


August 2016

# The Influence of Transcultural Humility Simulation Development Activities on the Cultural Competence of Baccalaureate Nursing Students

Teresa Hamilton

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THE INFLUENCE OF  
TRANSCULTURAL HUMILITY SIMULATION DEVELOPMENT  
ACTIVITIES ON THE CULTURAL COMPETENCE OF  
BACCALAUREATE NURSING STUDENTS

by

Teresa Hamilton

A Dissertation Submitted in  
Partial Fulfillment of the  
Requirements for the Degree of

Doctor of Philosophy  
in Nursing

at

The University of Wisconsin, Milwaukee

August 2016

## ABSTRACT

### THE INFLUENCE OF TRANSCULTURAL HUMILITY SIMULATION DEVELOPMENT ACTIVITIES ON THE CULTURAL COMPETENCE OF BACCALAUREATE NURSING STUDENTS

by

Teresa Hamilton

The University of Wisconsin, Milwaukee  
Under the Supervision of Professor Karen Morin

One way to mitigate health disparities in the provision of nursing care and impact social justice with vulnerable populations is the development of cultural competence. Although addressed in nursing curricula, gaps in how to best address cultural competence remain. A study was undertaken to determine whether participation in a researcher-designed intervention, entitled Transcultural Humility Simulation development, based on components of Campinha-Bacote's model with an emphasis on "becoming" culturally competent, improved cultural competence in graduating baccalaureate nursing students. A longitudinal, descriptive, quasi-experimental, pretest-posttest comparison group design using embedded mixed methods was used. A total of 57 student participants from one baccalaureate nursing school in the western US were randomly assigned to the intervention group ( $n = 22$ ) or the comparison group ( $n = 35$ ). All participants completed the Inventory for Assessing the Process of Cultural Competence-Student Version before and after the intervention. Intervention participants also completed three written reflection exercises the day of the workshop. A subgroup of participants in the intervention group ( $n = 12$ ) and the comparison group ( $n = 8$ ) were interviewed two to three months after graduation. No statistically significant differences were obtained between groups while treating the pretest as a covariate. Participants who identified as more than one race on the demographic survey

perceived they were more culturally competent than those who identified as one race,  $F$  ratio of  $F(10, 3) = 15.13, p = .02$ . Analysis of participant reflections during the intervention indicated they anticipated incorporating cultural competence into their practice by **shattering preconceived perceptions, constructing innovative insights, improving effective communication, and emerging personal development**. Once in practice, they incorporated cultural competence through **cultivating nursing-person relationships, providing quality nursing care, serving the patient and family, establishing extraordinary communication and approaching care with humility**. This study suggests that bringing attention to cultural competence through participation in Transcultural Humility Simulation Development could raise awareness and foster developmental growth among student participants through transformative learning, epistemic belief change, and double-loop learning.

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Dedicated to Stephan,  
Luke, Lyndon, Lauren  
Mother and Dad,  
And my whole family.

Each of you motivated, inspired, and cheered for me. I am grateful.

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## ACKNOWLEDGEMENTS

I express my deepest appreciation for the chair of my dissertation committee, Dr. Karen Morin, RN, PhD, ANEF, FAAN, for her expertise with my research and writing process, her good humor and motivation, and her mentorship to produce a quality product. I also thank Dr. Regina Smith, Dr. Ann Cook, and Dr. Julia Snethen for elevating this work and asking for more. Thanks very much to Dr. Campinha-Bacote, author of the theoretical framework and for giving permission to use her figures and instrument.

I thank my administration for financial and human resources. Thanks to Dr. Neal McBride for his statistical and research expertise. Thanks very much to Catherine Lundy, my sister, for her editing expertise. I thank my colleagues of the School of Nursing. Each of them encouraged me, wiped my tears and prayed with me. I would like to specifically express how grateful I am to Dr. Susan Drummond, RN, PhD, Associate Dean, who helped every step of the way, from brainstorming to reviewing. Her loving hand is tangible in this work and on my heart!

I especially want to thank all my students and those who agreed to participate in this study. I hope you enjoyed the intervention and I truly appreciate your constructive critique. Spending time with you keeps me excited for the future of our discipline. My desire is that you are aware of your attitudes, knowledgeable about diverse groups, skilled with accurate nursing assessment, diagnosis and treatment, desire to provide care that involves love, sacrifice, social justice, and humility, and while interacting with a culturally and linguistically diverse population, that you and all Registered Nurses choose to be inclusive of religious affiliation, language, physical size, gender, sexual orientation, age, disability, political orientation, socio-economic status, occupational status and country of origin in all nursing care provided!

## **CHAPTER 1**

### **INTRODUCTION**

People who are culturally and linguistically diverse experience discrimination, and structural and clinical barriers that preclude them from fully capitalizing on the advances in health promotion and disease prevention measures that have benefitted Caucasians (AHRQ, 2013; Betancourt, Green, Carillo & Ananeh-Firempong, 2003; Braveman, 2006; CDC, 2014; Healthy People, 2020; National Institutes of Health, 2013; Wilson, 2009). Health disparities among culturally and linguistically diverse populations persist (AHRQ, 2013) in spite of recommendations that curriculum in professional nursing education include developing cultural competence (AACN, 2015). Professional nursing students must be prepared to practice in a multicultural environment and possess the knowledge, skills, and attitudes needed to provide culturally competent care (AACN, 2005).

The racial and ethnic distribution of the United States population includes 62.6% non-Latino Caucasian majority population, 17% reporting Hispanic or Latino ethnicity, 13.2% Black or African American and 5% Asian (U.S. Census Bureau, 2015). In California, the location of this study, 39% of the population is non-Latino Caucasian, 39% of the population is of Hispanic or Latino ethnicity, 6.6% are Black or African American, and 14% are Asian (U.S. Census Bureau, 2015). The U.S. Department of Health and Human Services (2010) reported that over 82% of Registered Nurses are non-Latino Caucasian, demonstrating that the racial and ethnic distribution of the Registered Nurse population is substantially different from that of the US population as a whole. Bates and Spetz (2014) of the California Healthcare Foundation reported that 53% of Registered Nurses are non-Latino Caucasian and that, although nearly 40% of general population is Hispanic, only 7% of Registered Nurses are Hispanic. Global migratory



shifts and a lack of members of diverse populations entering nursing contributes to the growing disparity between minority populations and the dominant ethnic composition of nurses that leads to institutional discrimination (AHRQ, 2013).

The two main attempts to improve access to and quality of care among culturally and linguistically diverse populations are recruitment and retention of culturally and linguistically diverse people in health professions and education to develop cultural competence (AHRQ, 2013; Betancourt et al., 2003). This study addressed the development of cultural competence among baccalaureate nursing students as an intervention to prepare a registered nurse workforce equipped to address health disparities.

The problem of health disparities among culturally and linguistically diverse populations and the challenge of improving the cultural competence of professional nursing students are explicated in this chapter. The theoretical framework of this study, Campinha-Bacote's (2009b) the Process of Cultural Competence in the Delivery of Health Care Services, is explained. Finally, the study purpose, hypotheses and research questions, and significance of the study will be stipulated.

### **Problem Statement**

Health disparities of differences in length and quality of life, and rates and severity of disease and disability exist when comparing the majority non-Latino Caucasian population with culturally and linguistically diverse people (U.S. Department of Health and Human Services Administration, 2015). Patient outcomes and safety among culturally and linguistically diverse people may be adversely affected by the provision of culturally incongruent nursing care (Jeffreys, 2008) resulting in inappropriate nursing care (Ansuya, 2012). Automatically

categorizing an individual as a member of any culturally and linguistically diverse group can trigger unconscious stereotypes and prejudices (Brusin, 2012).

Culturally competent nurses, those who value and acknowledge diversity, may help improve healthcare access and quality (Brusin, 2012; Suh, 2004; Meleis, 1996) through the provision of nursing care in sensitive, creative and meaningful ways (Ansuya, 2012; Loftin, Hartin, Branson & Reyes, 2013). Culturally competent nursing care has been posited as one solution to help culturally and linguistically diverse populations have better health outcomes (Brusin, 2012; Malat, 2013). Nurses, investigators and educators have used intentional, multifaceted approaches to improving cultural competence.

Efforts to address the development of cultural competence have included conceptual aims and concrete methods. Conceptual objectives have included defining the terminology (Selig et al., 2006), measuring cultural awareness (Kardong-Edgren, 2007), increasing cultural knowledge in health related curriculum, and improving healthcare for the culturally diverse population (Lipson & DeSantis, 2007; Meltzoff & Lenssen, 2000). Elective courses have included strategies such as lectures, group discussions, written reports by students, clinical experiences, guest lectures, mentoring and consultation, and educational partnership (Long, 2012). The following examples have been shown to be useful in improving cultural competence among nursing students: teaching the positive value of diversity and the influence of cultural competence on health disparities, raising issues of communication barriers, increasing health literacy and knowledge of common health behaviors (Selig et al., 2006), focusing on the nurse-patient encounter (Lipson & DeSantis, 2007), and encouraging self-reflection (Kozub, 2013).

Fitzgerald et al. (2009), Lee, Litwin, Cheng and Harada (2012), and Musolino et al. (2010) suggested a positive relationship between students who reported to be of race other than

Caucasian and their level of cultural competence. Additionally, nursing students who had international immersion experiences were more culturally competent (Lee et al., 2012; Musolino et al., 2010) and immersion experiences have been shown to positively affect reactions to cultural variation, values, and health beliefs (Lockhart & Resick, 1997). On the other hand, natural experience with diversity may provide opportunities to develop cultural competence, but does not necessarily lead to a reduction in prejudice, does not require purposeful interaction, and does not provide safety and opportunities for reflection and analysis of the highly charged, controversial and emotional experiences connected with similarities and differences in culture (Meltzoff & Lensson, 2000).

Newer teaching modalities such as the use of simulation in education are promising, however, few investigators have reported the use of simulation activities to increase cultural competence (Rutledge et al., 2008; Seckman & Diesel, 2013). Rutledge et al. (2008) employed a computerized virtual patient encounter program and a simulated patient care scenario with a high fidelity mannequin. Rutledge et al. (2008) reported that students were able to experience diverse situations in a controlled environment, learned from the encounter, and developed strategies to overcome weaknesses. The program was well-received by students and faculty (Rutledge et al., 2008), however, there were no data to show that the program was effective. Seckman and Diesel (2013) used simulation activities to prepare students for an immersion experience in a foreign country. Participants reported being anxious, frustrated, and one said her mind went blank (Seckman & Diesel, 2013). Seckman and Diesel (2013) reported participants laughed nervously and talked with each other in front of the simulated patient, behavior that may make a patient uncomfortable.

Lipson and DeSantis (2007) found that faculty members were not consistent in their approach to cultural competence education. Even with inconsistent use, teaching strategies to improve cultural competence have been recommended (Cooper Brathwaite, 2005; Dykes & White, 2011). No single method of teaching has demonstrated acquisition of cultural competence over another, however, standardized patients have not been used in nursing to teach cultural competence (Long, 2012).

In this study, standardized patients were employed with Transcultural Humility Simulation Development activities to improve cultural competence among baccalaureate nursing students. In addition, this study addressed other gaps in the literature. No cultural competence study designs were found that included the use of a comparison group and few investigators measured cultural competence before and after learning activities, such as simulation, with valid and reliable instruments (Meltzoff & Lenssen, 2000; Shen, 2014). In addition, none were found which evaluated an educational intervention while in school and after graduation and none were found that used mixed methods (Calvillo et al., 2009; Fitzgerald et al., 2009).

### **Purpose of the Study**

The purpose of this study was twofold. The first aim was to determine whether participation in the researcher designed intervention, Transcultural Humility Simulation Development, significantly improved cultural competence and its constructs, cultural awareness, cultural knowledge, cultural skill, cultural desire and cultural encounters among graduating baccalaureate nursing students when compared with a group of students who did not participate in the intervention. The second aim was to explore the integration of culturally competent behaviors in nursing care following graduation.

## Theoretical Framework

The theoretical framework of this study was the practice model of cultural competence created by Campinha-Bacote (2009b), the *Process of Cultural Competence in the Delivery of Health Care Services* undergirds this study. This model was selected because there was conceptual congruence between the model, the instrument, nursing education, and the philosophy of the researcher and study location institution. Campinha-Bacote is a nurse and the model integrates intellectual and moral virtues necessary to become a culturally competent healthcare professional through the five constructs of the model (Campinha-Bacote, 2005).

Campinha-Bacote (2007) has employed a definition of culture inclusive of religious affiliation, language, physical size, gender, sexual orientation, age, disability, political orientation, socio-economic status, occupational status and geographical location. The five constructs of the model include cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire (Campinha-Bacote, 2007). Each are defined next.

Cultural *awareness* involves understanding bias, stereotypes, prejudice, and assumptions that are held about individuals who are different than us (Campinha-Bacote, 2007). In order to appreciate the broader social, economic, political and environmental variables that affect the nurse-patient encounter and how situational factors influence health-seeking behaviors, nursing students must self-examine feelings with regard to diversity (Lipson & DeSantis, 2012).

Cultural *knowledge* involves a sound educational base about culturally and linguistically diverse groups (Campinha-Bacote, 1998). To learn “laundry lists” of cultural characteristics is not helpful, but nurses must focus on the integration of health-related beliefs practices and cultural values, disease prevalence, and treatment efficacy (Lavizzo-Mourey, 1996).

Cultural *skill* is the ability to conduct a cultural assessment to obtain relevant information that will allow accurate diagnosis and treatment (Campinha-Bacote, 2007). Culturally and linguistically diverse patients should not be compared to “Eurocentric norms” (Campinha-Bacote, 2007). Rather, assessment ought to be conducted in a holistic manner (Campinha-Bacote, 2007).

Cultural *desire* provides the energy source for one’s journey towards cultural competence (Campinha-Bacote, 2007). Campinha-Bacote (2007) explains that cultural desire involves caring, love, sacrifice, social justice, and humility. She urges that nurses find common ground with patients, sacrifice any prejudice toward differences, and break down systems of practice that perpetuate inequities (Campinha-Bacote, 2007). Humility is revering others’ inherent dignity and worth (Campinha-Bacote, 2007; Parse, 2014). Humility was chosen as a portion of the title of the intervention, Transcultural Humility Simulation Development, as it is consistent with the theoretical framework of the study location institution.

Cultural *encounters* are interactions with culturally and linguistically diverse patients and involve communication (Campinha-Bacote, 2007). Campinha-Bacote (2007) cautions against exaggerated over-generalizations of a culturally and linguistically diverse population based on little or no external validity. Cultural encounters are at the center of Campinha-Bacote’s (2007) model so that while engaging in the cultural encounter, the nurse begins working on other constructs of cultural competence, including cultural awareness, knowledge, skill, and desire resulting in gaining preliminary knowledge about the specific patient (Campinha-Bacote, 2011b).

### **Research Hypotheses**

The research hypotheses for this study were:

1. Posttest measurement of overall cultural competence will differ between students who participate in Transcultural Humility Simulation Development and those who do not participate when controlling for the pretest measurement.

2. Posttest measurement of the construct of **cultural awareness** will differ between students who participate in Transcultural Humility Simulation Development and those who do not participate when controlling for the pretest measurement.

3. Posttest measurement of the construct of **cultural knowledge** will differ between students who participate in Transcultural Humility Simulation Development and those who do not participate when controlling for the pretest measurement.

4. Posttest measurement of the construct of **cultural skill** will differ between students who participate in Transcultural Humility Simulation Development and those who do not participate when controlling for the pretest measurement.

5. Posttest measurement of the construct of **cultural encounters** will differ between students who participate in Transcultural Humility Simulation Development and those who do not participate when controlling for the pretest measurement.

6. Posttest measurement of the construct of **cultural desire** will differ between students who participate in Transcultural Humility Simulation Development and those who do not participate when controlling for the pretest measurement.

### **Research Questions**

The following research questions guided this study to explore the integration of culturally competent behaviors in nursing care following graduation:

1. How do participants who engage in Transcultural Humility Simulation Development activities anticipate they will incorporate cultural competence into nursing practice following the intervention?

2. How will participants who completed Transcultural Humility Simulation Development (THSD) activities and those students that did not participate in THSD activities incorporate cultural competence into nursing practice several months after the intervention?

### **Theoretical and Operational Definitions**

The following theoretical and operational definitions were employed in this study.

**Cultural Competence.** This concept is defined as "The ongoing process in which the healthcare professional continuously strives to achieve the ability and availability to work effectively with the cultural context of the patient (individual, family, community)" (Campinha-Bacote, 2007, p. 15). Cultural competence was measured by the total score on the Inventory for Assessing the Process of Cultural Competence-Student Version. Cultural competence was also evaluated using the following subscales:

**Cultural Awareness** is the deliberate self-examination and in-depth exploration of one's own biases, stereotypes, prejudices, and assumptions about others who are different (Campinha-Bacote, 2011b). Cultural awareness was measured by calculating the total subscale score on items 1, 3, and 15 on the Inventory for Assessing the Process of Cultural Competence-Student Version.

**Cultural Knowledge** is the process of seeking and obtaining education about culturally and ethnically diverse groups (Campinha-Bacote, 2011b). Cultural knowledge was measured by calculating the total subscale score on items 4, 6, 8, 9, and 12 on the Inventory for Assessing the Process of Cultural Competence-Student Version.



**Cultural Skill** is the ability to collect culturally relevant data and accurately perform a physical assessment in a culturally sensitive manner (Campinha-Bacote, 2011b). Cultural skill was measured by calculating the total subscale score on items 7, 17, and 18 on the Inventory for Assessing the Process of Cultural Competence-Student Version measured cultural skill.

**Cultural Encounters** are the mindful interactions that can be face-to-face, telephonic, or indirect encounters via all forms of communications, with the key factor being the person, in this case the nursing student, is available and open (Campinha-Bacote, 2011b). The subscale item cultural encounters was measured by calculating the total subscale score on items 10, 11, 13, 14, and 19 on the Inventory for Assessing the Process of Cultural Competence-Student Version.

**Cultural Desire** is the motivation to “want to” engage in the process of becoming culturally competent; not the “have to” (Campinha-Bacote, 2011b). Cultural desire was measured by calculating the total subscale score on items 2, 5, 16, and 20 on the Inventory for Assessing the Process of Cultural Competence-Student Version.

### **Assumptions of the Study**

1. Student participants will complete all study activities.
2. Student participants have experienced simulation within the nursing program at the study location and will be well prepared to participate in the simulation portion of the study activities.
3. Participants will answer all questions truthfully, thoroughly and to the best of their ability.

## **Significance of the Study**

Health disparities persist and professional nursing students need purposeful education regarding race, ethnicity, and stereotypes in order to improve equal access and the provision of quality healthcare. Through the implementation of Transcultural Humility Simulation Development activities, cultural competence among baccalaureate nursing students may improve leading to a culturally competent Registered Nurse workforce. This phenomenon may positively influence nursing theory, nursing research, nursing education, nursing practice, and nursing policy.

## **Nursing Theory**

The concept of “culturally competent” involves both culture and competence. The meanings of “culturally competent” vary depending on the definition of the term, which theoretical framework is utilized by the researcher, and the concept of emphasis. For example, the researcher may focus more on culture and less on competence or more on competence and less on culture (Shen, 2014). Nursing has borrowed knowledge from other disciplines regarding culturally competent care, mostly from anthropology and sociology. Nurses are expanding nursing’s knowledge base as definitions of culturally competent care are developed, theoretical frameworks are created, and research guided by these theories is initiated. These expectations are consistent with the American Nurses’ Association (ANA) recommendation for nursing to continue to build knowledge addressing the human responses to disease processes, which is the essence of the discipline of nursing (White & Sullivan, 2012). These human responses are best met when nurses understand the cultural context of the individual’s experience.

Nursing theory guided this study. The intervention for the study, Transcultural Humility Simulation Development activities, was specifically designed using Campinha-Bacote’s (2002,

2007b, 2011b) model, The Process of Cultural Competence in the Delivery of Healthcare Services. Therefore, if there is a statistically significant effect on cultural competence, then there will be empirical evidence supporting the theory which will help further nursing knowledge and nursing theory.

### **Nursing Research**

This study used a mixed methods design in order to best understand complexities of cultural competence among baccalaureate nursing students. Investigators have used quantitative or qualitative methods in the past to explicate this phenomenon. Fitzgerald et al. (2009) and Calvillo et al. (2009) recommended the use of mixed methods to study cultural competence interventions among baccalaureate nursing students, however, no studies using mixed methods were found. This study was an initial effort to address this particular gap in the literature.

If results of this study suggest that participating in Transcultural Humility Simulation Development activities helps to develop cultural competence among baccalaureate nursing students in one private university in the western US, then there will be empirical literature supporting its use in further studies and replicating this study with a larger sample.

### **Nursing Practice**

Registered nurses represent the largest number of healthcare professionals in the US with the most direct patient interaction and are therefore perfectly poised to spearhead new and innovative projects for the provision of advocacy for various health issues, and the people affected by these issues (Kaminski, 2014). Hundreds of thousands of people have immigrated to the US, which presents opportunities for nurses to care for people from many races, ethnicities and cultures (Office of Immigration Statistics, 2013). When nurses are culturally competent, patients are more likely to feel accepted, recognized, and empowered to participate fully in their

care, regardless of cultural and linguistic diversity, leading to improved patient outcomes (Brusin, 2012).

If participating in Transcultural Humility Simulation Development activities improves cultural competence among baccalaureate nursing students, then the intervention could be made available to other baccalaureate nursing students. In spite of the progress made regarding cultural competence, disparities persist. Further development of cultural competence and expansion of participation in Transcultural Humility Simulation Development activities may help provide a competitive edge in the marketplace in the private sector as well as in state- and nationally-funded programs (National Center for Cultural Competence, 2014).

### **Nursing Education**

If participation in Transcultural Humility Simulation Development activities leads to the development of cultural competence, then nurse educators will have an economical educational intervention, and an easily implemented strategy to improve cultural competence among professional nursing students. Nursing schools across the US are using simulation to achieve various learning outcomes. Organizations overseeing and accrediting education in nursing include the American Association of Colleges of Nursing (AACN), the National League for Nursing (NLN), and Quality and Safety Education for Nurses (QSEN). Each of these organizations name cultural competence as a priority at this time.

The learning objectives of the intervention were synthesized from Campinha-Bacote's (2011b) model and constructs. The intervention, Transcultural Humility Simulation Development was carefully designed to reflect the researcher's learning objectives, Campinha-Bacote's (2011b) model and constructs, Bloom et al.'s (1956) learning domains, learning as development, and to accommodate various adult learning modalities. Learning activities

employed a multipronged approach with activities to be done alone, in a large group, and in small groups, to account for different learning styles. This approach was “bundled” together to have a greater impact on participants than any activity would alone.

### **Health Policy**

Cultural competence has the potential to increase trust and improve health outcomes among people in culturally and linguistically diverse populations (Brusin, 2012). Previous efforts to reduce health disparities included education about “cultures” of culturally and linguistically diverse populations, however this approach reinforces stereotypes, suggests that racial groups have homogenous cultures, and fails to recognize racism and inequality (Malat, 2013).

Policy is the most underdeveloped area of the many cultural competence efforts within health care systems (National Center for Cultural Competence, 2014). Policy is required in culturally competent care because it sets the mission and vision of organizations, supports the practitioners with resources to implement culturally and linguistically competent practice, measures the success of practitioners and the organization in terms of how it serves diverse families, and institutionalizes cultural and linguistic competence in the organization (National Center for Cultural Competence, 2014). If a solution to health disparities is not discovered and implemented successfully, the problem will be more severe in coming years as global migration continues. The US health care system, which is already strained, faced an influx of patients in 2014, when 32 million Americans and others had health insurance for the first time (Healthy People 2020).

Regulation and organizational oversight in nursing is predicated on patient safety. Organizations urging the provision of culturally competent nursing care as a way to address health disparities include Centers for Disease Control and Prevention (CDC), the Joint

Commission (TJC), the American Nurses' Association (ANA), the Agency for Healthcare Research and Quality (AHRQ), the Institute of Medicine (IOM), the American Association of Family Physicians (AAFP), and the Commonwealth Fund. If participation in Transcultural Humility Simulation Development activities helped to develop cultural competence among baccalaureate nursing students, then these regulating organizations could be informed of new ways to approach the problem.

### **Chapter 1 Summary**

Health disparities among culturally and linguistically diverse populations persist and one approach to resolving these is provision of culturally competent nursing care by preparing professional nursing students to practice in a multicultural environment. Campinha-Bacote's (2009b) model the Process of Cultural Competence in the Delivery of Health Care Services undergirded this study since it was generated from the discipline of nursing and best describes cultural competence to this researcher. The purposes were to determine whether participation in the researcher designed intervention, Transcultural Humility Simulation Development, significantly improved cultural competence and its constructs, cultural awareness, cultural knowledge, cultural skills, cultural encounters and cultural desire and to explore the integration of culturally competent behaviors in the delivery of nursing care.

In Chapter 1, the problem, study purpose, conceptual definitions, and theoretical framework were presented. Research hypotheses and questions, assumptions and implications on nursing theory, research, practice, education, and health policy were also explicated. Subsequent chapters will present the literature review, study methods, results, and discussion.

## **CHAPTER 2**

### **REVIEW OF THE LITERATURE**

This study was undertaken for two reasons. The first was to determine whether participation in Transcultural Humility Simulation Development significantly improved cultural competence and its constructs among graduating baccalaureate nursing students when compared with a group of students who did not participate in the intervention. The second reason for the study was to explore the integration of culturally competent behaviors in nursing care following graduation. Literature on cultural competence including models and the theoretical framework that was used to guide this study, research about cultural competence, information about health disparities among culturally and linguistically diverse populations, and the educational philosophy undergirding nursing education and the use of simulation, all of which lay the foundation for undertaking this study are presented in this chapter.

#### **Procedure**

Multiple sources were employed to conduct the review of literature including a literary search, personal communication with experts in cultural competence, and participation in continuing education relative to the field of study. The following keywords were employed to retrieve peer reviewed research articles limited to the English language spanning from 1999 to 2014: “Campinha-Bacote”, “cultural competence”, “culturally proficient”, “culturally competent”, “culturally incompetent”, “cultural and linguistic”, “racial and ethnic”, “health disparities”, “health care”, “nursing care”, “underserved”, “minority”, and “cultural competence”, “clinical simulation”, “nursing education”, “nursing students”, “simulation development”, “adult learning”, and “cultural competence”. The Boolean operator AND was used to combine keywords in the search. Databases used included Academic Search Premier,

Cumulative Index to Nursing and Allied Health Literature complete (CINAHL complete), Education Research Complete, Health Source: Nursing/Academic Edition, and MEDLINE. Books and other supporting scholarly sources were used and a bibliographic hand search for other pertinent articles was conducted.

### **Cultural Competence**

Cultural competence has been discussed for decades with theorists positing varied definitions and several models. Although it is good to understand the cultural and ethnic norms of diverse groups, studying broad norms for groups may lead to stereotyping and set up an “us versus them” dichotomy (Malat, 2013). It is important for nurses to individually assess each person, and not group the patient with others based on the color of skin or where, geographically, one lived before. Descriptions of concept analyses, models, and theories follow.

#### **Concept Analyses**

Suh (2004) used evolutionary concept analysis to understand the meaning of cultural competence, which she describes as changing continuously over time. She found the attributes of cultural competence to be ability, openness, and flexibility (Suh, 2004). Ability, the first attribute of cultural competence is characterized as the ability to effectively provide care for ethnically diverse populations through resolving cultural disparity between nurses and the patients for whom they provide care (Suh, 2004). The second attribute identified by Suh (2004) is openness, meaning acceptance and respect, and an objective and respectful attitude toward culturally and linguistically diverse people. Flexibility indicates an ability to adapt in different situations and appreciation of other cultures (Suh, 2004).

Suh (2004) also groups antecedents of cultural competence into cognitive, affective, and behavioral domains. These are learning domains, suggesting that cultural competence education



is well-situated in pedagogical theory. Cultural awareness and cultural knowledge are two constructs in Campinha-Bacote's (2009) model, the Process of Cultural Competence in the Delivery of Health Care Services, and are located in Suh's (2004) cognitive domain. The affective domain comprises cultural sensitivity, described as having an accepting attitude towards others and respect for cultural differences (Suh, 2004). Cultural skill is a construct in Campinha-Bacote's (2009) model, the Process of Cultural Competence in the Delivery of Health Care Services describing exceptional assessment of cultural beliefs, values, and practices, and is located in the behavioral domain (Suh, 2004).

In her evolutionary concept analysis building on the work of Suh (2004), Dudas (2012) explored the concept of cultural competence in nursing and nursing education literature. She found three dimensions of cultural competence to be awareness, attitudes and behaviors. She also revealed consistency between nursing and nursing education, suggesting that interventions aimed at nursing students may help promote cultural competence among the nursing workforce in the future (Dudas, 2012).

Awareness, the first dimension of cultural competence is described as knowledge of cultural differences and similarities taking into consideration one's own thoughts, ideas, and biases (Dudas, 2012). Bias may involve racism and stereotyping (Dudas, 2012). The second dimension described by Dudas (2012), attitudes, includes sensitivity toward those of other cultures and the moral and ethical responsibility of nurses. Behavior, the third dimension identified by Dudas (2012), describes using knowledge of the heritage, attitudes, and behavior of patients creatively during provision of care.

In their discussions of cultural competence, Suh (2004) and Dudas (2012) each describe dimensions and attributes helping to define cultural competence of nurses. In examining the

work of Suh (2004) and Dudas (2012), they are similar. All dimensions and attributes including awareness, attitudes, behaviors, ability, openness, and flexibility are integrated into the development of the intervention, Transcultural Humility Simulation Development.

### **Models and Theories**

Models of cultural competence are theoretical or methodological in nature (Shen, 2014). Models either examine the theoretical concept “competence” or focus on “culture” as a methodology (Shen, 2014). Select cultural competence theories and models, including those by Leininger, Giger and Davidhizar, Jeffreys, and Campinha-Bacote are evaluated briefly. Following the theoretical literature review, empirical literature is reviewed and presented to explain the cultural competence model and instrument selected for this study.

