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# The Impact Of Cultural Encounters On The Cultural Competence Of Baccalaureate Nursing Students

Amy J. Witt

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THE IMPACT OF CULTURAL ENCOUNTERS ON THE CULTURAL  
COMPETENCE OF BACCALAUREATE NURSING STUDENTS

by

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A Dissertation

Submitted to the Graduate Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

Grand Forks, North Dakota

May

2016

This dissertation, submitted by Amy J. Witt in partial fulfillment of the requirements for the Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

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Date

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Amy J. Witt  
December 2015

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## ABSTRACT

**Introduction:** By the year 2050 it is expected more than fifty percent of the American population will be of non-European descent (United States Census Bureau, 2011). Racial and ethnic minorities in the United States (U.S.) have more limited access to health care and a poorer quality of health care received, regardless of insurance coverage. Nursing education must provide a means for acquiring cultural competence by nursing students to help combat the growing health disparities. While many different methodologies can be found in nursing curricula, the cultural encounter during the nursing program may prove to be a promising means of acquiring competence. There is however, a gap in the literature addressing the effectiveness of this kind of face-to-face, or hands-on approach.

**Methods:** Dr. Campinha-Bacote's model "The Process of Cultural Competence in the Delivery of Healthcare Services" was the framework used to guide this study. A convenience sample included baccalaureate students from three nursing programs in the Midwest. The enrolled were sophomore or senior students in good standing. A total of 245 sophomores and 208 seniors participated. Students completed a demographic questionnaire and the self-report *Inventory Assessing the Process of Cultural Competence for Healthcare Providers-Student Version (IAPCC-SV)*, which examined their level of cultural competence. Pearson product-moment correlation coefficient, t-tests, and one-way analysis of variance (ANOVA) were utilized to determine the association of the five cultural competence construct mean scores, the overall cultural competence mean score,

the year in school, and academic program.

**Results:** There were statistically significant differences in the cultural competence mean scores when compared to the following demographic variables: had taken a previous course on culture ( $p < .001$ ), had a previous college degree ( $p < .01$ ), had traveled outside of the United States ( $p < .01$ ), and had lived outside of the United States ( $p < .001$ ). At the three schools of nursing, there were statistically significant differences in the mean scores from sophomore to senior year for cultural awareness  $t(453) = -3.67, p = .000$ ; cultural knowledge  $t(453) = -7.94, p = .000$ ; and cultural encounter  $t(453) = -3.11, p = .01$ . The overall cultural competence mean score difference was statistically significant from sophomore to senior year at all three schools of nursing ( $t(453) = -4.71, p = .001$ ). However, the overall cultural competence mean scores between the three schools of nursing were not significantly different ( $F(2, 450) = 1.23, p = .28$ ).

**Implications:** The results of this dissertation study indicated that the cultural encounter had an impact on the cultural competence of the baccalaureate nursing students in the study; the self-reported cultural competence scores increased from sophomore to senior nursing students as a result. This is important for nursing educators as they investigate how to improve their curriculum through integration of culture, and help their students acquire the cultural competence that is needed to combat the growing health disparities in the U.S. Future studies can expand the current study by researching multiple nursing schools and their curriculum, particularly comparing cultural encounters against other methodologies such as didactic content or simulation experiences, which would shed more light into the impact cultural encounter may or may not have on cultural competence development.

# CHAPTER I

## INTRODUCTION

### Background

By the year 2050 it is expected more than fifty percent of the American population will be of non-European descent (United States Census Bureau, 2011). In 2002, the Institute of Medicine (IOM) issued a report describing extensive evidence that racial and ethnic minorities in the United States (U.S.) had more limited access to health care and a poorer quality of health care received, regardless of insurance coverage. This same report recommended health care providers receive cultural education to increase their awareness and understanding of health disparities and other cultures as one way to eliminate the inequalities (IOM, 2002; Riley, 2010). Health disparities occur because of cultural differences between the patient and the healthcare provider that are not addressed; these differences include not only ethnicity, but gender, race, and socioeconomic status as well (Dayer-Berenson, 2011). The Healthy People Initiative has an overall goal to reduce health disparities and to eventually eliminate them. These disparities, which are linked to limited access to healthcare, limited educational opportunities and resources, poor economic status, and unhealthy living conditions, occur in greater numbers among racial and ethnic minorities who receive substandard quality of care and barriers to access. Healthy People 2020 described goals directed at eliminating health disparities and increasing quality of life, but have expanded to include health equity and health improvement of all cultural groups (U.S. Department of Health and Human Services, 2014).

The provision of culturally competent care is based upon the principle of social justice, the belief that all people should receive “fair and equal rights and participation in social, educational, economic, and...healthcare opportunities” (Douglas et al, 2011, p. 317). Health equality can be realized through a partnership between social justice and cultural competence, according to Stacks et al (as cited by Campinha-Bacote, 2007). Pacquiao (2008) agreed and stated, “advocacy for social justice and human rights protection must be informed by the cultural context of the people and their situated environment” (p. 192-193).

The literature is in agreement that cultural competence is a process without a specific endpoint, and includes awareness of cultural similarities and differences, an attitude of sensitivity, non-judgment and respect of cultural differences, and behaviors or actions that demonstrate an adaptation of care based upon different cultural groups (Campinha-Bacote, 1999; Capell, Dean, & Veenstra, 2008; Dudas, 2012; Giger, et al., 2007; Hughes & Hood, 2007; Leininger & McFarland, 2002; Purnell, 2002;). It has been described in the literature as a becoming competent, not being competent, as well as a journey from one point to another along a continuum (Campinha-Bacote, 1999; Schim, Doorenbos, & Borse, 2006). Campinha-Bacote (2007) has defined cultural competence as a process in which the healthcare provider endeavors to intentionally and continually work within the cultural context of the patient, family or community.

Providing culturally competent care has been a priority in nursing for more than fifty years, but has become more of a focus in the United States as the country has become increasingly diverse (Leininger, 1997; Dudas, 2012). Safe, culturally competent patient care is promoted by the American Association of Colleges of Nursing (AACN),

Commission on Collegiate Nursing Education (CCNE), state boards of nursing, and National League of Nursing (NLN), all of whom require nurse educators to teach nursing students cultural care (Calvillo et al., 2009; Chrisman, 2007; Hughes & Hood, 2007). The United States Department of Health and Human Services (USDHH) and the Health Resources and Services Administration (HRSA) have developed content on cultural competence making suggestions as to how it can be added to curriculum (USDHH, 2011b). The AACN (2008) addressed culturally competent care in the *Essentials for Baccalaureate Education for Professional Nursing Practice*, articulating support for liberal arts education and the importance of protecting human dignity and patient safety through cultural competence. Even the National Certification Licensing Examination is requiring knowledge of culture, further indicating the national focus on improving patient care (Cuellar et al., 2008).

Preparing nurses to be culturally competent is neither easy nor clear-cut. What is clear, however, is the need to make it a priority. Nursing education can address this growing problem by improving cultural education and providing a means for the acquisition of cultural competence by nursing students through cultural encounters (Upvall & Bost, 2007; Zoucha, Mayle, & Colizza, 2011). Lipson and DeSantis (2007) reinforced the importance of the cultural encounter and the impact it may have on patient care when they said, “students often see culture as something out there, irrelevant, and not affecting practice. They tend to judge their clients’ beliefs and practices from their own perception of reality” (p. 19S). Cultural encounter experiences, the face to face interactions with other cultures, may be an effective way to improve cultural competence,



decrease health disparities and promote safe patient care (Amerson, 2010; Worrell-Carlisle, 2005; Zoucha, et al, 2011).

### **Conceptual Framework for the Study**

“The Process of Cultural Competence in the Delivery of Healthcare Services”, developed by Dr. Campinha-Bacote, is a cultural competence model that examines the healthcare provider in the process of becoming culturally competent and is the framework used in this study. Campinha-Bacote’s model specifically addresses and measures cultural competence, and is appealing in its simplicity. Therefore it is the model adopted for this study.

Campinha-Bacote describes the model using five constructs (please see figure 1): cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire; and the pivotal experience of the cultural encounter. The inclusion of all of the constructs in one’s practice will improve the effectiveness of interactions and in turn promote positive outcomes for patient’s health.

#### **Constructs of the model**

Campinha-Bacote’s (1999, 2002, 2007, 2010b) five constructs are defined as follows:

**Cultural awareness:** Awareness involves a cognitive process of learning to both appreciate and become more sensitive to the client’s cultural beliefs, values and practices. Cultural awareness includes self-examination of ones own biases, prejudices, and cultural background.

**Cultural knowledge.** Knowledge involves the intentional gathering of information to gain an understanding of others’ worldview, including the variations

within each culture.

**Cultural skill.** Skill involves the ability to gather cultural data and to accurately perform a relevant and “culturally specific physical assessment” with cultural sensitivity (p. 204).

**Cultural encounters.** The encounter, the most pivotal component, involves the healthcare provider intentionally interacting with an alternative cultural group. The goals of the encounter are to create a variety of interactions and responses, as well as learn how to send and receive messages in an accurate and appropriate way based upon the client’s culture.

**Cultural desire.** Healthcare providers must be genuinely motivated to engage in the process of developing cultural competence. At the heart of desire is the concept of caring by the healthcare provider, treating the client with dignity, equity and justice.

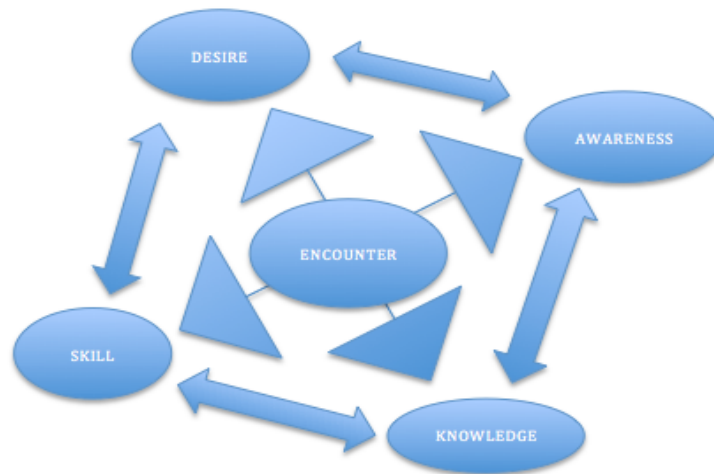


Figure 1. Campinha-Bacote’s Conceptual Model. (Campinha-Bacote, 1999, 2002, 2010b).

### Assumptions of the model

The following model assumptions are based upon the framework of Campinha-

Bacote:

1. Cultural competence is a dynamic process, not a static event. Healthcare professionals must recognize they are becoming increasingly competent, rather than viewing competence as an endpoint.

2. Cultural competence consists of five inter-related constructs: cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire.

3. There is more variation within ethnic groups than across ethnic groups

4. There is a direct relationship between level of competence of healthcare providers and their ability to provide culturally responsive health care services

5. Cultural competency is an essential component in effective and culturally responsive services to culturally and ethnically diverse clients

(Campinha-Bacote, 1999, 2002; Zoucha, et al., 2011).

To aid the nurse or nursing student to continually focus in on the cultural competence process, Campinha-Bacote (2002) developed the mnemonic ASKED, five questions to determine their cultural awareness, skill, knowledge, encounter, and desire.

The mnemonic is as follows:

A = Awareness. Am I aware of any biases or prejudices that I possess toward others?

S= Skill. Do I have the skill to conduct a sensitive cultural assessment?

K= Knowledge. Am I knowledgeable about the other cultural groups?

E= Encounter. Do I seek out encounters with those who are different from me?

D= Desire. Do I really want to be culturally competent?

## **Statement of the Problem**

Leininger and McFarland (2002) believed the shortage of nurses trained in transcultural nursing created a significant barrier in the ability to meet the healthcare needs of the diverse and vulnerable patient populations. Cultural encounter experiences, through clinical assignments, community engagement or service learning experiences, and immersion experiences, are ways used by educators within nursing curricula to improve cultural competence in response to the mandate to teach about culture as a means of acknowledging the larger issue of health disparities. There are several educational methods used in nursing schools to teach cultural competence, with cultural encounters showing the greatest potential. However, little empirical evidence is available to clearly evaluate its effectiveness. The purpose of this descriptive correlational study was to generate data to address the impact of the cultural encounter on the cultural competence of baccalaureate nursing students.

## **Specific Aims**

Therefore, this study proposes:

1. To determine the frequencies of the demographic and cultural competence measures of baccalaureate nursing students.
2. To determine if there were significant differences in the cultural competence of first semester baccalaureate nursing students and final semester baccalaureate nursing students.
3. To investigate the association of self-reported cultural awareness, cultural skill, cultural knowledge, cultural encounter, cultural desire, total cultural competence, year in school, and academic program credits of baccalaureate nursing students.

## **Operational Definitions**

### **Cultural competence**

For this study, cultural competence will be defined as an ongoing process of demonstrating attitudes and practices that effectively work with individuals of different cultures, while at the same time developing awareness of ones personal beliefs and cultural biases (Camphina-Bacote, 1999). This will be measured using the Inventory for Assessing the Cultural Competence of Healthcare Providers-student version (IAPCC-SV).

### **Cultural Encounter**

For this study, the cultural encounter will be defined as the intentional face-to-face interaction between the nursing student and clients from different cultures. It will be statistically measured through investigating the interaction between cultural encounter and the year of school on the cultural encounter self-reported scores on the IAPCC-SV.

## **Significance of the Study**

A study on how the cultural encounter impacts the cultural competence of baccalaureate nursing students is important for several reasons. These reasons include 1) the cultural makeup of the United States has changed dramatically over the past several decades, leading to an increase in health disparities that further emphasizes the importance of healthcare professionals' cultural knowledge acquisition; 2) there is extensive evidence racial and ethnic minorities in the United States have more limited access to health care and a poorer quality in the care they received, regardless of insurance coverage. (Institute of Medicine, 2002, 2010; USDHH, 2011a; USDHH, 2014); 3) the cause of health disparities is complex and healthcare providers need to be at the

frontlines preparing to meet the needs of the diverse and vulnerable (Sumpter & Carthon, 2011); and 4) in the scope of professional practice for nurses, the expectation is to actively seek out ways to promote culturally competent care as an essential part of professional practice.

