher than the Yates (2009) study that used the modified version of
this instrument.

**Table 8**

*Summary of the Internal Consistency Reliability Statistics*

<table>
<thead>
<tr>
<th>Scales</th>
<th>Cronbach Alpha Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Awareness Subscale</td>
<td>0.77</td>
</tr>
<tr>
<td>Cultural Knowledge Subscale</td>
<td>0.85</td>
</tr>
<tr>
<td>Cultural Skills Subscale</td>
<td>0.77</td>
</tr>
<tr>
<td>Cultural Encounters Subscale</td>
<td>0.66</td>
</tr>
<tr>
<td>Cultural Desire Subscale</td>
<td>0.74</td>
</tr>
<tr>
<td>Cultural Teaching Behaviors</td>
<td></td>
</tr>
<tr>
<td>Subscale</td>
<td>0.84</td>
</tr>
<tr>
<td>Overall Cultural Competence</td>
<td></td>
</tr>
</tbody>
</table>

Data Analysis

Research Question 1:

What is the overall cultural competence level of BSN faculty as measured by CDQNE-R and its six subscales?

Hypothesis 1: The majority of the BSN faculty will have low overall cultural competence level (<130).

To answer this question participants completed the CDQNE-R online survey, which measured the five subscales of Campinha-Bacote’s (2010) model of cultural competence and the sixth subscale of transcultural teaching behaviors by Sealy (2003). Participants responded to 41 items of the scale, and 18 demographic related questions. Each response was rated as 1= strongly disagree to 5= strongly agree. All responses were added to calculate the mean of the overall Cultural Competence Scale and six subscales. The metric by Ume-Nwagbo (2009) was used for classifying the overall level of cultural competence based on survey results (55–130= low level, 131–201= moderate level, 202–275=high level). For each subscale, the minimum and maximum possible responses were calculated based on the number of items for each subscale. The higher the mean of the subscale, the closer it is to the maximum possible response value.

Table 9

Overall Cultural Competence Level of Participants

<table>
<thead>
<tr>
<th>Overall Level</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Level (55–130)</td>
<td>30</td>
<td>6.54</td>
</tr>
<tr>
<td>Moderate Level (131–201)</td>
<td>421</td>
<td>91.72</td>
</tr>
<tr>
<td>High Level (202–275)</td>
<td>8</td>
<td>1.74</td>
</tr>
</tbody>
</table>
The results showed that more than 90% of the sample had a moderate cultural competence level (n=421) with a mean $166.3 \pm 19.5$. Table 9 describes the overall cultural competence level of the sample according to the metric described above.

Table 10

**CDQNE-R Subscales Mean Scores**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>SD</th>
<th>SE</th>
<th>Min</th>
<th>Max</th>
<th>Items</th>
<th>Poss Mini</th>
<th>Poss Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>C_Awareness_Subscale</td>
<td>35.161</td>
<td>3.509</td>
<td>0.167</td>
<td>20</td>
<td>40</td>
<td>8</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>C_knowledge_Subscale</td>
<td>43.529</td>
<td>6.201</td>
<td>0.295</td>
<td>17</td>
<td>55</td>
<td>11</td>
<td>11</td>
<td>55</td>
</tr>
<tr>
<td>C_Skills_Subscale</td>
<td>31.533</td>
<td>4.414</td>
<td>0.211</td>
<td>13</td>
<td>40</td>
<td>8</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>C_Encounter_Subscale</td>
<td>22.504</td>
<td>4.417</td>
<td>0.208</td>
<td>11</td>
<td>30</td>
<td>6</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>C_Desire_Subscale</td>
<td>33.486</td>
<td>4.190</td>
<td>0.199</td>
<td>15</td>
<td>40</td>
<td>8</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>C_Teaching_Subscale</td>
<td>42.11</td>
<td>4.982</td>
<td>0.236</td>
<td>24</td>
<td>50</td>
<td>11</td>
<td>11</td>
<td>55</td>
</tr>
<tr>
<td>C_Competence_Scale</td>
<td>166.21</td>
<td>19.531</td>
<td>0.932</td>
<td>86</td>
<td>204</td>
<td>41</td>
<td>41</td>
<td>205</td>
</tr>
</tbody>
</table>


Table 10 presents the respondents’ scores for the six subscales of the CDQNE-R; Cultural Awareness, Cultural Knowledge, Cultural Skill, Cultural Encounters, Cultural Desire, and Cultural Teaching Behaviors (Figure 7). The highest indices were the Cultural Knowledge Subscale with a mean $= 43.53 \pm 6.2$ and the Cultural Teaching Behavior Subscale with a mean $= 42.1 \pm 4.1$. These indices were followed by the Cultural Awareness Subscale with a mean $= 35.16 \pm 3.5$ and the Cultural Desire Subscale with a mean $= 33.49 \pm 4.19$. The lowest indices were the Cultural Skills Subscale with a mean $= 31.53 \pm 4.41$, and the Cultural Encounter Subscale with a mean $= 22.50 \pm 4.42$. 


Figure 7

*Mean Score of CDNQ-R Subscales*

![Mean Score / Distribution of CDNQ-R Subscales](chart1.png)

Figure 8

*Mean CDNQ-R Subscales Related to Possible Minimum and Maximum Answers*

![Mean CDNQ-R Subscales Related to Possible Minimum and Maximum Answers](chart2.png)
Research Question 2:

What is the age-and-gender-adjusted-means of the overall cultural competence scale including each contributing cultural competence score factors as measured by CDQNE-R?

Hypothesis 2: The different levels/categories of each contributing factor will not have a significantly different age-and-gender-adjusted-mean cultural competence score.

To assess the age-and-gender-adjusted-mean of overall cultural competence scale for each variable, multiple linear regressions (PROC GLM) were used to calculate the age-and-gender-adjusted-least squares means (LSM) and the standard errors as well as testing for linear trends using PROC GLM. Within each factor, the different levels/categories were compared to a reference group using DUNNETT adjustments for multiple comparisons. The adjusted factors were age group and race of the sample. The selected predictors were race, number of years of teaching experience, residence in a different country for more than six months, language spoken other than English, nursing specialty, employment status, type of teaching institution, highest degree attained, cultural continuing education in the past five years, inclusion of cultural content in current nursing program, level of incorporation of cultural content in current program, and assessing student needs related to cultural competence.

An analysis of the findings revealed interesting connections between various factors. Table 11 describes each predictor and how it is related to the age-and-gender-adjusted-mean of the overall cultural competence scale. A review of the least square mean (LSM) and level of significance p-value of the results revealed that 10 predictors
have statistical significance \((p < .05)\) on LS mean of the overall cultural competence scale.

Results revealed that the LS mean of the overall cultural competence scale of participants who identified their race and ethnicity as Caucasian (LSM=164.8 ±4) was significantly lower than participants who identified their race as other (LSM=174.8 ±4.3) adjusting for age group and gender \((p = .0007)\). Results revealed that the LS mean of the overall cultural competence scale of participants who resided in different culture for more than six months (LSM=174.8 ± 4.1) were significantly higher than participant who did not (LSM=166 ±3.8) adjusting for age group and gender \((p < .0001)\). Results also revealed that the LS mean of the overall cultural competence scale of participants who spoke a language other than English (LSM=182.9 ±4.4) were significantly higher than participants who did not (LSM=166 ±3.8) adjusting for age group and gender \((p < .0001)\).

Analyses of the predictor “nursing specialty” highlighted that participants from certain nursing specialties reported significantly higher LS-means of the overall cultural competence scale. Participants who identified their specialty as women health (LSM=172.7 ±4.5); community health (LSM=175.6 ±4.7); and transcultural nursing (LSM=185.2 ±4.9); and psychiatric nursing (LSM=170.8 ±4.6) were significantly higher than other specialties adjusting for age group and gender \((p < .0001, p < .0001, p < .0001, p =0.002)\).

Moreover, data analysis related to cultural continuing education revealed the following: LS-means of the overall cultural competence scale of participants who attended/completed any continuing education program on Transcultural nursing/cultural competence in the past five years (LSM=172.7 ±3.9) were significantly higher than
participants who did not (LSM=162.7 ±3.9) adjusting for age group and gender (p < .0001). Results also revealed that participants who identified their highest degree attained as DNP/PhD/Ed.D had significantly higher age-and-gender–adjusted LS-means (LSM=172.8 ±4.1) than participants who identified their highest degree as Bachelors/Master’s (LSM=166.7 ±3.9) adjusting for age group and gender (p = 0.001).

Data analysis related to cultural education revealed the following: LS-means of the overall cultural competence scale of participants who included cultural content in their current teaching program (LSM=169.77 ±3.9) were significantly higher than participants who did not (LSM=142.1 ±7) adjusting for age group and gender (p < .0001). Furthermore, LS-means of the overall cultural competence scale of participants who included cultural content as a fully integrated/or required course (LSM=174.1 ±3.7) were significantly higher than participants who only included cultural content occasionally or as an /or elective course (LSM=156.6 ±3.8) adjusting for age group and gender (p < .0001). Finally, LS-means of the overall cultural competence scale of participants who assessed their students’ cultural beliefs and values towards educational learning (LSM=173.1 ±3.7) were significantly higher than participants who did not (LSM=158.4 ±3.8) adjusting for age group and gender (p < .0001).