**Leininger.** Widely known as the first cultural competence theorist, Leininger (1991, 1995) developed the theory of cultural care diversity and universality, based on her education in nursing and anthropology. In order to provide relevant, meaningful, and congruent nursing care to culturally and linguistically diverse patients, Leininger (1991, 1995) suggested nurses must know the person’s cultural background and that nurses must use culturally-based knowledge to overcome cultural biases, prejudices, and non-therapeutic care practices (Leininger, 2007). She explained that emic knowledge comes directly from cultural informants as natural, local, and indigenous root care values (Leininger, 2007). Etic care knowledge, on the other hand, is a posteriori knowledge derived from outsider views of non-indigenous care values and beliefs such as those of nurses (Leininger, 2007). Leininger (2007) reported that nurses using etic care knowledge experienced cultural clashes, biases, conflicts, and nursing imposition practice, all of which were non-therapeutic to most cultures.

The theory has been used to guide research using the ethnonursing research method that was designed by Leininger (2007) to fit the tenets, purposes, premises and theoretical predictions of the theory and to reduce the use of inappropriate research methods to examine nursing phenomena. The aim of this qualitative research method is to enable the researcher to “enter the world of the participant and tease out the largely unknown and covert care beliefs, values, and lifeways” (Leininger, 2007, p. 11). Results of studies using ethnonursing have aided in demonstrating interrelationships of the concepts in her theory but the method requires extensive, ongoing investigation, is complex and difficult for use with individual patients, has failed to comprehensively discuss the role of nurses and expound on how to improve patient outcomes (Higginbottom et al., 2011; Giger & Davidhizar, 1990; Leininger, 2007; Shen, 2014).

**Giger and Davidhizar.** The Giger and Davidhizar transcultural assessment model (1990) was a response to Leininger’s theory, developed to provide bedside nurses, an easy, systematic approach to evaluating cultural phenomena among cultural groups. Giger and Davidhizar (1990, 2002) posited that each individual is culturally unique. In order to provide nursing care, each person should be assessed according to six phenomena: communication, space, social organization, time, environmental control, and biologic variations (Giger & Davidhizar, 1990, 2002).

Giger and Davidhizar (2002) explained that cultural difference manifests as a time-dependent patterned behavioral response variation both within and across certain races, cultures, and ethnic groups. While culture is predominantly affected by intrinsic and extrinsic environmental stimuli, values, beliefs, norms, and practices shared by those in a cultural group shape identity, thinking, action, and being (Giger, & Davidhizar, 1999).

The transcultural assessment model by Giger and Davidhizar (2002) does not have an associated instrument or research method. Assessing patients in terms of the six phenomena may be time consuming and educating nursing students on cultural characteristics attributed to a group leads to stereotyping and the use of general categories rather than patient centered assessments (Lipson & DeSantis, 2007). Limited time and the use of cognitive testing questions may foster broad stereotypes rather than sensitivity and adaptability of thinking (Calvillo et al., 2009).

**Jeffreys.** Jeffreys' cultural competence and confidence (CCC) model provides a framework for examining the multidimensional factors involved in the process of teaching and learning cultural competence by guiding education strategy, implementation, and evaluation (Jeffreys, 2006, 2010b, 2012). Jeffreys (2010b) was influenced both by Leininger and Bandura, a psychologist, who studied social cognitive theory. According to Jeffreys (2010b), Transcultural self-efficacy (TSE) is one's perception of confidence for learning the specific transcultural skills needed for culturally competent and congruent care despite obstacles and hardships. Within the CCC framework the transcultural self-efficacy pathway traces the proposed influence of TSE on a learner's action, performance, and persistence, for learning tasks associated with the development of cultural competence (Jeffreys, 2010b).

There is an associated instrument, the cultural competence clinical evaluation tool adapted from her transcultural self-efficacy tool, developed by Jeffreys (2010b) that measures cultural competence. Shen (2014) reported that Jeffreys' instrument is psychometrically validated through a series of five studies conducted between 1996 and 2010, however, the instrument was not chosen for this study because it has more than 80 items and a 10-point rating scale making it a complicated and time consuming instrument.

**Campinha-Bacote.** The final model explained is that of Campinha-Bacote (2002, 2007b, 2011b), the Process of Cultural Competence in the Delivery of Healthcare Services. While the previous theoretical perspectives all contribute to the discipline's understanding, Campinha-Bacote's practice model, crafted to assist nurses become culturally competent, was chosen for this study because it is the most cited in the literature found describing cultural competence and there is congruence between the theory and the instrumentation. The model involves the integration of five constructs of cultural competence: cultural awareness, cultural knowledge, cultural skill, cultural encounters and cultural desire. The theorist's assumptions have been illuminated in her model and are discussed next.

**Assumptions.** Campinha-Bacote (2002, 2007b) shared that the first of six assumptions of the model is that cultural competence is a process, journey, dynamic, and involves the paradox of knowing, so that the more one thinks he or she knows, the less he or she knows and the less one thinks he or she knows, the more he or she knows. The second assumption is that the process of cultural competence consists of five inter-related constructs, cultural awareness, cultural knowledge, cultural skill, cultural encounters and cultural desire. Third, the spiritual and pivotal construct of cultural competence is cultural desire. The fourth assumption is there is intra-cultural variation, that is, there is variation within cultural groups as well as across cultural groups. Fifth, there is the assumption that cultural competence is an essential component in rendering effective and culturally responsive care to all patients. The sixth assumption is that all encounters are both cultural and sacred. With these assumptions in mind, the model is discussed next.

**Model.** Campinha-Bacote has generated several iterations of the model for cultural competence over time. The prototype of the current model was developed in 1991 (Figure 1)

**Figure 1. The Process of Cultural Competence in the Delivery of Healthcare Services.**

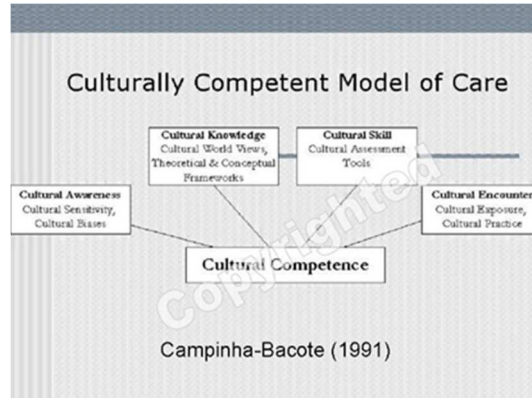


Figure 1. The Process of Cultural Competence in the Delivery of Healthcare Services. Copywritten by Campinha-Bacote, 1991, 1998, 2002, 2010. Reprinted with Permission from Transcultural C.A.R.E. Associates (see Appendix A).

identifying the constructs of cultural awareness, cultural knowledge, cultural skill, and cultural encounters.

Campinha-Bacote (2011b) shared that the constructs were very limited in scope, the model appeared linear and did not depict cultural competence as a process, and the model failed to portray the interdependency among the constructs. Furthermore, cultural desire, a fifth construct, was added in 1998, so Campinha-Bacote (2011b) updated the pictorial representation to reflect the interdependent relationship between the constructs and expanded the definitions of the constructs. The pictorial representation was modified to reflect the additional construct (Figure 2) and the model was renamed to emphasize that cultural competence is a process (Campinha-Bacote, 2011b).

The pictorial model was again revised in 2002 (Figure 3) to represent a volcano to illustrate that when cultural desire erupts, it gives forth the desire to enter into the process of becoming culturally competent by genuinely pursuing cultural encounters, learning cultural

**Figure 2. The Process of Cultural Competence in the Delivery of Healthcare Services.**



Figure 2. The Process of Cultural Competence in the Delivery of Healthcare Services. Copywrited by Campinha-Bacote, 1991, 1998, 2002, 2010. Reprinted with Permission from Transcultural C.A.R.E. Associates (see Appendix A).

knowledge through education and experience, conducting culturally sensitive assessments, and being humble to the process of cultural awareness (Campinha-Bacote, 2002).

**Figure 3. The Process of Cultural Competence in the Delivery of Healthcare Services.**



Figure 3. The Process of Cultural Competence in the Delivery of Healthcare Services. Copywrited by Campinha-Bacote, 1991, 1998, 2002, 2010. Reprinted with Permission from Transcultural C.A.R.E. Associates (see Appendix A).

The Process of Cultural Competence in the Delivery of Healthcare Services model was amended in 2010 based on Campinha-Bacote’s (2011b) desire to understand empirical findings

that indicated that the focus and center of cultural competence is the construct of cultural encounters rather than cultural desire (Figure 4).

Campinha-Bacote (2011b) explained the central focus of the discipline of nursing is a caring presence found in the nurse-person relationship. Beginning with cultural encounters, which are mindful nurse-person interactions, the nurse approaches the patient in an “open” manner (Campinha-Bacote, 2011b, p. 44). The latest version of the model is discussed here.

Figure 4. The Process of Cultural Competence in the Delivery of Healthcare Services.

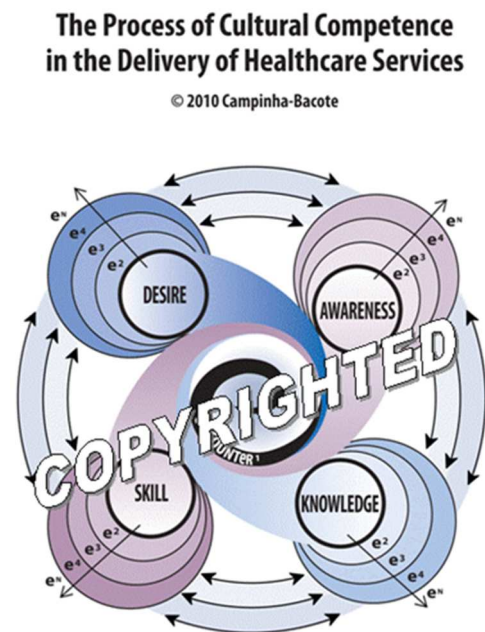


Figure 4. The Process of Cultural Competence in the Delivery of Healthcare Services. Copywrited by Campinha-Bacote, 1991, 1998, 2002, 2010. Reprinted with Permission from Transcultural C.A.R.E. Associates (see Appendix A).

The model explicates that while engaging in the cultural encounter, the nurse begins working on other constructs of cultural competence, including cultural awareness, knowledge, skill, and desire resulting in gaining preliminary knowledge about the specific patient (Campinha-Bacote, 2011b). Engaging in additional cultural encounters, more knowledge acquired will allow the nurse to validate, refine, or modify existing beliefs to prevent



stereotyping (Campinha-Bacote, 2011b). All constructs of the model are interrelated, indicated by the bidirectional arrows so that encounters will give rise to issues related to knowledge, awareness, skill, and desire (Campinha-Bacote, 2011b). According to Campinha-Bacote (2011b), every patient has values, beliefs, and practices that influence health. In order to render culturally competent care, every patient needs a cultural assessment, not just those who “look like” they need one (Campinha-Bacote, 2011b, p. 46).

***Constructs.*** There are five constructs in Campinha-Bacote’s (2010) Process of Cultural Competence in the Delivery of Healthcare Services. The five constructs are cultural awareness, knowledge, skills, encounters and desire. Each construct is described below, followed by a description of how the constructs were interrelated in this study.

***Cultural Awareness.*** According to Campinha-Bacote (1999, 2011a, 2011b), cultural awareness is the deliberate, cognitive process by in which nurses become sensitive to the similarities and differences between their own values, beliefs, and practices and those of people from other cultures. It involves recognition of one’s own biases, prejudices, and assumptions about individuals who are different (Campinha-Bacote, 2002). A stereotype is a simplified, prejudicial idea of others, and may be subconscious (Venes, 2014). Nurses must be aware of documented racism in healthcare delivery. Racial and ethnic minorities in the US receive lower quality health care than non-Latino Caucasians, even when accounting for insurance status, income, age, and severity of a health condition (Campinha-Bacote, 2005, 2011a).

***Cultural Knowledge.*** Cultural knowledge is the process of seeking and obtaining a sound educational foundation concerning the various world views of different cultures as well as the knowledge of ethnic and biological influences on health-related beliefs and cultural values, disease incidence and prevalence, and treatment efficacy (Campinha-Bacote, 1999, 2002,

2011b). Health-related beliefs and cultural values are best understood through knowledge of the worldview that explains how illness is interpreted and how it guides thinking, doing, and being (Campinha-Bacote, 2002). There are four stages that a nurse goes through when seeking cultural knowledge: unconscious incompetence, or not being aware that one is lacking cultural knowledge; conscious incompetence, recognition that cultural differences exist; conscious competence, the intentional act of learning about the patient's culture, verifying generalizations, and providing culturally responsive nursing interventions; and unconscious competence, the ability of the nurse to spontaneously provide culturally competent care (Campinha-Bacote, 1998, 2003).

*Cultural Skill.* Cultural skill involves excellent assessment abilities and the rendering of holistic and appropriate nursing care based on mutually agreed upon goals (Campinha-Bacote, 1998, 2011a, 2011b). As nurses gather information, nurses must remember how ethnically diverse patients' physical, biological, and physiological variations influence accurate, appropriate discernment, wisdom, and judgment (1998, 2002, 2005).

*Cultural Encounter.* Cultural encounter involves engaging directly in experiences with patients from diverse backgrounds and seeking out these experiences (Campinha-Bacote, 1999, 2002, 2003, 2009, 2011a). This may be uncomfortable at times, however, it is extremely important in order to refine one's existing beliefs or even biases regarding a cultural group and prevent stereotyping (Campinha-Bacote, 1999). By participating in cultural encounters, the individuals most likely do not represent the stated beliefs, values, practices of any specific cultural group (Campinha-Bacote, 1999). The nurse in cultural encounters must be attentive and fully present with the patient and emotions the nurse has can result in the understanding, temperance, and compassion (Campinha-Bacote, 2005).

By developing the virtues of understanding, temperance, and compassion, patients encountered feel valued, respected, and supported (Campinha-Bacote, 2011a). The goals of cultural encounters are to continuously interact with patients from culturally diverse backgrounds in order to validate, refine, or modify existing values, beliefs, and practices about a cultural group and to develop cultural desire, awareness, skill, and knowledge (Campinha-Bacote, 2011b, p. 43). Effective cultural encounters should consist of mindful intercultural communications, not mindless stereotyping (Campinha-Bacote, 2011b), and the beginning point of the process of becoming culturally competent.

*Cultural Desire.* Cultural desire is the genuine passion of the nurse to want to, rather than have to, engage in the process of becoming culturally aware, culturally knowledgeable, culturally skillful, and participate in cultural encounters (Campinha-Bacote, 1999, 2002, 2003b, 2005, 2011a, 2011b). Cultural desire involves the concept of love and caring for others, regardless of their cultural values, beliefs, customs, and practices, in a manner that allows nurses to examine situations in light of racism and patients to feel valued (1999, 2002, 2003a, 2003b). The willingness to learn should be considered life-long and has been called cultural humility, which is a quality of seeing the greatness in others and coming to the realization of the dignity and worth of others (Campinha-Bacote, 2003b, 2005, 2009). The building blocks for cultural desire are caring and love, sacrifice, social justice, humility, compassion, and sacred encounters (Campinha-Bacote, 2008).

*Interrelationship of constructs.* In this study, culture competence was conceptualized the same as Campinha-Bacote (2007), as "the ongoing process in which the healthcare professional continuously strives to achieve the ability and availability to work effectively with the cultural context of the patient (individual, family, community)" (p. 15). The interrelationship of

constructs involves integration of cultural desire, cultural awareness, cultural knowledge, cultural skill, and cultural encounters and requires nurses to see themselves as becoming culturally competent rather than being culturally competent.

For the nursing student, educators spark nursing students' desire through encounters with people from other cultures specifically designed to increase knowledge and awareness through culturally sensitive assessments. This is the link between the five constructs that supported the intervention, Transcultural Humility Simulation Development, in this study. Next, empirical literature using the instruments designed by Campinha-Bacote is discussed.

*Empirical Literature Using Campinha-Bacote's Theory.* Several researchers have used Campinha-Bacote's (2007) model as the theoretical framework to assess cultural competence (Giles, 2008; Kardong-Edgren, 2007; Kardong-Edgren et al., 2010) and some investigators have used Campinha-Bacote's instruments without an identified theoretical framework. Campinha-Bacote's original instrument, the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals (IAPCC) was developed in 1997 and was designed to measure cultural competence in transcultural nursing settings. This original instrument measured four constructs of cultural competence-cultural awareness, cultural knowledge, cultural skills and cultural encounters. When the fifth construct of the model was added, Campinha-Bacote added five additional questions to measure the fifth construct of cultural desire and the instrument was renamed Inventory for Assessing the Process of Cultural Competence-Revised (IAPCC-R) (Campinha-Bacote, 2015). What follows is a discussion and use of empirical findings using the Inventory for Assessing the Process of Cultural Competence-Revised.

*Research with the Inventory for Assessing the Process of Cultural Competence-Revised.* Campinha-Bacote (2015) developed the Inventory for Assessing the Process of Cultural

Competence among Healthcare Professionals-Revised in 2002 to measure the level of cultural competence among healthcare professionals and graduate students in the allied health fields, to correspond with the updated model adding cultural desire. The range of scores on the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Revised is 25-100 (Campinha-Bacote, 2007). 91 to 100 indicates “culturally proficient”, 75 to 90 indicates “culturally competent”, 51 to 74 is “culturally aware” and 25 to 50 is “culturally incompetent” (Campinha-Bacote, 2007). The Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Revised has been used extensively in research with a variety of populations including nurses, nursing students, nursing faculty, and allied health professionals and students (Cooper Brathwaite, 2005; Grady, 2014; Haack & Phillips, 2012; Kardong-Edgren, 2007; Kardong-Edgren & Campinha-Bacote, 2008; Kardong-Edgren et al., 2010; Lee et al., 2012; Mahabeer, 2009; Musolino et al., 2009; Musolino et al., 2010; Noble, Nuszen, Rom & Noble, 2014; Poirier et al., 2009; Salman et al., 2007; Riley, Smyer & York, 2012).

Cooper Brathwaite (2005) evaluated a course designed to introduce Campinha-Bacote’s model and transcultural terms to Public Health Registered Nurses. The course was given during a two-hour period in five consecutive weeks. Her study used a one-group repeated measures design and the Inventory for Assessing the Process of Cultural Competence Among Healthcare Professionals-Revised to measure cultural awareness, cultural knowledge, cultural skills, cultural encounters and cultural desire (Cooper Braithwaite, 2005). Data were analyzed with repeated measures-analysis of variance across four points of time, and the group’s mean scores differed over time. Statistically significant differences were present between the first and fourth times being statistically significant, suggesting her education program was useful in improving cultural competence (Cooper Braithwaite, 2005). Cooper Braithwaite (2005) reported the cultural

competence course was designed based on Campinha-Bacote's (2007) model using pedagogical approach of Kolb's adult learning theory and did increase participant's cultural competence.

Kardong-Edgren (2007) completed a randomized, stratified, descriptive, cross-sectional study using the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Revised with nursing faculty in baccalaureate programs. She compared faculty of schools in states with most immigrants ( $N=87$ ) with faculty of schools in states with least immigrants ( $N=83$ ) (Kardong-Edgren, 2007). Mean cultural competence score for all faculty ( $N=170$ ) was 75.72 (range 25-100) indicating culturally competent, mean cultural competence for faculty from states with most immigrants was 77.09, and mean cultural competence for faculty from states with least immigrants was 74.28 (Kardong-Edgren, 2007). Although a convenience sample was used so those who are more culturally competent may have responded whereas those who were not may have chosen not to, findings suggest faculty who teach in states with more immigrants are more culturally competent. Kardong-Edgren (2007) recommends further research using simulated cultural encounters with patients.

Kardong-Edgren and Campinha-Bacote (2008) used the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Revised to measure the cultural competence of graduating students from four schools of nursing ( $N=218$ ). No significant difference between the four nursing programs was found (mean 70.97, range 25-100, Cronbach's alpha 0.81). Kardong-Edgren and Campinha-Bacote (2008) acknowledge that with a self-report tool, students are not actually challenged to demonstrate cultural competence in a meaningful way.

In her study of Canadian hemodialysis nurses using a self-report instrument, ( $N=58$ ), Mahabeer (2009) found that the nurses were not knowledgeable in ethnic pharmacology, or specific diseases and biologic variations among different ethnic groups. Mahabeer (2009), using the

Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Revised, found the overall mean score of nurses was 65.5 (range 25-100) indicating “culturally aware”. These findings suggest the nurses in the sample need more education to develop cultural knowledge (Mahabeer, 2009).

Poirier et al. (2009) used the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Revised with pharmacy students ( $N=72$ ) to measure cultural competence before and after a course that was not described. The pretest mean score was 67.2 (range 25-100) and the posttest mean score was 80.2 (Poirier et al., 2009). The investigators reported that cultural competence content was “out of the students’ comfort zone” and that students “became aware of personal biases and reported increased knowledge of several sociocultural groups” (Poirier et al., 2009, p. 86).

Musolino et al. (2009) studied interdisciplinary participants ( $N=311$ ), and reported that some constructs of cultural competence improved after an educational intervention. The intervention was not described, however, Musolino et al. (2009) reported an improvement in cultural awareness, cultural knowledge, and cultural skills. In a later study, Musolino et al. (2010) investigated interdisciplinary professionals ( $N=596$ ) before and after an elective, noncredit cultural competence course. The pretest mean score was 69.4 (range 25-100) and the posttest mean was 73.4 with diverse participants scoring significantly higher than Caucasian participants (Musolino et al., 2010). The investigators reported that participants do not have sufficient cultural encounters in direct patient care due to geographic barriers (Musolino et al., 2010).

Kardong-Edgren et al. (2010) used the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Revised to compare the cultural competence among graduating students from six different BSN programs ( $N=515$ ) to determine if any one approach to

the education of cultural competence was more effective than another. The entire sample scored in the “cultural aware” range suggesting no one educational approach was better than another (Kardong-Edgren et al., 2010).

Using a cross-sectional exploratory descriptive design, Riley et al. (2012) used the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Revised to assess cultural competence among a convenience sample of BSN completion students ( $N=53$ ). Upon completion of their program, the overall mean was 75.3 (range 25-100) and over 50% were “culturally competent” based on the instrument (Riley et al., 2012). The students were associate degree prepared Registered Nurses so their previous content, practice experiences with different cultural groups, or continuing education may have accounted for the results (Riley et al., 2012).

Haack and Phillips (2012) used the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Revised and performed a one-time measurement following four years of integrated cultural competence education and compared results with a one-time measurement following regular programming. Haack and Phillips (2002) reported learning activities in the integrated cultural competence education group included lecture on key terms, health disparities, and strategies for communicating with culturally diverse patients and 40 hours of service learning diversity in free clinics or community health centers. The sample included doctor of pharmacy students, half of whom ( $N=67$ ) received the intervention and half ( $N=68$ ) who received regular programming (Haack & Phillips, 2012). In comparing the means between groups, cultural competence mean in the control group was 69.7 (range 25-100) and the mean in the intervention group was 71.5 ( $p$  0.114). When comparing the means among the constructs, two of the five constructs showed a statistically significant improvement, cultural encounters (control mean 12.7 and intervention mean 13.3 with a range of 0-20 and  $p$  0.048) and cultural skills (control mean 12.9



and intervention mean 13.8 with a range of 0-20 and  $p$  0.048) (Haack & Phillips, 2012). Since Haack and Phillips (2012) demonstrated improvement in cultural competence, even more needs to be done to improve cultural competence.

Haack and Phillips (2012) admitted to a lack of cultural diversity in student population and that it is unknown how the average student may have improved over the course of the curriculum, but the between group comparison design showed improvement in cultural competence. Their findings suggest that integrated cultural competence education may improve cultural competence among doctor of pharmacy students but Haack and Phillips (2012) recommend tracking individual progress in subsequent studies.

Lee et al. (2012) compared social responsibility and cultural competence among physical therapists ( $N=55$ ) grouped by those who had international experiences and those that had not. One instrument used was the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Revised. Inspection of findings revealed that those without international experiences' mean score was 75.47 (range 25-100) and those with international experience had a mean score of 80.09, suggesting those with international experiences are more culturally competent (Lee et al., 2012).

Grady (2014) completed a pilot pretest and posttest single group design implementing a 90-minute education program on key Latino cultural considerations using the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Revised to measure the constructs of cultural competence among 15 home care nurses. Although the sample was small ( $n=15$ ), no demographic information was reported, and there was no discussion of learning activities, Grady (2014) did report an improvement of mean scores on three of the five constructs of cultural competence, cultural awareness, cultural knowledge, and cultural skill. Scores on the

instrument improved with 20% of pretest sample scoring in the culturally competent range and 47% of posttest sample scoring in the culturally competent range (Grady, 2014).

Using a quasi-experimental pretest-posttest control group design, Noble et al. (2014) studied a convenience sample of 146 first year nursing students in Israel. The intervention was a two hour lecture followed by a group project designed to improve cultural competence. The intervention group ( $N=58$ ) mean increased significantly from 68 (range 25-100) to 73 while the control group had no significant increase (Noble et al., 2014).

This review of empirical literature using the Inventory for Assessing the Process of Cultural Competence-Revised is reported for two reasons. First, this was done to convey the validity and reliability of the instrument because Campinha-Bacote's newer instrument, the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Student Version, has not been used as extensively and therefore statistical implications may not be as robust. Second, findings of these studies have been incorporated into the design of Transcultural Humility Simulation Development activities. Useful recommendations from these investigators include tracking the individual progress of participants (Haack & Phillips, 2012), using simulated cultural patient encounters (Kardong-Edgren, 2007), and realizing culturally and linguistically diverse participants and those with international immersion experiences were more culturally competent so these were treated as confounding variables (Lee et al., 2012; Musolino et al., 2010).

*Research with the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Student Version.* Campinha-Bacote (2007) reported that to yield higher reliability, the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Revised was modified in response to Vito, Roszkowski and Wieland's (2005) research involving student nurses ( $N=695$ ) to the Inventory for Assessing the Process of Cultural

Competence among Professionals-Student Version. The Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Student Version measures the five cultural constructs and uses a four-point Likert scale, indicating strongly agree, agree, disagree, and strongly disagree (Campinha-Bacote, 2007). The range is 20 to 80 with scores indicating culturally incompetent (20 to 40), culturally aware (41 to 59), culturally competent (60 to 74) and culturally proficient (75 to 80). Research using the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Student Version will be presented next.

Fitzgerald, Cronin and Campinha-Bacote (2009) evaluated the psychometric properties for the Inventory for Assessing the Process of Cultural Competence-Student Version. A convenience sample ( $N=90$ ) of undergraduate nursing students were administered the instrument (Fitzgerald et al., 2009). Student mean was 59.79 (range 20-80) (Fitzgerald et al., 2009). Internal consistency reliability for the overall scale was .78 (Fitzgerald et al., 2009). Fitzgerald et al. (2009) reported Cronbach's alphas for the instrument's five subscales ranged from .19 to .68, indicating low levels of internal consistency so an alternative conceptual approach to subscale structure was considered reflecting interdependence of the constructs with new coefficient alphas equaling .74 and .67. No significant differences were noted in cultural competence between traditional and second-degree students (Fitzgerald et al., 2009). Finally, Fitzgerald et al. (2009) recommend the use of mixed methods, standardized patients, and simulation to study the phenomenon.

Escallier, Fullerton and Messina (2011) investigated the development of cultural competence through faculty and student self-assessment, student reports of the curriculum, expert review of the curriculum, and patient perceptions at one university. The Inventory for Assessing the Process of Cultural Competence-Student Version was used to understand the student view of the curriculum, however, no description of the sample and no psychometric properties were reported

(Escallier et al., 2011). A multifaceted education approach was reported and evaluation of patient perceptions of cultural competence among students (Escallier et al., 2011) lent strength to the design.

Durand, Abel, Silva and Desilets (2012) studied pharmacy students ( $N=12$ ) in a ten-week elective course on cultural competence. The design was pretest-posttest with all participants receiving the intervention (Durand et al., 2012). Durand et al. (2012) reported the pretest mean was 57.1 (range 20-80) and the posttest mean was 68 for a statistically significant increase. Four of the five constructs of cultural competence improved, however, there was no change in the cultural skill construct (Durand et al., 2012).

Hawala-Druy and Hill (2012) used a qualitative and quantitative pre-test post-test one group design using the Inventory for Assessing the Process of Cultural Competence-Student Version with voluntary interprofessional students ( $N=106$ ) and developed an elective semester-long experimental course on ethnic-racial identity, social determinants, homeless and mentally ill populations, deaf culture, and health traditions of patients and their families. The pre intervention mean was 60.8 (range 20-80) and the post intervention mean was 70.6, a statistically significant improvement in cultural competence (Hawala-Druy & Hill, 2012). Results were also stratified based on gender and race and students who were “other” ethnicities, other than non-Latino Caucasians, showed the highest end of study score (mean 74) (Hawala-Druy & Hill, 2012).

The Inventory for Assessing the Process of Cultural Competence-Student Version was used with doctor of physical therapy students ( $N=153$ ) in a pretest and posttest study designed to determine the minimal detectable change (MDC) for the instrument (Palombaro & Lattanzi, 2012). The MDC is the smallest amount of change in scores necessary to conclude that the change was not due to error (Palombaro & Lattanzi, 2012). The investigators reported a MDC of

8.57 points (range 20-80). Palomboro and Lattanzi (2012) report an internal consistency of .86, similar to the previously reported alpha coefficient of .74 (Fitzgerald et al., 2009).

Finally, Werremeyer and Skoy (2012) studied cultural competence using the Inventory for Assessing the Process of Cultural Competence-Student Version among advanced pharmacy students pre- and post- a short term medical mission trip ( $N=4$ ). Although the sample was very small, the average score pre-mission was 60.8 (range 20-80) and post-mission was 65.5, suggesting a short intensive trip overseas may increase the constructs of cultural competence (Werremeyer & Skoy, 2012). While this trip may have provided a “rare opportunity to integrate lecture and cultural concepts in a meaningful way” (Werremeyer & Skoy, 2012), going to other countries is very expensive and not something every student may be able to participate in.