Nursing education must provide a means for the acquisition of cultural competence by nursing students. Methods for increasing the cultural competence in nursing and nursing education are qualitative in nature, and address a variety of teaching methods, such as reading books, simulation, stand alone courses on culture, studying theoretical models on culture, and clinical, service learning or community engagement experiences, without clearly articulating what is the most effective. Many schools of nursing include cultural competence in their outcomes and/or program mission. Sumpter and Carthon (2011) recommend the full integration of cultural competence in nursing curriculum and corresponding clinical experiences. Methods described in the nursing curriculum include faculty development programs, traditional clinical experiences, and international immersion experiences (Lipson & DeSantis, 2007; Walsh-Brennan & Cotter, 2008). Cultural encounters throughout the nursing program may prove to be a promising means of acquiring competence; however, there is a gap in the literature addressing the effectiveness of this kind of face-to-face, or hands-on approach (Amerson, 2010; Calvillo et al., 2009; Kardong-Edgren, et al., 2010; Kardong-Edgren & Campinha-Bacote, 2008; Reyes, Hadley & Davenport, 2013; Upvall & Bost, 2007; Worrell-Carlisle, 2005).

This study can provide needed data on the impact of the cultural encounter on cultural competence, with the goal of producing culturally competent nurses who will

help improve healthcare quality and reduce healthcare disparities for all, particularly the diverse and vulnerable populations. As a result, this study will benefit nursing students, nurse educators, health care organizations and most importantly, patients who are at the receiving end of culturally competent care.

### **Organization of the Study**

This paper will be organized in the following manner: Chapter one presented the background, conceptual framework, problem statement, specific aims, operational definitions, and significance of the study. Chapter two contains the review of literature and research related to the cultural encounter and cultural competence, including gaps in the literature. Chapter three discusses the research methodology, describes the instrument to be used, and concludes with the proposed plan for analyzing the data. Chapter four discusses the statistical analysis and research findings. Chapter five provides conclusions and recommendations for future study and suggest applications of the findings for nursing education and practice

## **CHAPTER II**

### **REVIEW OF THE LITERATURE**

#### **Introduction**

The purpose of this descriptive correlational study was to generate data to address the impact of the cultural encounter on the cultural competence of baccalaureate nursing students. Research focusing on the importance of providing education to increase cultural competence in healthcare is occurring in greater frequency in nursing. The specific aims of this study are: 1) to determine the frequencies of the demographic and cultural competence measures of baccalaureate nursing students, 2) to determine if there are significant differences in the cultural competence of first semester baccalaureate nursing students and final semester baccalaureate nursing students, and 3) to investigate the association of self-reported cultural awareness, cultural skill, cultural knowledge, cultural encounter, cultural desire, total cultural competence, year in school, and academic program credits of baccalaureate nursing students.

This chapter provides an extensive review of the literature as well as research related to the cultural encounter and cultural competence to support this study. It will begin with a discussion of the significance of cultural competence, and then move into a discussion of cultural competence and how it is presented in nursing education. Finally, it will conclude with a discussion of a cultural encounter in nursing education. The chapter will be divided into sections that include (a) the significance of studying cultural competence by looking at healthcare generally, and nursing education, specifically, (b)



the current cultural competence methodologies in baccalaureate nursing education, (c) an overview of current theories and models on culture, and (d) the current state of research related to cultural competence and the cultural encounter, and its contribution to nursing education, with identification of the gaps in the literature.

### **Cultural Competence in Healthcare and Nursing Education**

There is a great deal of literature describing the importance of acquiring cultural competence in response to changing demographics and the increased health disparities among many cultural groups. In fact, the majority of literature states that health disparities exist, they are increasing, and that healthcare is in a position to impact the growing health disparities through improved cultural education (Anderson, Calvillo, & Fongwa, 2007; Cavillo, et al., 2009; Dudas, 2012; Sumpter & Carthon, 2011, Zoucha, et al., 2011). In response to the growing cultural diversity in the United States, cultural competence has become a focus in healthcare. According to Betancourt et al., (2003) cultural competence in healthcare requires the practitioner to understand the impact of the complex influences of culture and society on a person's beliefs and behaviors, and requires the healthcare provider to tailor interventions to "assure quality healthcare delivery to diverse patient populations" (p.297). These authors recommend an evaluation of how cultural competence is addressed and urged greater implementation educationally, organizationally, and structurally (Betancourt, et al., 2003). There is a need for change at the systems level, requiring the development of a partnership with healthcare organizations, academic institutions, and community agencies. The goals of the partnership would be the establishment of a standard of cultural competence for all

involved, a reduction in the existing discrepancies, and the provision of quality healthcare for all (Bolton, 2007; Bornemisza et al., 2010; Brach & Fraser, 2000; Chrisman, 2007).

There is also a growing body of literature specific to nursing education and the need to incorporate culture within the curriculum. Cultural competence requires nurses to demonstrate those skills, actions, and values that create effective care to patients from a variety of cultures. However, cultural competence is not associated with one theoretical foundation and is instead often presented related to skill or technique, creating difficulty in evaluation of its effectiveness (Williams, 2006). Though there is an awareness of the need to incorporate cultural competence education into nursing curricula, there is not a formal, integrated, consistent way of doing so (Bentley & Ellison, 2007; Chrisman, 2007; Kardong-Edgren, et al., 2010; Long, 2012). While it has become “an essential component of nursing practice”, there has not been a clearly articulated definition, mainly because the concept has many meanings depending upon its scope (Suh, 2004, p.93). Nursing education is in a position to affect change in the growing health disparities, but it will require improved cultural education and the acquisition of cultural competence in graduating nursing students (Anderson, et al., 2007; Cavillo, et al., 2009; Reye, Hadley & Davenport, 2013; Sumpter & Carthon, 2011; Zoucha, et al., 2011). All individuals are entitled to culturally competent care. Nursing students need to be equipped with knowledge about how ethnicity, living conditions, socio-economic status, gender, and geographic location create barriers to healthcare access and perpetuate health disparities, as well as be given the skills to provide culturally competent care (Anderson, et al, 2007; Wilcox & Taylor-Thompson, 2012; Zoucha, et al., 2011). Calvillo et al., (2009) assert,

“improved health professions’ education is one of the critical and potentially most effective interventions to eliminate health care disparities” (p.137).

In the past 20 years, national organizations have recommended that culturally competent standards be incorporated into nursing curriculum. These recommendations are fairly broad but are specific to the following concepts: cultural sensitivity or awareness, cultural knowledge, and cultural skills and behaviors (DeSantis & Lipson, 2007; Hughes & Hood, 2007; Hunt & Swiggum, 2007; Jeffreys, 2008; Lipson & DeSantis, 2007). The research has provided evidence that having cultural knowledge is important because the lack of knowledge may “cause deficits in practice” leading to nurses who treat their patients based upon their own stereotypes and ethnocentric attitudes (Kokko, 2011, p. 674). Lack of culturally competent nurses can lead to barriers in the nurse-patient relationship, such as increased stress and dissatisfaction by both the patient and the nurse, and poorer health outcomes for the patient (Jeffreys, 2010; Kokko, 2011; Leininger & McFarland, 2002). Cultural competence education, on the other hand, has shown to improve patient satisfaction and patient outcomes (Betancourt et al., 2003; Pacquiao, 2008; Waite & Calamaro, 2010). According to Jeffreys (2010), the goal of providing culturally competent care requires “active, ongoing learning based on theoretical support and empirical evidence...and can only be achieved through the process of developing (learning and teaching) cultural competence” (p.12).

The AACN’s *Essentials of Baccalaureate Nursing Education* articulated five cultural competencies to be incorporated into baccalaureate nursing programs as a guide for nurse educators as they prepare culturally competent graduates (AACN, 2008; Calvillo, et al., 2009). These competencies include:

1. Apply knowledge of social and cultural factors that affect nursing and health care across multiple contexts.
2. Use relevant data sources and best evidence in providing culturally competent care.
3. Promote achievement of safe and quality outcomes of care for diverse populations.
4. Advocate for social justice, including commitment to the health of vulnerable populations and the elimination of health disparities.
5. Participate in continuous cultural competence development.

(Calvillo et al., 2009, 139-140).

The American Association of Colleges of Nursing (AACN), the Commission on Collegiate Nursing Education (CCNE), the state boards of nursing, and the National League of Nursing (NLN), all require nurse educators to teach nursing students about cultural (Calvillo et al., 2009; Chrisman, 2007; Hughes & Hood, 2007). The AACN (2008) addressed culturally competent care in the *Essentials for Baccalaureate Education for Professional Nursing Practice*, articulating support for liberal arts education and the importance of protecting human dignity and patient safety through cultural competence. Nursing curricula has responded and included a variety of methodologies to teach about culture. The evidence appears to support a variety of educational interventions and their positive impact on skills, attitudes, and knowledge of nursing students; however, the evidence does not clearly determine which methodology is the most effective, or if indeed they are (Amerson, 2010; Rutledge et al., 2008).

## Cultural Competence Defined

Though the specific definitions vary a bit, there is agreement in the literature that cultural competence is an ongoing process (Table 1). Worrell-Carlisle's (2005) definition of cultural competence describes the values of the nurse and how values "led" her to learn about "differences and similarities" in the human race in order to provide care that is equal to all people (p.185).

Table 1

### *Cultural competence definitions in the literature*

Definition of Cultural Competence	Author(s)
An ongoing process of the nurse attempting to practice with the cultural context of the client, including their family and their community.	Axtell, Avery & Westra (2010)
Specific set of nursing behaviors and skills within the culture of the client, family and community.	Waite & Calamaro (2010)
A process consisting of five constructs: cultural awareness, cultural knowledge, cultural skill, cultural encounters and cultural desire. Cultural encounter is the pivotal construct in developing competence.	Campinha-Bacote, (2008)
A flexibility in dealing with the various cultures, as well as being able to adapt and modify plans of care, depending upon the culture.	Betancourt, et al., (2003), and Chrisman (2007)
The ability of the nurse to care for a client who differs in beliefs, values and behavior with healthcare tailored to meet the patient's social, cultural and linguistic needs.	Woods & Atkins (2006)
The nurse's values which lead her to learn about the similarities and differences in the human race in order to provide care that is equal to all people; a dynamic process.	Worrell-Carlisle (2005)
Care adapted to the culture that is a nonlinear, conscious process.	Purnell (2002)
A never-ending, ever expanding, non-linear process that includes the dimensions of cultural awareness, cultural knowledge, cultural understanding, cultural sensitivity and cultural skill.	Rosenjack-Burchum (2002)
The dimensions of cultural sensitivity, cultural knowledge and cultural skills.	Kim-Godwin, Clarke & Barton (2001)

Others have defined cultural competence as an ongoing process of the nurse attempting to practice within the cultural context of the client, including their family and

community, while tailoring the needs to meet each specific client within their culture (Axtell, Avery & Westra, 2010; Campinha-Bacote 1999; Campinha-Bacote, 2002; Waite & Calamaro, 2010; Woods & Atkins, 2006).

As one can see, most of the definitions are similar to each other, with slight variations in terminology. The concept of cultural competence is continually evolving and it will be important at some point in time to have agreement on exact terminology (Cowan & Norman, 2006).

### **Educational Methodologies and Considerations**

The literature posits that existing curricula are weak when it comes to effectively teaching about culture and preparing graduates to become culturally competent.

Educators are being challenged to develop new and better ways of emphasizing care of diverse cultures; focus of the curriculum needs to include acquisition of knowledge, attitudes and skills and be incorporated through leveling within the program (Campinha-Bacote, 2007; Long, 2012). Though educating nursing students about culture is required, there is growing evidence nursing graduates do not have the cultural competence required to care for the increasingly diverse population (Kardong-Edgren & Campinha-Bacote, 2008; Reeves & Fogg, 2006). Nursing educators have utilized several educational methods to teach about culture: reading books, didactic content within courses on culture, stand alone courses on culture, theoretical models infused throughout curriculum, simulation, and face to face experiences through clinical, community engagement, service learning, and immersion experiences (Axtell, Avery, & Westra, 2010; Kardong-Edgren & Campinha-Bacote, 2008; Long, 2012; Marcinkiw, 2003; Noble et al., 2014). Integrating culture throughout the curriculum appears to be the most common teaching

method (Caffrey et al., 2005; Calvillo et al., 2009; Kardong-edgren et al, 2010; Lipson & DeSantis, 2007; Long, 2012), and allows students to develop new ways of understanding based upon their previous experiences (Easterby et al., 2012). Integration of culture in nursing curricula means intentionally threading content on culture throughout all nursing courses utilizing various methodologies. Nurse educators can integrate culture by adding the five Baccalaureate Essentials competencies to their existing curriculum. These competencies call for a partnership between faculty, clinical and community settings, and administration to work on achieving the integration of the nursing cultural competencies (Callen & Lee, 2009; Calvillo et al., 2009; Hughes & Hood, 2007). However, nursing education has not been consistent in the way culture is taught, and there is confusion as to the best method for teaching culture and increasing cultural competence (Easterby, et al., 2012). The literature is not in agreement, leaving a gap related to which of the various methodologies is effective (Brennan & Cotter, 2008; Carey, 2011; Lipson & DeSantis, 2007).

### **Ethnocentrism**

Ethnocentrism, the inherent belief in the superiority of ones' ethnic group or culture, can impair the ability of the healthcare provider to give culturally appropriate care (Campinha-Bacote, 2002; Capell, et al., 2008; Kokko, 2011). The literature supports that nursing graduates feel inadequately prepared to provide culturally competent care, they have experienced discomfort in caring for patients whose backgrounds were different from their own, and they held deeply ingrained attitudes and beliefs about cultures different from their own. The need for students to initially deal with their own ethnocentrism, biases and prejudices is a first step in the development of cultural

awareness, because ethnocentrism has been linked to patient alienation, incorrect diagnosis, and poor or inadequate treatment. (Alpers & Zoucha, 1996; Amerson, 2010; Capell, et al., 2008; Dayer-Berenson, 2011; Dunagan, et al, 2014; Hunt & Swiggum, 2007; Long, 2012). Zoucha (2002) described the need for students to understand their cultural self in order to provide culturally competent care. Without understanding our own culture and the values that align with that culture, we inhibit our ability to understand another's culture. However, when we understand our cultural self we are able to step outside of our own culture and into another's, thereby reducing the risk of ethnocentrism. Cultural education must address students' ethnocentrism as a first step in the process of developing cultural competence.