Table 11

<table>
<thead>
<tr>
<th>LS-Means of Different Measures Adjusting for Gender &amp; Age Group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable</strong></td>
</tr>
<tr>
<td>Race</td>
</tr>
<tr>
<td>Caucasian</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Teaching Experience</td>
</tr>
<tr>
<td>&lt; 5 years</td>
</tr>
<tr>
<td>10-15 years</td>
</tr>
<tr>
<td>6-10 years</td>
</tr>
<tr>
<td>&gt; 15 years</td>
</tr>
<tr>
<td>Reside in Different Culture</td>
</tr>
</tbody>
</table>
Gender & Age group-adjusted means were calculated with LSMEANS PROC GLM. Values presented are means, P-values for trend are calculated based on Dunnett adjustment for multiple comparisons (P < 0.05)

Although some predictors’ p-value did not reach significant levels, it did influence age-and-gender–adjusted LS-means. For instance, participants who worked at both private and public institutions had higher age-and-gender–adjusted LS-means (LSM=168.2 ±6.4) than those who worked only at public institutions (LSM=166.2 ±3.7) or only at private institutions (LSM=160.9 ±5.3). Also participants who identified their employment status as “other” had a 20-point higher age-and-gender–adjusted LS-mean.
Research Question 3:

What are the different contributing factors to the overall cultural competence score of BSN faculty, when controlling for gender, age group, and race as measured by CDQNE-R?

Hypothesis 3: The contributing factors will not have significantly affect the overall cultural competence score controlling for gender, age group, and race.

To evaluate the different contributing factors, a multiple linear regression model was used to calculate estimates of regression coefficients, standard error, and the $p$-value controlling for gender, age group, and race. The overall regression is statistically significant with the probability of the $F$-test < .0001. Our model has predicting capability reaching 40% of the variability in overall cultural competence score ($R^2 = 0.39$). Table 12 shows that all listed predictors (Resided in a country with a different culture, Language spoken other than English, Highest degree attained, Teaching cultural content, Specialty, Continue cultural education, and assessing students’ values and beliefs toward cultural education) were statistically significant ($P$-value < .05) adjusting for race, age group, and gender.

The estimated coefficients imply the following findings given that all else in the model is fixed:

- Participants who did not reside in a country with a different culture for more than 6 months have a 5-point lower overall cultural competence mean score (estimate = -4.7 ±2.05) than participants who did.
• Participants who did not speak a language other than English scored 6 points lower on their overall cultural competence mean score (estimate = -6.2 ±2.48) than participants who did.

• Participants who identified bachelors/master’s as their highest degree attained scored 5 points lower on their overall cultural competence mean score (estimate = -5.09 ±1.65) than participants who identified DNP/PhD/Ed.D as their highest degree attained.

• Participants who identified their nursing specialty area as something other than adult health (Child Health, Community Health, Gerontology, Maternity Nursing, Nursing Administration, Psychiatric Nursing, Trans-Cultural Nursing, Women Health) had a 9-point lower overall cultural competence mean score (estimate = -9.1 ±2.926) than participants who identified their nursing specialty area as adult health.

• Participants who did not receive cultural continuing education in the last five years had a 5-point lower overall cultural competence mean score (estimate = -5.2 ±1.71) than participants who did.

• Participants who answered “No” to teaching cultural content in their current teaching program had 25 points less on their overall cultural competence mean score (estimate = -25.5 ±6.285) than participants who answered “Yes”.

• Participants who answered “No” to assessing students’ values and beliefs toward cultural education had 13 points less on their overall cultural competence mean score (estimate = -13.192 ±1.655) than participants who answered “Yes”.
Table 12

**Regression Estimate of Overall Cultural Competence Score Contributing Factors**

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F Value</th>
<th>Pr &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>21</td>
<td>59682.8715</td>
<td>2842.0415</td>
<td>11.46</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>Error</td>
<td>379</td>
<td>93967.9714</td>
<td>247.9366</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>400</td>
<td>153650.8429</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R-Square</th>
<th>Coefficient Variance</th>
<th>Root MSE</th>
<th>Cult_Compet_Scale Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.388432</td>
<td>9.449345</td>
<td>15.746</td>
<td>166.6359</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Estimate</th>
<th>SEM</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reside Diff. Country</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>-4.71</td>
<td>2.05</td>
<td>0.022</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Languages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>-6.225</td>
<td>2.5</td>
<td>0.012</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest Degree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-Bachelors/Masters</td>
<td>-5.094</td>
<td>1.7</td>
<td>0.002</td>
</tr>
<tr>
<td>DNP/PhD/Ed.D.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult Health</td>
<td>-9.0521</td>
<td>3.0</td>
<td>0.002</td>
</tr>
<tr>
<td>Cultural Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>-5.224</td>
<td>1.8</td>
<td>0.002</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teach Cultural Content</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>-25.478</td>
<td>6.3</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assess Student Culture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>-13.192</td>
<td>1.6</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Estimate, SEM and P-values were calculated using PROC GLM. All covariates were included in the model simultaneously, including Age group, race, gender, Reside in another country, Language other than English, Highest degree attained, Teaching cultural content, Specialty, Continue cultural education, Assess students’ cultural needs.
Research Question 4:

What is the impact of including transcultural nursing concepts in teaching on the overall cultural competence score of BSN faculty, when controlling for gender, age group, and race as measured by CDQNE-R?

**Hypothesis 4:** The inclusion of transcultural nursing concepts in teaching will not have a significant impact on the overall cultural competence as measured by the CDQNE-R.

To evaluate the effect of including transcultural nursing concepts in teaching on the overall cultural competence level, multiple linear regression models were used to calculate regression coefficients, standard error, and $p$-value controlling for gender, age group, and race. Table 13 shows the multiple regression analysis used to identify transcultural teaching behaviors and its relationship to the overall cultural competence mean score. The overall regression is statistically significant to the probability of the $F$-test $< .0001$. The model showed that with adjustments for all other variables, the transcultural teaching behaviors subscale was significantly associated with the overall cultural competence mean score ($p < .0001$).

The model also had predicting capability reaching 86% of the variability in overall cultural competence score ($R^2 = 0.86$). In other words, the transcultural teaching behaviors subscale was a critical predictor of the overall cultural competency score of participants. Participants who used transcultural teaching behaviors had 3.3 points $\pm$ 0.01 higher overall cultural competence mean scores than those who did not.
Table 13

**Regressions Estimate of Transcultural Teaching Behaviors Relation to the Overall Cultural Competence Level**

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F Value</th>
<th>Pr &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>22</td>
<td>132223.9456</td>
<td>6010.1793</td>
<td>106.03</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>Error</td>
<td>378</td>
<td>21426.8973</td>
<td>56.6849</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>400</td>
<td>153650.8429</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R-Square</th>
<th>Coefficient Variance</th>
<th>Root MSE</th>
<th>Cult_Compt_Scale Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.860548</td>
<td>4.518197</td>
<td>7.528938</td>
<td>166.6359</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimate</th>
<th>SEM</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>C_Teaching_Subscale</td>
<td>3.30</td>
<td>0.01</td>
<td>&lt; .0001</td>
</tr>
</tbody>
</table>

Estimate, SEM and P-values were calculated using PROC GLM; The model was adjusted for race, gender, age group, resided in another country, other language, highest degree attained, specialty, cultural education, teaching cultural content, and assess students cultural needs.

**Summary of Findings**

A total of 2,092 nursing faculty in accredited BSN programs across the United States received the invitation to participate in this study. A total of 461 participants completed the online questionnaires, with a response rate of 23%. Reliability assessment was obtained for the instrument used in the study. CDQNE-R demonstrated higher alpha coefficients comparing to other studies.

The demographic characteristics revealed that the majority of the participants were white, more than 56% received cultural education in the past five years, and 97% reported fully integrating cultural content into their current teaching programs. The data analysis revealed that the majority of study participants demonstrated moderate overall cultural competence levels. Moreover, the highest indices were the cultural knowledge subscale and transcultural teaching behaviors subscales. Finally, results showed selected
predictors for residence in a country with a different culture, language spoken other than English, highest degree attained, teaching cultural content, specialty, continuing cultural education, and assessing students’ values and beliefs toward cultural education were statistically significant ($P$-value < .05) and positively impacted the overall cultural competence mean scores.

The next chapter will discuss the findings and conclusions, as well as implications and recommendations for future research.
CHAPTER 5: Findings, Discussions, and Implications

This chapter presents an overview of the study, including methodology and findings. The discussion presented is according to the study research questions and is based on the theoretical framework of Campinha-Bacote’s (2010). Implications for nursing practice and limitations of the study also are discussed. The chapter concludes with suggestions for future research regarding cultural competence in nursing education.