Investigators who have used the Inventory for Assessing the Process of Cultural Competence among Healthcare Providers -Student Version with nursing students and students of allied health have made the following recommendations for further study. Similar to findings of investigators using the Inventory for Assessing the Process of Cultural Competence-Revised, there seems to be a positive relationship between students’ race and their level of cultural competence (Fitzgerald et al., 2009) so this was a confounding variable in this study. Second, because the provision of culturally competent care for culturally and linguistically diverse individuals is complex, investigators have recommended the use of mixed methods to capture breadth (Fitzgerald et al., 2009) and mixed methods were used in this study. Finally, these findings suggest that further research using standardized patients and simulation is warranted (Fitzgerald et al., 2009) and this study used standardized patients and simulation.

## **Summary of Literature on Cultural Competence**

In this section, models of cultural competence were examined, including evolutionary concept analyses of cultural competence by Suh (2004) and Dudas (2012), Leininger's (1991, 1995) theory of cultural care diversity and universality, Giger and Davidhizar's (1990) transcultural assessment model, and Jeffreys' (2006) cultural competence and confidence model. Further, Campinha-Bacote's (2011b) practice model, *The Process of Cultural Competence in the Delivery of Healthcare Services*, which has been chosen to undergird this investigation, was explained. The empirical findings using Campinha-Bacote's instruments suggest that the *Inventory for Assessing the Process of Cultural Competence-Student Version* is a valid and reliable instrument to measure cultural competence with nursing students and students of allied health. The *Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Student Version* was selected as the primary instrument for quantitative data collection and analysis in this study.

## **Health Disparities**

Background knowledge on health disparities is crucial in order to provide quality nursing care and improved patient outcomes among racial and ethnic minorities (Flaskerud, 2007; Mahabeer, 2009). Disparities in health include differences in length and quality of life, and severity of disease and disability when comparing the majority non-Latino Caucasian population with culturally and linguistically diverse people (U.S. Department of Health and Human Services Administration, 2015). Health disparities are caused by both societal factors and biologic factors (Betancourt et al., 2003) but the two main contributors for health disparities are lack of access to care and inadequate care (Flaskerud, 2007). The primary public health goal of the U.S.

Department of Health and Human Services Administration (2015) is achieving health equity and improving health access and quality outcomes among the disparate US population.

In the latest available data from the Centers for Disease Control and Prevention and the United States Department of Health and Human Services, almost 17% of the US population is uninsured, and of those, over 80% are culturally and linguistically diverse (National Center for Health Statistics, 2014). Li and Cai (2014) found disparities persisted after multivariable adjustments. In fact, even when insurance status, income, age, and severity of conditions are comparable, culturally and linguistically diverse population receive lower quality healthcare than do non-Latino Caucasians (Smedley, Stith & Nelson, 2002).

Culturally and linguistically diverse populations are more likely to report multiple chronic conditions and are almost twice as likely to have Diabetes Mellitus as non-Latino Caucasians (National Center for Health Statistics, 2014). Culturally and linguistically diverse populations use Emergency Department services as primary care, and report fair to poor health (National Center for Health Statistics, 2014). People who are culturally and linguistically diverse are less likely to be vaccinated (National Center for Health Statistics, 2014).

Disparities most reported are among African-Americans (Betancourt et al., 2003). Specifically, twice as many African-Americans gave birth to low birth weight infants and experienced infant mortality than Caucasians and there are nearly 10% more deaths among African-Americans than Caucasians for many reported disease processes including cerebrovascular disease, neoplasm, and Human Immunodeficiency Virus (National Center for Health Statistics, 2014). More American Indians and Alaska Natives died from motor vehicle-related injuries than Caucasians (National Center for Health Statistics, 2014). Finally, there were twice as many American Indian and Alaska Native and Latino deaths and seven times as many

African-American deaths than Whites because of homicide (National Center for Health Statistics, 2014).

Brusin (2012), Harris (2011), Harvey and O'Brien (2011), Matthews-Juarez and Juarez (2011), and Padela and Punekar (2008) implicate language barriers as contributing to health disparities. Without excellent communication in the best of circumstances, poor health outcomes are a potential. Differences among culturally and linguistically diverse populations include how health and illness is viewed, trust in healthcare and providers, and loci of control (Bruisin, 2012; Harris, 2011; Matthews-Juarez & Juarez, 2011; Padela & Punekar, 2008). Therefore, not only are there differences in measures to treat people of various races, ethnicity, cultures, and religions, but also people in disparate groups may not even seek care (Bhui et al., 2012; Brusin, 2012; Matthews-Juarez & Juarez, 2011).

### **Health Disparities in Summary**

Health disparities may occur due to insufficient knowledge and lack of understanding among nurses and other health care professionals (Bhui et al., 2012; Matthews-Juarez & Juarez, 2011). More alarmingly, health disparities may occur due to bias, discrimination, unacknowledged prejudices, stereotyping and stigmatizing, and outright racism (Bacigalupe & Askari, 2013; Bhui, Ascoli & Nuamh, 2012; Brusin, 2012; Flaskerud, 2007; Harris, 2011; Lipson & DeSantis, 2007; Malat, 2013; Matthews-Juarez & Juarez, 2011; Musolino et al., 2010; Padela & Punekar, 2008). There is compelling evidence that cultural competence as a concept may help address health disparities among people in the United States (Capell, Veenstra & Dean, 2006). Because care is provided for individuals who are racially, ethnically, culturally, and socially unique and different from the care giver (Kenney, Fisher, Fontaine, & Martin-Holland,



2008), having nurses demonstrate cultural competence may help address the issue of health care disparities.

### **Adult Education**

Adult learning models, concepts, and strategies were examined and those used in designing Transcultural Humility Simulation Development activities are presented here. Mature learners tend to be self-directed and have rich experience, which is a resource for learning (Merriam, Caffarella & Baumgartner, 2007). Following is a presentation of adult learning models, concepts, and strategies undergirding the intervention in this study. Additionally, empirical research in nursing education approaches to the development of cultural competence and the development of simulation as an instructional modality are presented.

### **Learning Models**

Although the following are not theories, each model explains learning about others who are diverse and informed the intervention. Models include transformational learning, epistemic belief change, learning to value the other, and double loop diversity. Each of these models explains that learning is a developmental process. The terms transformational and transformative are used interchangeably in the educational literature.

**Transformational Learning.** Transformational learning is a change in how something is known rather than simply the increase of knowledge, confidence, self-perception, motives, or self-esteem (Kegan, 1980). Kegan (1980, 2000) as cited by Drego-Severson (2004) explains that simply increasing knowledge is informational learning but that transformational learning must be conceived as a developmental process. Developmental learning shows progress in knowledge, results in knowledge reorganization, and constructs more advanced knowledge (Kegan, 1998, 2000 as cited by Drego-Severson, 2004). Informational learning, an increase in knowledge and

skill, is thought to bring about change in attitude and competency. Transformational learning introduces new cognitive resources or deepens existing resources, contributing to individual development (Kegan, 1980, 2000, as cited by Drego-Severson, 2004). Kegan (1980, 2000) as cited by Drego-Severson (2004) sums that the informational learning adds to what a person knows whereas transformational learning changes how a person knows.

This change in how something is known involves the development of a capacity for abstract thinking so that one can ask more general thematic questions about facts considering the perspectives and biases of others (Kegan, 1980, 2000). This development involves a change in *subject-object balance*, which refers to "the relationship between what we can take a perspective on (hold as 'object') and what we are embedded in and cannot see or be responsible for (are 'subject to')" (Drago-Severson, 2009, p. 37).

Adult educators who wish to support transformational learning must create educational designs that support the learner's ability to negotiate his or her own purposes, values, feelings, and meanings rather than simply to act on those of others (Kegan, 1980, 2000). Also importantly, the adult educator needs to determine when to make the transfer of authority from the educator to the learner (Kegan, 1980, 2000) to facilitate developmental growth.

**Epistemic Belief Change.** The development of personal epistemology is a dynamic process influenced by context, affect, and environment (Bendixon & Rule, 2004). Bendixon and Rule (2004) posit a link between personal epistemological development and the affective domain. If one's current epistemology is no longer working, then one weighs evidence and discerns the truthfulness of one's beliefs (Bendixon & Rule, 2004). Epistemic doubt is specifically questioning current epistemological beliefs or options and this plays a part in a mechanism for epistemic change if new information is found comprehensible, coherent,

plausible, and rhetorically compelling to a particular individual (Bendixon & Rule, 2004). Resolution strategies include reflection and social interaction and if discernment results in evidence that seems credible, then more advanced beliefs can develop (Bendixon & Rule, 2004). To resolve the doubt, one either goes back to the prior way of knowing or chooses the new way.

**Double Loop.** Single-loop learning leads to first-order change and innovation. Double-loop learning pertains to learning to change underlying values and assumptions (Argyris, 1976). Double loop learning leads to second- order change and transformation, or a paradigm shift to a change in the fundamental governing values that define the institution (Argyris, 1976, as cited by Tagg, 2010). The focus of the Argyris' (1976) theory is on solving problems that are complex and ill-structured and which change as problem-solving advances, as in the case of cultural competence. From this perspective, how students will learn is as important as what students will learn (Argyris, 1976, as cited by Tagg, 2010). Double-loop learning focuses on changing behavior by allowing reflection upon underlying values and beliefs that guide behavior (Argyris, 1976, as cited by Tagg, 2010). Reflection of participants was sought in this study to help make participants aware of biases, provide space to rethink actions, and practice how to incorporate new information (Argyris, 1976, as cited by Tagg, 2010). This is because only when one is able to reflect upon and change underlying beliefs will he or she experience a permanent change in behavior.

### **Learning Strategies**

Each of the following learning strategies help explain learning in adults. Learning strategies include self-directed learning, experiential learning and narrative learning.

**Self-Directed Learning.** Self-directed learning involves shifting the control of learning to the adult learner (Merriam et al., 2007) and the development of critical thinking, initiative, and

sense of self as co-creator of the culture that shapes self (Kegan, 2000). The process of self-directed learning includes independence, the ability to make choices, and the capacity to articulate the norms and limits of societal and personal values and beliefs (Goddu, 2012).

Self-directed learners are able to examine self, culture and situation in order to understand how to separate what is felt from what should be felt, what is valued from what should be valued, and what is wanted from what should be wanted (Kegan, 2000). Educators seeking self-directed learning for the student must not simply ask the student to take on new skills, modify the learning style or increase self-confidence (Kegan, 2000). In order to be culturally competent, nursing students are asked to change the whole way they understand themselves, their world, and the relationship between the two.

**Experiential Learning.** The term experiential learning is used in two ways in the educational literature. It is referred to as learning by directly encountering the phenomena being studied through the application of knowledge, feeling, and skills and “doing” something rather than merely thinking about it (Brookfield, 1987). In this description, experiential learning occurs in the discipline of nursing through the use of clinicals; that is, nursing students learn conceptual knowledge didactically and then put that knowledge to use in clinical education. The other way experiential learning is described is “education that occurs during participation in the events of life” (Houle, 1980). This definition of experiential learning can be used when thinking of the “life-long” learner. Kolb and Fry (1975) created a model involving an experiential learning circle that involves concrete experience, observation and experience, forming abstract concepts, and testing in new situations. The learning cycle can begin at any one of the above four points and should be approached as a continuous spiral (Kolb & Fry, 1975).

**Narrative Learning.** Clark and Rossiter (2008) discuss using stories to teach and learn by focusing on subjective meaning, making sense of experiences over the course of life. Stories are crafted of significant transitions throughout life and express the meaning of developmental growth throughout life (Clark & Rossiter, 2008). Knowles (1968) stated that adults bring life experience to the learning encounter, which can serve as a resource for learning. Clark and Rossiter (2008) argue that there is a very close connection between learners and experience. The experience occurs and then is explained verbally after the fact and the resulting narrative gives meaning to the experience (Clark & Rossiter, 2008).

Clark and Rossiter (2008) add that narrative learning involves conceptualizing the learning process itself. Learning through stories involves hearing and interpreting the story, telling stories by making a connection between new concepts and stories, and recognizing stories (Clark & Rossiter, 2008). Recognizing stories presumes that the learner begins to understand the fundamental narrative character of experiences and applies the story to oneself, groups, societies and cultures (Clark & Rossiter, 2008).

### **Cultural Competence Education**

Methods used to teach cultural competence to nursing students include discrete courses and integrating content into curriculum. Specific attempts at teaching cultural competence are presented here and include lecture (Cooper Brathwaite, 2005; Lipson & DeSantis, 2007; Lockhart & Resick, 1997; Long, 2012; Selig, Tropiano & Greene-Moton, 2006), group discussion (Cooper Brathwaite, 2005; Kozub, 2013; Lipson & DeSantis, 2007; Lockhart & Resick, 1997; Long, 2012; Munoz, DoBroka & Mohammed, 2009; Selig et al., 2006), written reports by students (Kozub, 2013; Lipson & DeSantis, 2007; Long, 2012; Munoz et al., 2009; Selig et al., 2006), clinical experiences (Lipson & DeSantis, 2007; Lockhart & Resick, 1997;

Long, 2012), guest lectures (Lipson & DeSantis, 2007; Long, 2012; Munoz et al., 2009), mentoring and consultation (Long, 2012), and lived immersion in other countries (Caffrey, Neander, Markle & Stewart, 2005; Lipson & DeSantis, 2007; Long, 2012). Prior to an actual immersion service learning opportunity, Seckman and Diesel (2013) used scenarios with artifacts consistent with specific cultures such as prayer rugs and statues.

Lockhart and Resick (1997) created an elective course in which nursing students self-assessed cultural values, conducted a detailed investigation of a cultural or ethnic group of their choice, and volunteered service hours in local community agencies of their choice. Experiential learning activities including in-class individual and group exercises and field experiences have been used with some success to minimize the tendency of students to memorize facts and help them react to cultural variation among the values and health beliefs (Lockhart & Resick, 1997). They found that it is faculty, as much as students, that must continually strive to develop creative ways to prepare nurses who are sensitive and cultural competent (Lockhart & Resick, 1997).

Cooper Brathwaite (2005) found a short term course is effective in enhancing cultural competence and transfer of cultural competence to practice. Participants in her study experienced an increase in self-confidence to care for diverse populations, and changed their behavior, meaning they incorporated new practices and positive attitudes in how they cared for patients from different backgrounds in their practice (Cooper Brathwaite, 2005). She recommended cultural courses be included in undergraduate nursing courses (Cooper Brathwaite, 2005).

Caffrey et al. (2005) evaluated the effect of integrating cultural content in undergraduate nursing curriculum during a five-week international immersion experience on students' self-perceived cultural competence. She compared those who received "traditional" education only

with those who got education plus a field immersion experience in another country that suggested those with immersion were more culturally competent (Caffrey et al., 2005).

Selig et al. (2006) designed an elective course on cultural competence to increase development of awareness, knowledge, understanding and skill to better serve diverse populations. The course included definitions, positive value of diversity, impact of cultural competence on health disparities, issues of communication barriers, health literacy and knowledge of common health behaviors (Selig et al., 2006). They found the course promoted students' self-awareness, increased students' understanding of cultural competence and racism, and provided an overview of available resources about cultural competence in health care settings (Selig et al., 2006).

Lipson and DeSantis (2007) reviewed five types of curricular input among associate, baccalaureate, and master degree programs to incorporate cultural competence including specialty focus, required courses, instruction on models, immersion experiences, and distance learning. They found that nursing faculty members are not always adequately prepared to teach cultural competence, nor are faculty consistent in their approach to cultural competence (Lipson & DeSantis, 2007). They reviewed immersion experiences lasting two to six weeks that were shown to increase student self-awareness and improve situational behaviors regarding cultural competence (Lipson & DeSantis, 2007). However, there are enormous expenses for travel, a limited number of students who can participate, and lack of formal evaluation (Lipson & DeSantis, 2007) which makes immersion experiences a less practical tool to reach the bulk of the nursing student population.

Lipson and DeSantis (2007) warn that a recipe or laundry list approach to teaching cultural competence is an inhibitor because students risk not understanding how broader social,

economic, political and environmental variables affect the nurse-patient encounter or how situational factors influence health-seeking behaviors. Rather, cultural competence education should focus on the nurse-patient encounter (Lipson & DeSantis, 2007).

In their descriptive study based on Leininger's cultural competence model, Gebru and Willman (2009) found that a more appropriate goal for students might be cultural awareness rather than cultural competence. In the same year, Munoz et al. (2009) developed a six-week elective course on cultural competence with multidisciplinary students. Munoz et al. (2009) used written reflection, group discussion, and guest speakers to present content on health disparities and cultural competence in education, and intercultural panels involving Somalian, Laotian, Vietnamese, Gay and Lesbian, African American, Appalachian, and Hispanic speakers. They found there were often more issues raised than time to dialogue on racism, equal access, class distinctions, social justice, and homophobia (Munoz et al., 2009).

Calvillo et al. (2009) underscore that educators are challenged to develop new and effective curricula emphasizing understanding and sensitivity toward vulnerable patients and population from a variety of cultural groups. Dykes and White (2011) found that behavioral changes to reduce healthcare disparities might be best advanced by education. Standardized patients are a promising way to teach this value-laden content, but Long (2012) found that standardized patients have only been used with students of medicine.

Kozub (2013) used event analysis to develop culturally competent nurses by engaging students and creating a cohesive group. Event analysis is a process in which participants choose events to describe what happened, understand their influence and explore the meaning each holds to facilitate learning (Kozub, 2013). Based in the theory of transformative learning, adult learners interacted directly with the concepts and content being taught (Kozub, 2013). She reported that



cultural knowledge improved as participants researched and sought information to help them understand and express the perspective of the other (Kozub, 2013). She reported event analysis provided self-reflection and transformational learning, which helped develop cultural awareness through group discussion (Kozub, 2013).

Recommendations gleaned from investigators reporting on useful pedagogical attempts include using teaching strategies to improve cultural competence (Cooper Brathwaite, 2005; Dykes & White, 2011). Selig et al (2006) taught relevant definitions, the positive value of diversity, the influence of cultural competence on health disparities, issues of communication barriers and health literacy, and knowledge of common health behaviors. Lipson and DeSantis (2007) focused on the nurse-patient encounter and Kozub (2007) shared the positive effects of self-reflection and group discussion.

## **Simulation**

Simulation has been shown to be a highly effective tool for learning and is defined as the recreation of an event that is as close to reality as possible (Baker et al., 2008; Hart et al., 2014). Simulation repositions learning from a passive, receptive and content driven process to an active, dynamic, and reflexive one (Berragan, 2011). The use of simulation in nursing education provides a “safe” environment where learners can make mistakes and problem-solve with guidance available from the facilitator (Jeffries & Battin, 2011; Long, 2012). The simulated experience enables learners to experience diverse situations in a controlled environment prior to working with actual patients (Rutledge et al., 2008).

The amount and quality of cultural experiences available to learners during clinical experiences in acute care settings varies (Shattel et al., 2013). In non-simulated “real” patient care settings, the needs of the patient take priority over learning needs but with simulation, the

learner's needs and learning objectives are the center of attention (Berragan, 2011). Simulation provides a context for purposeful interaction (Meltzoff & Lenssen, 2000) so learners can apply concepts. Simulation is not meant to replace experience with real patients but it is a reproducible, highly realistic learning environment (University of Pittsburgh, 2014). Explanation of the evolution of simulation, how it impacts learning and promotes critical thinking follows.

**Description.** Simulation has been used in aviation since the early part of the twentieth century (Page, 2000). Simulation can entail any physical representation of the full or partial task to be replicated (Cooper & Taqueti, 2004). In nursing education, this includes the use of an orange, for example, for intramuscular injections. Human patient simulation has evolved from the orange and parts of bodies to life-sized mannequins used first in medicine with anesthesia students in the 1960s (Ober, 2009).

Nursing education has used simulation and human patient simulators for years as the cost of human patient simulators has become more reasonable (Jeffries, 2005). Low fidelity simulation involves problem-based scenarios, static models, and two-dimensional displays that are good for procedural practice (Biteman, 2011; Li, n.d.). Mid fidelity simulators include virtual three-dimensional computer programs (Biteman, 2011) and computerized mannequins that produce heart, lung, and bowel sounds. High fidelity simulators are computerized life-like mannequins that are equal in size, and in some cases, weight to humans which produce heart, lung, and bowel sounds, have anatomically correct pulses, eyes that tear and blink, and respond physiologically to interventions (Biteman, 2011). Late model simulators reflect engineering and psychological fidelity to provide a "realistic" educational experience (Berragan, 2011).

Standardized patients are people who act as patients in scripted roles to help in communication,

physical examination, and other skills. This modality is especially useful when addressing sensitive issues with patients (University of Pittsburgh, 2014), such as cultural competence.

**Learning Domains.** Simulation promotes learning on a number of levels including the affective domain, as participants feel a broad range of emotions; the behavioral level when learners “do” and “experience”; and the cognitive level through discussion and application to real life (Meltzoff & Lenssen, 2000). The researcher-designed simulated patient encounter in this study addressed cultural diversity so learners would experience a change in the affective, behavioral and cognitive domains. These cultural encounters align with cultural awareness, cultural knowledge, cultural skills and cultural desire. The goal of the researcher-designed simulation experience was to increase cultural competence and the five constructs of cultural competence.

Because differences in culture lead to emotional responses like bias, stereotyping, and prejudice, simulation will allow a shift from cognitive learning to the affective (emotional) domain for the learning of cultural competence. Active, experiential, contextual learning approaches facilitate learning and the provision of simulation-based learning environments provide learning experiences that learners see as relevant for their future (Baker et al., 2008).

**Reflection.** The use of reflection, as is standard with simulation, provides a baseline for culturally competent practice and an understanding of the responses to diverse patient needs (Kozub, 2013). Reflection contributes to prioritization and organization, nursing assessment, and clinical judgment, connecting theory and practice (Lavoie, Pepin & Boyer, 2013). Simulated experiences are particularly recommended among adult learners due to the cognitive process of reflection upon the experience rather than just the experience (Merriam et al., 2007).

There are three types of reflection, however, only one may lead to transformative learning. The first type of reflection is content reflection, which is thinking about the actual experience itself. The second type of reflection is processed reflection, which is thinking about ways to deal with the experience. During this type of reflection, an individual may strategize about problem solving. Third is premise reflection, which involves examining long-held, socially constructed assumptions, beliefs, and values about the experience. This is the type of reflection that leads to transformative learning. During reflection, the individual reviews what happened and thinks critically in order to make sense of the experience and examine assumptions, beliefs and values.

**Critical Thinking.** According to Brookfield (1987), critical thinking consists of five phases. Discomfort is the first phase of critical thinking. Second is appraisal, or self-examination of the situation, thinking about the discomfort. Third is exploration, in which new and different ways of explaining or accommodating the experience are examined. The fourth phase involves trying on new roles, new ways of behaving, new ways of thinking about the experience, and gaining confidence in this new perspective. In the fifth phase of critical thinking, the individual is able to integrate new ways of thinking. Critical thinking enables the individual to scrutinize and analyze relationships and assumptions. Use of simulation enables learner critical thinking through opportunity to transfer classroom information to a realistic setting (Sinclair & Ferguson, 2009).

Following simulation, learners, as unique persons with different backgrounds and reactions to a situation, are able to compare their actions with events that could have or should have occurred (Lavoie et al., 2013) to allow for critical thinking and offers time to critically

examine rationale (Sinclair & Ferguson, 2009). Abe, Kawahara, Yamashina and Tsuboi (2013) recommend some silent time to allow for critical thinking during debrief.

**Limitations.** Limitations to the use of high-fidelity simulators include the inability of the simulator to display facial expressions, an important non-verbal behavior (Kameg et al., 2010); the time it takes for nursing faculty to learn to use the simulation technology and educational resources (Berragan, 2011); and the possibility that learners may not be able to interact seriously with a non-human simulator (Kameg et al., 2010). Sinclair and Ferguson (2009) discuss “faculty fatigue” because simulation requires time and human resources. Additionally, the speed of developments within simulation technology (Berregan, 2011), while exciting, may shift the thinking of nursing educators from ‘using manikins to teach’ to learning all about manikins. Learners, too, may not be satisfied with their experience with high-fidelity simulators (Luctkar-Flude, Wilson-Keates & Larocque, 2012).

### **Adult Education in Summary**

Instead of a high-fidelity simulator, standardized patients were used in Transcultural Humility Simulation Development activities. Standardized patients are carefully trained to accurately and consistently role play a patient and then provide feedback to the learner and have been shown to improve the perceived lack of realism and support the development of communication skills (Luctkar-Flude, Wilson-Keates & Larocque, 2012). Nursing researchers have used a variety of teaching modalities for cultural competence, including lecture, case studies, and travel for immersion experiences but none has shown to be superior in teaching cultural competence (Long, 2012). Simulation with standardized patients was not used to teach cultural competence to nursing students prior to this study but having reviewed theories of adult learning, pedagogy, empirical research on nursing education for cultural competence, and the use

of simulation, Transcultural Humility Simulation Development activities show promise for helping learners achieve cultural competence.

## **Chapter 2 Summary**

In this chapter, the review of literature was presented. The methods employed in reviewing the literature were articulated, and the current literature supporting this study, including theoretical and empirical evidence on cultural competence, health disparities, adult learning, nursing education, and the use of simulation as a strategy to address cultural competence, was explicated. Campinha-Bacote's (2007) model, *The Process of Cultural Competence in the Delivery of Healthcare Services*, was the theoretical framework for this study. The model involves the integration of five constructs: cultural desire, cultural awareness, cultural knowledge, cultural skill, and cultural encounters. The *Inventory for Assessing the Process of Cultural Competence-Student Version* was selected as the main instrument for quantitative data collection. Evidence of health disparities persist and innovative strategies to teach cultural competence are necessary. Nursing education through the examination of adult learning theory and models and the use of simulation as a sound teaching strategy for cultural competence involving three domains of learning, cognitive, affective, and behavioral was explained.

## **CHAPTER 3**

### **METHODOLOGY**

The research methods including design, setting and sample, intervention, instrumentation, data collection procedure, and data analyses are presented in this chapter. This study had two purposes. The first was to determine whether participation in the researcher designed intervention, Transcultural Humility Simulation Development, significantly improved cultural competence and its constructs, cultural awareness, cultural knowledge, cultural skill, cultural desire and cultural encounters among graduating baccalaureate nursing students when compared with a group of students who did not participate in the intervention. The second was to explore the integration of culturally competent behaviors in nursing care following graduation.

#### **Design**

A longitudinal, descriptive, quasi-experimental, pretest-posttest comparison group design (Shadish, Cook & Campbell, 2002) using embedded mixed methods (Creswell & Plano Clark, 2011) was used in this study. The embedded design combines collection of quantitative and qualitative data within a traditional quantitative research design (Creswell & Plano Clark, 2011). The collection and analysis of qualitative data occurred during and after the intervention and implementation of the data collection and analysis.

This study was longitudinal in order to see if any changes that resulted from the intervention persisted over time. It was descriptive, meaning it described the student participants' experiences with the intervention and with the provision of culturally competent nursing care. The design was quasi-experimental, meaning there was an educational intervention designed and empirically studied with the use of an intervention group and a comparison group that did not

participate in the intervention. Pretest-posttest measures strengthened the design to understand if there were changes and if so, whether they may have resulted from the intervention.

The embedded design was used because a single data set was not sufficient to test hypotheses and answer the research questions. It provided greater insight and breadth to address the problem than would be obtained by either type of data separately (Creswell & Plano Clark, 2011; Fitzgerald et al., 2009), because of the complexity of cultural competence (Calvillo et al., 2009). The intent was not to merge different data sets to answer the same question, but to keep the two sets of results separate using qualitative findings to help explain quantitative findings (Creswell & Plano Clark, 2011).

The longitudinal, quasi-experimental design was chosen to address some of the methodological issues highlighted in the literature. In order to determine whether participation in Transcultural Humility Simulation Development activities effectively improved cultural competence, both intervention and comparison groups were used. Moreover, to understand whether changes were maintained among student participants following graduation, data were collected over time.

The study design addressed potential threats to validity. Measures to address qualitative threats to validity were undertaken and are described under the qualitative data collection and analysis sections of this chapter. Quantitative threats to validity include attrition, history, maturation, testing, statistical regression, selection bias, interaction between participants in the intervention and comparison groups, reactive arrangement, and bias (Shadish et al., 2002; Creswell & Plano Clark, 2011). Each of these threats and the measures to prevent and minimize their effects are offered in the next passages.



Attrition, also called mortality, refers to any loss of response from a participant that occurs after participants are randomly assigned to conditions, as when a participant refuses any further participation (Shadish et al., 2002). History, as a threat to validity, refers to the specific events that occur between the first and second measurement (Shadish et al., 2002). Maturation refers to the effect of the passage of time on subjects as most participants may improve performance regardless of the intervention, just because of time between pretest and posttest measures (Shadish et al., 2002). Interaction between participants in the intervention and comparison groups as a threat to validity since those in the intervention group may share experiences with those assigned to the control group (Shadish et al., 2002). Measures to help prevent attrition, history, maturation and interaction in this study included minimizing time between assignment and intervention implementation, minimizing time spent on surveys, maintaining strict confidentiality and privacy, and debriefing participants about their study experience (Shadish et al., 2002).

Testing refers to the effects of taking a test on the outcomes of taking a second test (Shadish et al., 2002) as might be the case in a pretest-posttest design. Decreasing the amount of time between measures helped mitigate this effect. Instrumentation is best described as changes in the instrument, observers, or scorers, which may produce changes in outcomes (Shadish et al., 2002). Interaction selection of comparison groups and maturation interacting may lead to confounding outcomes, and erroneous interpretation that the treatment caused the effect (Shadish et al., 2002). Measures to reduce these threats to validity include using the same instrument in the same conditions and not assigning a cause and effect relationship between the effects of the intervention and the instrumentation.

Statistical regression, also known as regression to the mean, refers to selection of subjects on the basis of extreme scores or characteristics (Shadish et al., 2002). Selection bias is assigning specific participants to either the intervention or comparison group (Shadish et al., 2002). Random selection using a random number generator was used to address these threats to validity in this study.