### **Courses and integrated curriculum**

Didactic lessons on culture, stand-alone courses on culture, or reading books followed by reflection and discussion, while helpful in providing information, have proven to be more focused on stereotypes, biases, or cultural characteristics rather than in promoting awareness, knowledge and understanding (Brennan & Cotter, 2008; Halloran, 2009; Kardong-Edgren & Campinha-Bacote, 2008). Halloran (2009) found that students who read about other cultures learned about stereotyping and began to develop cultural sensitivity, while other students thought the novel actually perpetuated known stereotypes. They also found some students had difficulty changing ingrained stereotypes about other cultures. Understanding ones biases and stereotypes is an important part of cultural awareness, but it is only one part of a much larger whole.

Another study comparing graduating nursing students who learned about culture either through an integrated curriculum or through a stand-alone course on culture, found



the students were more culturally aware overall, but not culturally competent (Kardong-Edgren & Campinha-Bacote, 2008). In a study of 219 freshman, senior and masters level nursing students over two years, it was established that though students had received foundational education on culture through liberal arts courses, they desired more in-depth knowledge on how to practically apply their knowledge to reduce biases in both the classroom and clinical setting. Additionally, the integration of culture in the curriculum was often weighted more heavily on the didactic content and was lacking in clinical application. Even so, the same didactic content was often used repeatedly, which is neither efficient nor effective (Brennan & Cotter, 2008). Based upon the results of their qualitative study, Reeves and Fogg (2006) found exposure to cultural content within the nursing curriculum was not enough for graduating nursing students to perceive themselves as culturally competent, and recommended a more culturally comprehensive curriculum. Noble et al., (2014) described a small increase in cultural awareness for students who received a two hour culture lecture and student presentation intervention, while Reyes, et al., (2013) found graduating nursing students who experienced culturally integrated curriculum perceived their cultural competence significantly higher than beginning sophomore nursing students in the same curriculum. Didactic learning can be a passive means of gathering information, and can lead to poor retention when compared to other methodologies (Long, 2012).

The studies on cultural courses and integrated curricula describe evidence that reading about culture improves stereotypes and cultural sensitivity, exposure to cultural content is not as effective as a culturally integrated curriculum, and culture integrated into curricula is often heavier in didactic content than clinical experiences leading to poorer

retention of cultural learning. The findings from these studies are not consistent, undoubtedly due to diverse curricula across schools of nursing, and support the evidence that there is not a clear determination on what methodology is the most effective (Amerson, 2010; Long, 2012; Rutledge et al., 2008).

### **Simulation**

Simulation has the potential to develop a deeper understanding of culture for students than reading a book or stand-alone courses, because students can role play in a non-threatening way and make mistakes or face their biases in a more controlled environment (Long, 2012; Rutledge et al., 2008). Skills are honed and confidence is increased. However, there are also weaknesses. First, faculty creating the simulations must be culturally competent; this is difficult to achieve because it requires cultural expertise, academic and administrative support, and commitment on the part of the faculty within the course and across the curriculum (Kardong-Edgren & Campinha-Bacote, 2008; Leininger & McFarland, 2002; Lipson & DeSantis, 2007; Mixer, 2008; Waite & Calamaro, 2010). According to Kardong-Edgren and Campinha-Bacote (2008), not all faculty were culturally competent and able to effectively teach about culture. Additionally, Lipson and DeSantis (2007) state many faculty teach culture out of personal interest, but do not have training or experience to do so. The authors feel that without the necessary training and expertise on the part of the faculty, simulation scenarios will be lacking in depth and richness.

Simulation is also limited to the nurse-patient encounter in a controlled setting. There are many nuances within a culture that cannot be replicated during a simulation. The experience of the real world elements such as the economic, political and cultural

systems that impact the patient cannot be reproduced in the same way a face-to-face encounter can (Lipson & DeSantis, 2007).

### **Critics of cultural education methodologies**

Arguments against the effectiveness of cultural competence educational methodologies in eradicating health disparities are also found in the literature. The concept of cultural competence in nursing education is often individually focused, failing to address the larger, global issue sufficiently. The arguments against the effectiveness of cultural education are related to the difficulty teaching about factors at the political, social, economic and environmental levels that are often obscured by the focus on individuals and the nurse-client cultural interactions (Gustafson, 2005; Lipson & Desantis, 2007).

Drevdahl, Canales and Dorcy (2008) are critical of cultural competency educational methods, asserting they are often taught as a technique or skill, utilizing culturally focused guidelines and checklists that avoid the foundational understanding of the patient's experience and healthcare choices. Additionally, they discuss how the dominant, privileged, white nurse leaders and nurse educators created the foundational models of cultural care, creating a power imbalance in both the classroom and the clinical setting (Waite & Calamaro, 2010). Gustafson (2005) spoke to this power imbalance saying, "those of us located at the top of the hierarchical heap" are at risk of regarding "ourselves as innocent or unimplicated, and therefore, less responsible for making fundamental systemic changes" (p. 8). Macro-level issues leading to health disparities and the micro-level focus of cultural competence cause a disconnect, and therefore the idea of teaching cultural competence may not effectively lead to a decrease in health

disparities, according to these authors. Instead, they believe nursing must move out of the institutional arena and focus on voluntary interactions with a community or client, often evidenced in nursing education through cultural encounter experiences (Drevdahl, et al., 2008; Williams, 2006; Zoucha, et al., 2011).

Campinha-Bacote (2007) asserts there are more differences within a cultural group than between groups. Reading, learning about culture through a course, learning about theoretical model, or experiencing simulation, while important to address cultural awareness, cultural knowledge, and potentially cultural skill, do not allow the pivotal component of the cultural encounter to occur. A student has more potential to learn the nuances of a person and their culture when they are personally involved and experiencing first hand about the culture. Just as a nursing student is not able to grow in their competence as a practicing nurse until they take what they learned in class and apply it in the clinical setting on living patients, the process of cultural competence needs the encounter to allow the student to practice engagement.

Warner (2002), as cited in Marcinkiw (2003) found nursing students may be less ethnocentric after experiencing a face to face cultural encounter, because it “broadened horizons and presented opportunities for significant learning” (p.180). While all educational methodologies may provide avenues for the students to address their awareness, personal biases, and increase their knowledge, when comparing each one to the cultural encounter, the weaknesses found do not justify their use as a measurement for this study. Without the encounter, or that face to face interaction where the student experiences the real life “world” of someone of another culture, the learning is not

holistic. The cultural encounter appears to be a promising methodology for acquiring cultural competence, and why it was chosen versus other educational methods.

### **The Cultural Encounter as an Educational Tool**

The cultural encounter is an intentional, face-to-face, interaction between the nursing student and a client from a different culture. New nurses who have experienced training in culture, specifically cultural encounters, throughout their nursing programs indicated a higher level of confidence in working with a culturally diverse patient population (Hunt & Swiggum, 2007; Long, 2014; Reeves & Fogg, 2006). There are several ways the encounter can occur through experiential learning: clinical experiences, community engagement or service learning experiences, and immersion experiences.

#### **Clinical Experiences**

Clinical experiences increased nursing student confidence, developed their knowledge and skills, and moved them along the process of developing cultural competence when caring for diverse patients (Long, 2012; Upvall & Bost, 2007). In a study of nursing students at four nursing programs in the southeastern United States, Mayo et al., (2014) sought to identify the association between the students' attitudes and beliefs toward Latino patients and the impact of those attitudes and beliefs on patient-centered care. The results of the study suggested the cultural encounter, through the real-life clinical experience, could improve the cultural competence of graduating nursing students. Likewise, Webster et al. (2010) studied nursing students in a rural clinical rotation and found that the clinical experience positively impacted the students' preparation and attitude in working with rural communities, deepening their knowledge of that cultural population segment.

Cultural competence is a process that is ongoing, and therefore it is necessary for nursing education to provide more than knowledge about cultures (Long, 2014). The development of a nursing student's cultural competence "occurs best in environments supportive of diversity, and facilitated by guided clinical experiences" (Easterby, et al, 2012, p. 83). The clinical experience allows the nursing student to interact and care for a client from a different culture, thereby increasing the student's confidence and comfort in providing care. With repeated experiences in the clinical setting with clients of a different culture, the student's comfort and confidence continue to increase (Amerson, 2010; Chrisman, 2007; Easterby, et al, 2012; Long, 2012).

### **Service Learning Experiences**

Service learning, also referred to as community engagement in certain settings, first appeared in the literature in the early 1960s. The influences of service learning can be traced to the educational writings of John Dewey, who believed education should be experiential, reflective, and reciprocal, as cited in Champagne (2006) and Giles & Eyler, (1994). Service learning experiences allow students hands-on learning with cultures other than their own, thereby acquiring knowledge and skills for providing culturally competent care. When applied to a university setting, service learning is a collaborative model between students and the community, based upon mutual respect and reciprocal learning, where "each participant must learn about the other's knowledge and culture" (Champagne, 2006, p. 98). As service learning has gained momentum in colleges and universities across the United States, healthcare related disciplines have adopted it into their curriculum to enhance community relationships, improve community health, and prepare healthcare workers to be culturally competent. In order to be culturally

competent as a healthcare worker, one must have an understanding of the traditions, values and beliefs of other cultures. This involves moving “beyond the bricks and mortar of the university campus and engage with the true populations representing our communities” (Champagne, 2006, p.99).

Service learning participation can occur locally, with students engaged in their own communities, or internationally, with students participating in an immersion experience in another country. In order to differentiate service learning from other educational methods of teaching about culture, Bailey, Carpenter, and Harrington (2002) articulated four characteristics of service learning:

1. Experiential in nature.
2. Address human and community needs via structured opportunities for learning.
3. Involve thoughtful use of reflection.
4. Are respectful of the concept of reciprocity between the service-learning experience and the individuals being served, meaning both are teachers and learners. The benefits of this reciprocity include deeper relationships and engagement in the experience itself (Laplante, 2009).

Reflection, an important component of service learning, allows the students to connect their experience in the community setting to their academic learning, and allows them to construct new meanings based upon each prior experience; they can then examine their attitudes, beliefs and values, potentially leading to transformation of their previously held ideas and beliefs (Johnson, 2009; Laplante, 2009; Nokes et al., 2005).

**Qualitative examination of service learning.** Most of the studies on service

learning and cultural competence are qualitative studies. Several of these studies report nursing students who are engaged in service within their own communities have a deepened compassion, have changed previously held biases and beliefs, have recognized the similarities and differences between themselves and those of other cultures, and have improved in their overall cultural competence. The students have described the experiences as transformational, leading to more therapeutic nursing care, and a greater desire to learn about other cultures (Hunt & Swiggum, 2007; Ryan et al., 2000; Worrell & Carlisle, 2005). Another qualitative study took fifty-eight students enrolled in a course on childbearing and randomly selected twenty students to participate in a service learning project, with the remaining thirty-eight completing the traditional student assignments for the course. They found as a result of service learning, students' perspectives were changed, they found a new appreciation for the differences in life situations between themselves and their clients, and had a deeper understanding of their classroom content (Bentley & Ellison, 2006). Zoucha et al., (2011) described an educational innovation blending two freshman courses, *Transcultural Responses in Healthcare* and *Service Learning Strategies*. The blending of the didactic course concepts with the service learning course application resulted in improvement of students' cultural sensitivity for the provision of care, and improved the students' "sense of advocacy and moral agency" (p. 9). In a descriptive phenomenological study, Hunt (2007) found fourteen nursing students who participated in service learning at a homeless shelter were challenged in their established stereotypes and biases, they recognized similarities as well as differences between themselves and the homeless population, and they described the experience as eye-opening. One student said, "You can read about poverty, but you don't



feel the emotion of it or the impact of it like when you see it firsthand” (p. 278). These studies provide qualitative support for the hypothesis that the cultural encounter, through the methodology of service learning, has a direct impact on cultural competence in nursing students.

**Quasi-experimental studies of service learning.** There are few quantitative studies examining service learning and cultural competence. Chen et al. (2012), in a quasi-experimental study, examined the impact of a ten-hour service-learning project using the inventory by Campinha-Bacote. The twenty-six associate degree-nursing students were divided into a control and an experimental group. Thirteen students in the experimental group participated in the service learning experience and showed significant change from the pre-test to the post test, moving from cultural awareness to cultural competence. Though the sample size is quite small, the importance of the results cannot be ignored.

Sargent, Sedlak and Martsof (2005) studied 88 first year nursing students, 121 fourth year nursing students, and 51 faculty members, using Campinha-Bacote’s *Inventory for Assessing the Process of Cultural Competence*. This inventory measured four of her five cultural competence constructs: cultural awareness, cultural skill, cultural knowledge and cultural encounter. There was statistical significance in the difference of the self-reported cultural competence from the first students and fourth year students, a positive correlation with the entire sample between healthcare work experience and the overall inventory scores, as well as a positive correlation between the number of foreign countries visited and the overall inventory scores. This study used Campinha-Bacote’s inventory with only four of the five cultural constructs, excluding the construct of cultural

desire, thus limiting the study. Additionally, they studied one college of nursing and could have strengthened the study by comparing several schools of nursing.

### **International Immersion Experiences**

Several themes on international service learning experiences, or immersion experiences, have emerged from the literature. Immersion experiences have deepened nursing students' desire to engage with other cultures, improved cultural competence by increasing the students' confidence as a nurse, developed greater openness to different cultures, and expanded the students' worldview (Green, et al., 2011; Walsh & DeJoseph, 2003; Wilcox, 2012). Students described a deeper understanding of cultural and global issues, such as the environment, healthcare, and social justice; an increased desire to affect change and participate in additional service opportunities; personal and professional growth in the area of cultural desire; recognition of the reciprocal relationship with other cultures; and increased cultural awareness and competence (Bentley & Ellison, 2007; Caffrey et al., 2003; Callister, 2006; Evanson & Zust, 2004; Evanson & Zust, 2006; Wilcox & Taylor-Thompson, 2012; Woods & Atkins, 2006).

Smit and Tremethick (2013) developed an international interdisciplinary course combining service learning with cultural immersion in Honduras. The themes that emerged included a newly acquired appreciation for the resources in their own country, a new awareness of their own lifestyle in comparison to that in Honduras, a discomfort with their own limitations, a respect and awareness for the strength of the Honduran people, and a newfound value in working with others. Studies on international immersion experiences are predominantly qualitative in nature. While the themes described are valuable and provide important data to support its inclusion in nursing

curriculum, there is a need for more quantitative studies as well. Additionally, finding an international immersion experience that is affordable, provides course credits for participation, and are shorter in length to allow greater numbers of students to participate, are all challenges and potential barriers (Curtin et al., 2013). Because of the smaller number of students who are involved with international immersion experiences, studying the cultural encounter in the local community, particularly as it is integrated within the nursing curriculum where all students are part of the experience, may provide a more reliable indicator as to the effectiveness of the cultural encounter on the acquisition of cultural competence (Wros, 2010).