Summary of Study

The purpose of this descriptive, correlational, non-experimental, survey design study was first to assess the level of cultural competence among nursing faculty in collegiate schools of nursing in the U.S. and then to identify and examine demographic factors that influence the cultural competence level of nursing faculty.

The guided theoretical framework of this study was Campinha-Bacote’s (2010) Process of Cultural Competence in the Delivery of Healthcare Services Model. According to this model, the process of cultural competence consists of five interrelated constructs. Cultural encounter leads to seeking other constructs in the model: cultural desire, cultural awareness; cultural knowledge; and cultural skills (Campinha-Bacote, 2010). The primary instrument for this study was the “Cultural Diversity Questionnaire for Nurse Educators Revised” CDQNE-R (Sealey, 2003, Yates, 2009). The first section of the CDQNE-R measures the overall cultural competence of the participants. The second section of the instrument includes questions regarding demographic and professional characteristics of the participants.

The research questions that guided the study were as follows:
Research Question 1: What is the overall cultural competence level of BSN faculty as measured by CDQNE-R and its six subscales?

Research Question 2: What is the age-and-gender-adjusted-means of the overall cultural competence scale including each contributing cultural competence score factors as measured by CDQNE-R?

Research Question 3: What are the different contributing factors to the overall cultural competence score of BSN faculty as measured by CDQNE-R when controlling for gender, age group, and race?

Research Question 4: What is the impact of including transcultural nursing concepts in teaching on the overall cultural competence score of BSN faculty, as measured by CDQNE-R when controlling for gender, age group, and race?

A total of 461 participants completed the study questionnaire. The response rate was 23%, which is lower than the response rates of previous studies that used the same instrument (Sealey, 2003; Sealey, et al 2006, Yates, 2009, Reneau, 2013). However, all the mentioned studies were conducted at the state level which makes it easier to track non-respondents. All studies used both online and mail methods for data collection, and mail methods were not feasible in the current study due to a large sample size.

**Findings and Discussion**

The sample demographic characteristics are comparable to the national data of nursing faculty data from The National League for Nursing Faculty Report (2010) and The American Association of Colleges of Nursing for Nursing Faculty Report (AACN) (2014). The sample was predominantly Caucasian (87%). The majority of study participants were female, and most ranged between the ages of 51 and 60 (37%). NLN
report and AACN report indicated that the majority of nursing faculty are white 84%, and only 16% of faculty are from minority groups. The report also indicated that 48% of nursing faculty are above the age of 55 years old (AACN, 2014, NLN, 2010).

In this study, 30% of the participants have been teaching for more than 15 years, half of the sample had master degree as the highest degree attained, 91% were full-time employees, teaching at undergraduate nursing schools (62%), and working at public collages (88%). The majority of participants reported adult health nursing as their specialty area (26%), gerontology (12%), child health (11%), community health (11%), women health (11%), psychiatric nursing (9%), maternity nursing (7%); and (6%) participants reported nursing administration as their specialty.

Questions related to cultural exposure showed that only 23% of participants resided in a country with different culture for more than six months, and 15% spoke language other than English. Fifty eight percent of the sample reported that they attended continuing education program on Transcultural nursing/cultural competence in the past 5 years. The majority also reported including cultural content in their current teaching program (97%). More than half of participants reported (68%) including cultural content as fully integrated/core course in their current teaching program. Lastly, more than half of the participants reported that they assess students’ cultural beliefs and values towards educational learning (54%).

**Cultural Competence**

The major objective of this study was to assess the cultural competence level of nursing faculty teaching at BSN programs. According to Campinha-Bacote (2010) model cultural competence level is a process that includes five constructs of awareness, desire,
knowledge, skills, and encounter. The first section of the CDQNE-R measures the overall cultural competence of the participants and its six subscales.

**Cultural knowledge**

Cultural knowledge includes understanding of worldview, health beliefs, disease prevalence, treatment efficacy, and other data across culturally and ethnically diverse groups (Campinha-Bacote, 2010). The highest index of the CDQNE-R subscales was the Cultural Knowledge Subscale with a mean $= 43.53 \pm 6.2$, with a range of the possible minimum and maximum response is 11 to 55, indicating that the mean of this particular scale is close to the highest point of cultural knowledge. That indicates that participants strongly agree with items related to drug interaction, biological differences, worldview, cultural beliefs and practices, statements related to race and ethnicity.

The literature consistently emphasizes that cultural knowledge is a major component to providing culturally competent care (Campinha-Bacote, 2010; Leininger, 2002). It also found that lack of cultural knowledge among nurses could negatively affect the quality of care provided to clients from diverse backgrounds (Leishman, 2004). In addition to patient care, it is also essential for nursing faculty to impart cultural knowledge to nursing students in various different teaching environments (e.g. classroom, lab, or clinical) (Sealey, et al. 2006).

The findings of this study related to cultural knowledge are in contrast to those by Sealey (2003) and Yates (2009) studies. Both studies reported that their participants agreed with some items related to cultural knowledge but not all (Sealey, 2003; Yate, 2009).
**Cultural Teaching Behaviors**

The sixth subscale, cultural teaching behaviors, contains selected items from the first five major subscales. Its items relate specifically to the respondents’ behaviors and practices with students in the classroom and skills laboratory as well as clinical practice areas. Among the participants in this study, the results found that the second highest index of the CDQNE-R subscales was on Cultural Teaching Behaviors Subscale with a mean = 42.10 ± 4.98, with a range of the possible minimum and maximum response is 11 to 55, indicating that the mean of this particular scale is close to the highest point of Cultural Teaching Behaviors. This indicates that study participants strongly agree with items related to teaching cultural concepts in the courses they teach.

The findings of this study related to cultural teaching behaviors are in contrast to those by Sealey (2003) and Yates (2009) studies. Sealey participants scored M=3.97, and Yates participants reported M=4.06. Both studies reported that their participants only agree with some items related to including cultural content in teaching but not all (Sealey, 2003; Yate, 2009).

**Cultural Awareness**

Cultural Awareness is the deliberate self-examination and in-depth exploration of biases, stereotypes, prejudices, and assumptions that one holds about individuals and groups who are different (Campinha-Bacote, 2010). Among the participants in this study, the results found that the third index of the CDQNE-R subscales was the Cultural Awareness Subscale with a mean = 35.16 ± 3.5, with a range of the possible minimum and maximum response is 8 to 40, indicating that the mean of this particular scale is about average to highest point of cultural knowledge. This indicates that study
participants are culturally aware and respectful to cultural diversity issues. This finding is significant taking into account that the majority (87%) of the current study participants were Caucasians.

The literature showed that cultural awareness is crucial to create awareness and a respectful environment of cultural diversity within nursing practice and education (Campinha-Bacote, 2010). Other studies identified that lack of cultural awareness is a major barrier toward providing culturally competent education and care (Kardong-Edgren, & Campinha-Bacote, 2008; Schim, Doorenbos, & Borse, 2005; Leishman (2004).

The findings of this study related to cultural awareness are in contrast to those by Sealey (2003) and Yates (2009) studies. Sealey participants scored M=4.1, and Yates participants reported M=4.6. Both studies reported cultural awareness as the highest index and their participants strongly agree with items related to cultural awareness (Sealey, 2003; Yate, 2009).

**Cultural Desire**

Cultural Desire is the motivation of the healthcare professional to “want to” engage in the process of becoming culturally competent; not the “have to” (Campinha-Bacote, 2010). Among the participants in this study, the results found that the Cultural Desire Subscale index has a mean = 33.49 ± 4.19, with a range of the possible minimum and maximum response is 8 to 40, indicating that the mean of this particular scale is at average points of cultural desire. That indicates that participants selected agree with most items related desire and motivation to teach and care for individuals from diverse backgrounds.
Literature reports that lack of cultural desire lead to lack of motivation and commitment of nursing faculty related to cultural diversity issue (Kardong-Edgren, & Campinha-Bacote, 2008). Studies also reported lack of cultural desire affects faculty members’ personal views and their attitudes towards individuals from diverse backgrounds, which also affects their ability to prepare future culturally competent nurses (Wells, 2000; Leonard, 2006).

The findings of this study related to cultural desire are in contrast to those by Sealey (2003) and Yates (2009) studies. Sealey participants scored M=3.67, and Yates participants reported M=4.1. Both studies reported cultural desire as the highest index and their participants strongly agree with items related to cultural desire (Sealey, 2003; Yate, 2009).

Cultural Skills

The Cultural Skills Subscale has a low index compared with the rest of the cultural competence constructs in the study with a mean = 31.53 ± 4.41, with a range of the possible minimum and maximum response is 8 to 40, indicating that the mean of this particular scale indicates that study participants are at the lower point of cultural skills. Study participants selected undecided with most items related cultural skills to teach and care for individuals from diverse backgrounds. Cultural Skill is the ability to collect culturally relevant data regarding the patient’s presenting problem, as well as accurately performing a culturally based physical assessment in a culturally sensitive manner (Campinha-Bacote, 2010). The low score for this subscale indicates that participants have a low level of comfort when interacting, assessing, or communicating with individuals from diverse backgrounds.
The IOM report revealed that a lack of cultural skills in caring for individuals from diverse backgrounds can promote stereotypes, false assumptions, and can lead to negative health outcomes (IOM, 2002). Mayo and colleagues found that lack of skills among healthcare providers were a major barrier in caring for hispanic patients (Mayo, et al. 2007). Moreover, the literature emphasized that instructors’ personal experiences, prejudices, and expectations in addition to their influence as authority figures significantly impacts the student learning process (Leonard, 2006). Another study showed lack of cultural skills among nursing faculty is a major barrier toward retaining nursing students from diverse background (Mills-Wisneski, 2005; Ume-Nwagbo, 2009).