Reactive arrangement refers to the artificiality of the experimental setting and the participant's knowledge that he or she is participating in an experiment (Shadish et al., 2002). To remediate this problem, the intervention activities were incorporated as variants of the regular curricula (Shadish et al., 2002), such as faculty-facilitated discussion, the viewing of a video, and simulation, and treatment should be delivered by regular faculty and staff (Shadish et al., 2002) as was done in this study.

A data collection issue that can occur in the embedded design is introducing bias through the qualitative data collection that affects the quantitative instrument's internal validity. To address this issue, qualitative data collected prior to the posttest measurement of quantitative data used open-ended writing prompts so as not to persuade student participants in any way.

In this embedded mixed methods study, quantitative and qualitative data were collected at roughly the same time and were analyzed independently, using techniques traditionally associated with each data type, and then qualitative findings helped explain quantitative results (Creswell & Plano Clark, 2011). Transcultural Humility Simulation Development is an educational intervention designed by this researcher and is theoretically based. The intervention was administered to the experimental group only outside of any class time and the comparison group did not participate. The diagram (adapted from Shadish et al., 2002) of the research design is presented in Figure 5.

Figure 5. Diagram of Research Design

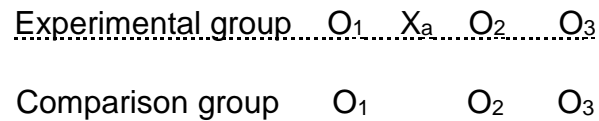


Figure 5. Pretest data were collected at Time 1 ( $O_1$ ), from both the experimental and comparison groups. The experimental group participated in the intervention ( $X_a$ ), Transcultural Humility Simulation Development activities, and data were collected. Posttest data were collected at Time 2 ( $O_2$ ). Following graduation of the participants, a subgroup of 20 participants was interviewed at Time 3 ( $O_3$ ).

### Setting

This study was conducted at a private parochial university in the western US that grants baccalaureate, master, and doctoral degrees. There are approximately 8,000 students enrolled in the university. The mission of the university is to help each student understand and engage his or her purpose by providing a Christ-centered educational experience that integrates academics with spiritual and social development opportunities. The mission of the School of Nursing is to educate competent, responsible, caring, and professional nurses prepared from a Biblical worldview to serve locally, nationally, and globally, revering the human dignity of all persons created in the image of God.

At the time of the study, the full time faculty were all female and predominately Caucasian. Less than 1% was Asian American and less than 1% was African American. Of the nearly 500 full time nursing students in the baccalaureate program, 85% were female and 15% were male. Ages ranged from 18 to 56 and 80% were 18 to 25 years old. The racial and cultural composition of the student population was 51% non-Latino Caucasian, 27% Hispanic, 12%

Asian, almost 5% African American, and approximately 1% Native American or Pacific Islander.

### **Sample**

The convenience sample was drawn from baccalaureate nursing students enrolled in NUR 471, a Nursing Leadership course, during the final semester of the program. Course enrollment was 60 students. Inclusion criteria included students enrolled in NUR 471 in Spring, 2015 who agreed to participate in the study ( $N=57$ , 95%). Exclusion criteria included students not enrolled in NUR 471 in the Spring, 2015 and who did not agree to participate in the study. All students who gave informed consent and met inclusion criteria were enrolled to the study.

Power and effect size were calculated and 26 participants per group ( $N=52$ ) were needed. Power is probability that a statistical test will reject the null hypothesis when it is false and refers to the ability of a test to detect relationships that exist in the population (Shadish et al., 2002). The higher the desired power, the more subjects are needed (Plichta & Kelvin, 2013). According to Cohen (1987) a power of .80 is reasonable for studies in the behavioral sciences (as cited in Plichta & Kelvin, 2013; Shadish et al., 2002). Effect size is a quantitative measure of the strength of the phenomenon (Shadish et al., 2002). The effect size, the difference between, the means of the two groups divided by the standard deviation, was set at .70 (Plichta & Kelvin, 2013). This medium to high effect size was used in this study to better assess the effect of the intervention. A sample of 26 participants per group, the alpha level of .05, an effect size of .70 and a power of .80 (Cohen, 1987 as cited in Plichta & Kelvin, 2013) were sufficient to detect differences between groups.

Those who participated in this study as standardized patients ( $N=8$ ) were qualified for inclusion because each was able to speak another language. Each standardized patient signed an

informed consent (see Appendix B) and was recruited and trained by the Assistant Director of the Learning Resource Center and Standardized Patient Coordinator. Of the eight standardized patients, four were male and four were female. Seven of the eight were African American and one was from India. The standardized patients ranged in age from 18 years old to 31 years old with a mean age of 22.6 years old.

### **Cultural Content Included in Curriculum**

In this section, the cultural content included in the regular curriculum is presented. Students in the baccalaureate nursing program at the private university in the western US typically learn about culture, defined as inclusive of religious affiliation, language, physical size, gender, sexual orientation, age, disability, political orientation, socio-economic status, occupational status and geographical location (Campinha-Bacote, 2007) but little in terms of cultural competence, meaning the ability of the nurse to provide excellent care to culturally and linguistically diverse individuals. At least one nursing course each semester includes content on culture and diversity, including the incidence and prevalence of disease and disability and racial and ethnic characteristics among culturally and linguistically diverse populations.

In the fifth semester, students take NUR 430, Transcultural Patterns of Health. A few of the course objectives are: 1) Explore concepts of cultural health beliefs, values, and health practices as they apply to nurse-person, nurse-group, and nurse-community processes through the context of the biblical worldview; 2) Describe socioeconomic factors impacting groups across the life span and analyze the barriers to health care in the United States related to cultural health beliefs and health practices; 3) Examine the legal, ethical, and research issues confronting the nurse regarding transcultural health care delivery.

NUR 430 focuses on incidence and prevalence of disease and disability and racial and ethnic characteristics among culturally and linguistically diverse populations, as well as complementary and alternative therapy (CAM). CAM includes the following: acupuncture; massage therapy; spinal manipulation; healing touch; heat and cold application; meditation, movement and relaxation; hypnotherapy; traditional healers and remedies; and, the use of natural products like herbs or botanicals (National Center for Complementary and Alternative Medicine, 2014).

The sample was drawn from NUR 471, Nursing Leadership, a course that does not include any content on cultural competence. Student participants in both the intervention and comparison groups had no class scheduled on the day of the intervention.

### **The Intervention: Transcultural Humility Simulation Development**

Transcultural Humility Simulation Development is a researcher-designed educational intervention developed to address the gap in the literature surrounding the use of simulation with cultural competence. The intervention related directly to the theoretical underpinnings of the study, Campinha-Bacote's (2007) model, The Process of Cultural Competence in the Delivery of Healthcare Services, with an emphasis on "becoming" culturally competent, as well as integration of Bloom et al.'s (1956) taxonomy of learning domains, and that of adult learning strategies. The greater part of the intervention, the Workshop, was conducted on Friday June 12, 2015, with one activity done independently within one week prior to that Friday. The date planned for the Workshop was presented to students in NUR 471 at the beginning of the Spring 2015 semester on the course calendar so they would "save the date". The Workshop was designed to allow student participants to complete all activities. Evaluation of the student

experience was obtained to determine what went well and what to improve (Seckman & Diesel, 2013).

### **Learning Objectives**

Five learning objectives were developed based on the five constructs of Campinha-Bacote's (2007) model, The Process of Cultural Competence in the Delivery of Healthcare Services. These were:

- 1) Recognize one's own cultural biases, prejudices, and assumptions.
- 2) Develop knowledge about cultural influences on health.
- 3) Conduct culturally sensitive assessments.
- 4) Generate desire through participation in cultural encounters.
- 5) Demonstrate cultural humility by recognizing the dignity and worth of others.

### **Activities**

The Transcultural Humility Simulation Development activities consisted of several engagements. Learning strategies were chosen based on the principles of adult learners (Fasokun, Katahuri & Oduaran, 2005). Each of the learning activities was also designed to support learning as development (Kegan, 1980, 2000 as cited by Drago-Severson, 2004). The reflective activities were designed to facilitate epistemic doubt so student participants could face their biases and stereotypes (Bendixon & Rule, 2004). Student participants assigned to the intervention group were asked to complete an online activity and then participate in a workshop. Each is explained in the following paragraphs.

**Online Activity.** Student participants self-administered the Harvard implicit online activity (Implicit Attitudes Test [IAT], 2011) at their convenience within one week prior to simulation day. The Harvard implicit online activity was originally created in 1998 to foster

dissemination and application of implicit social cognition and in 2011 it was made available for free use to promote social justice (IAT, 2011). It measures attitudes and beliefs that people may be unwilling or unable to report by measuring the strength of one's associations between concepts, such as people of a certain race and evaluations, like good or bad, or stereotypes like athletic or clumsy (IAT, 2011). The main idea is that making a response is easier when closely related items share the same response key (IAT, 2011).

This online activity involved sorting value-laden words into judgment categories. Stereotypes are the belief that most members of a group have some characteristic (IAT, 2011). Explicit stereotypes are those that are reported outwardly whereas implicit stereotypes are positive and negative evaluations that occur outside of conscious awareness and comparison (IAT, 2011). By participating in this activity in private, each participant could learn about his or her own cultural biases, prejudices, and assumptions engaging the affective and cognitive learning domains (Bloom et al., 1956). Learning during this online activity was self-directed in that learners managed the context, setting, and evaluation, and when they completed this activity (Abdullah, 2001). Assisting participants in becoming aware of implicit positive and negative evaluations, participants may experience epistemic doubt, specifically questioning current epistemological beliefs (Bendixon & Rule, 2004). This plays a part in a mechanism for epistemic change if new information is found comprehensible, coherent, plausible, and rhetorically compelling to a particular individual (Bendixon & Rule, 2004).

**Workshop.** On June 15, 2015, student participants in the intervention group attended the Workshop. During registration, student participants were provided a folder containing a schedule for the day, a color-coded card with their rotation (A or B), cultural assessment tools, blank paper for notes, index cards, and a pen. Student participants played a matching card game and



watched a video as a group. Then student participants, in groups of approximately fourteen participants, rotated through two stations in predetermined order. Student participants engaged in a faculty-facilitated lecture and group discussion at one station. The other station consisted of participating in simulation with the standardized patients followed by debrief. The day ended with a whole group wrap up and completion of a written evaluation of the intervention. Specific activities are explicated below. The workshop schedule and student rotation sequence are presented in Table 1.

Table 1

*Workshop Schedule with Student Rotation Sequence*

Time	Activity
0900-1000	Registration and Breakfast
1000-1100	Matching Card Game and Silent Reflection
1100-1230	Video and Silent Reflection
1230-1315	Lunch
1315-1445	Rotation 1
	<div style="display: flex; justify-content: space-around;"> <span><u>Faculty Facilitated</u></span> <span><u>Simulation and Debrief</u></span> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <span>A</span> <span>B</span> </div>
1445-1500	Break with Snacks
1500-1630	Rotation 2
	<div style="display: flex; justify-content: space-around;"> <span><u>Faculty Facilitated</u></span> <span><u>Simulation and Debrief</u></span> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <span>B</span> <span>A</span> </div>
1630-1700	Wrap up and Whole Group Debrief

***Matching Card Game.*** A matching card game was designed, based on Campinha-Bacote's (2007) theory, to help student participants understand concepts of cultural groups,

existing cultural assessment tools, biologic and anatomical variations among culturally and linguistically diverse populations, specific diseases, and differences within and between cultural groups. The matching card game activity was intended to help participants obtain knowledge regarding health-related beliefs, practices, and values, disease incidence and prevalence, and treatment which occur in the cognitive domain (Bloom et al., 1956).

Disease incidence varies among ethnic groups and health disparities prevail (Campinha-Bacote, 2007). Stereotypes discount uniqueness of diversity found within each culture and accumulation of life experiences (Campinha-Bacote, 2007) and understanding stereotypes involve the affective domain (Bloom et al., 1956). By understanding stereotypes, values, and health injustices, student participants may have situated learning in experience (Stein, 2004). As Campinha-Bacote (2007) stated, healthcare professionals must keep in mind that cultures are constantly evolving so it is necessary to obtain cultural knowledge.

Card games may be fun and their use may help motivate student participants to learn and immerses learners in the material so they learn more effectively (Teed, 2014) and may lead to double-loop learning. Argyris (1976) described double-loop learning, which leads to a paradigm shift, as the distinction between an individual's espoused theory and their "theory-in-use", or what they actually do, and bringing these two into congruence. Changes in values, behavior, leadership, and helping others, are all part of, and informed by, the individuals' theory of action (Argyris, 1976). Typically, interaction with others is necessary to identify the conflict (Argyris, 1976).

Four tables were used in a classroom. Each table was outfitted with a set of two decks of cards each, one deck of "categories" and one of "descriptions". The cards were color coded so each of the tables had a different colored set. The cards were created, printed, laminated, and cut

by the researcher. Student participants were given directions, played a round, mixed in various groupings at the tables and continued play.

The “descriptions” decks of cards were distributed equally among all players. Student participants were instructed to each take a turn being the “judge”. The judge chose a card from the “categories” deck and shared the category on the card with the other players at the table. Each player chose the card with a “description” that he or she thought best matched the category and placed it, face down, in front of the judge. Finally, the judge decided which “description” card matched the “category” card and the player who “won” kept the “category” card.

Every ten minutes, chimes were played to signal the winner at each table to move so different participants played together and all decks were used. About half-way through this activity, it was noticed that with only winners moving tables, not everyone would see all the decks. For the second half, those who did not win moved tables when the chimes were played so each participant would have the opportunity to play with all decks. The game lasted approximately an hour. After participating in the matching card game, student participants were provided with blank paper in order to write their reflection.

***Video and Silent Reflection.*** Student participants were instructed to remain silent while viewing a video and completing written reflection on feelings regarding this experience and content. Faculty members were in the room to encourage quiet time and to answer any questions in private. The video selected, *Hold Your Breath* <sup>©</sup>, portrayed the story of a male patient of Arab heritage who was Muslim. He was diagnosed with an aggressive, life-threatening cancer but rejected chemotherapy and embarked on a pilgrimage to Mecca. There was, at best, a communication conflict when he declined chemotherapy, which he understood to be a continuous transfusion of medication because it would inhibit his ability to pray five times per

day. He missed out on months of treatment as the doctor feared that family members, acting as interpreters, misinformed him about the gravity of his disease while the family blamed the health care system for his rapidly declining health.

Silent reflection uses self-directed learning to shift control of learning to the adult learner (Merriam et al., 2007). In this activity, student participants had the opportunity to make choices and articulate personal values and beliefs (Goddu, 2012) by documenting personal experience in writing. This is situated in the affective and cognitive domains (Bloom et al., 1956). Silence during this time was implemented to help student participants reflect on culture, values, inequity, and humility. By sharing their own words, stories, and reflections, student participants engaged in narrative learning (Goddu, 2012). Argyris (1976) explained in double loop learning, assumptions underlying current views are questioned and hypotheses about behavior are tested publically. The end result of double loop learning should be increased effectiveness in decision-making and better acceptance of failures and mistakes (Argyris, 1976). This silent time and reflection is a pair of double loop learning.

***Faculty-Facilitated Rotation.*** Student participants then heard lecture content, participated in faculty-facilitated group discussion, and completed a free-write reflection activity. Since Mahabeer (2009) found nurses need more education to develop cultural knowledge, ethnic pharmacology and biologic variations among different ethnic groups were topics specifically addressed in the faculty-facilitated rotation for student participants to increase cultural competence. The lecture content also included information on the importance of using interpreter services, the National Standards for Culturally and Linguistically Appropriate services in Health and Healthcare (CLAS), and health disparities. CLAS helps tailor services to an individual's culture and language preference in order to bring about positive health outcomes for diverse

populations (U.S. Department of Health and Human Services, Office of Minority Health, 2015).

Lecturing is an effective way to disseminate knowledge (Cashin, 2010) and involves the cognitive domain (Bloom et al., 1956). Lecturing to the group of student participants allowed for distribution of a large amount of information in a relatively short amount of time.

The group discussion provided student participants the opportunity to discuss concepts of health equity. Group discussion has been demonstrated to be a core learning activity for higher order critical thinking (Fasokun et al., 2005) situated in the affective and cognitive domains (Bloom et al., 1956). Group discussion allowed student participants the opportunity to come together and share information, knowledge, and ideas as well as air their views, and agree and disagree on issues before taking a position on them (Fasokun et al., 2005). Ground rules included the need to respect one another's ideas, the need to listen and the need to give opportunities to everybody to participate in the discussion (Fasokun et al., 2005). Participating in the group discussion offered student participants experiential and narrative learning (Goddu, 2012). Drego-Severson (2004) stated that informational learning adds to what a person knows whereas transformational learning changes how a person knows. This activity introduced new cognitive resources and deepened existing resources, contributing to individual development (Drego-Severson, 2004).

The prompt for the free write was: "When I (think, feel, hear, taste, smell, see) culture..." Directions for the free write may be found in Appendix C. The free-write activity provided the student participants with the opportunity to identify and express personal ideas, feelings, impressions and memories (Goldberg, 1986). This activity was intended to help student participants use the affective, cognitive and psychomotor domains (Bloom et al., 1956) for narrative (Goddu, 2012) and transformative learning (Kegan, 2000).

***Simulation Rotation.*** The standardized patients played either the patient or the sister. The role of the patient was 24-year-old Bismark Sentwali, a single, heterosexual, Catholic taxi driver who immigrated to the United States from Rwanda six months ago with his sister. The role of the sister was 22-year-old Nadia Sentwali, a single, healthy, student who accepted a scholarship from a local university to study English. They grew up in Africa in a poor family in a remote village with very little access to clean water and limited access to protein. Their primary languages were French and Kenyan Rwandan. Their paternal grandparents were killed when they were young and they never met their maternal grandparents. Their father died of a stroke when they were teenagers. Their mother is still in the village, she is healthy, and Bismark and Nadia hope she can join them in the United States soon.

The standardized patients were placed in a simulated hospital room. Bismark was in a hospital gown in a hospital bed. He had taped to him a nasogastric tube, an IV, and a midline abdominal dressing. His gown and bed sheets were very twisted and his feet were uncovered. He was instructed to report, if asked, that he had a sore throat, felt something was stuck in this throat and hoped the tube would come out today. He was to act scared and overwhelmed because he has never been in a hospital before and report pain, if asked, of five on a scale of zero to ten. Bismark was given cards expressing his body mass index (BMI) of 22, and vital signs including heart rate of 96, respiratory rate of 22, blood pressure of 142/88, body temperature of 99.2 degrees Fahrenheit. Cards are used with standardized patients because if vital signs were actually measured, they would not match the scenario. Nadia was in the chair next to the bed holding a rosary. She was to act worried and a little scared for her brother. On the bedside table, there was a picture of the Virgin Mary, a food tray with a plate containing a hamburger and French fries

next to an empty urinal, and an overflowing hospital trash bag. There were clean bags on another table in the room.

*Prebriefing.* During the prebriefing session, student participants were told that there were faculty members in an adjoining room observing them, consistent with institutional practice. Student participants heard a focused shift report. This report included the following information: 24-year-old male named Bismark Sentwail who is two days postoperative after a hemicolectomy secondary to small bowel obstruction; nothing by mouth (NPO), he has a nasogastric tube to low continuous suction with 200 milliliters output last shift; he has an intravenous catheter in his left forearm infusing 5% dextrose in 0.45 normal saline at 125 milliliters per hour; he has a midline abdominal dressing that has been dry and intact; a low grade fever that has not been treated; his last pain medicine was Dilaudid 1 milligram administered intravenously one hour ago; English his not his primary language but he “communicates fine”. Instructions for the students were to perform a shift assessment.

*Simulation.* Student participants entered the “inpatient room” in pairs. During simulation neither the standardized patient nor the family member communicated in English until the student participant stated he or she was calling for an interpreter. Once the student participant called for an interpreter, the standardized patient and family member did communicate in English. Expected learning activities included student use of an official interpreter rather than a family member, effectively conducting culturally sensitive collection of subjective and objective data, and demonstration of cultural humility by recognizing the dignity and worth of the standardized patient and family member (refer to Appendix D for rubric). Specific behaviors included untwisting the gown, straightening the linen, and emptying and replacing the trash bag.

A faculty member in a different room observed the simulations and completed the rubric. This was not to judge or grade the experience, but to watch student participants' performance. This rotation was intended to provide the opportunity for practice to help student participants elicit assessment data in a culturally sensitive manner (Campinha-Bacote, 2007) using an official interpreter and to demonstrate cultural humility.

Simulation engages the affective, cognitive and psychomotor learning domains (Bloom et al., 1956). Simulation is a form of experiential learning in which an adult learner makes practical use of knowledge and applies it appropriately to resolve a situation (Goddu, 2012). Experiential learning focuses primarily on processes rather than outcomes so student participants were able to learn from events as they occur (Stein, 2004). Simulation also offered the opportunity for transformative learning through the development of changed expectations in order to distance oneself from one's prior frame of reference in order to be open to learning (Kegan, 2000).

Kegan (1998, 2000) as cited by Drego-Severson (2004) explained that simply increasing knowledge is informational learning but that transformational learning in the constructive developmental theory must be conceived as a developmental process. Developmental learning shows progress in knowledge, results in knowledge reorganization, and constructs more advanced knowledge (Kegan, 1998, 2000, as cited by Drego-Severson, 2004). This change in how something is known involves the development of a capacity for abstract thinking so that one can ask more general thematic questions about facts considering the perspectives and biases of others (Kegan, 2000).

*Debrief.* Directly following the simulation, a faculty member facilitated a debrief session, that was approximately two to three times the length of the simulation. See Appendix E for debrief guide. Student participants were instructed to be quiet and were moved to the debrief



room because of the emotional charge during simulation (Arafeh, Hansen & Nichols, 2010). The Standardized Patient Coordinator debriefed standardized patients as well, in order to validate feelings regarding the simulation and collect information for continuous quality improvement.

Debrief is an intentional process designed to foster the development of clinical and critical thinking, judgment, and communication (Arafeh et al., 2010; Dreifuerst, 2012). Faculty facilitated discussion of feelings and reactions about what occurred in the scenario (Arafeh et al., 2012) engaged the student participants, explored actions of the participants and created a space to reflect (Dreifuerst, 2012). Dreifuerst (2012) suggested that debrief for “meaningful learning” as a process allows participants to reflect on decisions, actions, and alternatives using deduction, induction, and analysis and that this process is a catalyst for actionable knowledge.

Debrief following reflective quiet time is divided into three phases (Arafeh et al., 2010), however, they are fluid so participants may move back and forth through phases, as facilitated by the faculty member. In the reaction phase, it is typical for learners to express feelings and reactions about what occurred in the scenario and then the facilitator shifts the focus to a reflective discussion (Arafeh et al, 2010). The second and “most critical” phase is analysis in which the goal is to focus and reflect on the participants’ actions during the scenario (Arafeh et al., 2010). The third phase is summary in which participants learn crucial concepts to use in future practice (Arafeh et al., 2010).

Reflection of participants was situated as a learning activity in this study to help make participants aware of biases, provide space to rethink actions, and practice how to incorporate new information (Tagg, 2010). As the final step in epistemic belief change (Bendixon & Rule, 2004), this is because only when one is able to reflect upon and change underlying beliefs will he or she experience a permanent change in behavior.

***Whole Group Summary.*** After all learning activities, there was a whole group summary of the day. During this time, the standardized patients were introduced to the student participants and all were given the opportunity to share. This intervention helped student participants process a new way of interacting with culturally and linguistically diverse persons to experience epistemic doubt (Bendixon & Rule, 2004).

### **Education Design**

The Transcultural Humility Simulation Development activities were designed specifically to meet theoretical and educational objectives. First, Campinha-Bacote's (2011b) model and constructs were taken into consideration. Then, the researcher-designed learning objectives were matched with learning strategies and Bloom et al.'s (1956) learning domains, were incorporated. The relationships between learning objectives, learning activities, Campinha-Bacote's (2011b) model, Bloom et al.'s (1956) learning domains and adult learning strategies are depicted in Table 2. These pedagogical decisions were made to accommodate various learning styles, like visual, auditory, and kinesthetic and different personalities, like those who prefer individual time, those who feel comfortable in small groups, and those who enjoy large group activities.

### **Instrumentation**

Quantitative and qualitative data were collected and analyzed in this study. Quantitative data were collected using two instruments. The first instrument was the Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2007) and the second was an investigator developed demographic survey. Qualitative data included written reflection and a rubric evaluating participants' demonstration of cultural competence during the intervention and later, semi-structured interviews and re-interviews. Next the instrumentation is described.

Table 2

*Relationships Between Learning Objectives, Activities, Campinha-Bacote's Model, Bloom et al.'s Learning Domains, and Adult Learning Strategies*

Learning Objective	Learning Activities	Campinha-Bacote					Bloom's Learning Domains			Learning Strategies			
		Cultural Awareness	Cultural Knowledge	Cultural Skill	Cultural Encounters	Cultural Desire	Affective	Cognitive	Psychomotor	Self-Directed Learning	Experiential Learning	Narrative Learning	Transformative Learning
1, 4	Complete Online Activity	X			X		X	X		X			
	Matching card game	X	X					X			X		
2, 3	Listen to Faculty Facilitated Lecture		X	X				X			X		
2, 4	Participate in Faculty Facilitated Discussion		X		X		X	X			X	X	
4, 5	Complete Free-Writing Activity				X	X	X	X	X			X	X
1, 4	Watch Movie	X			X		X	X		X			
1, 4	Silent Reflection	X			X		X	X	X			X	
3, 5	Participate in simulation			X		X	X	X	X		X		X
4, 5	Participate in Debrief				X	X	X	X				X	X

## **Demographic Survey**

An investigator developed demographic form (Appendix F) was used to ascertain the demographics of the student participants. Gebru and Willman (2010) found that students of “foreign origin” may be more aware of cultural variety than those students without such a background. Therefore demographic data were collected to describe the sample in order to understand any relationship among such variables and to correlate student participant characteristics with cultural competence using a demographic survey (see Appendix F). Specifically, race, ethnicity and country of origin were correlated with cultural competence.

## **The Inventory for Assessing the Process of Cultural Competence-Student Version**

The Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2007) is an instrument designed to measure constructs of cultural competence, including cultural awareness, cultural knowledge, cultural skill, cultural encounter, and cultural desire. It consists of 20 items using a 4-point Likert scale. For items 1 through 13 and 15 through 20, response categories are strongly agree (4 points), agree (3 points), disagree (2 points), and strongly disagree (1 point). For item 14, there is reverse coding so response categories are strongly disagree (4 points), disagree (3 points), agree (2 points) and strongly agree (1 point).

**Validity.** Construct validity was established using the constructs in Campinha-Bacote’s (2011b) cultural competence model and correlation with a cumulative cultural experience score ( $r = 0.309$ ,  $p = 0.004$ ).

**Reliability.** Internal consistency reliability for the overall scale was adequate for a new tool at .78 ( $N=90$ ) (Fitzgerald et al., 2009). The overall reliability for this study was calculated and is reported in the last column of Table 3, along with operational definitions, instrumentation,

Table 3

*Operational Definitions, Instrumentation, and Psychometrics*

Term	Definition	Measured By	Previously Published Psychometrics	Psychometrics Calculated for this Study
Cultural Competence	"The ongoing process in which the healthcare professional continuously strives to achieve the ability and availability to work effectively with the cultural context of the patient (individual, family, community)" (Campinha-Bacote, 2007, p. 15).	Inventory for Assessing the Process of Cultural Competence-Student Version	Cultural composite Total Scale Coefficient alpha .74 (N=90)	Cultural Composite Total Scale Cronhach's Alpha .81 (N=54)
Cultural Awareness	Deliberate self-examination and in-depth exploration of one's own biases, stereotypes, prejudices, and assumptions about different others (Campinha-Bacote, 2011b).	Items 1, 3, and 15 on the Inventory for Assessing the Process of Cultural Competence-Student Version	Coefficient alpha .19	Coefficient alpha .02
Cultural Knowledge	Process of seeking and obtaining education about culturally and ethnically diverse groups (Campinha-Bacote, 2011b).	Items 4, 6, 8, 9, and 12 on the Inventory for Assessing the Process of Cultural Competence-Student Version	Coefficient alpha .68	Coefficient alpha .64
Cultural Skills	Ability to collect culturally relevant data and accurately perform a physical assessment in a culturally sensitive manner (Campinha-Bacote, 2011b).	Items 7, 17, and 18 on the Inventory for Assessing the Process of Cultural Competence-Student Version	Coefficient alpha .39	Coefficient alpha .37
Cultural Encounters	Mindful interactions that can be face-to-face, telephonic, or indirect encounters via all forms of communications, with the key factor being the person is available and open (Campinha-Bacote, 2011b).	Items 10, 11, 13, 14, and 19 on the Inventory for Assessing the Process of Cultural Competence-Student Version	Coefficient alpha .47	Coefficient alpha .56
Cultural Desire	Motivation to "want to" engage in the process of becoming culturally competent; not the "have to" (Campinha-Bacote, 2011b).	Items 2, 5, 16, and 20 on the Inventory for Assessing the Process of Cultural Competence-Student Version	Coefficient alpha .67	Coefficient alpha .66

and published psychometrics for the Inventory for Assessing the Process of Cultural Competence-Student Version. All reliability statistical analyses were similar to previously published psychometrics with the exception of the construct of cultural awareness. The coefficient alpha 0.02 calculated for the construct cultural awareness indicated no variation among subscale scores for student participants.

There were a total of 54 cases considered valid since they had no missing items. The Cronbach's alpha based on these data was .81. There were two items with very low corrected item-total correlation scores, relationship at .14 and aware at .04. The corresponding items on the Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2007) were "I believe there is a relationship between culture and health" and "I am aware of some of the stereotyping attitudes, preconceived notions and feelings that I have toward members of other ethnic/cultural groups". Although deleting these two items would have increased the reliability estimation, all items were kept since the study sample was small.

**Scoring.** Scores range from 20 to 80 points and reflect whether a student understands cultural considerations at a level of culturally proficient (scores from 75 to 80 points), culturally competent (scores from 60 to 70 points), culturally aware (scores from 41 to 59 points), or culturally incompetent (scores of 20 to 40 points).