### **Conclusion**

Overall, it appears the current literature provides evidence supporting cultural encounter experiences in their ability to move the student to a deeper level and improve their confidence and skill. This ultimately has the potential to translate into nursing practice, thereby improving patient care and ultimately patient outcomes. However, the majority of studies were qualitative in design. There is a need for quantitative research to study the effectiveness of the cultural encounter as an educational methodology to impact the cultural competence of baccalaureate nursing students. Therefore this study will provide further research, particularly quantitative research, and help to fill in the gap in the current literature on the impact of the cultural encounter on the cultural competence of baccalaureate nursing students.

## **CHAPTER III**

### **METHODOLOGY**

#### **Introduction**

The purpose of this descriptive correlational study was to generate data that would address the impact of the cultural encounter on the cultural competence of baccalaureate nursing students. The specific aims of this study were: 1) to determine the frequencies of the demographic and cultural competence measures of baccalaureate nursing students, 2) to determine if there were significant differences in the cultural competence of first semester baccalaureate nursing students and final semester baccalaureate nursing students, and 3) to investigate the association of self-reported cultural awareness, cultural skill, cultural knowledge, cultural encounter, cultural desire, total cultural competence, year in school, and academic program credits of baccalaureate nursing students.

Chapter three will be a discussion of the methodologies used for this study. It will be divided into sections that include (a) research design, (b) sample and setting, (c) instrumentation, (d) data collection procedures, (e) data analysis, and (f) limitations.

#### **Research Design**

The purpose of a research design is to achieve “greater control and thus improve the validity of the study in examining the research problem” (Burns & Grove, 2005, p. 231). Correlational research is focused on determining the differences in groups, and identifying the relationship between two or more sets of data (Polit & Beck, 2012).

This descriptive correlational study was designed: 1) to determine the frequencies of the demographic and cultural competence measures of baccalaureate nursing students, 2) to determine if there were significant differences in the cultural competence of first semester baccalaureate nursing students and final semester baccalaureate nursing students, and 3) to investigate the association of self-reported cultural awareness, cultural skill, cultural knowledge, cultural encounter, cultural desire, total cultural competence, year in school, and academic program credits of baccalaureate nursing students.

### **Sample and Population**

#### **Setting**

The study was conducted at three private, faith-based liberal arts colleges/universities in an upper Midwest state. The number of potential students for this proposed study was 482 undergraduate, nursing students from the three schools of nursing. Cultural encounter opportunities were introduced during the first semester of each of the three nursing programs and were a part of the requisite clinical hours or course requirements for each successive semester.

**A 48 Hour Program.** The first setting, 48 Hour Program, is an evangelical, Christian institution. Of the approximate 3,300 undergraduate students, there were approximately 86% Caucasian, 6% Black, 4% Asian, 2% Hispanic, 2% multiracial, and <1% American Indian/Alaskan Native students. Nursing is one of the five majors chosen most often by students (Minnesota's Private Colleges, 2013). Cultural encounters, through community engagement, were introduced in the curriculum during the first semester of the program and were a designated part of the total clinical hours for each successive semester: sophomores had five clinical hours, and juniors had eight clinical

hours in the fall and ten clinical hours in the spring for community engagement.

Community engagement is a teaching and learning strategy that integrates meaningful service with instruction and reflection to enrich learning experiences, teach civic responsibility, and strengthen communities. Community engagement focuses on the needs, expectations, and desires of a community's members (Schaffer & Hargate, 2015).

The cultural encounter experiences through community engagement occurred in inner city churches, Head Start and Early Childhood and Family Education programs, inner-city housing communities, domestic violence shelters, and substance abuse treatment centers. During the fall of senior year the students had 25 clinical hours incorporated into the course NUR425GZ Population-Focused Nursing Care. Additionally, throughout the nursing program students had clinical experiences with the opportunity to care for diverse patients. (Minnesota's Private Colleges, 2013).

**A 45 Hour Program.** The second setting, 45 Hour Program, is a private, faith-based, liberal arts college, founded on the Catholic, Benedictine heritage. Of the approximate 2,900 undergraduate students, there were 88% Caucasian, 4% Black, 3% Asian, 2% Hispanic, 2% American Indian/Alaska Native, 2% multiracial, and <1% Native Hawaiian/Pacific Islander students. Nursing was one of the top five majors chosen by students (Minnesota's Private Colleges, 2013).

Each semester, beginning in the spring of the sophomore year, the nursing students participated in a "community day", doing service with an agency of their choice such as homeless shelters, schools, or community agencies; each student interacted with cultures different from their own during these experiences. Throughout the nursing program students had clinical experiences with the opportunity to care for diverse

patients. During the fall of the senior year, students had 45 hours of clinical experiences in a community setting with diverse populations during the course *Community as Client*. The different settings included a homeless shelter, public health agencies and their populations, and assisted living for the homeless and those recovering from addictions (Minnesota Private Colleges, 2013).

**A 30 Hour Program.** The third setting, 30 Hour Program, is a private, faith-based, liberal arts college, founded on the Catholic, Benedictine heritage. Of the approximate 2,050 undergraduate students, there were 85% Caucasian, 6% Asian, 6% Hispanic, 2% Black, <1% American Indian/Alaskan Native, <1% Native Hawaiian/Pacific Islander, and 1% multiracial students (Minnesota's Private Colleges, 2013). Nursing students were admitted in the fall of sophomore year, and completed six semesters in the program. The sophomore students took a required two credit intercultural course and then participated in a cultural immersion public health clinical in the fall of senior year. The immersion experience could be international (South Africa, Belize, or Dominican Republic) or local (boys and girls clubs, or Somali population). In between the sophomore and senior years, the curriculum was integrated with cultural case studies, simulation, clinical experiences caring for diverse patients in settings that included schools, senior centers, acute and chronic care, domestic violence shelters, homeless shelters, a prison, and county public health agencies, and other culturally focused methodologies (Minnesota's Private Colleges, 2013).

### **Sampling**

Convenience sampling was used to recruit the baccalaureate-nursing students from the three schools of nursing. Each of the deans at the three schools of nursing

received a letter from the principal investigator describing the study and requesting their participation. The deans at each school consented, and then contacted the faculty leading the sophomore and senior nursing courses, connecting them with the principal investigator. The students were informed of the study by their faculty, and the principal investigator presented the study in person to each group of students at each of the three schools of nursing. The study began in September of 2014 and ended in May of 2015.

The colleges and universities in the study admit their students as follows: 48 Hour Program admits 90 students to the nursing program beginning the spring of the sophomore year; 45 Hour Program admits 112 students to the nursing program during the spring of the sophomore year; and 30 Hour Program admits 45-54 students to the nursing program in the fall of sophomore year.

### **Statistical Power**

The potential subjects for the study sample came from a voluntary pool of approximately 252 pre-licensure baccalaureate degree sophomore nursing students and 230 pre-licensure senior nursing students enrolled in the three private, liberal arts nursing programs. From this larger group, all students were given the opportunity to participate, and all completed surveys were included in the study. Using G\*Power 3.1, a minimum sample size of 134 sophomores and 134 seniors were needed to detect a small to medium effect size of 0.1, using an alpha of 0.05, and assuming a power of 0.80 with five predictors (Faul, Erdfelder, Lang, & Buchner, 2007). In fact this sample size exceeds the required sample of 90 participants according to Tabachnick and Fidells' formula (2012) of  $8m + 0$ , whereby  $m$  equals the expected numbers of predictors in the model. Therefore, based on the comparison of the two formulas, the sample size of 134 sophomores and 134



seniors was sought for this study with the final sample size of 245 sophomores nursing students and 208 senior nursing students.

### **Inclusion and Exclusion Criteria**

Inclusion criteria included sophomore students in the first semester of the program, and senior nursing students within a few weeks of graduating from the program. The rationale for choosing those students was because the sophomores did not have any cultural encounter experiences in the nursing program at the time of the survey, and the seniors had completed all of their cultural encounter experiences in the nursing program at the time of the survey. The students from both groups had to be enrolled in one of the three schools of nursing, they had to be students in good standing, had experienced or would be experiencing cultural encounters at some point during the nursing program, otherwise they would be excluded. The students could be women or men of any ethnic or cultural group. Specific target for non-white nurses was not set. An effort was made to obtain multi-ethnic and multi-racial representation in the sample but was limited to the composition of the current student group. The majority of nurses in the United States are women, therefore it was anticipated the inclusion of women in this study would not be problematic. Recruiting male nursing students proved to be more difficult related to their small numbers in the nursing profession. Subjects had to be willing to take the survey.

Participation was completely voluntary. All subjects were advised of the benefits of participation, their right to withdraw, and the measures used to ensure confidentiality. The principal investigator shared inclusion/exclusion criteria and explained the study procedures and requirements to those who were eligible. Based upon the University of Grand Forks IRB, completion of the demographic questionnaire and inventory

constituted consent. The principal investigator did not share the identity of the participants with faculty or staff of the university, and participation in the study did not impact the grade received in the course. The potential benefits of participating in the study included allowing subjects to examine their own cultural knowledge and how their experience with other cultures may impact patient outcomes, as well as benefit to the patients as the recipients of culturally competent care.

### Instrumentation

The study utilized the *Inventory for Assessing the Process of Cultural Competence in Healthcare Professionals-Student Version*, to measure the relationship between cultural encounters and cultural competence, as well as a demographic survey (Appendix A). The IAPCC-SV is a self-assessment instrument consisting of twenty questions with a four-point Likert scale from strongly agrees to strongly disagree (Figure 2). Each of the five constructs of Campinha-Bacote’s model is represented: cultural awareness, cultural skill, cultural knowledge, cultural encounter, and cultural desire.

1. I believe that there is a relationship between culture and health ( <i>cultural awareness</i> )			
Strongly Agree	Agree	Disagree	Strongly Disagree
2. I am comfortable asking questions that relate to the clients cultural/ethnic background ( <i>cultural skill</i> )			
Strongly Agree	Agree	Disagree	Strongly Disagree
3. I am knowledgeable of at least 2 institutional barriers that prevent cultural/ethnic groups from seeking healthcare services ( <i>cultural knowledge</i> )			
Strongly Agree	Agree	Disagree	Strongly Disagree
4. I am involved with cultural/ethnic groups outside of my healthcare setting role ( <i>cultural encounter</i> )			
Strongly Agree	Agree	Disagree	Strongly Disagree
5. I have a personal commitment to care for clients from culturally/ethnically diverse backgrounds ( <i>cultural desire</i> )			
Strongly Agree	Agree	Disagree	Strongly Disagree

Figure 2: Sample questions, related construct, and Likert scale measurement from the *Inventory for Assessing the Process of Cultural Competence in Healthcare Professionals-Student Version* (Campinha-Bacote, 2007).

Scores from the inventory range from 20-80 points, with higher scores indicating a higher level of competence: cultural incompetence (scores of 20 to 40), cultural awareness (scores 41 to 59), cultural competence (scores of 60 to 74) and cultural proficiency (score of 75 to 80). Administration of the inventory is a paper-pencil survey and took approximately 10-15 minutes to complete (Campinha-Bacote, 2007; Campinha-Bacote, 2010a; Palombaro & Lattanzi, 2012).

### **Instrument Analysis**

#### **Reliability**

One of the most common methods for checking instrument reliability is the Cronbach's alpha coefficient (Cronk, 2014; Pallant, 2013). The *Inventory for Assessing the Process of Cultural Competence in Healthcare Professionals-Student Version* (IAPCC-SV) has been found to be a reliable instrument in measuring cultural competence, with a Cronbach's alpha range of 0.74-0.856 (Campinha-Bacote, 2010a; Hsiu-Chin et al., 2012; Palombaro & Lattanzi, 2012; Wilson, 2011). The instrument has also been found to have construct and content validity. In 2009, Fitzgerald, Cronin, and Campinha-Bacote conducted a study, and within it addressed the construct validity and content validity of the inventory. The IAPCC-SV was administered to 91 participants in a baccalaureate nursing program, and the researchers found it reflected the available cultural competence literature that identified awareness/attitudes, skill and knowledge as important areas of cultural competence (Fitzgerald, Cronin, & Campinha-Bacote, 2009).

Additionally, it was important to check the reliability of the IAPCC-SV constructs, or subscales: cultural awareness (CA), cultural skill (CS), cultural knowledge (CK), cultural encounter (CE), and cultural desire (CD). The Cronbach's alpha ranged

from .25-.76 for the five constructs/subscales of the inventory (Table 2). This is similar to a study by Hsiu-Chin et al.(2012) who found the range of the constructs to be -.32 to .66 and a study by Fitzgerald, Cronin and Campinha-Bacote (2009) who found the constructs to range from .19-.68. The lower reliability could be a direct result of the small number of items for each of the constructs (Cronk, 2014; Hsiu-Chin et al., 2012; Pallant, 2013). When the overall inventory was tested using Cronbach's alpha, the item-total statistics output provided a Cronbach's alpha if a specific item was deleted from the scale. If deleted, two of the items (14 and 15) would have raised the overall alpha by a small amount (.002 and .004 respectively), so it appears that all the items were worthy of retaining (Field, 2013).

Table 2

*Instrument Construct Reliability*

Construct	<i>a</i>	N/Items	N/Cases
Cultural Awareness	.25	3	453
Cultural Skill	.68	5	453
Cultural Knowledge	.49	3	453
Cultural Encounter	.46	5	453
Cultural Desire	.76	4	453

Internal consistency of the five constructs was investigated using Pearson product-moment correlation coefficient.

Table 3

*Correlation Matrix Between Constructs of Cultural Competence*

	CA	CK	CS	CE	CD
CA	1				
CK	.27*	1			
CS	.22*	.59*	1		
CE	.35*	.49*	.46*	1	
CD	.41*	.30*	.28*	.55*	1

*Note: significance \*p = < .001*

Table 3 illustrates the findings and shows there were medium to large correlations between the five constructs, suggesting internal consistency of the inventory, and a fairly strong relationship between each of the constructs (Pallant, 2013).

### **Validity, Reliability, and Internal Consistency Analysis from the Literature**

Research studies on the psychometric properties of the IAPCC-SV were listed on the Transcultural C.A.R.E Associates website by Campinha-Bacote. The inventory based upon the five constructs of Campinha-Bacote's cultural competence model established construct validity (Fitzgerald, et al., 2008). Capell, et al. (2008) identified construct validity of the IAPCC-SV through the inverse relationship with the ethnocentrism scale. The IAPCC-SV demonstrated content validity because the items of the inventory reflected the cultural competence in healthcare literature. Review of the IAPCC-SV by national transcultural experts established face and content validity (Fitzgerald, et al.,

2008). A study by Okere et al (2011) found test-retest reliability of .87. Therefore this tool was selected for the study.