The findings of this study related to cultural skills are in contrast to studies by Sealey (2003) and Yates (2009). Sealey’s participants scored M=3.65, and Yates participants reported M=3.79. Both studies reported cultural skills higher than the current study and their participants agree with items related to cultural skills (Sealey, 2003; Yates, 2009).

*Cultural Encounter*

The lowest index was The Cultural Encounter Subscale with a mean =22.50 ± 4.42, compared with the rest of the cultural competence constructs in the study. With a range of the possible minimum and maximum response is 6 to 30, indicating that the mean of this particular scale indicates that study participants are at the low point of cultural encounter. Study participants selected disagree with most items related cultural encounter to teach and care for individuals from diverse backgrounds. Cultural encounters is the act of directly interacting with clients from culturally diverse background (Campinha-Bacote, 2010). The low score of this subscale indicates that
participants having low level of comfort in face-to-face interactions with individuals from diverse backgrounds. This low score may be due to lack of opportunities to interact with individuals from diverse background.

Studies show that lack of previous exposure to culturally diverse groups can negatively impact the nurse-client interactions and affect the quality of nursing care provided (Hagman, 2006; Mayo et al., 2007). Another study showed that exposure to cultural content and exposure to diverse populations has a major impact on cultural competence level of graduating nurses (Liu, Mao, & Barnes-Willis, 2008). Findings of this study related to cultural encounter is similar to scores by Sealey (2003), and Yates (2009) who found cultural encounter scores as the lowest indices.

**Overall Cultural Competence**

The overall cultural competence mean score for the study sample =166.3 ± 19.5 indicating that nursing faculty who teach at BSN programs across the U.S. have a moderate level of cultural competence. This is considered a positive finding of the current study. Studies have found that nurse educators with higher levels of cultural competence were more likely to meet the needs of culturally diverse nursing students and to feel more comfortable providing nursing care to clients from diverse cultural backgrounds (Kardong-Edgren et al., 2005; Mayo, et al., 2007; Sealy, Burnett, & Johnson, 2006).

A number of studies, however, have reported different findings. For example, Sealey (2003) and Sealey et al. (2006) measured the cultural competence level of nursing faculty in Louisiana and found that participants fell below expectations to teach and care for individuals from diverse backgrounds. Another study by Yates (2009) examined the cultural competence levels of nursing faculty in associate degree nursing programs in
Ohio and found a low level of faculty cultural competency. This illustrates the need for professional development programs for nursing faculty in the area of cultural diversity and the need for hiring and retaining a culturally diverse nursing faculty (Yates, 2009). A study by Ume-Nwagbo (2009) measured the cultural competence of nurse educators in accredited BSN programs in Tennessee. Their findings revealed that the majority of respondents were at least moderately culturally competent. This interesting inconsistency of the findings of several studies could be attributed to various factors. First, all the mentioned studies were conducted at state level limiting the comparison with the current study that was conducted at nationally. Location of nursing schools where studies were conducted also could influence the cultural competence of participants. For instance, participants who live in states with high immigration rates would have more exposure to individuals from diverse backgrounds than participants who live in states with low immigration rates. This factor might influence their cultural competence level.

**Contributing Factors to Cultural Competence Level**

Study findings highlighted that although strong relationships were not demonstrated between predictors and the overall cultural competence score, there were significant correlations between some predictors on the overall cultural competence score. Those predictors were race and ethnicity, teaching experience, resided in different culture more than six months, language spoken other than English, nursing specialty, highest degree attained, cultural continuing education in the past five years, including cultural content in current nursing program, level of incorporating cultural content in current program, and assessing student needs. Those predictors also positively influenced
the mean of the overall cultural competence score after adjusting for age group, and gender of participants.

Some findings are consistent with previous studies that examined factors influenced cultural competence level of nurses. However, those factors were not tested in one study. For instance, most studies identified higher levels of education; studies based on participants who had received continuing cultural education showed significantly higher scores for cultural sensitivity and cultural competence behaviors (Lampley, et al., 2008, Schim, Doorenbos, & Borse, 2005, Sealey, 2006; Ume-Nwagbo, 2009). This implies that nurses’ cultural competence develops not only from practice, but also from nursing education. Other studies identified nursing working experience has a positive influence on the cultural competence level of nurses (Lampley, et al 2008; Hagman, 2006; Schim, Doorenbos, & Borse, 2006). Those studies found that nurses who had more work experience were more competent caring for clients from different cultural and ethnic backgrounds.

Other studies found that exposure to culturally and ethnically diverse populations play an important role in improving cultural competence levels (Liu, Mao & Barnes-Willis, 2008; Kardong-Edgren, 2007; Sealey et al 2006; Ume-Nwagbo, 2009). Exposure includes personal experiences, or previous work experiences with clients from different cultural and ethnic backgrounds. A study by Liu, and colleague (2008) found that exposure to cultural concepts and to culturally and ethnically diverse populations plays an important role in improving cultural competence levels of graduating baccalaureate nursing students. Students’ exposure can be during course teaching, lab simulation teaching, and clinical training (Liu, et al. 2008).
There was nothing found in the literature about the relationship between assessing students’ cultural needs and level of cultural competence. However, one study highlighted the nurse educators’ role to assess students’ experiences and identify students who may need assistance and prepare them to care for culturally diverse populations (Reeves, 2006). All cited studies emphasize the need for nurse educators to continue to integrate cultural concepts and experiences into nursing education.

**Transcultural Teaching Behaviors**

Findings highlight a strong relationship with adjustment for all other variables; transcultural teaching behaviors subscale was significantly associated with the overall cultural competence level. Findings also highlighted that transcultural teaching behaviors subscale has predicting capability reaching 86% of the variability in overall cultural competence score. Nothing in the literature was found regarding the relationship between transcultural teaching and cultural competence level. However, a study by Bagnardi, Bryant, & Colin (2009), identified two common barriers to including transcultural teaching: difficulty incorporating it into current courses and underprepared faculty in the area of cultural competency. Cain (2003) suggested the need for specific guidelines for faculty to help implement cultural concepts into nursing education curriculum. This finding is one of the major findings of the current study. It showed that faculty commitment to transcultural teaching behaviors acts as a motivator toward pursuing cultural competency.

**Limitations**

The first limitation of this study is the study design, a descriptive correlational design, which can only show the relationship between and among variables. The
researcher cannot establish causality. This design also requires large sample size and large variance to determine the existence of a relationship. The second limitation is the sample including nursing faculty teaching in CCNE accredited BSN programs, so generalization of the findings is limited to these accredited schools. The findings also can be generalized to nursing faculty teaching in direct entry BSN programs only. Third, the use of an online survey to collect the data limited participation to those who are more proficient with and have access to this technology (Burns & Grove, 2009). Fourth, participants of this study were not asked about their religious affiliation, which might impact their cultural competence level. Lastly, using self-reporting instruments for data collection increased the risk for bias (Burns & Grove, 2009). There may be an element of self-selection bias; participants who have an interest in transcultural nursing are more likely to complete the survey. Therefore, the study results relied on the respondents in reporting their perceptions and teaching practices regarding their cultural competency level. Finally, large sample size limited the data collection method to online survey, and allowed for limited tracking of non-respondents, which might affect the overall response rate of the study.

**Implications**

The current literature highlights inconsistency in cultural competence level in nursing faculty. This suggests that nursing faculty are not well prepared to respond to issues related to cultural diversity (Grant, & Letzring, 2003; Ryan et al., 2000; Wells, 2000). The findings of this study have important implications for cultural competence of nursing educators. The researcher’s assessment of the study population is that there is improvement of the cultural competence level from previous studies. Yet, there is a major
gap in professional development needs for nursing faculty in the area of cultural competence. Studies showed inadequate attention has been given to identifying factors that contribute to cultural competency of nursing educators. However, the current study provided a deeper understanding of the factors affecting the cultural competence level of BSN faculty. It also showed that participants have low level of cultural skills and cultural encounter compared with the rest of the cultural constructs in the study. Participants demonstrated issues in clinical skills and face-to-face interactions with individuals from culturally and ethnically diverse backgrounds. These results can be used to design professional development programs for BSN faculty in the area of cultural competency. The professional development programs should be detailed and inclusive of the major constructs of cultural competence: cultural awareness, desire, knowledge, skills, and encounter.

Finally, the current study identified previous cultural exposure and cultural education as crucial factors to improve cultural competence. This researcher suggests that faculty cultural training needs to be mandated and should be more inclusive not only of educational material but also to include practice exposure to a diverse population. The training should occur during orientations, and as an annual competency check.