### **Written Reflection**

Student participants were asked to complete written reflection during three portions of the Transcultural Humility Simulation Development activities following: the matching card game, the viewing of the video, and the group wrap up at the end of the Workshop. Student participants were provided paper and pens in order to handwrite reflection following the workshop activities. They were provided quiet time to facilitate reflection and participation.

## **Workshop Evaluation**

Student participants who participated in the workshop were asked to complete a written evaluation of Transcultural Humility Simulation Development activities on the day of the intervention (refer to Appendix G). These responses were examined for any information that needed follow up by researcher (Denzin & Lincoln, 2008) such as ethical issues and feedback on how to improve the workshop.

## **Individual Interviews**

A subgroup of participants was interviewed after graduation, some from the intervention group ( $n = 12$ ) and some from the comparison group ( $n = 8$ ). The intention was that they would have passed the licensing exam, obtained a job, and had time to acclimate to the role of Registered Nurse. Questions used in semi-structured interviews were designed to answer Research Question 2 and a semi structured interview guide was prepared (refer to Appendix H).

At the time of the interviews, four participants (20%) had failed boards, one participant (5%) passed the licensing exam and went directly to graduate school, and the remaining participants (75%) had passed boards and were working as Registered Nurses. At the time of the re-interviews ( $n = 5$ ), all students (100%) had passed boards and were working as Registered Nurses.

## **Data Collection**

The collection of data commenced after the Institutional Review Board (IRB) of both the University of Wisconsin-Milwaukee (UWM) (see granted approval of the study, Appendix I) and the study site (refer to Appendix J). The Dean and Associate Dean of the School of Nursing granted approval for the study. Several members of the faculty and staff assisted in implementation of the workshop and data collection, and their role and qualifications are

presented in Table 4. Each was recruited because of experience, education and interest in cultural competence. Recruitment entailed personal conversations with the student primary investigator, in person or via telephone. All faculty and staff who participated were provided breakfast, lunch, and snacks on the day of the workshop, as well as a small gift worth no more than \$25 to recognize their giving up personal time to help with this study. The investigator met with the faculty and staff members one month prior to commencing the study to apprise each about study purposes, procedures and the intervention planned. A copy of Campinha-Bacote's (2007) book explaining her theory and instruments was made available to faculty and staff so each may become familiar with cultural competence and its constructs, and the primary instrument used for quantitative data collection. Faculty Member 1 (refer to Table 4) presented the study at the very end of a class meeting one week before the beginning of data collection using an established recruitment script (Appendix K) to potential student participants.

Potential student participants were informed that declining to participate in the study, or withdrawing from the study, will in no way affect their educational status or grade. Instructors leading coursework for the student participants were not informed whether a student participated, declined to participate, or withdrew from the research study so that no unintended negative consequences could result. Potential student participants were invited to ask any questions of the investigator either by email or phone and Faculty Member 1 provided this contact information to them. No questions were asked. The study time line is presented in Table 5.

### **Pretest Data**

On the first day of data collection, one week before the workshop, Faculty Member 1 gave all potential student participants a large envelope that contained the informed consent (Appendix L), the demographic survey (Appendix F) and the Inventory for Assessing the Process of



Table 4

*Faculty and Staff Assisting with Data Collection and the Workshop*

Member	Qualifications	Role
1	Registered Nurse Master of Science, Nursing Never taught the sample population No responsibility for grading	<u>Friday, May 29</u> Read recruitment script <u>Friday, June 5</u> Consented student participants Distributed and collected surveys for pretest Collected phone numbers of those willing to participate in semi-structured interviews Provided student participants with instructions and website for the online activity <u>Friday, June 19</u> Distributed and collected surveys for posttest
2	Master of Science, Education Assistant Director of the Learning Resource Center Standardized Patient Coordinator No responsibility for grading	Recruited, consented, trained Standardized Patients <u>Friday, June 12</u> Prebriefed and debriefed Standardized Patients Was available for Standardized Patients when questions or concerns arose
3	Registered Nurse Doctor of Philosophy, Nursing Master of Science, Nursing Clinical Nurse Specialist, Gerontology Ethnogeriatric Certification from Stanford University No responsibility for grading	<u>Friday, June 12</u> Led the Faculty-Led rotation of the intervention three times on day of Workshop. <b>Lecture</b> -content included information on the importance of using interpreter services, the National Standards for Culturally and Linguistically Appropriate services in Health and Healthcare (CLAS), and health disparities. <b>Group Discussion and Free Write</b> -allowed participants to discuss concepts of health equity.
4	Registered Nurse Doctor of Nursing Practice No responsibility for grading	<u>Friday, June 12</u> Observed and rated student participants' performance on a rubric during simulation on day of Workshop. There were approximately fifteen student pairs observed and rated.
5	Registered Nurse Doctor of Nursing Practice No responsibility for grading	<u>Friday, June 12</u> Observed and rated student participants' performance on a rubric during simulation on day of Workshop. There were approximately fifteen student pairs observed and rated.
6	Registered Nurse Doctor of Philosophy, Nursing No responsibility for grading	<u>Friday, June 12</u> Observed and rated student participants' performance on a rubric during simulation on day of Workshop. There were approximately fifteen student pairs observed and rated.
7	Registered Nurse Doctor of Nursing Practice Director of the Learning Resource Center No responsibility for grading	<u>Friday, June 12</u> <b>Debriefed</b> -student participants following each simulation with Standardized Patients on day of Workshop. There were approximately fifteen student pairs to be debriefed.

Table 5

*Study Time Line*

Date	Activity
Last week in May	Invitation to Participate in Study
Friday, June 5	Consent, Pretest with Inventory for Assessing Cultural Competence-Student Version, and Demographic Survey
Friday, June 12	Written Reflection following Card Matching Game and Movie
Friday, June 12	Free-Write during Faculty-Facilitated Rotation
Friday, June 12	Faculty Assessment per Rubric during Simulation
Friday, June 12	Written Evaluation of Intervention
Friday, June 19	Posttest with Inventory for Assessing Cultural Competence-Student Version
July, After Graduation	Invitation to Participate in Interviews
July through September	Semi-structured Interviews
February 2016	Invitation to Participate in Re-Interviews
February & March 2016	Re-Interviews

Cultural Competence-Student Version. Potential student participants were invited to read the informed consent form, complete the instruments, add a self-generated identification code to all materials, and return the envelope to the faculty member. The self-generated identification code consisted of seven elements: gender (M or F), month and day of mother's birth; number of older brothers; number of older sisters; and first initial of mother's first name. The self-generated identification code was unidentifiable to the researcher but allowed matching of instruments. This was the collection of pretest data at Time 1 ( $O_1$ ) (Shadish et al., 2002). Faculty Member 1 collected all envelopes so that nobody knew who decided to participate and who did not.

Faculty Member 1 delivered the envelopes to another room where the primary investigator then reviewed the informed consents and instruments and used a random number generator to assign student participants to the intervention group or comparison group. Randomly, 22 student participants were assigned to the intervention group and 35 were assigned to the comparison group. The investigator compiled a list of the self-generated identification codes of student participants in each group. Faculty Member 1 posted the list of student participants assigned to each group, identified by the self-generated identification code, on a bulletin board. Instructions were left on the list for student participants assigned to the intervention group to access and complete the online activity and return the next week for the Workshop.

### **Data Collected During Intervention**

The intervention was planned for a day the student participants were not scheduled for normal class activities. The intervention group participated in Transcultural Humility Simulation Development activities and data were collected outside of class time. The comparison group did not have regular programming on the day of the workshop. Qualitative data were collected from participants in the intervention group during the Workshop. Student participants engaged in written reflection (see Appendix M) following the matching card game, after viewing the video and at the end of the Workshop and completed a free-write activity (refer to Appendix C for free-writing directions).

Qualitative data were collected using the principals of credibility, transferability, dependability and confirmability (Schmidt & Brown, 2015). The assurance of credibility was met through persistent observation, peer debrief, and referential adequacy. Persistent observation involved spending a good deal of time with student participants during interviews to describe and

capture the phenomenon of study (Schmidt & Brown, 2015). Peer debrief occurred when the researcher enlisted the help of another person to discuss the data, findings, and the researcher's reflections and feelings (Schmidt & Brown, 2015), and was provided in this study through interaction with education colleagues, the Major Professor and dissertation committee. Referential adequacy was satisfied in this study through comparison with other sources of data (Schmidt & Brown, 2015) comparing student responses with the audio and video recordings of simulation and debrief. Transferability was accomplished through rich written comments and narrative, achieving data saturation (Schmidt & Brown, 2015). In this study, an audit trail was maintained to demonstrate the researcher's decision making throughout the study. Refer to Appendix N for an example of the audit trail. Records were kept throughout this study on a password protected computer to help assure consistency in the findings over time and auditability (Schmidt & Brown, 2015). Records and original data were shared with the Major Professor as requested. Using objectivity and using non-leading, open-ended questions addressed confirmability (Schmidt & Brown, 2015) in this study through free-write, written reflection and semi-structured interview questions.

### **Posttest Data**

The Inventory for Assessing the Process of Cultural Competence-Student Version was administered to both the experimental group and the comparison group on the Friday following the Workshop at Time 2 (*O*<sub>2</sub>) after class. The instrument was placed in a large envelope and distributed to student participants. Student participants were asked to write the self-generated identification code in order to match data, complete the instrument, place it back in the envelope and return it to the faculty member.

**Semi-Structured Interviews.** Approximately two months after the workshop, those student participants who agreed to be interviewed ( $n = 22$ ) were contacted by phone to ascertain when they could meet for a semi-structured interview. Student participants from both the intervention ( $n = 12$ ) and comparison group ( $n = 8$ ) were contacted later in the summer after they graduated and had some patient care experience in the role of an entry level Registered Nurse for semi-structured interviews (refer to Appendix H for semi-structured interview questions). Two participants who had said they were interested in being interviewed were not available later in the summer. Interviews were interactive using a range of probes, penetration, exploration, and explanation to fully explore all factors that underpin participants' answers, including reasons, feelings, opinions, and beliefs (Ritchie & Lewis, 2009). The semi-structured interviews took place at a time and public location convenient for each student participant; all but one was conducted in the office of the investigator. The other interview was conducted at a local coffee shop. The majority of the interviews lasted about 30 minutes. Interview data were digitally audio recorded and then transcribed.

**Re-Interviews.** After completing 20 interviews, and evaluating the depth and quality of the data, in consultation with three members of the committee, review of interview transcripts indicated a need to re-interview student participants. Institutional Review Board approval was amended to re-interview the student participants (Appendix O). Student participants were recruited by phone and school email. Student participants were consented (please refer to Appendix Q for re-interview consent). A total of five students were re-interviewed, from the intervention group ( $n = 3$ ) and control group ( $n = 2$ ). These qualitative data were elicited by the use of open ended questions regarding "cultural competence", the same concept as quantitative data measured. All re-interviews were conducted in the office of the investigator. Each was much

longer than prior interviews, averaging one hour. The re-interviews were digitally audio recorded and then transcribed.

### **Human Subjects Protection**

Confidentiality was assured and maintained. Student participants were instructed not to write their names or any other personal identifying information on any of the data collection instruments. Instead, the participants were asked to write the self-generated identification code on the top of each instrument so data could be matched for analysis.

Student participants who were willing to be contacted for semi-structured interviews following graduation were asked to place a phone number where they could be reached under the self-generated identification code. After survey and written reflection and evaluation data were matched by the self-generated identification code, phone numbers were placed on a worksheet in random order so no associations could be made between survey answers and any person.

Simulation activities were digitally audio and video recorded. The recordings of the simulation activities were used during debrief to help participants reflect on their actions, and later to compare student perceptions of their actions with their actions. Written reflection and evaluation were used to analyze aggregate data, not individual performance or opinions. Semi-structured interviews and re-interviews were digitally audio recorded and transcribed verbatim.

The participants were informed that all study data, including surveys, written reflections and evaluations, and digital audio and video recordings will be stored in a locked cabinet.

Student participants were informed that transcribed data would be saved on a password protected computer. Student participants were informed that only the researcher and the Major Professor of this study would have access to the raw data. All data will be kept for a period of three years in case further or future analysis is warranted and then data will be destroyed. Findings are reported

only in the aggregate with no individual personal identifying information. Findings were sent to the author of the model and instrument as per Campinha-Bacote's instruction (J. Campinha-Bacote, Personal Communication, May 17, 2014). The analyses of quantitative and qualitative data are presented next.

### **Data Analysis**

The use of mixed methods in this study enabled the investigator to be more likely to capture the essence of the phenomena (Creswell & Plano Clark, 2011) of cultural competence. Statistical analyses were performed for the Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2007) and the researcher designed demographic survey to test the study hypotheses. Qualitative content analysis (Ritchie & Lewis, 2009) was used to analyze data gathered from student participants' written reflections, the free-write activity, and the semi-structured interviews and re-interviews in order to answer the two research questions. How the quantitative data were managed is presented next.

### **Data Management**

Version 23 of the Statistical Product and Services Solutions (SPSS) for Windows was used to perform quantitative data analysis on a personal computer. The independent variables for the research study were demographic data and Transcultural Humility Simulation Development activities. The dependent variables included cultural competence as well as its five constructs, cultural awareness, cultural knowledge, cultural skills, cultural encounters and cultural desire as measured by the Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2011b) and the demographic survey. The data were cleaned to ensure the variables have valid and usable values and then missing data were addressed.

**Cleaning Data.** Once quantitative data were entered into SPSS, the data were cleaned using three methods. The first was “spot checking” where the raw data was compared with the electronically entered data to check for data-entry and coding errors by randomly selecting several participants’ completed paper surveys and comparing them to the data on the electronic spreadsheet (Plichta & Kelvin, 2013). The second was “eye-balling” to review the data for errors that may have resulted from a data-entry or coding mistake (Plichta & Kelvin, 2013). The third was a “logic check” in which data were carefully reviewed to make sure the codes and answers entered made sense (Plichta & Kelvin, 2013). No errors were found in this process.

**Missing Data.** Reasons for missing values included student participant attrition or student participant declined to answer individual questionnaire items (Plichta & Kelvin, 2013; Shadish et al., 2002). In this study with 57 participants, there was attrition of 23% ( $n = 13$ ) on any part of requested instrumentation. The intervention group had 27% ( $n = 6$ ) attrition and the comparison group had 20% ( $n = 7$ ) attrition.

The goal with the missing data of random individual questionnaire items was to estimate what the study would have shown had there been no missing values (Shadish et al., 2002). In the case of this study, the treatment effect of missing individuals was modeled by assuming the treatment effect for those who left the study was the same as those who remain (Armijo-Olivo, Warren & Magee, 2009).

Multiple imputation is the best method for imputation and is commonly used (Weiming Ke, Personal Communication, February 9, 2016). Multiple imputation is a statistical technique for analyzing incomplete data sets, that is, data sets for which some entries are missing (Plichta & Kelvin, 2013). Application of the technique requires three steps: imputation, analysis and pooling. For imputation, missing entries of incomplete data sets are filled in not once, but  $m$



times, commonly five, and in this case,  $m = 5$ . Imputed values are drawn from a distribution (that can be different for each missing entry) (Plichta & Kelvin, 2013). This step results in  $m$  complete data sets (Plichta & Kelvin, 2013). Second, there is analysis of each of the  $m$  completed data sets resulting in  $m$  analyses (Plichta & Kelvin, 2013). Finally, the  $m$  analysis were integrated into a final pooled result (Plichta & Kelvin, 2013).

### **Descriptive Analysis**

Descriptive analysis was performed to describe the sample characteristics and to evaluate pretest and posttest scores to examine for outliers (Plichta & Kelvin, 2013). Frequencies such as mean, median, mode, range, and standard deviations were computed for the intervention group and the comparison group (Plichta & Kelvin, 2013). Scores on the Inventory for Assessing Cultural Competence-Student Version in this study ranged from 53 to 80 (instrument range is 20 to 80). The mean score was 65.93, the standard deviation was 5.57 and the coefficient of variation was 9.62%. The Pearson's skewness coefficient of the distribution was 0.066 ( $SD = 0.597$ ) and the Fisher's measure of kurtosis was -0.835 ( $SD = 1.154$ ). These data suggest a positive minor skewness and leptokurtic distribution but this was not statistically significant so subsequent statistical analyses were not affected.

### **Research Hypotheses**

The criterion for significance (alpha) of  $p < 0.05$  was adopted for significance testing (Plichta & Kelvin, 2013).

1. *Posttest measurement of overall cultural competence will differ between students who participate in Transcultural Humility Simulation Development and those who do not participate when controlling for the pretest measurement.* To test this hypothesis, one-way analysis of covariance (ANCOVA) was used to measure the difference among intervention group and

comparison group means of total scores on the Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2007) while controlling for the covariate effect of the pretest, which is neither a dependent variable nor an independent variable (Plichta & Kelvin, 2013).

2. *Posttest measurement of the construct of **cultural awareness** will differ between students who participate in Transcultural Humility Simulation Development and those who do not participate when controlling for the pretest measurement.* To test this hypothesis, one-way analysis of covariance (ANCOVA) was used to measure the difference among intervention group and comparison group means of total construct scores on items 1, 3, and 15 on the Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2007) while controlling for the covariate effect of the pretest, which is neither a dependent variable nor an independent variable (Plichta & Kelvin, 2013).

3. *Posttest measurement of the construct of **cultural knowledge** will differ between students who participate in Transcultural Humility Simulation Development and those who do not participate when controlling for the pretest measurement.* To test this hypothesis, one-way analysis of covariance (ANCOVA) was used to measure the difference among intervention group and comparison group means of total construct scores on items 4, 6, 8, 9, and 12 on the Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2007) while controlling for the covariate effect of the pretest, which is neither a dependent variable nor an independent variable (Plichta & Kelvin, 2013).

4. *Posttest measurement of the construct of **cultural skill** will differ between students who participate in Transcultural Humility Simulation Development and those who do not participate when controlling for the pretest measurement.* To test this hypothesis, one-way analysis of

covariance (ANCOVA) was used to measure the difference among intervention group and comparison group means of total construct scores on items 7, 17, and 18 on the Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2007) while controlling for the covariate effect of the pretest, which is neither a dependent variable nor an independent variable (Plichta & Kelvin, 2013).

5. *Posttest measurement of the construct of **cultural encounters** will differ between students who participate in Transcultural Humility Simulation Development and those who do not participate when controlling for the pretest measurement.* To test this hypothesis, one-way analysis of covariance (ANCOVA) was used to measure the difference among intervention group and comparison group means of total construct scores on items 10, 11, 13, 14, and 19 on the Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2007) while controlling for the covariate effect of the pretest, which is neither a dependent variable nor an independent variable (Plichta & Kelvin, 2013).

6. *Posttest measurement of the construct of **cultural desire** will differ between students who participate in Transcultural Humility Simulation Development and those who do not participate when controlling for the pretest measurement.* To test this hypothesis, one-way analysis of covariance (ANCOVA) was used to measure the difference among intervention group and comparison group means of total construct scores on items 2, 5, 16, and 20 on the Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2007) while controlling for the covariate effect of the pretest, which is neither a dependent variable nor an independent variable (Plichta & Kelvin, 2013).

**Ancillary analysis.** Ancillary analysis included one-way analysis of variance (ANOVA), using regression, to test whether the between-group variation exceeds the within-group variation

and explore the influence of select demographic variables on the dependent variable (cultural competence). Hawala-Drury and Hill (2012) and Musolino et al. (2010) suggested that individuals who identify as non-Latino Caucasian and those who are born in countries other than the US may be more culturally competent. The demographic variables “race”, “ethnicity”, and “country of birth” were each used to explore this relationship and to test whether the level was significant in predicting cultural competence scores controlling for demographic variables (Plichta & Kelvin, 2013). The *f* statistic was computed by obtaining a ratio of the between-group variance to the within-group variance (Plichta & Kelvin, 2013).

## **Research Questions**

### **Preamble**

The researcher’s personal bias most likely influenced data analysis since qualitative research is value-laden and iterative. The researcher’s assumptions include the following. First, all persons are created in God’s image, are created equally, and have inherent worth and dignity. Second, cultural competence is particularly important in the geographical area of the study location since culturally and ethnically diverse individuals are widely encountered by baccalaureate nursing students here. Third, nursing faculty must have requisite knowledge, skills and attitudes in order to develop learning experiences relevant to culturally and linguistically diverse populations. Lastly, measurable patient outcomes will improve with culturally competent care.

### **Research Question 1**

*How do participants who engage in Transcultural Humility Simulation Development activities anticipate they will incorporate cultural competence into nursing practice following the intervention?*

The first research question was answered by analyzing student participants' written reflection and the free-write activity to understand feelings, perceptions and experiences of student participants and the research question using content analysis (Ritchie & Lewis, 2009). Although the question was not specifically asked of student participants, all by two participants ( $n = 20$ ) discussed how they anticipated their practice would change based on experience with the intervention.

Content analysis is generally used when the study purpose is to describe phenomena (Hsieh & Shannon, 2005) and involves analysis of both content of documents collected, and context, in this case the intervention. Content analysis involved generating codes to reduce the data and then searching for themes (Ritchie & Lewis, 2009). This analysis allowed understanding of the essential character of the phenomenon, cultural competence, and evaluation analysis commenced, which is targeted towards providing "answers" about the effectiveness of the intervention (Ritchie & Lewis, 2009).

Ritchie and Lewis (2009) explained the following "hallmark" analytic features which were used in this study to maximize qualitative analysis: grounded in data, facilitates and displays ordering, and permits case searches identifying thematic categories across cases (p. 210). Analysis of the data was grounded in the data, rather than superimposed, because concepts and patterns were captured, but the original data were also easily accessible throughout the analytic process (Ritchie & Lewis, 2009). This was not to simply count the number of times a concept of interest appeared, as that would be quantitative analysis, but rather, raw data were reduced to make sense of the evidence while not losing the original terms (Ritchie & Lewis, 2009).

Data were transcribed from the written reflection pages and the free write activity verbatim. Transcribed data are presented in Appendix Q. Data were printed and read repeatedly to achieve immersion (Hsieh & Shannon, 2005). The data were then coded by hand to inspect the evidence in largely related blocks of subject matter (Ritchie & Lewis, 2009). A highlighter was used to highlight words and phrases that appeared to capture key thoughts or concepts (Hsieh & Shannon, 2005). The data did not come in tidy subject related data, which would suggest that the data collection lacked the penetrative and exploratory interrogation needed to understand the phenomena (Ritchie & Lewis, 2009). Rather, synthesis was captured to make sense of responses.

These codes, the highlighted words and phrases were then placed into a new word document. A hard copy of the new word document was printed. Different colored highlighters were used to highlight words or phrases that seemed to go together, making categories used to organize and group codes into meaningful themes (Hsieh & Shannon, 2005). The themes were compared with the originally transcribed data to ensure the overall meaning was not lost (Ritchie & Lewis, 2009). Lastly, analysis permitted case searches so that while the investigator used defining characteristics, clusters, and created themes, the whole data set was always available to understand patterns across different and within cases (Ritchie & Lewis, 2009). This analysis was an iterative process, not linear, in that as categories are refined, dimensions clarified, and explanations developed, there is a constant need to revisit the original or synthesized data (Ritchie & Lewis, 2009).

## **Research Question 2**

*How will participants who completed Transcultural Humility Simulation Development (THSD) activities and those students that did not participate in THSD activities incorporate cultural competence into nursing practice several months after the intervention?*

Research Question 2 was answered through analysis of semi-structured interviews with student participants from the intervention group ( $N = 12$ ) and the comparison group ( $N = 8$ ). Later, the interview transcripts from those participants who were re-interviewed ( $N = 5$ ) were analyzed. Ritchie and Lewis (2009) state the *actual* words used by study participants and the categorical themes together comprise descriptive, qualitative evidence for content analysis.

Questions with participant responses to the iterative and value-laden semi-structured interview questions were transcribed verbatim. Analytic induction was used to identify themes and sort data so materials with similar content were located together (Ritchie & Lewis, 2009). These data were printed and words and phrases that fit with the research question were highlighted. The highlighted words and phrases became initial codes were then transcribed into new documents and a hard copy of the new word document was printed. These quotes can be found in Appendix R. Different colored highlighters were used to highlight words or phrases that seemed to go together, grouping codes into themes (Hsieh & Shannon, 2005). The themes were compared with the originally transcribed data to ensure the overall meaning was not lost (Ritchie & Lewis, 2009). This analysis was an iterative process, not linear. From the themes, the data were further categorized. Finally, findings were synthesized in a way that is conceptually pure, with meaningful distinctions to best answer Research Question 2 (Ritchie & Lewis, 2009).

**Re-Interviews.** As data from the interviews were analyzed and in consultation with the committee, it became clear that the data were insufficient to answer Research Question 2. The questions, probes and content were not at issue with the interviews. Rather, it was the technique of the interviewer and failure to uncover “in-depth” answers to the question. To this end, during re-interviews, the techniques of active listening, facilitation, clarification, restatement, and reflection were used. Each of the techniques are explained next.

To use active listening, the interviewer concentrated on what the participant was saying and the subtleties of the message being conveyed together with the facial expressions and body language observed. The interviewer paid attention to the participant's responses rather than predicting how the person would respond or what question will be asked next. Facilitation and back-channeling techniques dug "deeper" into answers using phrases such as "uh-huh", "go on", and "then?", and techniques such as leaning forward to show interest, and head nodding to encourage participants to continue talking were used. Clarification like "what do you mean by..." was used to obtain more information about conflicting, vague, or ambiguous statements. Confirmation of the interpretation of what was said was used by restating, for example, "let me make sure I understand...". Finally, reflection was used to ask participants a question to clarify a phrase or sentence that encouraged elaboration and indicated that the interviewer was interested in more information. These additional data were analyzed in the same way as the original interview findings using content analysis (Hsieh & Shannon, 2005; Ritchie & Lewis, 2009).

### **Interpretation**

In this embedded mixed methods design, quantitative and qualitative data were collected and analyzed separately, as described above. Following analysis, findings were compared and qualitative findings were used to help explain quantitative findings. Sandelowski (1996) first introduced embedding the qualitative design within the experimental design (as cited in Creswell & Plano Clark, 2011). The qualitative data in this study consisted of student reflection during the intervention and semi-structured interviews regarding provision of nursing care in a culturally competent manner. These data were analyzed separately and interpreted within the larger experimental design to make sense of findings.



### Chapter 3 Summary

The research design, sample, and setting, the intervention, instrumentation, data collection procedure, and data analyses procedures were presented in this chapter. The literature search identified several gaps in the literature measuring cultural competence among baccalaureate nursing students. There were no investigators who used standardized patients with simulation. There were no investigators who measured cultural competence before and after learning activities, such as simulation with valid and reliable instruments (Meltzoff & Lenssen, 2000; Shen, 2014). No investigators used a comparison group and none studied longitudinally using mixed methods to understand the effect of an educational intervention after time.

In this study, quantitative and qualitative data were collected, analyzed, and mixed to understand whether and how participants will implement cultural competence in the provision of nursing care (Creswell & Plano Clark, 2011). A longitudinal, descriptive, quasi-experimental, pretest-posttest comparison group design (Shadish et al., 2002) using embedded mixed methods (Creswell & Plano Clark, 2011) was used. Campinha-Bacote's (2007) Inventory for Assessing the Process of Cultural Competence-Student Version, which has shown content and construct validity and reliability, and a researcher designed demographic survey comprised the quantitative data. Qualitative data included student participant written reflections, a free-write activity and later, semi-structured interviews and re-interviews. Qualitative data were analyzed through content analysis (Ritchie & Lewis, 2009).

The purpose of this study was twofold. The first aim was to determine whether participation in the researcher designed intervention, Transcultural Humility Simulation Development, significantly improved cultural competence and its constructs, cultural awareness, cultural knowledge, cultural skill, cultural desire and cultural encounters among graduating

baccalaureate nursing students when compared with a group of students who did not participate in the intervention. The second aim was to explore the integration of culturally competent behaviors in nursing care following graduation at one private university in southern California.

## CHAPTER 4

### RESULTS OF THE INVESTIGATION

This chapter provides the results of the investigation of cultural competence among graduating professional nursing students. The purpose of this study was twofold. The first aim was to determine whether participation in the researcher designed intervention, Transcultural Humility Simulation Development, significantly improved cultural competence and its constructs, cultural awareness, cultural knowledge, cultural skill, cultural desire and cultural encounters among graduating baccalaureate nursing students when compared with a group of students who did not participate in the intervention. The second aim was explore the integration of culturally competent behaviors in nursing care following graduation. Presented next are the characteristics of the sample studied followed by the results of data analysis.

#### Sample Characteristics

A total of 57 student participants, 22 in the intervention group and 35 in the comparison group began the study. This comprised 95% of the graduating class. Each student participant completed the Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2007) at Time 1 ( $O_1$ ) prior to the intervention. Student participants that remained in the study (overall attrition  $n = 13$ , 23%) completed the Inventory for Assessing the Process of Cultural Competence-Student Version at Time 2 ( $O_2$ ) following the intervention. The demographic and descriptive analysis for the two groups is presented next. The groups did not differ demographically. The typical student participant was female, non-Latino Caucasian and in her mid-twenties.

## **Intervention Group**

The participants in the intervention group were mostly female ( $n = 20$ ) with 9.1% indicating they were male ( $n = 2$ ). Age of the participants in the intervention group was 21 years old to 36 years old, a narrower range than the comparison group with a mean age of 26 years old and a mode of 25 years old. Two participants described their race as of two or more races with 90.9% ( $n = 20$ ) indicating one race. Over thirty-eight percent (38.1%) of participants in the intervention group ( $n = 16$ ) stated they are White, European or Middle Eastern American. Almost five percent (4.8%) ( $n = 2$ ) of participants in the intervention group described themselves as Black or African American, 7.1% ( $n = 3$ ) were Asian American, and 2.4% ( $n = 1$ ) was Native Hawaiian or Pacific Islander. The majority ( $n = 13$ ) indicated they were Non-Hispanic or Latino. Over 38.1% ( $n = 16$ ) were single and live alone or with a parent.