### **Demographics**

Demographic data was created by the primary investigator alongside two consultants Dr. Yurkovich and Dr. Zoucha, and was designed to obtain information on the samples' age, gender, race and ethnicity, religion, marital statuses, previous courses on culture, previous college degree, previously traveled outside the United States, and previously lived outside of the United States. Additionally there was a question for the senior students related to international immersion experiences within the nursing program. The data was used to study the relationship of the demographics to the overall cultural competence score.

### **Data Collection Procedures**

The IAPCC-SV was administered to all sophomore nursing students from the three schools of nursing within two weeks of beginning the nursing program, and was administered to all senior nursing students at the three schools of nursing at end of their program, two weeks before their graduation day (Campinha-Bacote, 1999, 2002). Because of time constraints for completing the data gathering, the sophomore students were not the same as the senior students. Additionally, all subjects were given a demographic questionnaire. Data was gathered in the following manner:

1. Paper/pencil demographic questionnaire
2. Paper/pencil inventory on cultural competence

All students were given an envelope with the demographic questionnaire and IAPCC-SV instrument inside; code numbers were specific to each packet, identified the

school represented by the data, and was assigned to each individual subject. Students were instructed that completion of the demographic inventory and the IAPCC-SV constituted consent, with the exception of 48 Hour Program; their IRB required students to sign an informed consent. It took approximately twenty minutes to complete the questionnaire and inventory. Upon completion, the students returned the sealed envelope containing the questionnaire to the principal investigator. The principal investigator gathered the packets from each individual school, separated out the completed from not completed packets, and entered the data from all completed demographic questionnaires and IAPCC-SV.

The demographic questionnaire and the IAPCC-SV by individual school were kept in a locked file accessible only to the principal investigator. Confidentiality of the individual subjects was maintained, with no names or other identifying information gathered or used in any publication or shared with university faculty or staff.

### **Protection of Human Subjects**

Participants were nursing students enrolled in a pre-licensure baccalaureate nursing program. Because participants may have worried their grade would be affected by non-participation, complete anonymity of the participants was ensured. The principal investigator kept the data and the course instructor assigning grades did not have access to who was participating or to the participant's survey results. No invasive procedures were implemented in the study.

Participants were recruited from three private, faith-based, liberal arts Midwest schools of nursing. Potential participants were recruited from a sophomore and senior year nursing class and participation was completely voluntary. All participants were told

that their completion of the questionnaire and inventory constituted consent, and that they were free to refuse to participate. 48 Hour Program nursing students signed an informed consent, a requirement of their Institutional Review Board (Appendix C). The principal investigator provided explanation of the study, which included the study purpose, time commitment for the study, the nature of the study, and advised the students of the benefits of participation, their right to withdraw, and the measures to ensure confidentiality. The principal investigator shared inclusion/exclusion criteria and explained the study procedures and requirements. Participants remained anonymous to the principal investigator, the faculty, and the staff of the university.

Human subjects education was completed by the principal investigator, which was required by the University of North Dakota. Protection from potential risks were included as part of the study design. Research data was kept in a locked file in the principal investigator's office. No names were gathered, and no identifying data were used in any report shared with university faculty or staff. Electronic files were protected by passwords to ensure confidentiality and privacy. No adverse event occurred as a part of the study. Had there been an adverse event it would have been reported to the University of North Dakota and the Midwest universities' IRB, and procedures would have been followed as necessary.

The study protocol was submitted for approval to the IRB at both the University of North Dakota and each of the Midwest universities from which the participants were recruited. Full IRB approval was obtained before any aspect of the study was initiated (Appendix B). The principal investigator on this project acknowledged that stringent safeguards were needed to ensure that the rights, well-being, and confidentiality of



enrolled participants were protected. The principal investigator continuously monitored the study implementation.

### **Data Analysis**

Descriptive statistics were calculated for each continuous demographic variable, including mean, range, standard deviation, and frequency distribution. All data were assessed for normal distribution. Pearson product-moment correlation coefficient was calculated to determine to the association of the self-reported cultural awareness, cultural skill, cultural knowledge, cultural encounter, cultural desire, total cultural competence, year in school, and academic program credits of baccalaureate nursing students. The effects of age, gender and ethnicity on the overall IAPCC-SV scores were analyzed using independent t-tests, and chi square tests. One-way analysis of variance was used to determine if there is statistical significance in the variance of the mean scores of cultural competence between the three schools of nursing, as well as mean cultural competence scores of the sophomores and seniors (Pallant, 2013). Data was entered into a Statistical Package for the Social Sciences (SPSS) software package for analysis and statistical comparisons. The data was analyzed with a significance level of  $\alpha = 0.05$ .

## **CHAPTER IV**

### **FINDINGS**

#### **Introduction**

The purpose of this descriptive correlational study was to generate data that would address the impact of the cultural encounter on the cultural competence of baccalaureate nursing students. The specific aims of this study were: 1) to determine the frequencies of the demographic and cultural competence measures of baccalaureate nursing students, 2) to determine if there were significant differences in the cultural competence of first semester baccalaureate nursing students and final semester baccalaureate nursing students, and 3) to investigate the association of self-reported cultural awareness, cultural skill, cultural knowledge, cultural encounter, cultural desire, total cultural competence, year in school, and academic program credits of baccalaureate nursing students.

This chapter begins with an overview of the analysis of the quantitative data collected from the three participating schools of nursing, totaling 453 sophomore and senior baccalaureate nursing students. The overview of the analysis will include the statistical procedures of the analysis and a description of the demographic characteristics of the sophomore and senior nursing students who completed the survey. After the presentation of the results of the nursing students' responses, the chapter will conclude with a presentation of the findings as they relate to the specific aims.

## Data Analysis Procedures

The researcher utilized data gathered from both the demographic (Appendix B) and the IAPCC-SV (Appendix A) questionnaires that were administered to sophomore nursing students within two weeks of beginning the nursing program, and to senior nursing students at end of their program before two weeks of their graduation day.

The demographic questionnaire and the IAPCC-SV were administered in person by the principal investigator at each school of nursing. The data was entered and analyzed using SPSS (Statistical Package for Social Sciences) version 22. Descriptive statistics were used for the demographic data, including mean, range, standard deviation, and frequency distribution, and all were assessed for normal distribution. The three specific aims were examined using independent samples t-test, Pearson product-moment correlation coefficient, and one-way analysis of variance (ANOVA). Correlation and independent sample t-tests were chosen to compare cultural competence scores for specific categorical demographic data of the sophomore and senior nursing student. ANOVA was used to examine the three schools of nursing and their mean cultural competence scores, as well as the year in school and the mean cultural competence scores, to determine the amount of variability (Cronk, 2014; Pallant, 2013).

For this study, the sample size exceeded the required sample of 90 participants according to Tabachnick and Fidells' formula (2012) of  $8m + 50$ , whereby  $m$  equals the expected numbers of predictors in the model. The assumptions of multicollinearity and singularity were met in this study, because the independent variables were not highly correlated ( $r=.9$  or above), nor were any of the independent variables a combination of the other independent variables.

The assumptions of outliers, normality, linearity, homoscedasticity, and independence of residuals can be examined through the histogram, the *Normal Probability Plot (P-P) of the Regression Standardized Residual*, as well as the scatterplot.

The histogram for this study would suggest normality:

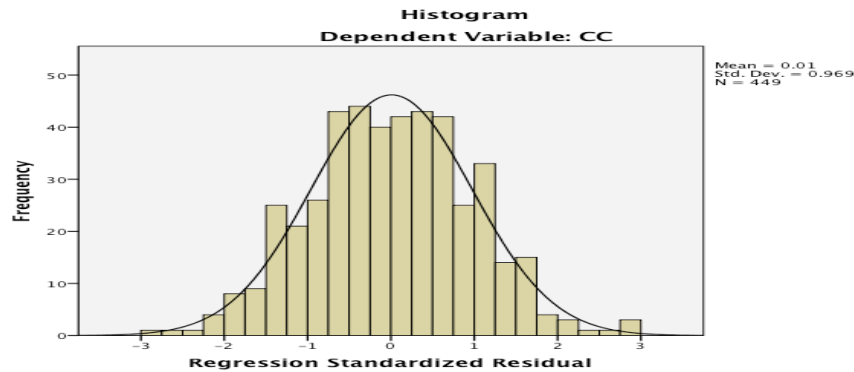


Figure 3: Histogram of Standardized Residuals

The Normal P-P Plot for this study would suggest no deviations from normality based upon the diagonal line from the bottom left to the top right of the graph (Pallant, 2013):



Figure 4: Normal P-P plot of the standardized residuals

The scatterplot of the standardized residuals should appear roughly rectangular in shape, with most scores at the zero point and concentrated in the center (Figure 5). If there were deviations from the center one would assume some violation of the

assumption of homoscedasticity and independence of the residuals. However, with large samples it is expected there will be a number of outlying residuals; therefore it may not be necessary to take any action as a result (Pallant, 2013). In the scatterplot below (Figure 6) most scores are concentrated at the center and around the zero point. Although there are outliers, because the sample is large this researcher did not take any action and believes the assumptions have not been violated. (Pallant, 2013).

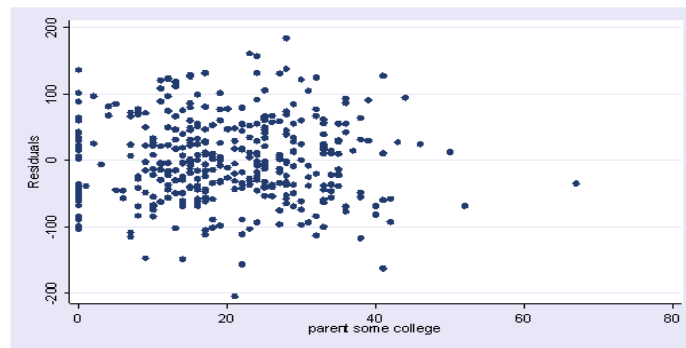


Figure 5: Reference Scatterplot of Standardized Residuals

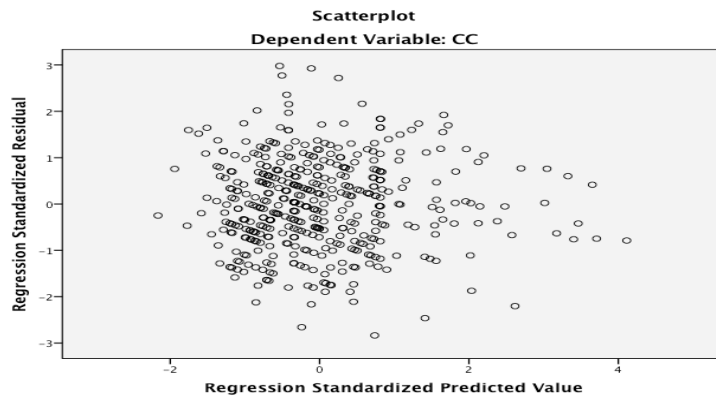


Figure 6: Scatterplot of Standardized Residuals

### Demographic Data

The demographic questionnaire contained questions to gather specific information from the sophomore and senior nursing students at the three schools of nursing. The questionnaire included questions on age, gender, marital status, ethnicity, religion, if they

had a previous college degree, if they had taken a previous course on culture, if they had traveled outside of the United States, if they had lived outside of the United States, and for seniors only, if they had participated in an immersion experience while in the nursing program.

### Results Reported For Each Specific Aim

The following pages will be divided by each individual specific aim and report of the statistical tests and corresponding analysis for each aim.

#### **Specific Aim #1: To determine the frequencies of the demographic and cultural competence measures of baccalaureate nursing students.**

The population of the study consisted of 252 sophomore nursing students and 230 senior nursing students from the three schools of nursing (Table 4). The actual sample consisted of 245 sophomore nursing students and 208 senior nursing students from the three nursing schools. This equated to a 93.9% participation rate, with 36.7% of the sample from 48 Hour Program, 41.4% of the sample from 45 Hour Program, and 21.9% of the sample from 30 Hour Program.

Table 4

*Participation by Academic Program and Year in School*

School	Year on School	n	%
48 Hour Program	Sophomore	90	19.9
	Senior	76	16.8
45 Hour Program	Sophomore	102	22.5
	Senior	86	18.9
30 Hour Program	Sophomore	53	11.7
	Senior	46	10.2

Note: N=453

100 %

## Overall Sample Demographic

The statistics for the overall sample will be discussed first. The entire sample was made up of students who ranged in age from 18 years to 41 years old, with 86.6% of the sample in the 18-22 year old range. The remaining sample was divided as follows: 9.7% in the 23-27 year old range, 2.7% in the 28-32 year old range, and 1% in the 33-41 year old range. The mean age of sophomores was 19.84 (SD = 1.66) and of seniors was 22.70 (SD = 2.94). One student did not provide their age on the questionnaire. Table 5 provides data on the reported student age.

Table 5

### *Age of Sample*

Age Range	n	%
Age in years		
18-22	390	86.3
23-27	44	9.7
28-32	13	2.9
33-41	5	1.1

Note: N=452 100 %

The sample for this study was made up of approximately 9% male and 91% female; one student did not provide their gender. The reported marital status of the sample for the study was made up of 84.8% single nursing students, 13.2% married students, 0.7% divorced students, and 1.1% other (dating, engaged, widowed).

One student did not provide data on marital status (Table 6).

Table 6

*Gender and Marital Status of Baccalaureate Nursing Students By Year in School*

Variable	Sophomore (n = 244)		Seniors (n = 208)	
	n	%	n	%
Gender				
Male	24	9.8	15	7.2
Female	220	89.8	192	92.3
Marital Status				
Single	215	88.1	169	81.3
Married	24	9.8	36	17.3
Divorced	2	0.8	1	0.5
Other	3	1.2	2	1

The study sample consisted of 8.1% ethnically diverse students between the three schools of nursing. There were two students who did not provide their ethnicity on the demographic questionnaire. The religion of the sample was quite homogenous, though the majority of the sample was Catholic (30.9%), Christian (38.9%), and Lutheran (15.9%). The remaining students in the sample were “other Christian”, such as Methodist, Orthodox, Presbyterian, and Seventh Day Adventist (6.4%), and “other non-Christian”, such as agnostic, atheist, and “none” (7.5%). Two students did not provide data on their religion (Table 7).