**Future Research**

This study is considered the first national study that assessed the cultural competence of nursing faculty teaching in BSN programs. Giving the increasing diversity of this country and the increasing demand of culturally competent nurses, more national studies are needed to assess the cultural competence level of nurse educators in all types of programs. More studies need to compare cultural competence levels between three
groups: on-campus BSN degree nursing faculty, online faculty members, and faculty teaching both online and on-campus.

Studies showed that faculty members’ cultural competence level affects students’ cultural competence level (Reeves, 2006; Kardong-Edgren, 2007; Sealey et al 2006; Ume-Nwagbo, 2009). More longitudinal studies are needed to focus on nursing students at the start of their program of study, after graduation, and after working for some time. A longitudinal study would help to assess their cultural competence levels at each stage and identify contributing factors at the three phases of the study.

The goals of future research are to address the issue of culturally competence in nursing education by identifying factors that contribute to cultural competence from faculty perspectives; to identify the best-standardized evaluation tool to assess cultural competence levels in nursing education; and to identify the best educational strategies to teach cultural competency in nursing programs.

Summary

This study examined the level of cultural competence of nursing faculty teaching in collegiate schools of nursing in the U.S. and identified demographic factors that influence the cultural competence level of nursing faculty. The major findings of the study were that participants had a moderate level of cultural competence. Secondly, the data demonstrated a strong positive relationship between the transcultural teaching behaviors and the overall cultural competence level of nursing faculty. A comparison of the results of this study with prior research by Sealey (2003), Yates (2009), and Kardong-Edgren (2007) provided a deeper understanding of the factors that influence the cultural competency of nursing faculty who teach at BSN programs. It is crucial that nurse
educators understand the level of culture competence and teaching behaviors of faculty who teach at BSN programs. However, there are many questions left unanswered as to whether or not including cultural teaching behaviors increases the cultural competence level of students. Within the nursing profession nurse leaders need to examine all levels of nursing programs to identify best teaching practices of transcultural nursing materials.
REFERENCES


Campinha-Bacote, J. (2006). Cultural competence in nursing curricula: how are we doing 20 years later? The Journal of Nursing Education, 45(7), 243-244.


Commission on Collegiate Nursing Education (CCNE). (2009). Standards for Accreditation of Baccalaureate and Graduate Degree Nursing Program. Retrieved from


Leininger, M., & McFarland, M. (2002). Transcultural Nursing: concepts, theories, research,


Ume-Nwagbo, P. N. (2009). Relationship between nurse educators' cultural competence and ethnic minority nursing students' recruitment and graduation. Unpublished doctoral dissertation, ProQuest Information & Learning, US.


Appendix A

Permission Letter Dr. Sealey

From: Lorinda Sealey lorinda.sealey@selu.edu
To: Nadiah Baghdadi <baghdadi.n@husky.neu.edu>
Date: Wed, Nov 16, 2011 at 10:33 PM
Subject: Re: Permission to Use CDQNE

Nadiah,
I am pleased that you are interested in the Cultural Diversity Questionnaire for Nurse Educators. You have my permission to use it and you may modify it in any way you deem necessary to suit your study. You probably should cite my dissertation (available online at LSU.edu) as the reference for the instrument since it provides much more detail about its development than the article in the Journal of Cultural Diversity. I have not used the instrument in any other studies and while I have given permission for its use to several doctoral students, I have no information about their research outcomes.

If you should in fact decide to use my instrument, here are a few comments/suggestions: Starting on page 61 of my dissertation, there is the discussion of the factor analysis of each subscale, which was done to determine how well the items fit on each subscale (see tables 7, 9, 11, 13, and 15). The items that did not fit were eliminated and not used in the analysis. These are indicated at the bottom of each of those tables. I observed that most of the items that did not fit were stated negatively on the instrument and it is possible that this was confusing to the respondents. Anyway, they were not used in the analysis and were not part of the subscale indexes. If I were to repeat this study I would either revise the way those items are stated, or I would not use them at all.

Please keep me informed about the outcome of your study and I sincerely wish you the best in your research.

Sincerely,
Lorinda Sealey
Appendix B

Permission Letter Dr. Yates

From: Vivian Yates vyates@lorainccc.edu
To: Nadiah Baghdadi <baghdadi.n@husky.neu.edu>
Date: Tue, Nov 15, 2011 at 9:21 PM
Subject: RE: Permission to use Cultural Diversity Questionnaire for Nurse Educators Revised

Good Evening Ms. Baghdadi,

You most certainly have my permission to use the Cultural Diversity Questionnaire for Nurse Educators Revised and to modify the tool to fit the needs of your study. To my knowledge, the tool has not been used since my research study in 2008. The validity and reliability information included in the dissertation is the extent of the information on the tool at this time.

I wish you the best in your research endeavor, and I look forward to reading your study.

Best regards,

Vivian Yates

Vivian M. Yates, PhD, RN, CNS
Professor, Division of Allied Health and Nursing
Lorain County Community College
1005 North Abbe Road
Elyria, Ohio  44035
440.366.7172 (telephone)
440.366.4116 (fax)
Appendix C
SUBSCALES OF THE CULTURAL COMPETENCE QUESTIONNAIRE FOR NURSE EDUCATORS – REVISED (Yates, 2009)

Cultural Awareness Subscale
(7) I am aware that biological variations exist in different cultural, racial, and ethnic groups.

(10) When I care for a client, I consider how the difference between our perceptions of health, illness, and preventive health could affect the outcome of my care.

(28) I teach my students that the client’s culture is a determining factor in the client’s perception of health and illness and in his or her adherence to the prescribed treatment regimen.*

(31) I encourage my students to examine their attitudes, preconceived notions and feelings toward members of other cultural/racial/ethnic groups.*

(36) I teach my students that when working with clients who are culturally, racially, or ethnically different they should become familiar with indigenous beliefs and practices.*

(37) I believe that failure to explore my own culture’s influence on the way I think and behave may lead me to impose my own values and beliefs on my clients.

(38) What I believe about health, illness, and preventative care is influenced by my culture.

(40) I accept that male-female roles may vary among significantly among different cultures and ethnic groups.

Cultural Knowledge Subscale
(5) I am knowledgeable about variations in drug metabolism among specific cultural groups.

(11) I am knowledgeable about the biological variations that exist among specific cultural, racial, and ethnic groups.

(14) I am knowledgeable about diseases that have a high incidence among cultural/racial/ethnic groups in our service area.

(16) I require that students be knowledgeable about diseases that have a high incidence among clients in our service area from diverse cultural, racial, and ethnic groups.*

(17) I have a clear understanding of the differences in meaning of the following terms; acculturation, assimilation, and socialization.

(21) My students are expected to demonstrate knowledge of their client’s world views, beliefs, and practices by incorporating this knowledge in their plans of care.*

(22) I am knowledgeable about diseases that are common in the countries of origin of recent immigrants in our service area.

(29) I am knowledgeable about the socio-economic and environmental risk factors that contribute to the major health problems of culturally, ethnically, and racially diverse populations served by my nursing program.

(32) I know the prevailing beliefs, customs, norms, and values of the
cultural/racial/ethnic groups, other than my own, residing in our service area.

(35) I am knowledgeable about the population percentages of the major ethnic groups living in my service area.

(39) I have a clear understanding of the differences in meaning of the following terms; immigrant, alien resident, and citizen.

**Cultural Skills Subscale**

(1) I feel confident in using a variety of cultural assessment tools in the health care setting.

(8) I use the appropriate communication style and protocol to communicate with clients who are of different cultural/racial/ethnic backgrounds.

(9) My students are required to seek information on acceptable behaviors, courtesies, customs, and expectations that are unique to the culturally, racially, and ethnically diverse groups served by our program. *

(12) I am knowledgeable of keywords and phrases needed to communicate effectively with the major groups with limited English language proficiency that are served by our program.

(18) I am confident that I possess the necessary skills and experience to select and work with appropriate translators as needed to care for clients with limited English language proficiency.

(33) I teach my students to recognize presenting signs and symptoms as they are manifested in individuals who are culturally, racially, and ethnically diverse. *

(34) The cultural assessment tool that I use elicits information about clients’ dietary practices, health beliefs, and social organization.

(41) I am confident that I can effectively assess conditions such as pallor, jaundice, and cyanosis in clients of race or ethnicity different from my own. □

**Cultural Encounters Subscale**

(3) I am involved socially with cultural/racial/ethnic groups different from my own, outside of my teaching role and health care setting.

(13) I seek out clinical opportunities for my students to care for clients who are culturally, racially, and ethnically diverse. *

(15) I am in contact with individuals who provide health services to groups that are culturally, racially, and ethnically diverse.

(20) I attend holiday celebrations within culturally, racially and ethnically diverse communities.

(23) I have spent extended periods of time (i.e. at least seven consecutive days) living among people from cultural/racial/ethnic groups different from my own.