The pretest and posttest means of the overall scores on the Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2007) were 63.86 ( $SD = 5.73$ ) and 65.93 ( $SD = 5.57$ ). Please refer to Table 6 for total and construct subscale scores and descriptive findings for the intervention and comparison groups. The majority of the participants in the intervention group self-rated “culturally competent” or “culturally proficient” (77%). Please see Table 7 for pretest and posttest report of cultural competence.

## **Comparison Group**

The comparison group consisted of 25 females (69.4%) and 11 males (30.6%). The group ranged in age from 22 years old to 44 years old for a mean age of 30 years old and a mode of 27 years old. The majority of participants in the comparison group were White, European American, or Middle Eastern American (82%). Three participants were African American (8%), three were Asian American (8%) and one was Native Hawaiian or Pacific Islander (2%).

Table 6

*Total and Construct Pretest and Posttest Mean Scores for Intervention and Comparison Groups*

	Intervention Group		Comparison Group		
	Totals				
	Pretest Mean	Posttest Mean	Pretest Mean	Posttest Mean	
Total Instrument	63.86 ( <i>SD</i> = 5.73)	65.93 ( <i>SD</i> = 5.57)	Total Instrument	63.24 ( <i>SD</i> = 6.15)	64.79 ( <i>SD</i> = 7.18)
Range 20-80	Min 53/Max 78	Min 58/Max 76	Min 53/Max 80	Min 53/Max 79	
	Constructs				
	Pretest Mean	Posttest Mean	Pretest Mean	Posttest Mean	
Cultural Awareness 3-12	10.9 ( <i>SD</i> = .83)	10.88 ( <i>SD</i> = .89)	Cultural Awareness 3-12	10.54 ( <i>SD</i> = .85)	10.71 ( <i>SD</i> = 1.12)
Cultural Knowledge 5-20	14.32 ( <i>SD</i> = 2.01)	14.75 ( <i>SD</i> = 2.08)	Cultural Knowledge 5-20	14.43 ( <i>SD</i> = 2.38)	14.82 ( <i>SD</i> = 2.82)
Cultural Skill 3-12	8.45 ( <i>SD</i> = 1.41)	9.2 ( <i>SD</i> = 1.42)	Cultural Skill 3-12	8.26 ( <i>SD</i> = 1.5)	8.82 ( <i>SD</i> = 1.49)
Cultural Encounter 5-20	15.77 ( <i>SD</i> = 1.97)	16.73 ( <i>SD</i> = 1.39)	Cultural Encounter 5-20	15.69 ( <i>SD</i> = 2.11)	16 ( <i>SD</i> = 1.72)
Cultural Desire 4-16	14.32 ( <i>SD</i> = 1.64)	14.37 ( <i>SD</i> = 1.71)	Cultural Desire 4-16	13.94 ( <i>SD</i> = 1.66)	14.32 ( <i>SD</i> = 1.72)

Table 7

*Respondents Pretest and Posttest Report of Cultural Competence in Intervention and Comparison Groups*

	Intervention Group		Comparison Group		
	<i>N</i> (%) of Participants		<i>N</i> of Participants		
Culturally Proficient (75-80)	2 (9%)	1	Culturally Proficient (75-80)	4 (11%)	3
Culturally Competent (60-74)	15 (68%)	10	Culturally Competent (60-74)	22 (61%)	15
Culturally Aware (41-59)	5 (23%)	3	Culturally Aware (41-59)	10 (28%)	6
Culturally Incompetent (20-40)	0 (0%)	0	Culturally Incompetent (20-40)	0 (0%)	0

Eleven out of the 36 participants indicated they were Hispanic or Latino. All but one was born in the United States. The majority are single ( $n = 21$ ) and live alone ( $n = 10$ ) or with parents ( $n = 10$ ). There were few differences between the intervention group and comparison group on Campinha-Bacote's (2007) Inventory for Assessing Cultural Competence-Student Version.

The comparison pretest and posttest means of the overall scores on the Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2007) were 63.24 ( $SD = 6.15$ ) and 64.79 ( $SD = 7.18$ ). The total and construct subscale scores and descriptive findings were presented in Table 6. The majority of the participants in the intervention group self-rated "culturally competent" or "culturally proficient" (72%). Please refer to Table 7 for pretest and posttest report of cultural competence.

### **Hypotheses Testing**

The instruments used to collect quantitative data included the Inventory for Assessing the Process of Cultural Competence-Student Version and the researcher designed demographic survey discussed above. Presented next are the results of the inferential statistical analyses of the data collected using the Inventory for Assessing the Process of Cultural Competence-Student Version and the demographic survey.

#### **Hypothesis 1**

*Posttest measurement of overall cultural competence will differ between students who participate in Transcultural Humility Simulation Development and those who do not participate when controlling for the pretest measurement.* Based on a significance (alpha) of  $p < 0.05$ , results indicate no difference of the means of the posttest total between the intervention group ( $M = 65.93, SD = 5.57$ ) and the comparison group ( $M = 64.79, SD = 7.18$ ) on the Inventory for

Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2007),  $F$  ratio of  $F(1, 31) = .74, p = .40, \eta^2 = .023$ . The hypothesis was not supported.

## **Hypothesis 2**

*Posttest measurement of the construct of **cultural awareness** will differ between students who participate in Transcultural Humility Simulation Development and those who do not participate when controlling for pretest measurement.* Based on a significance (alpha) of  $p < 0.05$ , results indicate no difference of the means of the posttest total between the intervention group ( $M = 10.88, SD = .89$ ) and the comparison group ( $M = 10.71, SD = 1.12$ ) on items 1, 3 and 15 on the Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2007),  $F$  ratio of  $F(1, 3) = 2.479, p = .12, \eta^2 = .403$ . The hypothesis was not supported.

## **Hypothesis 3**

*Posttest measurement of the construct of **cultural knowledge** will differ between students who participate in Transcultural Humility Simulation Development and those who do not participate when controlling for pretest measurement.* Based on a significance (alpha) of  $p < 0.05$ , results indicate no difference of the means of the posttest total between the intervention group ( $M = 14.75, SD = 2.08$ ) and the comparison group ( $M = 14.82, SD = 2.82$ ) on items 4, 6, 8, 9 and 12 on the Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2007),  $F$  ratio of  $F(1, 4) = 1.179, p = .37, \eta^2 = .300$ . The hypothesis was not supported.

## **Hypothesis 4**

*Posttest measurement of the construct of **cultural skill** will differ between students who participate in Transcultural Humility Simulation Development and those who do not participate*



when controlling for pretest measurement. Based on a significance (alpha) of  $p < 0.05$ , results indicate no difference of the means of the posttest total between the intervention group ( $M = 9.2$ ,  $SD = 1.42$ ) and the comparison group ( $M = 8.82$ ,  $SD = 1.49$ ) on items 7, 17 and 18 on the Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2007),  $F$  ratio of  $F(1, 4) = 1.70$ ,  $p = .23$ ,  $\eta^2 = .405$ . The hypothesis was not supported.

### **Hypothesis 5**

106 *Posttest measurement of the construct of **cultural encounters** will differ between students who participate in Transcultural Humility Simulation Development and those who do not participate when controlling for pretest measurement.* Based on a significance (alpha) of  $p < 0.05$ , results indicate no difference of the means of the posttest total between the intervention group ( $M = 16.73$ ,  $SD = 1.39$ ) and the comparison group ( $M = 16$ ,  $SD = 1.72$ ) on items 10, 11, 13, 14 and 19 on the Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2007),  $F$  ratio of  $F(1, 5) = 1.79$ ,  $p = .21$ ,  $\eta^2 = .499$ . The hypothesis was not supported.

### **Hypothesis 6**

*Posttest measurement of the construct of **cultural desire** will differ between students who participate in Transcultural Humility Simulation Development and those who do not participate when controlling for pretest measurement.* Based on a significance (alpha) of  $p < 0.05$ , results indicate no difference of the means of the posttest total between the intervention group ( $M = 14.37$ ,  $SD = 1.71$ ) and the comparison group ( $M = 14.32$ ,  $SD = 1.72$ ) on items 2, 5, 16 and 20 on the Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2007),  $F$  ratio of  $F(1, 8) = .57$ ,  $p = .72$ ,  $\eta^2 = .221$ . The hypothesis was not supported.

## **Ancillary Analysis**

Hawala-Drury and Hill (2012) and Musolino et al. (2010) suggested that individuals who identify as other than non-Latino Caucasian or are born in countries other than the US may be more culturally competent. The selected demographic variables analyzed to determine whether any had an effect on cultural competence were race, ethnicity and country of birth. Based on a significance (alpha) of  $p < 0.05$ , the effect of race on cultural competence yielded an  $F$  ratio of  $F(10, 3) = 15.13, p = .02$ , indicating that participants who identified as being from more than one race on the demographic survey were more cultural competent than those identified as being one race. ANOVA was also used to determine whether ethnicity [ $F(17, 6) = 1.63, p = .38$ ] and country of birth [ $F(10, 3) = 1.41, p = .35$ ] had an effect on cultural competence but the results indicated no relationship.

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## **Summary of Quantitative Analysis**

Inspection of findings revealed no differences in cultural competence between intervention and comparison groups indicating the intervention did not make a difference in cultural competence among professional nursing students. The pretest and posttest measures in both the intervention and control group were each equivalent. Statistical analysis indicated that students who identified as more than one race perceived higher cultural competence than those who identified as one race.

## **Research Questions**

### **Research Question 1**

*How do participants who engage in Transcultural Humility Simulation Development activities anticipate they will incorporate cultural competence into nursing practice following the intervention?*

Four themes were identified from the analysis of data. The themes include **shattering preconceived perceptions, constructing innovative insights, improving effective communication, and emerging personal development**. This evidence is displayed in Table 8. Each of the themes answering Research Question 1 and evidential support are described next.

**Shattering Preconceived Perceptions.** The first theme identified in the content analysis of written reflection and the free write emphasized what participants understood before being exposed to the intervention. The theme shattering preconceived perceptions is made of *discomfort* and *misunderstanding*. Each are explained with student participant responses next.

108 **Discomfort.** A few student participants revealed personal discomfort with the situation. A student shared:

When I think about culture or it comes into my mind, many things enter my thoughts. Of course depending on the situation varies. Unfortunately many times the first thing that enters my mind and I'm sure many other people as well is my preconceived ideas, beliefs, values, and definitely biases. It is easy to think or convince ourselves that our way is the "best" way of doing or thinking because that is what we've been taught and groomed our entire lives. I would we be taught the wrong way so of course we, and I could admit, me as well, tend to be ethnocentric in large.

**Misunderstanding.** Student participants discussed the frustration of not understanding how to interact with culturally and linguistically diverse persons. A student stated:

It sheds light on my own need to improve on being culturally competent, especially in practice as a nurse. It is impossible to know everything about each culture but we have to at least try.

Table 8

*Research Question 1 Analysis of Written Reflection and Free-Write Activity*

Student participant words, phrase or sentence	Codes	Themes
<p>Simulation demonstrated caregiver frustration                      I feel the frustration of attempting to communicate with someone whose primary language is not the same as mine.                      Unneeded stress and frustration                      My preconceived ideas, beliefs, values and definitely biases</p>	<p>Discomfort                       Misunderstanding</p>	<p><b>Shattering                      Preconceived                      Perceptions</b></p>
<p>I see the cultural barriers all the time now with my patients.                      I want to be the nurse that takes the time to make sure her patients understand the information they are given                      It has allowed me to open my eyes and to be more culturally aware and sensitive.                      how important it is to understand other cultures/religions and to respect them                      see someone's world from their perspective                      It sheds light on my own need to improve on being culturally competent, especially in practice as a nurse.                      This is a huge issue that I feel not many people in the healthcare setting are aware of.</p>	<p>Discernment                           Desires for the Future</p>	<p><b>Constructing                      Innovative                      Insights</b></p>
<p>Language barriers are often the problem between healthcare providers and patients.                      I gained a better understanding on what (or how I should approach) a patient with the language barrier.                      I cannot assume people will ask questions if they don't understand.                      I have not stopped to think what I would do if I were to encounter a patient that has other language needs, especially if an interpreter is not readily available for them.                      importance of a translator                      the importance of using a hospital's translator.                      It is eye-opening to see how much is lost in translation when it comes to having a patient of different culture that speaks a different language.                      A translator or is absolutely crucial to have the family and patient understand all options.I'm not going to waste time trying to get them to understand my question about pain, nor touch them which may be a violation of their cultural and spiritual beliefs before I take the time to handle the language barrier.</p>	<p>Language                           Translation</p>	<p><b>Improving                      Effective                      Communication</b></p>

Table 8

*Research Question 1 Analysis of Written Reflection and Free-Write Activity (Continued)*

110	<p>Communication is the basis of understanding each other or human beings.          communication errors          Communication <u>can</u> save lives.          I really see how important communication is. When speaking with any and everyone you really have to take the time to make sure what is said is understood.          It is very important to be effective at communication to understand or provide health care.          Effective line of communication is necessary for effective patient centered care          I need to make sure we can properly understand each other.</p>	Meaning	
	<p>The simulation demonstrated barriers to providing consistent care that should be tailored to the patient's cultural needs.          As health professionals, cultural, education, religion and all factors that pose as barriers must be considered in providing a better healthcare.          We should try to learn multiple culture and languages.          Made me want to take a step in the right direction and learn Spanish because it is the second most used language in California.          Learned about the importance of culturally competent care.          I gained a better understanding on what (or how I should approach) a patient with a language barrier.          learned that there were several cultures that I did not know much about          Taught me how I should treat others in my practice.          It made me realize that getting a cultural background on a patient is absolutely necessary to provide care.          It's important to take the time to explore and figure out what exactly they are comprehending. This is important also because if they are illiterate it needs to be written in their chart so all their healthcare providers are aware.          I was not aware of how many people couldn't follow (to me seemed like simple directions) but many were unable to follow drug directions.          I gained a better understanding of how I should approach a patient with a language barrier.          I think we could each work towards being equipped with certain tools to learn to approach each</p>	Idealistic Prospects	<b>Emerging Personal Development</b>
		Learning Needs	

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Table 8

*Research Question 1 Analysis of Written Reflection and Free-Write Activity (Continued)*

situation.

It's impossible to know everything and anything about each culture but we have to at least try.

I got a little bit of insight as to how it will be with patients from other cultures that I am not familiar with.

I'm intrigued to dig further into healthcare barriers and educate myself on ways to help my patients.

This helped me understand a little bit more about being more tolerant and respectful to a person's cultural/religious wishes.

Affective  
Growth

As a new nurse it has given me the confidence to be culturally competent regardless of the obstacles I might face.

This has showed me how important it is to take the time and teach patient.

Makes us think about how we perceive and judge others.

Showed me how an "outsider" really feels when faced with the language challenge.

III

Highlighted important considerations that should be considered when taking care of culturally diverse patient.

This gives me a newfound discovery of my job as a nurse.

This helped me understand a little bit more about being more tolerant and respectful to a person's cultural/religious wishes.

This starts with me. I need to be aware of any stereotypes and may have and deal with them.

Reflect upon my values and beliefs.

I learned as a healthcare provider.

I feel that I will be more attentive to culture, ethnicity, race, and language.

More accepting and tolerant of different cultures

great experiences to help us reflect on our role in that as professionals

I feel that today I learned to be even that much more aware, especially in the healthcare setting, because these are people's lives.

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A student reflected:

When I think about a culture other than my own, I think of strange and uncomfortable situations. I went to Little India for cultural projects and felt like everything was too bright, too loud, too hot, and confusing. I felt like a stranger and as if people were staring at me and judging me. When I think of my trip this past summer to Ukraine, I felt the same way. Only everything was too cold, too harsh, too gray, and just uncomfortable. When I think of my own American culture, I feel comfortable and at ease. I tend to trust people who speak English were the people who don't and I tend to be more comfortable around people from my own ethnic group than others.

Another student shared:

While the nursing program has continually emphasized cultural competence, today showed that it is a really big issue in healthcare. I'm appreciative of having exposure to these issues and being allowed a safe place to explore these topics. I'm intrigued to dig further into healthcare barriers and educate myself on ways to help my patients.

**Constructing Innovative Insights.** The second theme answering Research Question 1 is innovative insights. This theme reflects what student participants newly perceive. This theme is made of *discernment* and *desires for the future*.

**Discernment.** Student participants revealed personal awareness about diversity. A student shared:

Hands on with the patient, such as in simulation can demonstrate exactly how we react, engage, critically think, and respond to unfamiliar situations (different culture). Most importantly, it shows the type of care we would provide. Putting us in uncomfortable, hands-on situation pushes us to gain more experience.

Another student reflected:

I will most definitely use this experience in my practice. The simulation was priceless! I learned so much about myself. It's much different when you're put in the situation with real people. Thank you for allowing me to be in this study. I gained so much new knowledge about a topic I thought I knew. Thank you for this rare opportunity.

A third student wrote:

Cultural diversity is a large barrier to overcome. We are unique and different in every way. It is important to ask the patient what their ideal health is. By learning to understand other cultures and beliefs on healthcare, it is the first step in providing the best care possible.

***Desires for the Future.*** Student participants reflected about their future practice and interactions with culturally and linguistically diverse patients. A student reflected:

It was eye-opening to be exposed to the concept of cultural competence. I found that I have so much to learn on the topic. I feel that today I learned to be even that much more aware, especially in the healthcare setting, because these are people's lives.

Another student stated:

I feel that I will be more attentive to culture, ethnicity, race, and language.

A third student shared:

This makes me want to be a different nurse. I want to be the nurse that takes the time to make sure her patients understand the information they are given. Overall what I learned I will carry with me throughout my nursing career.

Another student wrote:



I really appreciate the standardized patients feedback because it truly showed me how an outsider really feels when faced with the language challenge. As a new nurse it has given me the confidence to be culturally competent regardless of the obstacles I might face. I definitely would want to be represented and understood if I was in their position. It was a good experience and taught me how I should treat others in my practice.

**Improving Effective Communication.** The third theme answering Research Question 1 was increasing effective communication. This theme was made of statements regarding language, interpretation, messages, and understanding. Nearly every single participant reflected on language and the ability to be understood and understand culturally and linguistically diverse persons. This theme is comprised of *language*, *translation* and *meaning*. The theme effective communication is described next.

**Language.** Student participants discussed linguistic diversity, communicating with people speaking languages other than English in the simulation, and their personal experiences in clinical settings while in school. A student shared:

Being a bilingual native Spanish speaker, I have come across a lot of patients needing Spanish-speaking interpreting. I have not stopped to think what I would do if I were to encounter a patient that has other language needs, especially if an interpreter is not readily available for them.

Another student reflected:

The video has emphasized even more how important it is to understand other cultures/religions and to respect them. This story shows the importance of a translator as well. It's sad because it seems like the patient never fully understood that he could have another form of chemotherapy besides the pump. It would've been valuable if the doctor

knew he did not want to have the pump due to his cultural beliefs.

So many family members were used as translators instead of official figures which I think effective communication. The daughter who helped in the most in the end seemed very upset and official translator wasn't used the whole time because it could've been a difference of starting chemo right away and could possibly have changed the outcome.

A third student shared:

I feel the frustration of attempting to communicate with someone whose primary language is not the same as mine. I can feel the tension between the different values between their culture and my culture.

**Translation.** The patient encountered during the simulation did not speak English with his sister. Instead, they spoke French or Kenyan Rwandan until the student participant used the phone for an interpreter. The student participants discussed the importance of an interpreter but use the term synonymously with translator. A student shared:

Although the issue of cultural diversity/competence is an issue at any health setting, it was good to experience it in simulation. I was so used to asking for a Hispanic interpreter that when faced with different ethnic groups that I'm not familiar my mind went blank. In the simulation I could have used simple terms to ask about their background/language. I could have used visuals (map) to pinpoint their origin. An effective line of communication is necessary for effective patient centered care.

Another student stated:

This is a somewhat good lesson learned in regards to always use a translator. As it was evidently shown that family members do hold back vital information to protect their loved ones from getting hurt. (Not telling him he had cancer.) Is also critical to verify

patients fully understand the info they are receiving as well as all their options provided.

A third student reflected:

I understand that in some cultures the language barrier is extremely difficult. If the patient doesn't want to hear the word cancer because he or she believes they can pray or seek a higher being, then I can completely understand that. The mind is a very powerful thing, if you change your thinking, meaning think positive, and have less stress you yourself can cure many things. But it's so hard to fully understand the cultures meaning of things. If they doctor would have said we have other chemos available or even asked why don't you want chemo, his outcome may have been a little different. It is important to give all options to the patient. You never really know why people decide things until you ask. Communication can save lives.

Student participants shared the personal impact of not being able to communicate. A student wrote:

And being a future nurse I see the cultural barriers all the time now with my patients. So many times I've felt inadequate or useless because I was unable to provide what my patient needed. Something so small and simple that I take advantage of every day would hinder me from doing my job. Whenever I have a Spanish-speaking only patient, I never feel good about the job I did at the end of my shift because (of things) I missed or didn't do something important.

Another student shared:

I felt personally humbled and challenged in this study because of the lack of experience in dealing with different cultures/languages. I think this gave me a good glimpse of the future in the complex I may face with different cultural groups. I think I gained a better

understanding on what (or how I should approach) a patient with a language barrier.

**Meaning.** Communication is not just sending and receiving messages. Rather, one, especially when discussing health issues must ensure understanding occurs. A student stated:

I was emotional during watching this video. Due to the language barrier, the patient cannot understand the doctor, he felt upset, hopeless. With totally understand the patient's feelings. He felt bad he cannot communicate well with the doctor. Also, in this video, it reflects some different culture background. Such as, family don't tell the true diagnosis of the patient. Language barrier and different culture background may stop patients seek help from health care provider. From this video, I learned as a healthcare provider. We should try to learn multiple culture and languages.

Student participants also discussed communication in the context of patient care. A student reflected:

This definitely opened my eyes to myself. I want all my patients to feel comfortable with me and be able to provide great care. Language barriers are often the problem between healthcare providers and patients. The miscommunication is so deftly, and can be fatal.

Another student shared:

I really see how important communication is. When speaking with any and everyone you really have to take the time to make sure what is said is understood. Healthcare can be so ambiguous and saying something as simple as "I am going to start an IV," can be really hard for individuals to understand.

**Emerging Personal Development.** The student participants discussed their discomfort with their current experiences and innovative modifications in the provision of nursing care among culturally and linguistically diverse persons. Emerging personal development as a theme

indicates participants' dissatisfaction with current approaches and a change in how and what they think about provision of culturally competent care. The theme emerging personal development is comprised of three clusters, including *idealistic prospects*, *learning needs*, and *affective growth*. Each theme is described next.

***Idealistic Prospects.*** Some student participants proposed impractical solutions to cultural competence. Learning a new language is difficult and time consuming, let alone learning multiple languages. Also, although language barriers are an issue when providing nursing care for culturally and linguistically diverse persons, it is only a fraction of issue when considering cultural customs, norms, values, and then individual desires. One student reflected:

Language barrier and different culture background may stop patients seek help from health care provider. From this video, I learned as a healthcare provider. We should try to learn multiple culture and languages.

***Learning Needs.*** Lessons learned during the intervention activities regarded recognition of “the importance of culturally competent care” and how to better provide care for culturally and linguistically diverse persons. A student reflected:

It opened my eyes to my need to be more culturally competent. In regards to culture, I realize there are many things to consider...language, religion, gender, race, ethnicity. I feel like it's a skill in itself to be culturally competent. The challenge now is to be able to perform well as a culturally competent nurse given sometimes limited resources, time, or support in the hospital setting.

Another student wrote:

During this experience, I felt that I really had to think about my feelings toward and subjects such as racism and cultural factors. The description cards were mostly positive

words such as good, self-confident, compassionate, or brief. It was difficult to choose a positive word for something like racism. Overall, the exercise was good because I had to reflect upon my values and beliefs.

A third student shared:

Although it is impossible to learn every language spoken, it is made me want to take a step in the right direction and learn Spanish because it is the second most used language in California.

***Affective Growth.*** Many student participants reflected on their emotions regarding cultural competence throughout Transcultural Humility Simulation Development activities and how their feelings were changing. A student reflected:

When I think about culture I think of automatic respect. I sometimes find it hard to think if I have a culture as a citizen of the United States. I have recently come to realize that the American culture is to adopt, practice, and experience all cultures. And I find that to be unique.

Another student wrote:

This experience made me feel a little uncomfortable. I did not want to come off mean, rude, uncaring, or racist based on the cards I put down. I try my best to treat everyone equally. And this game made it really difficult to do so. It was also very eye-opening because it definitely shows you that people out in the world feel this way towards others. It makes me sad to see that this is how some people can be perceived and treated based on where they come from the things they deal with on a daily basis.

A paradigm is a way of viewing something (Kuhn, 1970). Student participants demonstrated a change in their way of viewing something. A student revealed:

When I think about culture, I see so many different things. I see yellow, black and beautiful colored cloth. But when I think about it in a healthcare setting, it's different. For example, I would think that I would only run into speaking either English or Spanish. Just a stereotype of mine. I also think I would be fairly competent in treating these patients but after the simulation, I was wrong. After listening to this lecture, I was not aware of how many people couldn't follow (to me seemed like simple directions) but were unable to follow drug directions. This is a huge issue that I feel not many people in the healthcare setting are aware of. It was a huge eye open and I will remember this for when I'm in my own practice.

Another student shared:

When I think about culture, I get a feeling of diversity and mystery behind what a certain culture could be or is. I find figuring out the mystery of a different culture is interesting and can be specifically revealing for the nurse and patient. Recently, I interacted with a Middle Eastern patient (to which I made no mention of my travel or experience in the Middle East). However, when the patient was informed of my experiences the patient immediately wanted to speak about politics, people, geography, etc. Our cultural experiences can be insightful to each other after discerning our cultural backgrounds.

## **Research Question 2**

There were five themes identified from analysis of the data. Each of these with supporting evidence in the form of statements from participants is displayed in Table 9. The themes include **cultivating the nurse person relationship, providing quality nursing care, serving the patient and family, establishing extraordinary communication, and approaching care with humility**. Each theme is explained next in the statements used by





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Table 9

*Research Question 2 Analysis of Semi-Structured Interviews and Re-Interviews (Continued)*

You need to take time to show them you care. Culture is immersed in everything and it is how we care. Need to make sure they have complete care. We have to consider health literacy. Need to take the time to education patients in a way they understand. Make sure someone knows about their disease and how to take their meds. Need to take the time to educate patients in a way they understand.	Patient Education	
Food preferences are much different. It shows you're willing to be more accepting when you are willing to try (new foods). Food is a big difference. A patient wanted nothing to do with what we offered. In other cultures, family takes care of you. Wife, 7 kids, mom and dad and dad's wife all visiting in the room. Mom, aunt and grandma were all there. He wanted food that his wife had prepared with love. He wanted something that his wife had prepared with love. He wanted food to bring not just sustenance but comfort.	Meaning of Food  Importance of Family	<b>Serving the Patient and Family</b>
Hispanic Mostly African American and some Hispanic A lot of my patients are Hispanic. Hispanics, Vietnamese, Chinese Any language, color, ethnicity, religion. Large Hispanic population We have many Latinos, many African Americans, some Asians. Wide variety of different cultures. Genetics means there is a different pharmacological effect of medications on different ethnicities.	Population we Serve	
Communication barriers. A communication barrier can seriously affect a patient's care. Communicating is hard. Using an interpreter is very time consuming "like having an extra patient".	Sending Messages	<b>Establishing Extraordinary Communication</b>

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Table 9

*Research Question 2 Analysis of Semi-Structured Interviews and Re-Interviews (Continued)*

Frustration of not being able to communicate. I did not even know what language they were speaking.

It is frustrating to not be able to communicate.

Speak Spanish

The majority of the patients speak Spanish but I don't.

Speaking Spanish with each other but English with me.

Spanish speaking.

All Spanish speaking.

My nurse preceptor and the guards speak Spanish.

Use a proper interpreter.

Have a telephone translation service.

If they don't speak English, we need an interpreter.

We need to use the official interpreter, not the family.

(Their) communication style is very interesting.

Always be aware of communication.

Communication

We have to communicate in a way that the patients understand.

Communication barriers.

try to communicate

Communication is the foundation of good health care.

Without communication, it is impossible for nurse to deliver patient centered care.

If you show you are trying to communicate, people will work with you and give you grace.

I can't assume people will understand me.

When you slow down, go step by step asking them if they understand, you can see they're more at peace with the care they're receiving they're more appreciative when you have taken the time to show them you care.

Our nurses' duty to make sure our patient understands us and offer the patient our time.

You and the patient have to truly understand what is going on.

We have to communicate in a way that the patients understand.

I try and understand the person and where they are coming from.

I like to try and understand where they are coming from.

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Table 9

*Research Question 2 Analysis of Semi-Structured Interviews and Re-Interviews (Continued)*

You need to understand the person you are taking care of.  
(With language barriers) you have to learn to be a little bit more creative and put yourself in their shoes and pay attention to their body language.  
In the simulation, the patient spoke a language that I didn't recognize. It was good practice for when the patients don't speak Spanish. I knew I had to call an interpreter but did not know what language and did not know how to figure it out.

I enjoy different cultures and learning their ways  
Any language, color, ethnicity, religion.  
Culture is how we care.  
Be willing to be accepting of other cultures.  
Accept people.

Acceptance

**Approaching  
Care with  
Humility**

Cultural competence is a work in progress.  
Be aware of your assumptions so you don't stereotype.  
It is best to ask, you cannot assume.  
Do not make assumptions. I do make assumptions.  
I can't assume people will understand me.  
You cannot assume parents (of pediatric patients) were born here.  
We should not assume  
I assumed my diverse patients would be Latino but they can be from anywhere.  
You have to be willing to try and grow as an individual.  
Everyone is diverse. Every person has his or her own views, religion, culture, ethnicity, race.  
Everyone is diverse!  
Looks can be deceiving.  
I assumed my diverse patients would be Latino but they can be from anywhere.  
Don't pass judgment.  
Prejudices can be subconscious.  
Prejudices can negatively affect your patients because you may not realize it, that you're being different, but they may realize it.  
Using language like "those people" shows prejudice.

Attitudes

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Table 9

*Research Question 2 Analysis of Semi-Structured Interviews and Re-Interviews (Continued)*

I thought she was middle eastern or Asian but she was Hispanic.