Table 7

*Ethnicity and Religion By Year in School of Baccalaureate Nursing Students*

Demographic Variable	Sophomore (n = 243)		Seniors (n = 208)	
	n	%	n	%
<b>Ethnicity</b>				
American Indian/ Alaskan Native	1	0.4	1	0.5
Asian	5	2.1	5	2.4
Black	7	2.9	3	1.4
Caucasian	223	91.8	190	91.3
Hispanic	4	1.6	2	1.0
Other	3	1.2	7	3.4
<b>Religion</b>				
Catholic	72	29.6	68	32.7
Christian	93	38.3	83	39.9
Lutheran	40	16.5	32	15.4
Other Christian	21	8.6	8	3.8
Other non-Christian	17	7.0	17	8.2

The demographic questionnaire asked students if they had obtained a previous college degree. There were 431 students who did not have a previous degree (95.1%), twenty-one students who had a previous degree (4.6%), and one student did not provide the data for that question. Of the 450 students who supplied the data about whether they had taken a previous course on culture, 314 students (70%) had taken a course on culture prior to this study and 136 students (30%) had not taken a course on culture. Three students did not provide data for this question.

The questionnaire also asked students whether they had ever lived outside of the U.S. or traveled outside of the U.S. Of the 451 students who answered both questions,

393 students (86.8%) had never lived outside of the U.S., 58 students (13.2%) had lived outside of the U.S., 361 students (79.7%) had traveled outside of the U.S., and 90 students (19.9%) had never traveled outside of the U.S. The final question on the questionnaire was for senior nursing students only and asked whether they had participated in an international immersion experience during their nursing program. Of the 207 senior nursing students (one student did not supply data for this question), 116 students (55.7%) had not participated in an immersion experience, while 91 students (43.7%) had participated in an immersion experience during their nursing program (Table 8).

Table 8

*Other Demographic Variables By Year in School of Baccalaureate Nursing Students*

Demographic Variable	Sophomore (n = 244)		Seniors (n = 208)	
	n	%	n	%
Previous Degree				
Previous Degree	11	4.5	10	4.8
No Previous Degree	233	95.5	198	95.2
Course on Culture				
Course	137	56.0	177	86.0
No Course	107	44.0	29	14.0
Lived outside of U.S.				
Lived	31	12.7	27	13.0
Not Lived	213	87.3	180	87.0
Traveled outside of U.S.				
Traveled	184	75.4	177	85.5
Not Traveled	60	24.6	30	14.5
International Immersion Experience (Seniors Only)				
Experience			91	44.0
No Experience			116	56.0

**Specific Aim #2: To determine if there were significant differences in the cultural competence of first semester baccalaureate nursing students and final semester baccalaureate nursing students.**

### **Mean Cultural Competence and Demographic Data**

Independent-samples t-tests were conducted to compare cultural competence scores for specific categorical demographic data. There were significant differences in the mean scores on some of the demographic data, including previous course on culture, previous college degree, traveled outside of the United States, and lived outside of the United States.

**Previous Course on Culture.** Taking a previous course on culture compared to not taking a previous course on culture showed statistically significant differences in mean scores from sophomore to senior year, with a magnitude of the mean differences indicating a medium effect.

Table 9

*Previous Course on Culture and Mean Cultural Competence Score*

	M	SD	t	p
Previous Course	61.64	5.79	4.47**	.000
No Previous Course	59.98	5.83		

Note: \*\* significance =  $p < .001$

**Previous Degree.** Those students who had a previous college degree showed statistically significant differences in their mean scores from sophomore to senior year, with the magnitude of the mean differences indicating a medium effect.

Table 10

*Previous Degree and Mean Cultural Competence Score*

	M	SD	t	p
Degree	64.48	5.93	2.93*	.004
No Degree	60.61	5.91		

Note: \*significance =  $p < .05$

**Lived Outside of U.S.** There was also a significant difference in mean scores from sophomore to senior year, for those students who had lived outside of the United States and those students who had not. The magnitude of the mean difference indicated a medium effect.

Table 11

*Lived Outside of United States and Mean Cultural Competence Score*

	M	SD	t	p
Lived outside of U.S.	64.68	5.65	5.50*	.000
Not lived outside of U.S.	60.21	5.66		

Note: \*\*significance =  $p < .001$

**International Travel.** Finally, there was a significant difference in the mean scores from sophomore to senior year, for those students who had traveled outside of the United States and those who had not, with the magnitude of the mean difference showing a small effect.

Table 12

*Traveled Outside of United States and Mean Cultural Competence Score*

	M	SD	t	p
Traveled outside of U.S.	61.15	5.99	2.58*	.01
Not Traveled outside of U.S.	59.35	5.63		

Note: \*significance =  $p < .05$

**IAPCC-SV Cultural Competence Levels**

The IAPCC-SV is divided into four different levels of cultural competence: culturally incompetent, culturally aware, culturally competent, and culturally proficient. Overall, the self-report for the sophomore group produced scores indicating 49% (n = 119) were culturally aware, 50% (n = 123) were culturally competent, and 1% (n = 3) were culturally proficient (Figure 7). The senior group scored 34% (n = 71) as culturally aware, 65% (n = 135) as culturally competent, and 1% (n = 2) as culturally proficient. No one in either group scored as culturally incompetent (Figure 8).

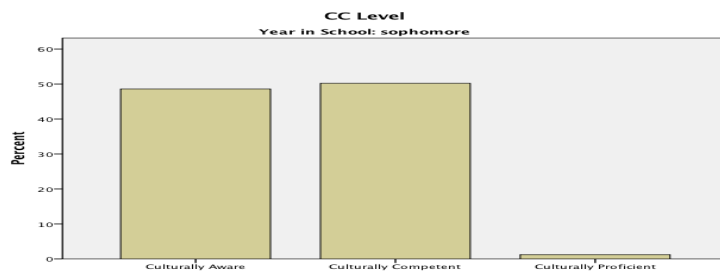


Figure 7: Sophomore Cultural Competence Level (n=245)

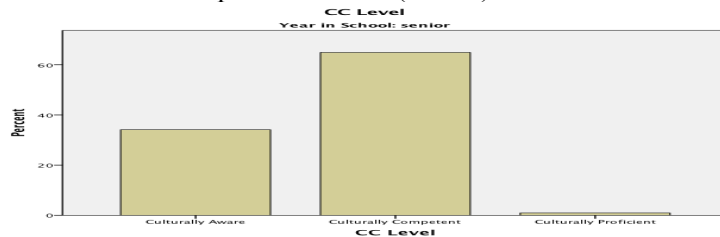


Figure 8: Senior Cultural Competence Level (n=208)

A t-test comparison of the mean cultural competence scores (total score and construct score) by year in school was performed (Table 13). Three of the constructs were statistically significant including cultural awareness, cultural knowledge, and cultural encounter. Furthermore, the overall mean cultural competence score was statistically significant from sophomore to senior year. However, cultural skill and cultural desire were not statistically significant from sophomore to senior year.

Table 13

*Comparison of Mean Cultural Competence Scores by Year in School*

Construct of Model	M	SD	t	p
Cultural Awareness			-3.67**	.000
Sophomore	10.25	0.95		
Senior	10.56	0.84		
Cultural Skill			-1.71	no significance
Sophomore	8.05	1.37		
Senior	8.27	1.38		
Cultural Knowledge			-7.94**	.000
Sophomore	12.61	2.17		
Senior	14.14	1.89		
Cultural Encounter			-3.11*	.002
Sophomore	15.02	1.84		
Senior	14.14	1.89		
Cultural Desire			-.07	no significance
Sophomore	13.68	1.88		
Senior	14.14	1.89		
Overall CC Score			-4.71**	.000
Sophomore	59.63	5.85		
Senior	62.22	5.81		

Note: significance = \* $p < .01$ , \*\* $p < .001$ ; N=453

Another interesting finding was the result of the cultural competence scores for the sophomore and senior nursing students (Table 14). The overall scores showed an increase in the mean cultural competence scores from the sophomores to the seniors at each of the three schools, though 45 Hour Program had only a minimal increase.

Table 14

*Mean Cultural Competence Score By Academic Program and Year in School*

School	<u>Sophomore</u>			<u>Senior</u>		
	M	SD	n	M	SD	n
48 Hour Program	59.61	6.29	90	63.14	5.33	76
45 Hour Program	60.23	6.09	102	60.34	6.14	86
30 Hour Program	58.47	4.30	53	64.17	4.98	46

Note: N=453

The mean scores of the constructs by school and year in school are shown in

Table 15. Of the five constructs, cultural knowledge had the greatest increase from sophomore to senior year.

Table 15

*Mean Cultural Competence Construct Score by Academic Program and Year in School*

	<b>48 Hour Program</b>		<b>45 Hour Program</b>		<b>30 Hour Program</b>	
	Construct Scores		Construct Scores		Construct Scores	
	<u>Sophomore</u>	<u>Senior</u>	<u>Sophomore</u>	<u>Senior</u>	<u>Sophomore</u>	<u>Senior</u>
	(n=90)	(n=76)	(n=102)	(n=86)	(n=53)	(n=46)
Cultural Competence Construct						
Cultural Awareness	10.28	10.64	10.27	10.42	10.16	10.70
Cultural Skills	7.97	8.37	8.11	7.94	8.07	8.72
Cultural Knowledge	12.44	14.33	12.84	13.56	12.45	14.93
Cultural Encounter	15.07	15.87	15.31	15.21	14.38	15.83
Cultural Desire	13.81	13.93	13.70	13.31	13.43	14.00

Note: N=453

The mean scores for 48 Hour Program and 30 Hour Program increased from sophomore to senior year in all five constructs. However, 45 Hour Program's mean scores increased from sophomore to senior year in only two constructs: cultural awareness and cultural knowledge, while actually decreasing in their mean scores in the other three constructs: cultural skill, cultural encounter, and cultural desire.

ANOVA was then used to examine the three schools of nursing and the differences in their mean cultural competence scores in order to determine the amount of variability (Cronk, 2014; Pallant, 2013). ANOVA calculation indicated the cultural competence mean scores were not significantly different between the three schools of nursing:  $F(2, 450) = 1.23, p = .28$  (Table 16). Post-hoc comparisons using Tukey HSD test also indicated that the mean scores for 30 Hour Program ( $M = 61.12, SD = 5.45$ ), 45 Hour Program ( $M = 60.29, SD = 6.10$ ), and 48 Hour Program ( $M = 61.24, SD = 5.97$ ) were not statistically significant (Pallant, 2013).

Table 16

*ANOVA of Mean Cultural Competence Scores by Academic Program*

Cultural Competence Construct	M	SD	F	p
Overall Cultural Competence Score			1.23	.28
30 Hour Program	61.12	5.45		
45 Hour Program	60.29	6.10		
48 Hour Program	61.24	6.10		

Note: N=453

**Specific Aim #3: To investigate the association of self-reported cultural awareness, cultural skill, cultural knowledge, cultural encounter, cultural desire, total cultural**



**competence, year in school, and academic program credits of baccalaureate nursing students.**

The investigation began by using Pearson product-moment correlation coefficient to examine the correlation of the cultural competence constructs, the total cultural competence score, and the year in school; this was done for each individual school.

Table 17

*30 Hour Program Correlation Matrix of Cultural Competence Constructs, Total Cultural Competence Score, and Year in School*

	CA	CK	CS	CE	CD	CC	Year
CA	1						
CK	.25*	1					
CS	.27**	.61**	1				
CE	.41**	.54**	.47**	1			
CD	.28*	.22*	.13	.31**	1		
CC	.54**	.81**	.68**	.80**	.60**	1	
Year	.30**	.58**	.31**	.41**	.16	.53**	1

*Note: Significance \*\*  $p = <.01$ , \* $p = <.05$*

Table 17 illustrates the findings for 30 Hour Program and shows there were medium to large correlations between the four of the constructs, the total cultural competence score, and the year in school suggesting a fairly strong relationship. There appeared to be no correlation between cultural desire and year in school (Pallant, 2013).

For 45 Hour Program, there were medium to large correlations between the five constructs and the total cultural competence score, suggesting a fairly strong relationship.

Table 18

*45 Hour Program Correlation Matrix of Cultural Competence Constructs, Total Cultural Competence Score, and Year in School*

	CA	CK	CS	CE	CD	CC	Year
CA	1						
CK	.24**	1					
CS	.22**	.58**	1				
CE	.37**	.51**	.51**	1			
CD	.44*	.36**	.34	.62**	1		
CC	.54**	.78**	.72**	.84**	.77**	1	
Year	.08	.17*	-.06	-.05	-.10	.01	1

*Note: Significance \*\*  $p < .01$ , \* $p < .05$*

There was also a small correlation between cultural knowledge and year in school. However, there appeared to be no correlation between the other four constructs (cultural awareness, cultural skill, cultural encounter, cultural desire), cultural competence and year in school (Pallant, 2013).

For 48 Hour Program, there were medium to large correlations between the five constructs and the total cultural competence score, suggesting a fairly strong relationship (Table 19). There was a large correlations between cultural desire and year in school, and medium correlations between year in school and cultural knowledge and year in school and cultural encounter. There were small correlations between year in school and cultural awareness and cultural competence. However, there appeared to be no correlation between the cultural skill and year in school (Pallant, 2013).

Table 19

*48 Hour Program Correlation Matrix of Cultural Competence Constructs, Total Cultural Competence Score, and Year in School*

	CA	CK	CS	CE	CD	CC	Year
CA	1						
CK	.31**	1					
CS	.21**	.60**	1				
CE	.30**	.46**	.42**	1			
CD	.43*	.26*	.29**	.59**	1		
CC	.53**	.79**	.72**	.79**	.71**	1	
Year	.21**	.41**	.13	.21**	.66**	.29**	1

*Note: Significance \*\*  $p < .01$ , \*  $p < .05$*

Next, Pearson product-moment correlation coefficient was used to examine the correlation of the cultural competence constructs, the total cultural competence score, year in school, and school (Table 20). There were medium to large correlations between the five constructs and the total cultural competence score, suggesting a fairly strong relationship. There was a medium correlation between cultural knowledge and year in school and cultural desire and year in school. There was also a small correlation between cultural encounter and year in school, and cultural competence and year in school. However, there appears to be no correlation between cultural skill and year in school. (Pallant, 2013).