(30) I patronize businesses on my service area that are owned by people who are culturally, racially, and ethnically diverse. □

**Cultural Desire Subscale**

(2) I make time to include cultural competence in my course content. *

(4) Caring for clients who are culturally, racially, or ethnically diverse is a challenge that I welcome. □

(6) I avail myself of professional developmental and training opportunities to enhance my knowledge and skills in the provision of health care
services to culturally, racially, and ethnically diverse groups. 
(19) I keep abreast of the major health concerns and issues of culturally, racially, and ethnically diverse client populations residing in my program’s service area.

(24) I screen books, movies, and other media sources for negative cultural, racial, or ethnic stereotypes before using them in my course or sharing them with clients cared for by me or by my students. *

(25) I am personally and professionally committed to providing nursing care that is culturally competent

(26) I am personally and professionally committed to teaching how to provide nursing care that is culturally competent. *

(27) I advocate for the review of my program’s mission statement, goals, policies and procedures to ensure that they incorporate principles and practices that promote cultural and linguistic competence.

Transcultural Teaching Behavior Subscale

(2) I make time to include cultural competence in my course content. *

(9) My students are required to seek information on acceptable behaviors, courtesies, customs, and expectations that are unique to the culturally, racially, and ethnically diverse groups served by our program. *

(13) I seek out clinical opportunities for my students to care for clients who are culturally, racially, and ethnically diverse. *

(16) I require that students be knowledgeable about diseases that have a high incidence among clients in our service area from diverse cultural, racial, and ethnic groups. *

(21) My students are expected to demonstrate knowledge of their client’s world views, beliefs, and practices by incorporating this knowledge in their plans of care

(24) I screen books, movies, and other media sources for negative cultural, racial, or ethnic stereotypes before using them in my course or sharing them with clients cared for by me or by my students. *

(26) I am personally and professionally committed to teaching how to provide nursing care that is culturally competent. *

(28) I teach my students that the client’s culture is a determining factor in the client’s perception of health and illness and in his or her adherence to the prescribed treatment regimen. *

(31) I encourage my students to examine their attitudes, preconceived notions and feelings toward members of other cultural/racial/ethnic groups. *

(33) I teach my students to recognize presenting signs and symptoms as they are manifested in individuals who are culturally, racially, and ethnically diverse. *
Appendix D

THE CULTURALLY DIVERSE QUESTIONNAIRE FOR NURSE EDUCATORS – REVISED Part I (Yates, 2009)

1. I feel confident in using a variety of cultural assessment tools in the health care setting.
   
   Strongly agree  Agree  Undecided  Disagree  Strongly Disagree

2. I make time to include cultural competence in my course content.
   
   Strongly agree  Agree  Undecided  Disagree  Strongly Disagree

3. I am involved socially with cultural/racial/ethnic groups different from my own, outside of my teaching role and health care setting.
   
   Strongly agree  Agree  Undecided  Disagree  Strongly Disagree

4. Caring for clients who are culturally, racially, or ethnically diverse is a challenge that I welcome.
   
   Strongly agree  Agree  Undecided  Disagree  Strongly Disagree

5. I am knowledgeable about variations in drug metabolism among specific cultural groups.
   
   Strongly agree  Agree  Undecided  Disagree  Strongly Disagree

6. I avail myself of professional development and training opportunities to enhance my knowledge and skills in the provision of health care services to culturally, racially, and ethnically diverse groups.
   
   Strongly agree  Agree  Undecided  Disagree  Strongly Disagree

7. I am aware that biological variations exist in different cultural, racial, and ethnic groups.
   
   Strongly agree  Agree  Undecided  Disagree  Strongly Disagree

8. I use the appropriate communication style and protocol to communicate with clients who are of different cultural/racial/ethnic backgrounds.
   
   Strongly agree  Agree  Undecided  Disagree  Strongly Disagree

9. My students are required to seek information on acceptable behaviors, courtesies, customs, and expectations that are unique to the culturally, racially, and ethnically diverse groups served by our program.
   
   Strongly agree  Agree  Undecided  Disagree  Strongly Disagree

10. When I care for a client, I consider how the difference between our perceptions of health, illness, and preventive health could affect the outcome of my care.
    
    Strongly agree  Agree  Undecided  Disagree  Strongly Disagree

11. I am knowledgeable about the biological variations that exist among specific cultural, racial,
and ethnic groups.

12. I am knowledgeable of keywords and phrases needed to communicate effectively with the major groups with limited English language proficiency that are served by our program.

13. I seek out clinical opportunities for my students to care for clients who are culturally, racially, and ethnically diverse.

14. I am knowledgeable about diseases that have a high incidence among cultural/racial/ethnic groups in our service area.

15. I am in contact with individuals who provide health services to groups that are culturally, racially, and ethnically diverse.

16. I require that students be knowledgeable about diseases that have a high incidence among clients in our service area from diverse cultural, racial, and ethnic groups.

17. I have a clear understanding of the differences in meaning of the following terms; acculturation, assimilation, and socialization.

18. I am confident that I possess the necessary skills and experience to select and work with appropriate translators as needed to care for clients with limited English language proficiency.

19. I keep abreast of the major health concerns and issues of culturally, racially, and ethnically diverse client populations residing in my program’s service area.

20. I attend holiday celebrations within culturally, racially and ethnically diverse communities.

21. My students are expected to demonstrate knowledge of their client’s worldviews, beliefs, and practices by incorporating this knowledge in their plans of care.

22. I am knowledgeable about diseases that are common in the countries of origin of recent immigrants in our service area.
23. I have spent extended periods of time (i.e. at least seven consecutive days) living among people from cultural/racial/ethnic groups different from my own.

Strongly agree  Agree  Undecided  Disagree  Strongly Disagree

24. I screen books, movies, and other media sources for negative cultural, racial, or ethnic stereotypes before using them in my course or sharing them with clients cared for by me or by my students.

Strongly agree  Agree  Undecided  Disagree  Strongly Disagree

25. I am personally and professionally committed to providing nursing care that is culturally competent.

Strongly agree  Agree  Undecided  Disagree  Strongly Disagree

26. I am personally and professionally committed to teaching how to provide nursing care that is culturally competent.

Strongly agree  Agree  Undecided  Disagree  Strongly Disagree

27. I advocate for the review of my program’s mission statement, goals, policies and procedures to ensure that they incorporate principles and practices that promote cultural and linguistic competence.

Strongly agree  Agree  Undecided  Disagree  Strongly Disagree

28. I teach my students that the client’s culture is a determining factor in the client’s perception of health and illness and in his or her adherence to the prescribed treatment regimen.

Strongly agree  Agree  Undecided  Disagree  Strongly Disagree

29. I am knowledgeable about the socio-economic and environmental risk factors that contribute to the major health problems of culturally, ethnically, and racially diverse populations served by my nursing program.

Strongly agree  Agree  Undecided  Disagree  Strongly Disagree

30. I patronize businesses on my service area that are owned by people who are culturally, racially, and ethnically diverse.

Strongly agree  Agree  Undecided  Disagree  Strongly Disagree

31. I encourage my students to examine their attitudes, preconceived notions and feelings toward members of other cultural/racial/ethnic groups.

Strongly agree  Agree  Undecided  Disagree  Strongly Disagree

32. I know the prevailing beliefs, customs, norms, and values of the cultural/racial/ethnic groups, other than my own, residing in our service area.

Strongly agree  Agree  Undecided  Disagree  Strongly Disagree

33. I teach my students to recognize presenting signs and symptoms as they are manifested in
individuals who are culturally, racially, and ethnically diverse.

Strongly agree      Agree     Undecided    Disagree   Strongly Disagree

34. The cultural assessment tool that I use elicits information about clients’ dietary practices, health beliefs, and social organization.

Strongly agree      Agree     Undecided    Disagree   Strongly Disagree

35. I am knowledgeable about the population percentages of the major ethnic groups living in my service area.

Strongly agree      Agree     Undecided    Disagree   Strongly Disagree

36. I teach my students that when working with clients who are culturally, racially, or ethnically different they should become familiar with indigenous beliefs and practices.

Strongly agree      Agree     Undecided    Disagree   Strongly Disagree

37. I believe that failure to explore my own culture’s influence on the way I think and behave may lead me to impose my own values and beliefs on my clients.

Strongly agree      Agree     Undecided    Disagree   Strongly Disagree

38. What I believe about health, illness, and preventative care is influenced by my culture.

Strongly agree      Agree     Undecided    Disagree   Strongly Disagree

39. I have a clear understanding of the differences in meaning of the following terms; immigrant, alien resident, and citizen.

Strongly agree      Agree     Undecided    Disagree   Strongly Disagree

40. I accept that male-female roles may vary among significantly among different cultures and ethnic groups.

Strongly agree      Agree     Undecided    Disagree   Strongly Disagree

41. I am confident that I can effectively assess conditions such as pallor, jaundice, and cyanosis in clients of race or ethnicity different from my own.