I try to understand my own feelings and avoid stereotypes.

Always offer anything more than one time to Asian patients. They think it is rude to say yes the first time.

Asian Americans are very stoic.

We have to improve our assessment.

We have to perform tasks while being culturally sensitive.

You have to slow down and make sure they are okay with what you are doing.

You get down on eye level.

We have to build trust and rapport

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Areas to  
Improve

participants.

**Cultivating the Nurse-Person Relationship.** Clusters of student participant responses that described the nurse-person relationship included *building rapport* and *patient-centered care*. These concepts enabled the student participants to value the importance of cultural competence in their practice.

***Building Rapport.*** Student participants shared that building rapport and trust are essential components in relationships with patients. Also, the concept of respect was shared. Evidence of this concept includes the following. A participant shared:

“I literally sat with her and, and it was kind of against our clinical ideology to be a sitter, but my fear was that if I walked away and nobody was in the room and she wasn’t on a tele monitor, she was gonna tank again. And so, I mean, I did my little things with my room next door, but I kept going back and I was checking her blood pressure, and her blood pressure never really came down with the blood pressure medication. So I was kind of shocked that she had this reaction, but it never brought her blood pressure down. And when I was talking to her after the fact, um, it was kind of funny. She told me she had never met such a kind and endearing white woman in a position of authority to talk to another woman in a position of authority that was African American. And it was amazing to me because she was in her late 60s and I am in my mid-30s. I was shocked that there was a dividing line cuz I didn’t see a diving line.”

***Patient-Centered Care.*** Student participants shared that patients should be at the center of nursing care. Statements showing this included the following. A participant stated:

“You have to look at each patient and find out what is most important to them. What is their priority? What is their value they place on the events of the day?”

Another participant said:

“Yeah, um. Like a lot of it, like I think the simulations that we've done, like, with, you know, like, one of the first one we had to do first semester, they just walked us into a room and we had to, like, talk to the brother that was there and then the sick sister that was, you know, on the bed and But they're Middle-Eastern so it's like they weren't really talking to you because you were talking to her and then he's on the phone, so you're kind of like, so it's like, dealing with a difficult situation where you're, you're really uncomfortable but still trying to pursue, like, you know, the care for the patient even though they don't really want to talk to you. And, like, they made it really difficult on purpose to teach you, like, not to give up and to, like, just to continue to pursue, like, the situation, you know, so. Yeah, I think little things like that are difficult, um, but that teaches you to kind of not, not just let that, let something difficult, like, kind of kill the opportunity that says still provide the care for the patients, so. Think, like that, think just, like, taking the time to, like, go through that chap, maybe if it, if it is a very short, short chapter, going through and talking about it and asking questions and having it, like we have to get, you know, signed off on cultural, like, you know, so different cultures like learning those basic things are very important. But then, like, not being always, like, something that you know is going to be on the test. So, like, you're constantly trying to review it. So things like that I think really help to bring it to the forefront, like, rather than just sit being something that's insignificant. Because, you know, compared to all the information you have to learn, it's very, it's, like, the one percent. But if the instructors and, like, it's something that's a priority for the school as a whole-”

Student participants discussed equality and social justice.

One participant stated:

“Every patient should get the same quality of care.”

Another participant said:

“Treat all patients as individuals.”

**Providing Quality Nursing Care.** The third theme answering Research Question 2 is providing quality nursing care. This theme is made of the data clusters *nursing assessment*, *pain management*, *loving care*, and *patient education*. Each of these clusters is supported with student participants’ statements during semi-structured interviews.

**Nursing Assessment.** The following originated from student participants’ responses. A participant stated:

“Assess the person’s background, the whole person.”

Another participant said:

“Um, the way you assess somebody is going to be different because people from different cultures require different things to happen. Some people, some cultures don’t want a male to be doing a physical head to toe on a female. It’s unacceptable so we need to make sure that we meet those needs.”

A third participant stated:

“Where are they from? What is their language? What is their family structure? What is their religion? What cultural practices are important to them? Who do they live with?

And then who makes health decisions?”

Another participant shared:

“There’s a difference pharmacology wise because different cultures are tied to ethnicity and ethnicity is tied to genetics which means there’s a different pharmacological effect on different genetic people ...”

***Pain Management.*** Student participants discussed pain management with regards to culturally and linguistically diverse persons. A participant said:

“We have to improve our pain assessment.”

Another participant stated:

“Other cultures cry out and scream really loud in pain.”

A third participant said:

“We need to know how to deal with diverse people in pain.”

***Loving Care.*** Many student participants discussed “showing love” and “showing Jesus’ love” toward patients during provision of nursing care. A participant stated:

“I think that, I think, you know, you learn a lot of like the, the more the norms for, you know, whether it be like, you know, death rituals or like, you know, practices when you’re dealing, you know as a male, dealing with, you know, different cultures, how you address the man. You know, like, things like that. I think the school sets you up to be...To have the base knowledge. But I think you’re not really comfortable until you come with a, like, difficult experience working with a patient, like, and the family, like...It stretches you to be better. And you realize, okay, maybe I didn’t say that the right way or maybe I should’ve addressed, you know, maybe I should’ve been more aware of the different culture that was in the room rather than just walking in and, like, expecting it to be normal.

***Patient Education.*** Student participants mentioned patient teaching. A participant stated:



(Teaching) “actually involves language, caring, prior knowledge, and the nurse’s ability to make sure someone knows about their disease and how to take their ‘meds’.”

**Serving the Patient and Family.** Patients and the importance of including family members were discussed by student participants. The topic of the importance of family seems universal across cultures, but the student participants had some unique discussion surrounding this. The theme was supported by discussion of *foods and meanings, importance of family, and population we serve*. Each is discussed with student participant statements next.

**Meaning of Food.** Food is sometimes referred to as universal, since all persons need food to fuel the body. Food carries meanings with it. As Ottenheijm (2011) explains, meals are religiously and socially important occasions surrounded by rituals, in which there is social discourse. One participant stated:

“So it’s just, you know, she brought like a tea that she really likes and like a, you know, a breakfast dish that she really likes and it’s something I’ve never had so I was like asking about it and, um, trying to understand how that plays a significant role in her, her culture, and even her family, like, history, like, you know, so just understanding how that lineage has been passed on where it’s a completely different thing for my wife’s family, so.”

Another participant said:

“They’re always asking, like, ‘- - -, are you going to come by and have dinner?’ If I already ate, they’re like, ‘come eat anyway.’ But they just, they want to share in the experience of, you know, the people that, you know, it doesn’t matter what you look like. It’s the, they just want to spend time with you because, you know, you matter to someone and their family, so, they matter to you, so.”

A third participant stated:

“He was like, ‘this is absolute hogwash. Like, I hate this food. I don’t want to touch it. Like, don’t come near it. Don’t put it in my room.’ Like, he would only eat food that his wife brought in. And I was like, why? Like it’s just food. And you know it was like a sandwich and like, a drink and some fruit and basically protein, carb, fruit, vegetable, all the normal things as we nurses say, this is the essentials to what you need. Well, the essentials for him was not just those categories being fulfilled, it was something that his wife had prepared with love and something that was from his culture which meant beans, rice, um, maybe some chicken, um and something from the Hispanic culture and it was like, those are all really bad for diabetes. Those are all not my, my go to’s for our renal patients, so, like, what am I supposed to do? So I think I relate to food so much. So I see it in a lot of patients where they relate to food and it’s like, this is not something that brings on sustenance but it, doesn’t bring comfort.”

***Importance of Family.*** Student participants discussed family generally and the presence of family during hospitalization, including multigenerational differences. A participant said:

“If you can see the kind of, the discomfort and, even with the language barriers too it’s like, you know, is this something that’s okay, like, you know. If you’re not, you know, let me know and...Even working, communicating with the older, you know, like the daughter of the patient but then talking to her daughters, the granddaughter, and like them having to, you know, translate through, you know, and so you’re trying to be, you know, inclusive of everybody in the room and not trying to exclude people because they just can’t understand necessarily what you’re saying, so, you know.”

**Population We Serve.** Student participants described the population served through the use of ethnicities and cultures and one mentioned genetic differences. The list included Hispanic/Latinos, African American, Vietnamese, and Chinese. One participant said:

“Genetics means there is a different pharmacological effect of medications on different ethnicities.”

Another participant stated:

“Like the School of Nursing here, I think we do a lot to incorporate culture. I think that, you know, I can’t not...I don’t know a lot of other, you know, nurses from other schools but it seems like we go above and beyond, like...I don’t feel like culture’s a big importance at other universities because it’s, it’s hard to teach but I think it’s something worth investing time into, you know. There’s not a lot of research in the area-

Kind of like it’s the shortest chapter in the book, you know. Kind of like-

Here’s the norms, you know, and then that’s, that’s really what they teach you at like, you know. The simulations we do here, um, you know, just making it a focus of your curriculum, like, because it’s something that you analyze with every step. Like it’s part of the nursing process rather than just like a, you know, a checklist...”

**Establishing Extraordinary Communication.** Nearly all student participants discussed communication. The fourth theme is establishing extraordinary communication. The clusters that comprised the theme included *sending messages*, and *understanding others*.

**Sending Messages.** Nearly every student participant spoke in depth about communication, which does not simply involve speaking. One has to ensure the message is being understood.

A participant stated (it is) “our nurses’ duty to make sure our patient understands us and

offer the patient our time”.

Another participant stated:

“We have to communicate in a way that the patients understand.”

A third participant said:

“When you slow down, go step by step asking them if they understand, you can see they’re more at peace with the care they’re receiving they’re more appreciative when you have taken the time to show them you care.”

Another participant said:

“A communication barrier can seriously affect a patient’s care.”

***Understanding Others.*** Miscommunication can occur when messages are not received accurately or understood. A participant said:

“In the simulation, the patient spoke a language that I didn’t recognize. It was good practice for when the patients don’t speak Spanish. I knew I had to call an interpreter but did not know what language and did not know how to figure it out.”

Another participant stated:

“Since graduating, I have, I think I have experienced almost, just, I mean, a huge variety of, of, of patients and, and clientele. From multiple cultures, um, but even some cultures within America I’ve seen a lot of. So, like, initially as a nurse, you, you would think, oh, I’m worried about running into a patient that I can’t speak the same language as, and that’s always frightening because, like, okay, my subjective data is now altered because I can’t understand what they’re saying. Um, whereas now it’s not just do I speak the same language, do I understand or am I familiar with their culture in a way that I can say this is normal?”

**Approaching Care with Humility.** The last theme answering Research Question 2 is approaching care with humility. Student participants discussed how they approach nursing care with culturally and linguistically diverse persons. This discussion included *acceptance* of culturally and linguistically diverse persons, *attitude* toward others, and *areas to improve*. These three clusters that make up the theme approaching care with humility and help explain how student participants care. The evidence in student participant's words are displayed next.

**Acceptance.** A few student participants specifically discussed diversity. One participant said:

“I enjoy different cultures and learning their ways.”

Another participant said:

“Culture is how we care.”

A third participant stated:

“Nurses must be willing to accept other cultures; any language, color, ethnicity, religion.”

**Attitudes.** Student participants shared assumptions, stereotypes, judgment, and prejudices. The following quotations support this cluster of data. A participant stated:

“Cultural competence is a work in progress. Who is important to them, who is in their family, what is their influence? Is it family, religion, the neighborhood?”

Quite a few student participants discussed prejudice. A participant said:

“Prejudices can negatively affect your patients because you may not realize it, that you're being different, but they may realize it.”

Another participant said:

“So there's this one guy. He's white guy, older. And we had two African American patients and he was very prejudice and to see him, like ... He just, he'll like piddle, like,

word usage, like, like, ‘Those people. They don't respond to ACE inhibitors as well as us.’ And I was just like, ‘What do you mean, us?’ I was like, yeah, you're talking to my professor that's white, but, and I guess I'm, like, white, but like his tone was very ... unnecessary. And he didn't really, there was no ... He didn't react to the patients in a negative way. Like there was no ... Yeah, I think he did a good job not being prejudice with the, with the patient present. But you can see how that can affect care down the line, like, because those subconscious, like, prejudices can be, can be, can negatively affect your patients because you may not realize it, that you're being different, but they may realize it. Or they may overhear you from the hallway, you know.”

Student participants revealed a few personally held stereotypes. A participant stated:

“I try to understand my own feelings and avoid stereotypes.”

*Areas to Improve.* Student participants recognized the need for improvement while approaching patient care with culturally and linguistically diverse persons. A participant said:

“We have to build trust and rapport.”

Another participant said:

“We have to perform tasks while being culturally sensitive.”

A third participant stated:

“You have to slow down and make sure they are okay with what you are doing.”

Another participant stated:

“You just, you have to be cognizant of, you know, especially in the small ICU unit. Like, everybody’s within earshot, you know. You just don’t know what you’re going to say and who hears at that exact moment and it just, it can be very rude and unnecessary.”

## **Campinha-Bacote**

Following examination of qualitative data through content analysis by use of coding and themes, data were further investigated to understand relationships between the data and Campinha-Bacote's (2007) cultural competence model. Campinha-Bacote (2007) theorizes five constructs of cultural competence, cultural awareness, cultural knowledge, cultural skill, cultural desire and cultural encounters. Example participant statements with codes and themes were elevated to the theoretical constructs. These relationships are presented in Table 10.

## **Summary of Qualitative Analysis**

While quantitative analysis is relatively straightforward, qualitative data are value-laden and analysis is iterative. Content analysis, as was used with this analysis, was used to capture and interpret meaning in the data (Ritchie & Lewis, 2009). The codes, concepts, and ultimately themes generated used the student participants' own words much of the time (Ritchie & Lewis, 2009). The two research questions were answered through content analysis.

Student participants who engaged in Transcultural Humility Simulation Development activities reflected on how they planned to incorporate cultural competence into nursing practice following the intervention through **shattering preconceived perceptions, constructing innovative insights, improving effective communication, and emerging personal development**. Student participants have incorporated cultural competence into nursing practice several months after the intervention through **cultivating nurse-person relationships, providing quality nursing care, serving the patient and family, establishing extraordinary communication, and approaching care with humility**. Following content analysis, the themes as well as actual participants' words were also organized by the theoretical framework used in this study

Table 10

*Relationship of Campinha-Bacote's Model, Themes, Codes, and Example Participant Statements*

Campinha-Bacote's (2007) Constructs of Cultural Competence	Themes	Codes	Example Statements by Student Participants
Cultural Awareness	Cultivating the Nurse-Person Relationship	Affective Growth Existing Barriers Unrealistic	(The simulation) helped me see how much (patients) expect a health care worker to be able to work with their specific language and culture, despite the slew of religions, cultures, and spiritual beliefs out there.
	Approaching Care with Humility	Expectations Discomfort Equality Attitudes Assumptions	
Cultural Knowledge	Shattering Preconceived Perceptions	Practical Lessons Language Translation Pain Management	As nurses it is our duty to make sure our patient understands us and offer the patient time to discuss about anything that they feel they need to talk about their situation.
	Constructing Innovative Insights	Languages	I learned new cultural terms and how different cultures feel while being cared for in the US. In order to provide something better, better care, you have to know about different cultures.
Cultural Skill	Providing Quality Nursing Care	Existing Barriers Discernment Patient Centered Care Nursing Assessment Foods and Meanings Receiving Messages	You have to look at each patient and find out what is most important. What is their priority? What is the value they place on how they are feeling and the events of the day? I believe that in order to raise the level of care, we have to create a healthcare team that it is compassionate to the struggles of all individuals



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Table 10 Continued

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Cultural Desire	Emerging Personal Development  Approaching Care with Humility	Meaning Desires for the Future Loving Care Accepting all People	and respects differences among patients.  The person has inherent worth and dignity. Nurses need to be more attentive to the patient and humbly try and offer the best care possible.
Cultural Encounters	Cultivating the Nurse-Person Relationship  Serving the Patient and Family	Frustration Building Rapport Patient Education Population we Serve Use of Interpreter Understanding Others Diversity	I learned how frustrating it is, as the nurse, to not be able to communicate and how that barrier can seriously affect the patient's care. I learned also that I have to come up with creative ways to overcome the barriers. Like hand gestures, showing them how to breathe. Everyone is unique. We need to make sure our patient understands us and offer the patient time to discuss about anything that they feel they need to talk about their situation.

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## **Interpretation**

A strategy specific to the mixed methods design used in this study, the embedded design, is quantitative and qualitative data are collected and analyzed as they would be in two separate studies and then during interpretation, the extent to which qualitative findings support or discredit quantitative findings is examined (Creswell & Plano Clark, 2011). Quantitative analyses indicate no statistically significant differences among intervention and comparison group pretest and posttest scores. The majority of student participants in the intervention group and the comparison group self-rated “culturally competent” or “culturally proficient”. Qualitative findings, however, suggest student participants did not demonstrate cultural competence and awareness that they have changes to make in their provision of nursing care.

## **Chapter 4 Summary**

In this chapter, the results of the data analysis were presented. The characteristics of the sample studied were presented followed by the results of the quantitative and qualitative data analyses. Hypotheses were accepted or rejected based on inferential statistical analyses and research questions were answered through content analysis. In the next chapter, findings are discussed and recommendations are made.

## CHAPTER 5

### CONCLUSIONS AND RECOMMENDATIONS

In this chapter, discussion of the findings of the study is presented. Study limitations, recommendations for further study and implications are also elucidated. The purpose of this study was twofold. The first aim was to determine whether participation in the researcher designed intervention, Transcultural Humility Simulation Development, significantly improved cultural competence and its constructs, cultural awareness, cultural knowledge, cultural skill, cultural desire and cultural encounters among graduating baccalaureate nursing students when compared with a group of students who did not participate in the intervention. The second aim was to explore the integration of culturally competent behaviors in nursing care following graduation. The study was undertaken at one private university in western US.

#### Summary of the Study

In order to address health disparities, this study commenced to address the gaps in the literature surrounding cultural competence among graduating nursing students. Before this study, few investigators measured cultural competence before and after learning activities, such as simulation with standardized patients, with valid and reliable instruments (Meltzoff & Lenssen, 2000; Shen, 2014). No investigators evaluated an educational intervention while in school and after graduation and none were found which used mixed methods (Calvillo et al., 2009; Fitzgerald et al., 2009). No cultural competence study designs were found that include the use of a comparison group or longitudinal design, measuring the effects of an intervention over time.

An educational intervention, Transcultural Humility Simulation Development, was designed based on the theoretical framework by Campinha-Bacote (2007) the *Process of Cultural Competence in the Delivery of Health Care Services*. Pedagogical decisions

incorporated learning as development, Bloom et al.'s (1956) learning domains, adult learning strategies, various learning styles and different personalities. Quantitative data were collected using the Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2009) in a pretest-posttest comparison group design and a demographic survey. These data were analyzed using inferential statistics (Plichta & Kelvin, 2013) to test the research hypotheses but did not show a statistically significant difference between pretest and posttest measures in either the intervention group or the comparison group.

Qualitative data were collected through written reflection, a free-write activity and semi-structured interviews. Research questions were answered by content analysis of these qualitative data (Ritchie & Lewis, 2009). Themes answering Research Question 1 were **shattering preconceived perceptions, constructing innovative insights, improving effective communication**, and **emerging personal development**. Themes that arose from participants answering Research Question 2 were **cultivating the nurse-person relationship, providing quality nursing care, serving the patient and family, establishing extraordinary communication**, and **approaching care with humility**. The analysis of qualitative data was embedded within the quantitative design (Creswell & Plano Clark, 2011). A discussion of the hypotheses and research question findings are presented next.

### **Discussion of Hypotheses Findings**

In this study, there was not a statistically significant difference between the pretest and posttest scores among the intervention group and comparison group on the Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2007). Furthermore, there were no differences among the means of any construct subscale scores among the intervention group when controlling for the pretest measure. These findings indicate the

researcher-designed intervention, Transcultural Humility Simulation Development, was not effective. The minimal detectable change for the instrument is 8.57 points (range 20-80) (Palombaro & Lattanzi, 2012). In this study, there was a difference in the mean scores of both the intervention group and the comparison group of only 2 points indicating no change as a result of the intervention.

One reason for the lack of detectable change in both the intervention group and the comparison group was the high pretest ratings of student participants and another possible reason was the length of time planned for learning activities. The high pretest ratings left little room for improvement, regardless of the quality of the educational intervention, Transcultural Humility Simulation Development, since all student participants perceived they were culturally competent. The theoretical framework, Campinha-Bacote's (2007) model, the Process of Cultural Competence in the Delivery of Health Care Services (Campinha-Bacote, 2007) may provide another explanation for a lack of detectable change. The first assumption of the model is that cultural competence is a process, a journey, it is dynamic, and involves the paradox of knowing, so that the more one thinks he or she knows, the less he or she knows and the less one thinks he or she knows, the more he or she knows (Campinha-Bacote, 2007).

Pacquaio (2007), Kardong-Edgren et al. (2010) and Riley et al. (2012) reported all participants self-rated in the "culturally aware" or "culturally competent" ranges, as did students in the present study. Kardong-Edgren and Campinha-Bacote (2008) acknowledge that with a self-report tool, students are not actually challenged to demonstrate cultural competence in a meaningful way. Together with the findings from this study this suggests that self-perception may be inaccurate. Perhaps the qualitative data presented a more accurate picture of "becoming"

culturally competent. Participation in simulation gleaned reflective responses indicating the student participants were not as culturally competent as they thought.

Cooper Brathwaite (2005) and Hawala-Druy and Hill (2012) used a longer time frame for their educational interventions than one day as was used in this study and found a statistically significant improvement in cultural competence. This may help explain the lack of statistically significant improvement before and after Transcultural Humility Simulation Development, in that there was not enough time to impact change in an intervention that took place primarily in one day. Perhaps increasing awareness might have been a more reasonable goal.

Several previous studies found a positive relationship between students' race and their level of cultural competence (Fitzgerald et al., 2009; Hawala-Druy & Hill, 2011; Lee, Litwin, Cheng & Harada, 2012; Musolino et al., 2010). During ancillary analysis of results, the effects of race, ethnicity and country of birth were examined using ANOVA in relation to cultural competence. Of the three demographic variables, only race had a statistically significant relationship with cultural competence. These findings are congruent with previous studies.

### **Discussion of Research Questions Findings**

Analysis of qualitative data indicated gaps in the cultural awareness, cultural knowledge, cultural skill, cultural desire, and cultural encounters of student participants. Student participants in the intervention group stated in written reflection and, later, semi-structured interviews that they feel more adequately prepared to provide nursing care for culturally and linguistically diverse persons, even though the quantitative analysis did not reflect this. Poirier et al. (2009) reported that cultural competence content was "out of the students' comfort zone" and that students "became aware of personal biases and reported increased knowledge of several sociocultural groups".

A multifaceted education approach was used in Transcultural Humility Simulation Development through use of an online implicit attitudes test, a matching card game, a video, a faculty-facilitated rotation and participation in simulation and debrief. Qualitative findings suggest each educational activity was valuable in helping students reflect on how their provision of nursing care will change and has changed in light of this information. Student participants' written evaluations at the end of the workshop revealed every learning activity was useful.

Research findings suggest transformative learning among student participants. Transformative learning is a change in how something is known by developing a capacity for perspectives and biases of others (Kegan, 2000). Learning as development is an essential feature of transformational learning so as to contribute to the development through reconfiguring the individuals' way of knowing (Kegan, 1998, 2000, as cited by Drago-Severson, 2004). Transcultural Humility Simulation Development activities supported student participants' ability to negotiate purposes, values, feelings, and meanings rather than simply to act of those of others (Kegan, 2000).

Findings of this study suggest student participants may have begun to experience epistemic belief change, the development of personal epistemology influenced by context, affect, and environment (Bendixon & Rule, 2004). The questioning of current beliefs plays a role in change IF a new way of understanding makes sense (Bendixon & Rule, 2004). Student participant statements suggest epistemic belief begin to change as a result of the intervention. In this study, several strategies were designed to do this. For example, during the simulation, student participants demonstrated cultural knowledge by "knowing" they needed an interpreter, the student participants did not know what language the standardized patients were speaking and did not know how to ascertain this knowledge.

Double-loop learning leads to a paradigm shift by focusing on changing behavior, in this case development of cultural competence, by allowing reflection upon underlying values and beliefs that guide behavior (Argyris, 1976, as cited by Tagg, 2010). Reflection of participants was sought in this study to help make participants aware of biases, provide space for to rethink actions, and practice how to incorporate new information (Argyris, 1976, as cited by Tagg, 2010). This is because only when one is able to reflect upon and change underlying beliefs will he or she experience a permanent change in behavior. The following statements made by student participants suggest double-loop learning occurred.

Student participants were particularly open and honest through the written data articles. More “negative” comments were elicited through written reflection the day of the Workshop than later during semi-structured interviews. Perhaps this was because it was a more private way to share data than through face-to-face interviews with student participants. Perhaps it was because the collection of these data occurred during and throughout the experience of the intervention so “negative” thoughts were remembered and recorded. Perhaps it was because during interviews months later, student participants were able to think more on their experiences so they no longer felt “negative”.

Communication was a theme in both the written reflections and in semi-structured interviews, suggesting its importance. Nearly every single participant wrote about communication and nearly every participant interviewed discussed communication. The video selected portrayed the effects of poor communication between a patient and his family with the healthcare team and many student participants wrote about how powerful this was for them. Additionally, the simulation put each student participant into a patient care context in which they had to make decisions and demonstrate culturally competent nursing care.



Findings of this study are consistent with Campinha-Bacote's model, the Process of Cultural Competence in the Delivery of Healthcare Services. Of the six assumptions, two really stood out as having been supported by these findings, the first and the fourth. The first assumption in her model is that cultural competence is a process, journey, dynamic, and involves the paradox of knowing, so that the more one thinks he or she knows, the less he or she knows and the less one thinks he or she knows, the more he or she knows. The first assumption was supported by the pretest findings, that student participants perceived they were culturally competent and the first research question, that student participants did not know how to provide care for the culturally and linguistically diverse standard patients in simulation. The fourth assumption is there is intra-cultural variation, that is, there is variation within cultural groups as well as across cultural groups. Student participants indicated understanding of this, that every individual is unique.

The constructs of cultural competence were addressed in this study. The first construct, cultural awareness, is the deliberate process of becoming aware of values, beliefs, biases, prejudices, and assumptions about people from other cultures (Campinha-Bacote, 2007). Cultural knowledge is the process of seeking foundational education about different cultures (Campinha-Bacote, 2007). Cultural skill involves excellent assessment abilities (Campinha-Bacote, 2007). The fourth construct, cultural encounter is participating in direct experience with others in order to refine existing beliefs and biases regarding cultural groups (Campinha-Bacote, 2007). Cultural desire is the genuine passion of the nurse to want to, rather than have to, engage in the process of becoming culturally aware, culturally knowledgeable, culturally skillful, and participate in cultural encounters (Campinha-Bacote, 2007). This study supported the constructs of cultural competence in that the intervention objectives were modeled after them. Research question

findings supported the beginning development of improved awareness of one's own biases and stereotypes, provided information for development of knowledge, and provided one encounter for student participants. More needs to be done but this was a good first step for student participants in improving cultural competence.

### **Limitations**

There were no ethical implications in this study but there were limitations in the research design, methods, and intervention. Each is discussed in the next paragraphs.

#### **Design Limitations**

One study limitation was a small convenience sample at one institution. Participation was on a voluntary basis and the intervention occurred over days but data were collected from participants over months so this may have affected attrition, which was quite high, over 20%. Shadish et al. (2002) reported that if attrition is low, less than ten percent and the effect size is high, as it is in this study, then analyses will rarely change the conclusion about whether the intervention was effective. However, since attrition was over twenty percent, analysis in this study might have been affected. Finally, as Secomb, McKenna and Smith (2012) experienced, the time frame used for the intervention may not be sufficient to detect change in all three learning domains, including cognitive, affective, and psychomotor.

#### **Limitations of Methods**

First, the use of a self-generated identification code made matching data difficult because some student participants forgot their codes over time. It may have been better to assign codes and preprint several labels for each participant and after all data collection destroy any list connecting the participant with the code. Second, quantitative instruments only measured the extent to which student participants agreed they are culturally competent, not patient satisfaction

with culturally competent care or patient outcomes. Lastly, written reflection throughout the intervention elicited genuine and authentic experiences, feelings, and opinions of student participants regarding many aspects of nursing care, not just cultural competence.

### **Intervention Limitations**

Limitations with the educational intervention were discussed among faculty and staff who assisted in implementation. Student participants were reticent to admit to their personal biases. An opportunity to debrief about the online activity was missed. We ought to have collected data regarding their experiences and feelings about it through written reflection after discussing experiences with the activity. The student participants ought to have been reassured that everyone has biases and prejudices so each would be more honest with him- or herself and acknowledge this very first construct of cultural competence-cultural awareness (Campinha-Bacote, 2007). Next, student participant feedback on the card game was that the students “didn’t like how it made me feel”. Addressing cultural awareness early in the day, or even earlier in the semester, might have helped them open their minds to awareness prior to the card game.

Next, there were limitations with the simulation portion of the educational intervention. Student participants wore street clothes. The faculty has noticed that students behave more professionally when in the School of Nursing uniform. The student participants also did not have a watch with a second hand; their hair pulled back, closed toed shoes or even their stethoscopes, which they would have had they been in uniform. Although the simulation was a culturally sensitive assessment, student participants were not prepared to do this because they had not been informed of the activity before the day of the Workshop. Asking them to come in uniform may have addressed this very practical issue.

Another issue with the simulation was that student participants were given a verbal report. It may have been more effective and realistic to print out a report sheet for each student with the information. Next, the student participants went in the simulated in-patient hospital room to care for the patient in pairs. It was planned this way for practical reasons, such as time constraints, but was a limitation. If each student had been by him- or herself, he or she would have had to think “on their feet” more specifically. Instead, most participants waited for the partner to decide and act and this actually took more time since each was waiting for the other. Also, there are very rarely two nurses who round on patients together so this did not mirror current practice.