Table 20

*Correlation Matrix of Cultural Competence Constructs, Total Cultural Competence Score, Year in School, and Academic Program*

	CA	CK	CS	CE	CD	CC	School	Year
CA	1							
CK	.27**	1						
CS	.22**	.59**	1					
CE	.35**	.49**	.46**	1				
CD	.41**	.30**	.28**	.55**	1			
CC	.54**	.79**	.71**	.81**	.71**	1		
School	.01	-.06	-.08	.07	.02	-.01	1	
Year	.17**	.35**	.08	.15**	.01	.22**	.01	1

*Note: Significance \*\*  $p = <.01$*

### Summary

Significant differences in the cultural competence mean scores for those students who had taken a previous course on culture, who had a previous college degree, who had traveled outside of the United States, and who had lived outside of the United States, compared to those students who had not, indicated that students who had exposure to cultural education, including the cultural encounter, may improve in their cultural competence score.

The overall mean cultural competence score was statistically significant from sophomore to senior year at all three of the schools, though 45 Hour Program had only a minimal increase. Furthermore, three of the cultural competence constructs were statistically significant from sophomore to senior year, including cultural awareness,

cultural knowledge, and cultural encounter. Cultural skill and cultural desire did not have statistically significant difference from sophomore to senior year in school.

The mean scores for 48 Hour Program and 30 Hour Program increased from sophomore to senior year in all five constructs, while 45 Hour Program mean scores increased from sophomore to senior year in only two constructs: cultural awareness and cultural knowledge. The 45 Hour Program actually decreased in their mean scores in three of the constructs: cultural skill, cultural encounter, and cultural desire. Of the five cultural constructs of the model, cultural knowledge had the greatest increase from sophomore to senior year.

All three schools had a small statistically significant correlation between year in school and the cultural competence constructs of cultural awareness, cultural encounter, and cultural competence. The association of cultural knowledge and year in school, however, showed a statistically significant medium correlation.

Finally, one-way between groups ANOVA and post-hoc comparisons showed there was not a statistically significant difference in the cultural competence mean scores between the three schools of nursing. There were, however, statistically significant differences from sophomore to senior year in cultural awareness, cultural knowledge, cultural encounter, and the overall cultural competence mean scores. Additionally, there was no statistical significance from sophomore to senior year in cultural skill and cultural desire. The results of this dissertation study indicated that though there is an increase in the cultural awareness, cultural knowledge, cultural encounter, and overall cultural competence mean scores from sophomore to senior year at all three schools, the greatest increase from sophomore to senior year occurred in the cultural knowledge mean score.

## **CHAPTER V**

### **SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS**

#### **Introduction**

The purpose of this descriptive correlational study was to generate data that would address the impact of the cultural encounter on the cultural competence of baccalaureate nursing students. The specific aims of this study were: 1) to determine the frequencies of the demographic and cultural competence measures of baccalaureate nursing students, 2) to determine if there were significant differences in the cultural competence of first semester baccalaureate nursing students and final semester baccalaureate nursing students, and 3) to investigate the association of self-reported cultural awareness, cultural skill, cultural knowledge, cultural encounter, cultural desire, total cultural competence, year in school, and academic program credits of baccalaureate nursing students.

This chapter will contain a brief summary of the overall study, a discussion of the results divided by each specific aim, conclusions based upon the findings, and recommendations for nursing education and future research.

#### **Summary of the Research Study**

The results of this dissertation study indicated statistically significant differences in the overall mean cultural competence scores when comparing nursing students in the sophomore year of study to nursing students in the senior year of study at all three schools. There were statistically significant differences from sophomore to senior year in

cultural awareness, cultural knowledge, cultural encounter, and cultural competence mean scores. There were no statistically significant differences from sophomore to senior year in cultural skill or cultural desire. Additionally, there was not a statistically significant difference in the cultural competence mean scores between the three schools of nursing. When examining the five cultural constructs of the model, cultural knowledge had the greatest increase from sophomore to senior year. Additionally, 48 Hour Program's and 30 Hour Program's mean scores for all five constructs increased from sophomore to senior year. The cultural awareness mean scores and cultural knowledge mean scores increased from sophomore to senior year for 45 Hour Program. However, 45 Hour Program's mean scores decreased in cultural skill, cultural encounter, and cultural desire.

All three schools had small statistically significant correlations between year in school and the cultural competence constructs of cultural awareness ( $r = .17$ ,  $n = 453$ ,  $p < .01$ ), cultural encounter ( $r = .15$ ,  $n = 453$ ,  $p < .01$ ), and cultural competence ( $r = .22$ ,  $n = 453$ ,  $p < .01$ ). Cultural knowledge and year in school, however, showed a statistically significant medium correlation ( $r = .35$ ,  $n = 453$ ,  $p < .01$ ). A one-way between groups analysis of variance showed there was not a statistically significant difference in the cultural competence mean scores between the three schools of nursing:  $F(2, 450) = 1.23$ ,  $p = .28$ .

Research focusing on the importance of culturally competent education for healthcare providers is occurring in greater frequency in nursing. This trend appears to be directly related to the changing demographics and the increasing health disparities among many cultural groups in the U.S. (Betancourt, et al, 2003). Cultural competence

was defined in the literature as an ongoing process without a specific endpoint, and included awareness of cultural similarities and differences, an attitude of sensitivity, non-judgment and respect of cultural differences, and behaviors or actions that demonstrated an adaptation of care based upon different cultural groups (Campinha-Bacote, 1999; Capell, Dean, & Veenstra, 2008; Dayer-Berenson, 2011; Dudas, 2012; Giger, et al., 2007; Hughes & Hood, 2007; Leininger & McFarland, 2002; Purnell, 2002;). According to Campinha-Bacote (1999, 2002), whose model was used as the framework for the study, components of cultural competence include cultural awareness, cultural skill, cultural knowledge, cultural encounter, and cultural desire.

Providing culturally competent care is promoted by nursing regulatory bodies that require nurse educators to teach students cultural care (Calvillo et al., 2009; Chrisman, 2007; Dayer-Berenson, 2011; Hughes & Hoode, 2007). However, preparing nurses to be culturally competent is not easy or clear cut. Most of the research addressing the various educational methodologies utilized in nursing education is qualitative, and none have clearly articulated the most effective method for improving nursing students' cultural competence (Calvillo et al., 2009; Upvall & Bost, 2007). Several studies have recommended fully integrating cultural competence in nursing curriculum, including the provision for the cultural encounter through clinical experiences, service learning or community engagement, and international immersion experiences (Amerson, 2010; Calvillo et al., 2009; Kardong-Edgren et al., 2010; Kardong-Edgren & Campinha-Bacote, 2008; Reyes, Hadley & Davenport, 2013; Upvall & Bost, 2007; Worrell-Carlisle, 2005).



## **Sample and Methods**

The potential sample for this proposed study was undergraduate sophomore and senior baccalaureate nursing students at three Midwest schools of nursing. Cultural encounter opportunities, such as community engagement or designated service days, were introduced during the first semester by each of the three nursing programs. For each successive semester, these encounters were included as part of the clinical hours or academic course requirements. The subjects for the study sample came from a voluntary pool of approximately 252 pre-licensure baccalaureate degree sophomore nursing students and 230 pre-licensure baccalaureate senior nursing students enrolled in the three private, liberal arts nursing programs. From this larger group, all students were given the opportunity to participate, and a total of 245 sophomore and 208 senior nursing students from the three schools of nursing chose to participate. Each student completed a demographic questionnaire and the *Inventory for Assessing the Process of Cultural Competence in Healthcare Providers-Student Version (IAPCC-SV)*. Data was entered into a Statistical Package for the Social Sciences (SPSS) software package for analysis and statistical comparisons using descriptive statistics, Pearson product-moment correlation coefficient, and one-way analysis of variance (ANOVA). The data were analyzed with a significance level of  $\alpha = 0.05$ .

## **Discussion of the Findings**

**Specific Aim #1: To determine the frequencies of the demographic and cultural competence measures of baccalaureate nursing students.**

The first specific aim set out to determine the frequencies of the demographic and cultural competence measures of baccalaureate nursing students. The subjects for the

study sample came from a voluntary pool of approximately 252 pre-licensure baccalaureate degree sophomore nursing students and 230 pre-licensure senior nursing students enrolled in the three private, liberal arts nursing programs. From this larger group, all students were given the opportunity to participate, and a total of 245 sophomore and 208 senior nursing students from the three schools of nursing chose to participate. There was a 93.9% participation rate among the three schools of nursing, presumably due to the researcher being present for the administration of the demographic questionnaire and survey, as well as strong support from the faculty at each of the schools. Of those students who participated, the majority (86.6%) were 18-22 years old and single (84.8%).

The three largest religions represented included Christian (38.9%), Catholic (30.9%), and Lutheran (15.9%). According to the AACN (2014) approximately 11% of nursing students in the United States are male. The gender makeup in this study was predominantly female (91%), with only nine percent of this sample being male. This closely mirrors the population of nursing schools across the country. The ethnic make up of nursing programs across the United States remains predominantly Caucasian, although the number of minority students has steadily increased over the past five years, with approximately 28% diversity in U.S. baccalaureate programs in 2014. In Minnesota, baccalaureate nursing students make up 24.9% of the student population (AACN, 2014). The study sample was considerably lower, with only 8.1% diversity between the three schools of nursing. Other private, liberal arts colleges and universities in the upper Midwest are similar in their demographic makeup, though the three schools in the sample are in the lower 10% on total ethnic diversity compared to colleges and universities

across the U.S. (Best College Diversity, 2015).

Finally 95.1% of students in the sample were pursuing their first college degree; 70% had taken a course on culture during their college years; 79.7% had traveled outside of the U.S.; and 13.2% had lived outside of the United States. Of the 208 senior nursing students, 43.7% participated in some kind of international immersion experience during their nursing program.

Significant differences in the cultural competence mean scores for those students who had taken a previous course on culture ( $p < .001$ ), who had a previous college degree ( $p < .01$ ), who had traveled outside of the United States ( $p < .01$ ), and who had lived outside of the United States ( $p < .001$ ), compared to those students who had not, indicated that students who have exposure to cultural education, including the cultural encounter, may improve in their cultural competence score.

**Specific Aim #2: To determine if there were significant differences in the cultural competence of first semester baccalaureate nursing students and final semester baccalaureate nursing students.**

Developed by Dr. Campinha-Bacote, the cultural competence model used in the study examined the nursing students' process of becoming culturally competent. The Inventory for Assessing the Process of Cultural Competence-Student Version (IAPCC-SV) was used to gather data about the cultural competence measures of baccalaureate nursing students at three schools of nursing in the Midwest. The IAPCC-SV is a four-point likert scale, twenty item inventory score that translates to a cultural competence level: culturally incompetent, culturally aware, culturally competent, and culturally proficient. The majority of sophomores (50.2%) self-reported as culturally competent

followed by culturally aware (48.9%). A greater percentage of seniors self-reported as culturally competent (64.9%) followed by culturally aware (34.1%). This equated to approximately a 14% increase in the self-reported cultural competence from sophomores to seniors. In both groups only 1% fell in the culturally proficient level, and no one was in the culturally incompetent level.

The self-reported mean cultural competence scores increased at all three schools from sophomore year of study to senior year of study. The mean cultural competence score for 48 Hour Program increased from 59.61 to 63.14. The mean cultural competence scores for 30 Hour Program's increased from 58.48 to 64.17. The mean cultural competence scores for 45 Hour Program's showed only a minimal increase from 60.24 to 60.35.

The nursing students of 48 Hour Program had designated clinical hours all five semesters with an organization serving diverse and vulnerable populations through community engagement; the students remained with the same organization throughout the entire nursing program. Additionally, students were exposed to diversity through clinical experiences, simulation, and courses that intentionally integrated culture. The nursing students of 30 Hour Program began their nursing program with a two credit intercultural course, had opportunities for clinical experiences with diverse patients, and had a more integrated curriculum with cultural case studies, simulations and other culturally focused methodologies. During the senior year public health clinical, all of their nursing students participated in some type of international or local immersion experience. The nursing students of 45 Hour Program participated in cultural experiences through clinical placements, were involved every semester in a "community

day” to experience service-learning at an agency of the student’s choice, and had a 45 hour community clinical experience the fall of the senior year.

Most of the constructs mean scores from all three programs showed increases from the sophomore to the senior year, with cultural knowledge having the greatest increase for all three programs. This result is similar to Hsiu-Chin et al’s (2012) study, which showed cultural knowledge and cultural competence increased after a service-learning experience with nursing students. It was also consistent with a study by Amerson (2010) who found students recognized a positive change in their cognitive domain after service learning. Sealey et al (2006), found cultural knowledge to be the most important construct in developing cultural competence.

It is not clear why there was little change in the mean cultural competence scores from sophomores to seniors in the 45 Hour Program. It is possible there was not as much integration in the curriculum, or less opportunity for the cultural encounter, thereby explaining the small difference in cultural competence mean score. The students had only one day per semester designated as a service day and 45 hours during the fall of senior year, while the other schools had more designated days throughout their programs for service or community engagement. The literature presented the importance of consistent and intentional integration of cultural experiences in the curriculum, stating acquisition of cultural competence is more likely to occur through integration throughout the curriculum rather than “piecemeal information” from one single course or readings from a textbook (Calvillo, 2009, p. 138).

Statistically significant differences in the mean scores were found in three constructs (cultural awareness, cultural knowledge, and cultural encounter) and the

overall cultural competence score. The magnitude of the mean differences showed a medium effect for cultural awareness and cultural encounter, with a large effect for cultural knowledge. There was a medium effect for overall cultural competence as well. There was not a statistically significant difference from sophomore to senior year in cultural skill or cultural desire.

All three schools of nursing had designated clinical hours throughout their curricula, with the intention of exposing students to various cultural experiences. Each school also included content about culture in various courses throughout the curriculum, though 30 Hour Program required a course on culture at the start of the nursing program. There did not appear to be a variance in the overall mean cultural competence scores between the three schools of nursing regardless of the educational strategies employed at each school of nursing.

Year in school was statistically significant, indicating that cultural competence of nursing students is associated to the year they are in school, with seniors experiencing an increase in their cultural competence over sophomores. This is exciting information, and mirrors a study by Sargent, Sedlak and Martsof (2005), who found statistically significance difference in the self-reported cultural competence scores from first year nursing students to fourth year nursing students, with the fourth year students significantly more culturally competent. They also found a positive correlation between international travel and increased cultural competence scores, similar to this study. Sargent, Sedlak and Martsof excluded the cultural desire construct and only included four constructs, which is different than this study that utilized all five of Campinha-Bacote's constructs.