Strongly agree      Agree     Undecided    Disagree   Strongly Disagree
Appendix E
THE CULTURALLY DIVERSE QUESTIONNAIRE FOR NURSE EDUCATORS – REVISED Part II
Updated Demographic Questions

Please, provide the following information about yourself:

1) What is your age group?
   1. ________20 to 30 years
   2. ________31 to 40 years
   3. ________41 to 50 years
   4. ________51 to 60 years
   5. ________61 and above
   6. ________Decline to state

2) What is your racial/ethnic background classification?
   1. _______American Indian/Alaskan Native
   2. _______African American/African American
   3. _______Caucasian
   4. _______Hispanic
   5. _______Asian
   6. _______Native Hawaiians/Pacific Islander
   7. _______Other (Please specify)____________
   8. _______Decline to state

3) What is your gender?
   1. _______Male.
   2. _______Female.
   3. _______Decline to state

4) Have you resided in a country with a different culture of your own for more than six months?
   1. _______Yes
   2. _______No

5) Are you fluent in any language other than English?
   1. _______Yes
   2. _______No

6) If yes, please specify ________________

7) How long have you been teaching nursing?
   1. _______Less than one year
   2. _______1-5 years
   3. _______6-10 years
   4. _______10-15 years
   5. _______More than 15 years

8) What is your highest degree attained?
   1. _______Bachelor’s
   2. _______Masters
   3. _______DNP
   4. _______PhD
   5. _______Ed.D
9) What is your nursing specialty area? (Please check all that apply)
1. ______ Adult Health
2. ______ Community Health
3. ______ Child Health and Illness
4. ______ Maternity Nursing
5. ______ Psychiatric Nursing
6. ______ Women’s Health
7. ______ Nursing Administration
8. ______ Trans-cultural Nursing
9. ______ Gerontology
10. ______ Other (Please list, if necessary) ____________________________

10) Which of the following best describes your employment status?
1. _____ Full-time
2. _____ Part-time
3. _____ Adjunct
4. _____ Other. Please specify______

11) Select the state in which your school of nursing located ________________________

12) In which of the following types of institutions is your nursing school located?
1. _____Public college/university
2. _____Private college/university
3. _____Both

13) At what level in your nursing school do you teach? (Please, indicate all that apply).
1. ______ Undergraduate
2. ______ Graduate

14) Have you attended /completed any continuing education program on Transcultural nursing/cultural competence in the past five years?
1. ______ Yes
2. ______ No

15) If yes, approximately how many continuing education hours have you earned? ________

16) Do you include cultural content in your current teaching program?
1. ______ Yes
2. ______ No

17) If yes, what is the level of cultural content in your current teaching program?
1. ______ Fully Integrated
2. ______ Occasionally mentioned
3. ______ Required course
4. ______ Elective cultural course

18) Do you assess your students’ cultural beliefs and values towards educational learning?
1. ______ Yes
2. ______ No
Appendix F
Mail Invitation to Deans/Directors of Nursing Schools

As the diversity of the population in this country continues to increase, the disparities in health and health status for many racially and ethnically diverse persons have also increased. The accrediting body, CCNE and the NCLEX-RN test plan encourage nursing educators to include cultural competence in all areas of the nursing curriculum. However, we must first be educated to become culturally competent in order to prepare future nurses.

As a research doctoral student in the School of Nursing at Northeastern University, I am conducting a study to investigate cultural competency among nursing faculty teaching in Baccalaureate Nursing Programs in the U.S.

I respectfully ask you to encourage your nursing faculty members to participate in a research study by completing an on-line questionnaire that addresses cultural competency. Their identity will remain confidential throughout the study and completed questionnaires will be de-identified prior to my review.

Your nursing faculty’s participation in the study will contribute to the current body of nursing literature regarding trends and differences in cultural competence among nursing faculty. This study has been approved by Northeastern University Institutional Review Board (IRB) for the Protection of Human Subjects.

As the investigator, I am available to answer any questions or concerns regarding this research study. You may contact me at baghdadi.n@husky.neu.edu.

I look forward to receiving responses from your faculty in the next few weeks.

Sincerely,

Nadiah, Baghdadi, RN, MSN, PhD (C)
Appendix G

EMAIL ADVANCED NOTICE OF THE STUDY TO FACULTY

From: Nadiah Baghdadi (baghdadi.n@huskey.neu.edu)
To: Faculty Participants Email Addresses
Subject: Advanced Notice to Take the CDQNE-R Survey
Date:

Dear Nursing Faculty Members,

I am a PhD student in Nursing at Northeastern University, Boston. As part of my dissertation requirements, I am conducting a study to investigate cultural competence among nursing faculty teaching in Baccalaureate Nursing Programs in the U.S.

I am writing to inform you that in few days you will receive an email asking you to participate in my study by completing a short survey. More details about the study and survey access will be included in this invitation.

I appreciate your time and consideration in completing the survey. If you have any further questions or comments, please feel free to contact me at baghdadi.n@huskey.neu.edu. It is only through the help of nurse educators like you that we can provide information to help guide the direction of nursing education.

Sincerely,

Nadiah Baghdadi, RN, MS, PhD (C)
Dear Nursing Faculty Member,

I am writing to ask for your participation in a survey that I am conducting a study to investigate cultural competence among nursing faculty teaching in Baccalaureate Nursing Programs in the U.S. I ask nurse educators like you to reflect on your interests and experiences in cultural competence as a nurse educator.

Your responses to this survey are very important to and will contribute to the current body of nursing literature regarding trends and differences in cultural competence among nursing faculty. The inclusion criteria for the study are: 1) Nursing faculty members who are actively teaching in CCNE baccalaureate nursing programs; 2) Nursing faculty who are teaching in class, clinical, online, or laboratory settings; 3) Nursing faculty who are teaching in generic (entry-level) baccalaureate nursing programs; and 4) Nursing faculty who are teaching as full time, part time, or adjunct. The exclusion criteria are: 1) Nursing faculty who are teaching non-generic forms of BSN programs, 2) Nursing faculty who hold administrative, non-teaching positions in their school of Nursing.

This is a short survey and should take you no more than 20 minutes to complete. Please click on the link ______ to go to the survey website (or copy and past the survey link into your Internet browser)

Your participation in the survey is entirely voluntary and all of your responses will be kept confidential. The access code is used to remove you from the list once you have completed the survey. No personally identification information will be associated with your responses in any reports of this data. Should you have any further questions or comments, please feel free to contact me at Baghdadi.n@huskey.neu.edu

We appreciate your time and consideration in completing the survey. It is only through the help of nurse educators like you that we can provide information to help guide the direction of nursing education.

Sincerely,
Nadiah Baghdadi, RN, MS, PhD (C)
From: Nadiah Baghdadi (baghdadi.n@huskey.neu.edu)
To: Faculty Participants Email Addresses
Subject: CDQNE-R Survey
Date:

Dear Nursing Faculty Member,

I recently sent you an email asking you to respond to a brief survey about your interests and experiences in cultural competence as a nurse educator. Your responses to this survey are very important to and will contribute to the current body of nursing literature regarding trends and differences in cultural competence among nursing faculty.

This is a short survey and should take you no more than 20 minutes to complete.

Please click on the link to go to the survey website (or copy and paste the survey link into your Internet browser)

Your response is important. Getting direct feedback from nurse educators is crucial in improving the quality of nursing education. Thank you for your help by completing the survey.

Sincerely,

Nadiah Baghdadi, RN, MS, PhD (C)
From: Nadiah Baghdadi (baghdadi.n@huskey.neu.edu)
To: Faculty Participants Email Addresses
Subject: CDQNE-R Survey
Date:

Dear Nursing Faculty Member,

The end of the semester is quickly approaching. However, there is still time to become part of nationwide survey by completing and submitting the Cultural Diversity Questionnaire for Nurse Educators – Revised. This is a short survey and should take you no more than 20 minutes to complete.

Please click on the link ______ to go to the survey website (or copy and past the survey link into your Internet browser).

Thank you in advance for your participation. Your responses are important to us. Educators are a key source of information to help shape nursing education.

Sincerely,

Nadiah Baghdadi, RN, MS, PhD (C)
From: Nadiah Baghdadi (baghdadi.n@huskey.neu.edu)
To: Faculty Participants Email Addresses
Subject: Deans Reminder to Participate
Date:

Dear Deans/Chairperson,

I recently sent you an email asking you to encourage your nursing faculty members to participate in a research study by completing an on-line questionnaire that addresses cultural competency. Their identity will remain confidential throughout the study and completed questionnaires will be de-identified prior to my review.

Please share this email with your school faculty. I was trying to reach them via their emails that are available through the schools’ websites. However, some emails was outdated, which is affecting the study response rate and results.

The inclusion criteria for the study are:
1) Nursing faculty members who are actively teaching in CCNE baccalaureate nursing programs
2) Nursing faculty who are teaching in class, clinical, online, or laboratory settings.
3) Nursing faculty who are teaching in generic (entry-level) baccalaureate nursing programs.
4) Nursing faculty who are teaching as full time, part time, or adjunct.

The exclusion criteria for the study are:
1) Nursing faculty who are teaching non-generic forms of BSN programs.
2) Nursing faculty who hold administrative, non-teaching positions in their school of Nursing.

The survey link:_________ to go to the survey website (or copy and past the survey link into your Internet browser).

Your response is important. Obtaining direct feedback from nurse educators is crucial in improving the quality of nursing education. Thank you for your help by completing the survey.

Sincerely,
Nadia Baghdadi, RN, MS, PhD (C)
Dear Nursing Faculty Member,

The end of the semester is quickly approaching. However, there is still time to become part of nationwide survey by completing and submitting the Cultural Diversity Questionnaire for Nurse Educators – Revised. I was trying to reach you using faculty emails that provided on your school websites. However, some emails were outdated, which is affecting the study response rate and results.

This survey should take you about 25 minutes to complete. Please click on the link ____________to go to the survey website (or copy and past the survey link into your Internet browser) to begin the survey.

The inclusion criteria for the study are:
1) Nursing faculty members who are actively teaching in CCNE baccalaureate nursing programs
2) Nursing faculty who are teaching in class, clinical, online, or laboratory settings.
3) Nursing faculty who are teaching in generic (entry-level) baccalaureate nursing programs.
4) Nursing faculty who are teaching as full time, part time, or adjunct.

The exclusion criteria for the study are:
1) Nursing faculty who are teaching non-generic forms of BSN programs.
2) Nursing faculty who hold administrative, non-teaching positions in their school of Nursing.

Thank you in advance for your participation. Your responses are important to us. Educators are a key source of information to help shape the future of nursing education.

Please disregard this email of you already participated.

Sincerely,

Nadiah Baghdadi, RN, MS, PhD (C)
Appendix M

NORTHEASTERN UNIVERSITY IRB UNSIGNED CONSENT DOCUMENT FOR WEB-BASED ONLINE SURVEYS

Northeastern University, School of Nursing

Name of Investigator(s):
Elizabeth P. Howard, PhD, RN, BC-ACNP, Associate Professor, Director, PhD Program in Nursing, Northeastern University
Nadiah A. Baghdadi, RN, PhD (C), School of Nursing, Northeastern University

Title of Project:
Cultural Competency of Nursing Faculty Teaching in Baccalaureate Nursing Programs in the U.S.

Request to Participate in Research

I would like to invite you to participate in a web-based online survey. The survey is part of a research study whose purpose is to measure cultural competency of nursing faculty teaching in Baccalaureate nursing programs in the U.S. This survey should take about 20 minutes to complete.

I am asking you to participate in this study because your participation in the study will contribute to the current body of nursing literature regarding trends and differences in cultural competence among nursing faculty. You must be at least 18 years old to take this survey. The inclusion criteria for the study sample are: 1) Nursing faculty members who are actively teaching in CCNE baccalaureate nursing programs; 2) Nursing faculty who are teaching in class, clinical, online, or laboratory settings; 3) Nursing faculty who are teaching in genetic (entry-level) baccalaureate nursing programs; and 4) Nursing faculty who are teaching as full time, part time, or adjunct. The exclusion criteria are: 1) Nursing faculty who are teaching non-generic forms of BSN programs, 2) Nursing faculty who hold administrative, non-teaching positions in their school of Nursing.

The decision to participate in this research project is voluntary. You do not have to participate and you can refuse to answer any question. Even if you begin the web-based online survey, you can stop at any time. There are no foreseeable risks or discomforts to you for taking part in this study.

There are no direct benefits to you from participating in this study. However, your responses may
help us learn more about new trends to improve faculty cultural competency.

You will not be paid for your participation in this study.

Your part in this study is anonymous to the researcher(s). However, because of the nature of web-based surveys, it is possible that respondents could be identified by the IP address or other electronic record associated with the response. Neither the researcher nor anyone involved with this survey will be capturing those data. Any reports or publications based on this research will use only group data and will not identify you or any individual as being affiliated with this project.

If you have any questions regarding electronic privacy, please feel free to contact Mark Nardone, IT Security Analyst via phone at 617-373-7901, or via email at privacy@neu.edu.

If you have any questions about this study, please feel free to contact Nadiah Baghdadi at baghdadi.n@huskey.neu.edu, the person mainly responsible for the research. You may also contact Elizabeth P. Howard, the Principal Investigator, at e.howard@neu.edu

If you have any questions regarding your rights as a research participant, please contact Nan C. Regina, Director, Human Subject Research Protection, 960 Renaissance Park, Northeastern University, Boston, MA 02115. Tel: 617.373.7570, Email: irb@neu.edu. You may call anonymously if you wish.

By clicking on the survey link below you are indicating that you consent to participate in this study. Please print out a copy of this consent form for your records.

http://__________________________________________

Thank you for your time.

Nadiah A. Baghdadi
Appendix N
Northeastern University IRB Study Approval

Northeastern
Notification of IRB Action

Date: August 21, 2012
IRB #: 12-07-11

Principal Investigator(s):
Elizabeth Howard
Nadia Baghdadi

Department: School of Nursing

Address: 103 Robinson Hall
Northeastern University

Title of Project: Cultural Competency of Nursing Faculty Teaching in Baccalaureate Nursing Programs in the U.S.

Participating Sites: N/A

Informed Consent: One (1) unsigned consent for survey

As per CFR 45 46.117(c)(2) signed consent is being waived as the research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required.

DHHS Review Category: Expedited #7
Monitoring Interval: 12 months

Approval Expiration Date: AUGUST 20, 2013

Investigator's Responsibilities:
1. Informed consent form bearing the IRB approval stamp must be used when recruiting participants into the study.
2. The investigator must notify IRB immediately of unexpected adverse reactions, or new information that may alter our perception of the benefit-risk ratio.
3. Study procedures and files are subject to audit any time.
4. Any modifications of the protocol or the informed consent as the study progresses must be reviewed and approved by this committee prior to being instituted.
5. Continuing Review Approval for the proposal should be requested at least one month prior to the expiration date above.
6. This approval applies to the protection of human subjects only. It does not apply to any other university approvals that may be necessary.

C. Randall Colvin, Ph.D., Chair
Northeastern University Institutional Review Board

Regina, Director
Human Subject Research Protection

Northeastern University FWA #: 4630
Appendix O

Northeastern University IRB Action Renewal Approval

NOTIFICATION OF IRB ACTION RENEWAL APPROVAL

Date: July 24, 2013
IRB #: 12-07-11

Principal Investigator(s):
Elizabeth P. Howard
Nadiah Baghdadi

Department:
School of Nursing
Bouvé College of Health Sciences

Address:
103 Robinson Hall
Northeastern University

Title of Project:
Cultural Competency of Nursing Faculty Teaching in Baccalaureate Nursing Programs in the U.S.

Approval Status:
Closed to Enrollment – Ongoing Analysis Only

Participating Sites:
N/A

Original Protocol Approved:
August 21, 2012

DHHS Review Category:
Expedited #7

Informed Consents:
N/A

Monitoring Interval:
12 months

APPROVAL EXPIRATION DATE: JULY 23, 2014

Investigator’s Responsibilities:
1. The informed consent form bearing the IRB approval stamp must be used when recruiting participants into the study.
2. The investigator must notify IRB immediately of unexpected adverse reactions, or new information that may alter our perception of the benefit-risk ratio.
3. Study procedures and files are subject to audit any time.
4. Any modifications of the protocol or the informed consent as the study progresses must be reviewed and approved by this committee prior to being instituted.
5. Continuing Review Approval for the proposal should be requested at least one month prior to the expiration date above.
6. This approval applies to the protection of human subjects only. It does not apply to any other university approvals that may be necessary.

C. Randall Colvin, Ph.D., Chair
Northeastern University Institutional Review Board

Nan C. Regina, Director
Human Subject Research Protection

Northeastern University FWA #4630
Appendix P

Campinha-Bacote Permission to Use 2010 Copyrighted Model of Cultural Competence

Date: September 26, 2013

To: Ms. Nadia Baghdadi
From: Dr. Josepha Campinha-Bacote
President, Transcultural C.A.R.E. Associates


This letter grants permission to Ms. Nadia Baghdadi to use my 2010 model of cultural competence in her dissertation entitled, "Cultural Competency of Nursing Faculty Teaching in Baccalaureate Nursing Programs in the US." Ms. Nadia Baghdadi agrees to put the following citation directly under the model:

The Process of Cultural Competence in the Delivery of Healthcare Services
(Copyrighted by Campinha-Bacote, 2010)
Used with permission from Transcultural C.A.R.E. Associates

TIME FRAME: Permission to use this model is limited to this one-time submission to her professor in 2013. Any future use of this model will require Ms. Nadia Baghdadi to seek further permission.

RESTRICTIONS OF COPYING: Ms. Nadia Baghdadi agrees that my model cannot be copied or reproduced for any other reason. This includes, but not limited to, being copied in formal or informal publications or presentations, handouts for presentations, poster presentations, BlackBoard, PowerPoint presentations or in any electronic or hard copy presentations.

Thank you for your understanding of the restrictions of using my copyrighted model and please do not hesitate to contact me if you have any questions about use of my copyrighted works. Best of luck in your graduate studies.