**Specific Aim #3: To investigate the association of self-reported cultural awareness, cultural skill, cultural knowledge, cultural encounter, cultural desire, total cultural competence, year in school, and academic program credits of baccalaureate nursing students.**

The third specific aim set out to investigate the association of self-reported cultural awareness, cultural skill, cultural knowledge, cultural encounter, cultural desire, total cultural competence, year in school, and academic program credits of baccalaureate nursing students. The results indicated that though there is an increase in the cultural competence mean construct scores from sophomore to senior year at all three schools, the greatest increase occurred in cultural knowledge.

All three schools had a small statistically significant correlation between year in school and the cultural competence constructs of cultural awareness, cultural encounter, and cultural competence. Cultural knowledge and year in school showed a statistically significant medium correlation, which aligned with the literature that new nurses who have experienced training in culture, specifically cultural encounters, throughout their nursing programs indicated a higher level of confidence and may show improvement in their cultural competence after working with a culturally diverse patient population (Chrisman, 2007; Hsiu-Chin et al., 2012; Hunt & Swiggum, 2007; Long, 2014; Reeves & Fogg, 2006).

### **Limitations**

The inability to control the level of cultural knowledge and skill in the faculty at each school of nursing was also a limitation. This lack of control also had the potential to limit the ability for the researcher to make correct inferences from the data because

IAPCC-SV results could be related to ineffective teaching, or inexperienced faculty who are uneducated about cultural diversity.

Due to time constraints for the study, the two groups were not the same students. Studying the same nursing students from admission into the program through graduation would potentially provide a more expansive picture of cultural competence acquisition.

Additionally, the results may not be generalizable because the sample is more homogenous, from the upper Midwest, and from faith-based schools; students may have been inclined to self-report how they want to be rather than how they truly feel and believe. The principal investigator provided extensive explanation of the study and the importance of truthful self-reporting, reinforcing the anonymity of the inventory scores, in an effort to offset this risk, but had to rely on the truthfulness and candor of the students. Considering these limitations, the researcher came up with the following conclusions and recommendations based upon the findings.

## **Conclusions and Recommendations**

### **Conclusions**

**Literature.** The increasing number of disparities in healthcare requires a change in how educators are teaching nursing students about culture. These disparities, which are linked to limited access to healthcare, limited educational opportunities and resources, poor economic status, and unhealthy living conditions, occur in greater numbers among racial and ethnic minorities who receive substandard quality of care and barriers to access. The challenge is to figure out what is the most effective methodology to lead to acquisition of cultural awareness, cultural skill, cultural knowledge, cultural encounter, and cultural desire, the five constructs that formulate the process of cultural competence



(Campinha-Bacote, 1999, 2002). The literature is clear that single courses, or readings from a textbook, are not sufficient to prepare nurses to competently care for diverse patient populations. It takes integration throughout the curriculum, and includes opportunities for the cultural encounters to improve students' cultural competence (Callen & Lee, 2009; Calvillo et al., 2009; Hughes & Hood, 2007; Williams, 2006). Nursing must move out of classroom and focus on voluntary interactions with a community or client, evidenced in nursing education through cultural encounter experiences (Drevdahl, et al., 2008; Williams, 2006; Zoucha, et al., 2011). The literature states new nurses who have experienced training in culture, specifically cultural encounters, throughout their nursing programs indicated a higher level of confidence in working with a culturally diverse patient population (Hunt & Swiggum, 2007; Long, 2014; Reeves & Fogg, 2006). There are several ways the encounter can occur using experiential learning: clinical experiences, community engagement, service learning experiences, and immersion experiences.

**Schools in the study.** All three schools had small statistically significant correlations between year in school and the cultural competence constructs of cultural awareness, cultural encounter, and cultural competence. Cultural knowledge and year in school, however, showed a statistically significant medium correlation. There was no statistically significant difference from sophomore to senior year in the cultural competence constructs of cultural skill and cultural desire. Lack of significance in cultural skill may be because an increase in cultural knowledge can lead the student to become aware of what they do not know and therefore self-report a lower rating, or related to the tool itself, which had only three of the twenty questions related to cultural

skill. Additionally, cultural desire may not have changed because all of the students are at faith-based schools, with the majority aligning with an organized religion. As a result, their self-reported desire may already be higher and therefore not show significant differences as they progress to senior year.

A one-way between groups analysis of variance showed statistical significance in the cultural knowledge mean scores from sophomore to senior year, as well as the overall cultural competence mean scores from sophomore to senior year. There was not a statistically significant difference in the cultural competence mean scores between the three schools of nursing regardless of the educational strategies employed at each school of nursing. The three schools of nursing in this study all described doing some form of integration of cultural teaching in their curriculum, though none were consistent in their methods. In addition to clinical placements, simulation, case studies, and didactic content, 48 Hour Program had a formalized community engagement experience each semester that was part of the student clinical hours, 30 Hour Program had a required course on culture for all of their students as well as integrated experiences each semester, and 45 Hour Program had one day per semester for service with a culminating 45 hours of community experience in the spring of the senior year. Calvillo et al. (2009) discussed how nursing education across the U.S. is not consistent in how they teach culture and the findings from the three schools in the study support their claim.

There was a statistically significant difference in the cultural competence mean scores from sophomore to senior nursing students in the study, especially for those who had taken a previous course on culture (70% of the sample), who had traveled outside of the U.S. (79.4% of the sample), and who had lived outside of the U.S (13.2% of the

sample). All of these variables provided students exposure to other cultures and therefore suggest a positive correlation with increased cultural competence. Additionally, almost half of the seniors had experienced an international immersion during the nursing program. International immersion opportunities increase student's cultural competence as supported in the literature (Green, et al., 2011; Walsh & DeJoseph, 2003; Wilcox, 2012; Wros, 2010).

### **Recommendations**

**Nursing education.** It is recommended that nursing education programs must intentionally provide immersion experiences for their students. Cultural immersion experiences provide students with valuable knowledge about other cultures, and their own areas of weakness related to cultural competence (Easterby et al., 2012).

International immersion experiences have proven to be a way to positively provide acquisition of cultural competence, but they are limiting because of the financial investment and extensive time away from home (Easterby et al., 2012; Long, 2014). This is a barrier for many students who could benefit from the immersion experience and therefore it is recommended for nursing education programs to provide immersion experiences in more local communities.

Changing curricula to ensure culture is integrated throughout each semester of the nursing program is the primary way that nursing education will successfully improve the acquisition of cultural competence in their nursing students. It must include cumulative educational processes that focus students' gaining awareness, skills, knowledge, encounters, and desire, through intentionally providing exposure to diverse populations in a consistent way across all semesters (Calvillo, et al., 2009; Easterby et al., 2012). As a

result of the study and the findings that the cultural encounter may lead to increased cultural competence scores from sophomore to senior year, it is recommended that nursing faculty intentionally work to create cultural encounter experiences in their nursing curriculum. Including a cultural competence inventory, such as the IAPCC-SV, as a program evaluation tool could provide nursing faculty valuable information about the effectiveness of their curriculum in bringing students along the continuum of cultural competence development.

**Future Research.** Future studies can expand upon this current study by including multiple nursing schools and their curriculum, particularly comparing cultural encounters against other methodologies such as didactic content or simulation experiences, which would shed more light into the impact cultural encounter may or may not have on cultural competence development.

If replicating this study, studying the same students longitudinally, while adding a culturally sensitive ethnocentrism, cultural confidence, or self-efficacy scale, would be more valuable and provide more extensive insight to the impact of the cultural encounter on baccalaureate nursing students (Alpers & Zoucha, 1996; Capell et al., 2008; Jeffreys, 2010). Also, adding focus groups, or an essay question, to elicit qualitative data would provide a deeper understanding into the students' self-reported score.

Plans to study nursing faculty and their cultural competence using Campinha-Bacote's inventory and comparing to their students' cultural competence is an important aspect to include when addressing how nursing education teaches about and provides acquisition of cultural competence.

## Summary

This descriptive correlational, observational study demonstrated the cultural encounter had an impact on the cultural competence of the baccalaureate nursing students in the study, and that the self-reported cultural competence scores increased from sophomore to senior nursing students as a result. While there were limitations to the study, it provides a springboard for other studies to further investigate the unique relationship of the cultural encounter as an educational methodology in undergraduate nursing curriculum.

The results of this study are important for nursing educators as they investigate how to improve their curriculum and help their students acquire the cultural competence that is needed to combat the growing health disparities in the U.S. This study can provide needed data on the impact of the cultural encounter on cultural competence, with the goal of producing culturally competent nurses who will help improve healthcare quality and reduce healthcare disparities for all, particularly the diverse and vulnerable populations. As a result, this study will benefit nursing students, nurse educators, health care organizations and most importantly, patients who are at the receiving end of culturally competent care.

## Appendices

## Appendix A: Demographic Questionnaire





## Appendix B: IRB Approval

May 22, 2014

Amy Witt  
870 Midwest Trail North  
Lake Elmo, MN 55042

Dear Ms. Witt:

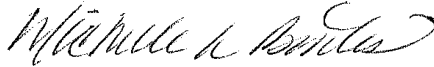
We are pleased to inform you that your project titled, "The Impact of the Cultural Encounter on the Cultural Competence of Baccalaureate Nursing Students" (IRB-201405-469) has been reviewed and approved by the University of North Dakota Institutional Review Board (IRB). The expiration date of this approval is August 1, 2015.

As principal investigator for a study involving human participants, you assume certain responsibilities to the University of North Dakota and the UND IRB. Specifically, any adverse events or departures from the protocol that occur must be reported to the IRB immediately. It is your obligation to inform the IRB in writing if you would like to change aspects of your approved project, prior to implementing such changes.

When your research, including data analysis, is completed, you must submit a Research Project Termination form to the IRB office so your file can be closed. A Termination Form has been enclosed and is also available on the IRB website.

If you have any questions or concerns, please feel free to call me at (701) 777-4279 or e-mail [michelle.bowles@research.und.edu](mailto:michelle.bowles@research.und.edu).

Sincerely,



Michelle L. Bowles, M.P.A., CIP  
IRB Coordinator

MLB/je

Enclosures

## Appendix C-Consent Form

**THE UNIVERSITY OF NORTH DAKOTA  
CONSENT TO PARTICIPATE IN RESEARCH**

**TITLE:** The Impact of the Cultural Encounter on the Cultural Competence of  
Baccalaureate Nursing Students

**PROJECT DIRECTOR:** Amy J. Witt

**PHONE #** 651-503-9650

**DEPARTMENT:** Nursing

You are invited to participate in a study of the impact of the cultural encounter on the cultural competence of baccalaureate nursing students. I hope to learn how the cultural encounter impacts the level of cultural competence from sophomore year to senior year, as well as how the self-reported cultural desire impacts the overall cultural competence score.

You were selected as a possible participant in this study because you are a nursing student who has experienced or will be experiencing these cultural encounters at some point during your nursing program. Approximately 500 students (250 sophomores and 250 seniors) will be invited to participate in this study through the University of North Dakota. The voluntary pool of students will come from three liberal arts university nursing programs in the upper Midwest.

If you decide to participate, your participation in the study will occur one time.. Completion of the questionnaire and the IAPCC-SV will take approximately 15-20 minutes. All students who agree to participate will be given a packet in an envelope with the demographic questionnaire and the *Inventory for Assessing the Process of Cultural Competence-Student Version (IAPCC-SV)*. Code numbers will be specific to each packet and will be assigned to each individual subject. All packets will be sealed by the subject, and then collected, maintaining anonymity of the participant; no identifying information will be on the outside of the packet. The principal investigator will collect data from all completed packets.

The IAPCC-SV is a self-assessment tool, consisting of twenty questions with a four-point Likert scale from strongly agree to strongly disagree. Each of the five constructs of Dr. Campinha-Bacote's model "*The Process of Cultural Competence in the Delivery of Healthcare Services*" is represented: cultural awareness, cultural skill, cultural knowledge, cultural encounter, and cultural desire. Scores from the inventory range from 20-80 points, with higher scores indicating a higher level of competence: cultural incompetence (scores of 20 to 40), cultural awareness (scores 41 to 59), cultural competence (scores of 60 to 74) and cultural proficiency (score of 75 to 80). Demographic data to be obtained includes age, gender, race and ethnicity, and previous cultural encounter experiences outside of what is required in the nursing program. You are free to skip any questions that you would prefer not to answer.

There may be some risks from being in this study. You may worry your grade will be affected by non-participation and therefore complete anonymity will be ensured. The principal investigator will have the data and the course instructor assigning grades will not have access to the participant's survey results. Additionally you may experience frustration that is often experienced when completing surveys. Some questions may be of a sensitive nature, and you may want to answer a certain way out of guilt and therefore

become upset as a result. However, such risks are not viewed as being in excess of “minimal risk”. If, however, you become upset by questions, you may stop at any time or choose not to answer a question.

You may benefit personally from being in this study. The potential benefits of participating in the study include allowing you to examine your own cultural knowledge and how your experiences with other cultures may impact patient outcomes, as well as provide benefit to the patients as the recipients of culturally competent care.

There is also the hope that, in the future, the knowledge gained from this study will benefit nursing students, nurse educators, health care organizations and most importantly, patients who are at the receiving end of culturally competent care.

The records of this study will be kept private to the extent permitted by law. In any report about this study that might be published, you will not be identified. Your study record may be reviewed by Government agencies, the UND Research Development and Compliance office, and the University of North Dakota Institutional Review Board.

Confidentiality will be maintained using code numbers assigned to each of you. The list linking code numbers between the demographic questionnaire and the IAPCC-SV will be kept in a locked file accessible only to the principal investigator. No names will be obtained from any student except for this consent form; names from the consent form will not be linked to the IAPCC-SV or demographic questionnaire. If a report or article is written about this study, the study results will be described in a summarized manner so that you cannot be identified

Your participation is voluntary. You may choose not to participate or you may discontinue your participation at any time without penalty or loss of benefits to which you are otherwise entitled. Your decision whether or not to participate will not affect your current or future relations with the University of North Dakota or your grade or standing in the nursing program.

This research project has been reviewed and approved in accordance with your institution’s Levels of Review for Research with Humans. If you have any questions about the research and/or research participants’ rights or wish to report a research related injury, please call Amy Witt at 651-503-9650 or her advisor Glenda Lindseth at 701-777-4506. You will receive a copy of this form to keep.

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**You are making a decision whether or not to participate. Your signature indicates that you have read the information provided above and have decided to participate. You may withdraw at any time without prejudice after signing this form should you choose to discontinue participation in this study.**

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Signature

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Date

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Signature of Investigator

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Date

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