Finally, the student participants were not shown how to use the interpreter phone. So even though they needed to use a phone to call for interpreter services, they literally did not know where the phone was in the room or who they were calling. Many chose to call “the doctor” which we had not planned for. The design of the simulation was a shift assessment that was culturally sensitive. The nurse cannot call the doctor until the assessment is complete. It would have been more realistic to give the student participants a quick room tour of the simulated inpatient hospital room without any standardized patients present and point out the phone, the resources and supplies available, and those not available, and introduce them to the simulated charge nurse.

### **Conclusions**

The following conclusions are offered.

1. Total cultural competence scores among graduating professional nursing students were equivalent in the intervention and comparison groups as measured by pretest and posttest scores on the Inventory for Assessing the

Process of Cultural Competence-Student Version (Campinha-Bacote, 2007) surrounding an educational intervention.

2. Cultural constructs, including cultural awareness, cultural knowledge, cultural skills, cultural encounters, and cultural desire, among graduating professional nursing students were equivalent in the intervention and comparison groups measured by pretest and posttest subscale scores on the Inventory for Assessing the Process of Cultural Competence-Student Version (Campinha-Bacote, 2007) surrounding an educational intervention.
3. Participants who identified as more than one race were more culturally competent.
4. Although intensive, a one-day workshop intervention allowed participants to become aware of the need to change and reflect on cultural competence but did not permit time to demonstrate change. Cultural competence requires adult development.
5. Student participants articulated how they will incorporate cultural competence into their nursing care through written reflections and semi-structured interviews.

### **Implications**

This study had implications in several areas including nursing theory, research, practice, education and health policy.

#### **Nursing Theory**

Campinha-Bacote's (2007) model, The Process of Cultural Competence in the Delivery of Healthcare Services guided this investigation. This theoretical framework provided the

structure like scaffolding from the design to interpretation in order to address health disparities. Transcultural Humility Simulation Development learning objectives mirrored Campinha-Bacote's (2007) constructs and then all learning activities were designed using adult learning models and strategies.

There was not a statistically significant difference in pretest and posttest mean scores in either the intervention group or the comparison group. However, student participants identified multiple areas for personal development when providing nursing care for culturally and linguistically diverse persons. Although additional studies replicating this intervention with a larger sample are recommended, these results suggest the nursing theory did adequately underpin the study intervention.

### **Nursing Research**

This study used a longitudinal, descriptive, quasi-experimental, pretest-posttest comparison group design (Shadish et al., 2002) using embedded mixed methods (Creswell & Plano Clark, 2011) in order to best understand complexities of cultural competence among baccalaureate nursing students. Investigators have used quantitative or qualitative methods in the past to explicate this phenomenon but this is the first study using mixed methods to study cultural competence interventions among baccalaureate nursing students. In this study, qualitative findings were embedded within the larger quantitative empirical design.

There was not a statistically significant difference among pretest and posttest scores in either the intervention group or the comparison group on the Inventory for Assessing the Process of Cultural Competence-Student Version. The results of the study suggest that the self-report instrument may not adequately measure cultural competence among participants, since

qualitative findings suggested they did learn as a result of the intervention and student participants stated they developed and learned.

### **Nursing Practice**

Results of this study did not suggest that participating in Transcultural Humility Simulation Development activities improves cultural competence among graduating baccalaureate nursing students in one private university in the western US. It is hoped that the graduates of the program who participated will continue to participate in the process of becoming cultural competent and reflect on the learning activities in which each participated. By participating the process of becoming culturally competent participants from this study may model consistently using an official hospital interpreter, assessing each individual in light of cultural context, and providing nursing care in a culturally humble way for other nurses and new nursing students, perpetuating change in practice. Additionally, the intervention could be made available to other nursing students and other schools and colleges of nursing.

Three of the five themes answering Research Question 2, including cultivating the nurse-person relationship, providing quality nursing care, serving patient and family, are “normal” nursing activities that might be expected of nurses from the general public. These themes surfaced in this study from the participants’ statements. Perhaps cultural competence is simply a part of these nursing activities, rather than something on its own. Cultural competence may be a “value added” piece of nursing care.

### **Nursing Education**

Nursing schools across the US are using simulation to achieve various learning outcomes. The results of this longitudinal, descriptive, quasi-experimental, pretest-posttest comparison group design (Shadish et al., 2002) using embedded mixed methods (Creswell & Plano Clark,

2011) suggest that participating in Transcultural Humility Simulation Development activities helps to improve cultural competence and its constructs among baccalaureate nursing students in one private university in the western US. In this study, cultural competence was repositioned in the context of adult development. In this way, participants and others may acknowledge how they interacted with culturally and linguistically diverse persons before the intervention and conceptualize how they may change following the intervention. Nurse educators could be informed of this intervention as a strategy to develop cultural competence among professional nursing students.

The learning objectives of the intervention were synthesized from Campinha-Bacote's (2011b) model and constructs. The intervention, Transcultural Humility Simulation Development was carefully designed to reflect the researcher's learning objectives, Bloom et al.'s (1956) learning domains, and accommodate various adult learning modalities. Learning activities employed a multipronged approach with activities to be done alone, in a large group, and in small groups, to account for different learning styles with all strategies "bundled" to have a greater impact together than separately.

The AACN mandated elimination of health disparities through cultural competence (Department of Health and Human Services [DHHS], 2005) as support for the development of patient-centered care which identifies, respects and addresses differences in patients' values, preferences and expressed needs (Institute of Medicine, 2003). Five of AACN's nine Baccalaureate of Science in Nursing (BSN) Essentials address cultural competence, including the ability to work with diverse populations and contexts, prepared faculty with requisite attitudes, knowledge, and skills, the development of cultural competence in students and faculty by providing environments supportive of diversity and facilitated by guided experiences with



diversity, the appreciation of the profound influence of culture in people's lives, and the commitment to minimize the negative responses of healthcare providers to these differences (Paasche-Orlow, 2004).

The NLN included cultural diversity in one of its four core values (NLN, 2009). QSEN (2016) established prelicensure competencies for nursing education and proposed targets for the knowledge, skills, and attitudes (KSAs) to be developed for each competency. The very first competency is patient centered care which stresses cultural competence and states the patient or designee as the source of control and full partner in providing compassionate and coordinated care based on respect for patient's preferences, values, and needs (QSEN, 2016). Knowledge: Nurses must know how diverse cultural, ethnic and social backgrounds function as sources of patient, family, and community values (QSEN, 2016). Skills: Provide patient-centered care with sensitivity and respect for the diversity of human experience (QSEN, 2016). Attitudes: Value seeing health care situations "through patients' eyes", respect and encourage individual expression of patient values, preferences and expressed needs, seek learning opportunities with patients who represent all aspects of human diversity, and recognize personally held attitudes about working with patients from different ethnic, cultural and social backgrounds (QSEN, 2016).

### **Health Policy**

Cultural competence has the potential to increase trust and subsequently improve outcomes among people in culturally and linguistically diverse populations (Brusin, 2012). Previous efforts to reduce health disparities included education about "cultures" of culturally and linguistically diverse populations, however this approach reinforces stereotypes, suggests that

racial groups have homogenous cultures, and fails to recognize racism and inequality (Malat, 2013).

Policy is the most underdeveloped area of the many cultural competence efforts within health care systems (National Center for Cultural Competence, 2014). Policy is required in culturally competent care because it sets the mission and vision of organizations, supports the practitioners with resources to implement culturally and linguistically competent practice, measures the success of practitioners and the organization in terms of how it serves diverse families, and institutionalizes cultural and linguistic competence in the organization (National Center for Cultural Competence, 2014). If a solution to health disparities is not discovered and implemented successfully, the problem will be more severe in coming years as the US health care system, which is already strained, especially after facing an influx of patients in 2014, when 32 million Americans had health insurance for the first time (Healthy People 2020).

Regulation and organizational oversight in nursing is predicated on patient safety and many organizations urge the provision of culturally competent nursing care as a way to address health disparities. Since the empirical results of this study suggest that participating in Transcultural Humility Simulation Development activities helped to develop cultural competence among baccalaureate nursing students in one private university in the western US, then these regulating organizations could be informed of new ways to approach the problem.

### **Recommendations**

Based on the findings of this study, the following recommendations for further study are made:

1. The educational intervention, Transcultural Humility Simulation Development, showed promise as one way to improve cultural competence among baccalaureate nursing

students. The intervention could be used with other nursing students and shared with nursing educators for use at other institutions.

2. Data collected in this study were self-reported and reflective in nature. Student participants reported they were culturally competent before the intervention yet reported during and following the intervention how little they knew. More simulation, in which student participants can view back their behaviors, is recommended.
3. Since a one-day workshop was not effective in developing cultural competence, educational intervention activities could be lengthened and threaded throughout the curriculum, beginning earlier in their journey.

### **Chapter 5 Summary**

In this chapter, a summary of the study was presented. Research findings for this study including analyses of hypotheses and research questions were discussed. The study limitations were identified and addressed. The implications of this study on nursing theory, research, practice and education, and health policy were discussed. Finally, recommendations were made for future work with regards to cultural competence as a way to address health disparities.

### **Study Summary**

One way to mitigate health disparities in the provision of nursing care is for healthcare providers to be culturally competent. Although addressed in nursing curricula, gaps in how best to improve cultural competence remain.

The purpose of this study was to determine whether participation in a researcher designed intervention, entitled Transcultural Humility Simulation development, based on components of Campinha-Bacote's model, improved cultural competence in graduating baccalaureate nursing students and explore how student participants will become culturally competent having been

exposed to the intervention. A longitudinal, descriptive, quasi-experimental, pretest-posttest comparison group design, using embedded mixed methods was used to study 57 students from one school in the western US. Student participants were randomly assigned to either the intervention ( $n = 22$ ) or comparison group ( $n = 35$ ).

All participants completed the Inventory for Assessing Cultural Competence-Student Version before and after the intervention. Intervention participants also completed written reflection during the intervention. A subgroup of participants in the intervention group ( $n=12$ ) and the comparison group ( $n=8$ ) were interviewed 2 to 3 months after graduation.

In this study, no statistically significant differences in cultural competence or its constructs were obtained between groups while treating the pretest score as a covariate, suggesting the intervention was not effective. Analysis of participant reflections written during the intervention indicated they anticipated incorporating cultural competence into their practice by **shattering preconceived perceptions, constructing innovative insights, improving effective communication, and emerging personal development**. Once in practice, they incorporated cultural competence through **cultivating nursing-person relationships, providing quality nursing care, serving the patient and family, establishing extraordinary communication and approaching care with humility**.

Participation in Transcultural Humility Simulation Development may increase student awareness and could foster developmental growth among student participants through transformative learning, epistemic belief change, and double-loop learning. Transformative learning is a change in how something is known by developing a capacity for perspectives and biases of others (Kegan, 2000). Epistemic belief change is the development of personal epistemology influenced by context, affect, and environment if a new way of understanding

makes sense (Bendixon & Rule, 2004). Double-loop learning leads to a paradigm shift by focusing on changing behavior, in this case development of cultural competence, by allowing reflection to become aware of biases, provide space for to rethink actions, and practice how to incorporate new information (Tagg, 2010).

The educational intervention, Transcultural Humility Simulation Development, shows promise as one way to improve cultural competence among baccalaureate nursing students. Recommendations for further study include using the intervention with other nursing students and shared with other educators to be used with nursing students at other institutions. It is further recommended that the intervention be done at more institutions with the investigation replicated and expanded. Finally, it would be beneficial to not only continue education on cultural competence, but also to study culturally and linguistically diverse patient experiences and patient outcomes.

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## Appendix A

### Permission to Use Model and Figures



Clinical, Administrative, Research  
& Educational Consultation  
in Transcultural Health Care

**J. Campinha-Bacote,**  
PhD, MAR, PMHCNS-BC, CTN-A, FAAN  
Transcultural Healthcare Consultant

Date: March 12, 2015  
To: Ms. Teresa Hamilton  
From: Dr. Josepha Campinha-Bacote  
President, Transcultural C.A.R.E. Associates  
RE: **Contractual Agreement for Limited Use of Campinha-Bacote's Models of Cultural Competence in a Dissertation**

This letter grants one-time permission to Ms. Teresa Hamilton to copy my 1991, 1998, 2002 and 2010 models of cultural competence as it appears on my website at [www.transculturalcare.net/Cultural\\_Competence\\_Model.htm](http://www.transculturalcare.net/Cultural_Competence_Model.htm), in her proposal to her professor and in her final dissertation in 2015.

**TIME FRAME:** Permission to use my model is a one-time from March 2015 through December 30, 2015 when she submits it to her chair and in her dissertation.

**RESTRICTIONS OF COPYING:** This permission only grants the copying/ reprinting of my model in **Ms. Teresa Hamilton proposal and dissertation. She agrees that my model cannot be copied for any other reason outside of her proposal and dissertation.** This includes, but not limited to, being copied in another formal or informal publication, a journal article, in another academic paper, handouts for presentations, nor for any PowerPoint or Poster presentations or in any hard copy or electronic formats.

As part of this permission agreement, it is required that Ms. Teresa Hamilton will use the following citation when citing my model in her dissertation:

**The Process of Cultural Competence in the  
Delivery of Healthcare Services  
Copyrighted by Campinha-Bacote, 1991, 1998, 2002, 2010  
Reprinted with Permission from  
Transcultural C.A.R.E. Associates**

**GOVERNING LAW:** All parties acknowledge that this Contractual Agreement for Limited Use of Campinha-Bacote's Model of Cultural Competence is a valid contract. This contract shall be governed and construed under the laws of the State of Ohio, except as governed by Federal law. Jurisdiction and venue of any dispute or court action arising from or related to this contract shall lie exclusively in or be transferred to Hamilton County Municipal Court, Hamilton County Court of Common Pleas, or the Federal Court situated in the County of Hamilton, Ohio.

**ATTORNEY'S FEES AND COSTS:** In any action to enforce any provision of this Agreement, the prevailing party will be awarded reasonable attorney's fees and costs.

☎ 513-469-1664  
☎ 513-469-1764  
meddir@aol.com

[www.transculturalcare.net](http://www.transculturalcare.net)

11108 Huntwicke Place  
Cincinnati, Ohio 45241

\_\_\_\_\_  
Josepha Campinha-Bacote  
*J. Campinha-Bacote*  
Ms. Teresa Hamilton

3/12/15  
Date  
3/17/15

## Appendix B

### Standardized Patient Informed Consent

### University of Wisconsin – Milwaukee Consent to Participate in Research

**Study Title: Influencing cultural competence among baccalaureate nursing student participants with Transcultural Humility Simulation Development**

**Person Responsible for Research:**

Student PI: Teresa Hamilton, RN, MSN, Assistant Professor  
California Baptist University, School of Nursing  
8432 Magnolia Avenue, Riverside, CA 92504  
P 951-343-4956 E [thamilton@calbaptist.edu](mailto:thamilton@calbaptist.edu)

PI: Karen Morin, RN, PhD, Professor Emeritus  
University of Wisconsin, Milwaukee, College of Nursing  
E [morin@uwm.edu](mailto:morin@uwm.edu)

The student PI is a doctoral student at University of Wisconsin, Milwaukee and the PI is the chair of the dissertation committee who will oversee the study.

**Study Description:** The purpose of this research study is to evaluate cultural competence among graduating baccalaureate nursing student participants and determine whether participation in a researcher-designed intervention, Transcultural Humility Simulation Development, will influence cultural competence.

**Activities:** If you agree to participate you will be asked to

- Come to the School of Nursing at California Baptist University for eight hours on June 12, 2015
- Portray a Standardized Patient
- You will be given a script and prebriefed for your role and wear undergarments and shorts under a patient hospital gown
- You or the student participant will lift your gown for nursing student participants to assess your abdomen.
- Student participants will be instructed to complete a culturally sensitive abdominal assessment
  - Student participants will ask you questions, and inspect, palpate, and listen to your abdomen with a stethoscope
- Student participants will enter room in pairs to complete their assessment
- There will be approximately fifteen encounters and each encounter will take approximately 10 minutes.
- You may take a break whenever you need to in between encounters with student participants.

- You will be asked to give anonymous written feedback for participants (less than five minutes per pair of student participants).
- Demographic information will be collected but remain anonymous and no identifying information will be collected.
- Encounters will be digitally audio and video recorded. The purpose is for student participants to review their actions and behaviors for learning purposes.
- If you refuse to be recorded, you may not participate.

**Risks / Benefits:** Risks that you may experience from participating are considered minimal. There are no foreseeable physical risks and no foreseeable social risks. There may be psychological risks, these are unlikely. You may feel embarrassment from exposing your abdomen. To minimize this risk you will be provided a gown and bed linens to use for privacy between assessments.

There are no costs for participating. There are no benefits to you other than to further research.

You will be provided breakfast, lunch, and snacks the day of the simulation. As a small token of thanks for your valuable time, you will receive a gift card worth \$25 at the end of the day of the simulation.

**Confidentiality:** All information collected about you during the course of this study will be kept confidential to the extent permitted by law. We may decide to present what we find to others, or publish our results in scientific journals or at scientific conferences. No information that identifies you personally will be released. Only the student PI and faculty PI will have access to the information. However, the Institutional Review Board at California Baptist University, or the Institutional Review Board at UW-Milwaukee or appropriate federal agencies like the Office for Human Research Protections may review this study's records. We will collect demographic data and collect feedback from you about student interactions. Digital audio and video recordings will be made, transcribed, and destroyed. Transcriptions of the recordings will be kept on a password protected computer. All information collected for this study may be kept for three years for future use and then it will be destroyed.

The PI, Dr. Karen Morin, the Institutional Review Board at California Baptist University or UW-Milwaukee or appropriate federal agencies like the Office for Human Research Protections may review this study's records. Aggregate data from one instrument only, the Inventory for Assessing the Process of Cultural Competence-Student Version will be submitted to the theorist, Dr. Josepha Campinha-Bacote, but will include no personal information.

**Voluntary Participation:** Your participation in this study is voluntary. You may choose not to take part in this study, or if you decide to take part, you can change your mind later and withdraw from the study. You are free to not answer any questions or withdraw at any time. Your decision will not affect any present or future relationships with California Baptist University or the University of Wisconsin Milwaukee. There are no known alternatives available to participating in this research study other than not taking part.

**Who do I contact for questions about the study:** For more information about the study or study procedures, contact Teresa Hamilton at [hamilt59@uwm.edu](mailto:hamilt59@uwm.edu) or 951-343-4956.

**Who do I contact for questions about my rights or complaints towards my treatment as a research subject?** Contact the UWM IRB at 414-229-3173 or [irbinfo@uwm.edu](mailto:irbinfo@uwm.edu).

**Research Subject's Consent to Participate in Research:**

To voluntarily agree to take part in this study, you must be 18 years of age or older. By signing the consent form, you are giving your consent to voluntarily participate in this research project.

\_\_\_\_\_  
Printed Name of Subject/Legally Authorized Representative

\_\_\_\_\_  
Signature of Subject/Legally Authorized Representative

\_\_\_\_\_  
Date

**Research Subject's Consent to Audio/Video/Photo Recording:**

It is okay to digitally audio and video record me while I am in this study and use my digitally audio and video recorded data in the research.

Please initial: \_\_\_\_Yes \_\_\_\_No

## Appendix C

### Student Participant Free Write Activity

The goal of this activity is to give you the opportunity to identify your own ideas, feelings, impressions and memories through writing. You will have ten minutes to write. In the top right corner, please write your self-generated identification code consisting of seven elements: gender (M or F), month and day of mother's birth; number of older brothers; number of older sisters; and first initial of mother's first name.

1. Keep your pen moving, even if you repeat yourself.
2. Do not reread what has been written.
3. The idea is to access one's stream of consciousness and put it directly on the page.
4. Disregard any concern for spelling, grammar and punctuation during this process.
5. This is called a free write to be free of the "shoulds" and to simply tune in to one's own voice in the moment.
6. If you are writing about an experience, for example, include your experience, what happened, what time of day, the setting, who was with you, all specifics.
7. A minute before the end of the free write, you will be alerted to complete your current thought.

The prompt for the free-write activity is: "When I (think, feel, hear, taste, smell, see) culture..."

## Appendix D

### Rubric for Student Participants during Simulation

This rubric will be used to assess behaviors of participants during the simulation. It is purposefully without ranking and has space for comments to gather as much data as possible. This will be completed for each participant by the student primary investigator and a faculty member using Cohen *K* prior to and at least every ten simulations for inter rater reliability.

Objective	Behavior	Observation		Comments
		Student Performed	Did Not Perform	
Conduct culturally sensitive assessments.	Use official interpreter			
	Perform culturally sensitive assessment to obtain subjective data			
	Perform culturally sensitive assessment to obtain objective data			
Generate desire through participation in cultural encounters.	Introduce self to patient and family member			
	Find common ground			
	Show "caring" behaviors to enhance the health-related existence of SP			
Demonstrate cultural humility by recognizing the dignity and worth of others.	Recognize Discomfort			
	Intervene to alleviate Discomfort			
	Treat SP as a unique human being worthy and deserving of love and care			

Examples of Discomfort- twisting of gown, feet uncovered, overstuffed trash bag on bedside table



## Appendix E

### Student Participant Debrief Guide after Simulation

**NOTE:** These questions are used consistently in this institution for debrief.

Directions: Use the following questions to elicit information from student participants immediately after participation in simulation. Your role is to facilitate discussion among student participants that will help them reflect on decisions, actions, and alternatives using deduction, induction, and analysis.

In a sentence or two, what was the scenario about?

What were your feelings about the scenario?

Did your feelings surprise you?

What was your experience while participating in the scenario?

Describe what went well in the scenario?

Was there something you could have done differently in the scenario?

What did you think about \_\_\_\_\_? (Anything that happened in the scenario.)

If you had done something different, would there have been a change in the situation?

Do you think this was a valuable experience?

## Appendix F

### Demographic Surveys

#### Student Participant Demographic Survey

Directions: Please do not write your name on this form. In the top right corner, please write your self-generated identification code consisting of seven elements: gender (M or F), month and day of mother's birth; number of older brothers; number of older sisters; and first initial of mother's first name so data can be matched with data on other instruments. Please answer the following. All data will be reported in the aggregate, no individual data will be reported.

Gender:

- 1 Male  
 2 Female

Age: \_\_\_\_\_

Race:

- 1 identify with one race  
 2 identify with two or more races
- Mark any race(s) with which you identify
- 1 White American, European American, or Middle Eastern American  
 2 Black American or African American  
 3 Native American or Alaska Native  
 4 Asian American  
 5 Native Hawaiian or other Pacific Islander

Ethnicity:

- 1 Hispanic or Latino  
 2 NON Hispanic or Latino

Country of birth:

- 1 United States  
 2 Other  
Write in \_\_\_\_\_

Marital Status:

- 1 Single  
 2 Married  
 3 Legally Separated

With whom do you live at your primary residence (select all that apply):

- 1 Alone  
 2 One or More Parent (check if a parent "claims" you as a dependent)  
 3 Spouse  
 4 Child or children

## Standardized Patient Demographic Survey

Directions: Please do not write your name on this form. Please answer the following. All data will be reported in the aggregate, no individual data will be reported.

Gender:

- 1 Male
- 2 Female

Age: \_\_\_\_\_

Race:

- |  |  |
|--|--|
| <input type="checkbox"/> 1 identify with one race          | Mark any race(s) with which you identify   |
| <input type="checkbox"/> 2 identify with two or more races | <input type="checkbox"/> 1 White American, European American, or Middle Eastern American |
|  | <input type="checkbox"/> 2 Black American or African American                            |
|  | <input type="checkbox"/> 3 Native American or Alaska Native                              |
|  | <input type="checkbox"/> 4 Asian American  |
|  | <input type="checkbox"/> 5 Native Hawaiian or other Pacific Islander                     |

Ethnicity:

- 1 Hispanic or Latino
- 2 NON Hispanic or Latino

Country of birth:

- 1 United States
  - 2 Other
- Write in \_\_\_\_\_

Marital Status:

- 1 Single
- 2 Married
- 3 Legally Separated

With whom do you live at your primary residence (select all that apply):

- 1 Alone
- 2 One or More Parent (check if a parent "claims" you as a dependent)
- 3 Spouse
- 4 Child or children

## **Appendix G**

### **Student Participant Evaluation of the Workshop**

This evaluation is intended to provide a way for you to share your experience about the workshop you participated in today. Please answer the following and be honest and specific. There are no “correct” answers, it is completely confidential, and your evaluation will not be used to determine your grade in this course, standing in the program, or graduation status.

1. Were the learning objectives clear?

2. Were the learning activities consistent with the learning objectives?

3. What did you like best about the intervention, Transcultural Humility Simulation Development, as a whole?

4. What knowledge did you gain in any part of the workshop?

5. What skills did you gain in any part of the workshop?

6. How have your feelings or opinions changed in any part of the workshop?

7. Of the learning activities which do you think benefitted you most and why? Learning activities included the Harvard implicit online activity, matching card game, faculty-facilitated lecture, group discussion, silent reflection, video(s), simulation with a standardized patient, debrief, and whole-group wrap up.

8. Of the learning activities, which do you think benefitted you the least and why? Learning activities included, the Harvard implicit online activity, matching card game, faculty-facilitated lecture, group discussion, silent reflection, video(s), simulation with a standardized patient, debrief, and whole-group wrap up.

9. Describe any suggestions for improvement in any of the activities.

## **Appendix H**

### **Student Participant Semi-structured Interview Questions**

1. Tell me about your current work as a nurse. Probes: area of practice, role, shift, full- or part-time, patient experience prior to graduating.
2. What have been your experiences with persons from diverse cultures since graduating?  
Probes: patients, family members, co-workers.
3. What has helped your experiences with persons from diverse cultures since graduating?  
Probes: school, learning, knowledge, skills, attitudes, co-workers, family.
4. Is there anything else you would like to say about your experiences with persons from diverse cultures since graduating?

Thank you

## Appendix I

### Institutional Review Board Report by University of Wisconsin, Milwaukee (UWM)



Department of University Safety & Assurances

Melissa Spadanuda  
IRB Manager  
Institutional Review Board  
Engelmann 270  
P. O. Box 413  
Milwaukee, WI 53201-0413  
(414) 229-3173 phone  
(414) 229-6729 fax

#### New Study - Notice of IRB Expedited Approval

<http://www.irb.uwm.edu>  
[spadanud@uwm.edu](mailto:spadanud@uwm.edu)

**Date:** April 27, 2015

**To:** Karen Morin, PhD  
**Dept:** College of Nursing

**Cc:** Teresa Hamilton

**IRB#:** 15.294

**Title:** Influencing Cultural Competence Among Baccalaureate Nursing Students with Transcultural Humility Simulation Development

After review of your research protocol by the University of Wisconsin – Milwaukee Institutional Review Board, your protocol has been approved as minimal risk Expedited under **Category 6 and 7** as governed by 45 CFR 46.110.

This protocol has been approved on **April 27, 2015** for one year. IRB approval will expire on **April 26, 2016**. If you plan to continue any research related activities (e.g., enrollment of subjects, study interventions, data analysis, etc.) past the date of IRB expiration, a continuation for IRB approval must be filed by the submission deadline. If the study is closed or completed before the IRB expiration date, please notify the IRB by completing and submitting the Continuing Review form found in IRBManager.

Any proposed changes to the protocol must be reviewed by the IRB before implementation, unless the change is specifically necessary to eliminate apparent immediate hazards to the subjects. It is the principal investigator's responsibility to adhere to the policies and guidelines set forth by the UWM IRB, maintain proper documentation of study records and promptly report to the IRB any adverse events which require reporting. The principal investigator is also responsible for ensuring that all study staff receive appropriate training in the ethical guidelines of conducting human subjects research.

As Principal Investigator, it is your responsibility to adhere to UWM and UW System Policies, and any applicable state and federal laws governing activities which are independent of IRB review/approval (e.g., [FERPA](#), [Radiation Safety](#), [UWM Data Security](#), [UW System policy on Prizes, Awards and Gifts](#), state gambling laws, etc.). When conducting research at institutions outside of UWM, be sure to obtain permission and/or approval as required by their policies.

Contact the IRB office if you have any further questions. Thank you for your cooperation and best wishes for a successful project.

Respectfully,

A handwritten signature in cursive script that reads "Melissa C. Spadanuda".

Melissa C. Spadanuda  
IRB Manager

## Appendix J

### Institutional Review Board Report by California Baptist University (CBU)

**RE:** IRB Review    **IRB No.:** 15-EF-045

**Project:** *Influencing Cultural Competence Among Baccalaureate Nursing Student Participants with Transcultural Humility Simulation Development*

**Date Complete Application Received:** 5/1/2015

**Principle Investigator:** Teresa Hamilton (Faculty)

**College/Department:** School of Nursing

**IRB Determination:** Expedited Application Approved – Faculty research to complete a doctoral degree as University of Wisconsin-Milwaukee; mixed-methods longitudinal study; no deception utilized; voluntary CBU adult participants; some minor risk is associated with participation; adequate consent and data protection procedures. May begin data collection.

**RESTRICTION:** PI may not recruit student participants in courses where she is the instructor of record.

**Date:** 5/4/2015

Approval is for one year from the data appearing above.

On behalf of the IRB

Neal F. McBride  
Certified IRB Professional (CIP)  
Chair, IRB



## **Appendix K**

### **Recruitment Scripts**

#### **Student Participant Recruitment Script-First Invitation**

Instructions: Please read the following script to the student participants.

Teresa Hamilton is conducting a study as part of her dissertation at the University of Wisconsin, Milwaukee, and you are invited to participate. She is interested in learning more about how student participants learn cultural competence.

Your participation is completely voluntary. You do not have to participate if you do not want to. Participation or nonparticipation will not affect your course grade, or progress or standing in the program.

If you agree to participate, you will be randomly assigned to the comparison group or the intervention group. You will be asked to complete two surveys several weeks apart. You will be asked to talk with Ms. Hamilton at a later date after graduation at the school or a mutually agreed upon public location for approximately 1 hour.

If you are assigned to the intervention group, you will be asked to complete an online activity which will take approximately 15 minutes and participate in an 8-hour workshop on Friday, June 12.

You are being informed of the study this week so you can think about being part of the study. Next week I will come back and give you the opportunity to enroll in the study.

Ms. Hamilton hopes you will be part of this study – but she wants to reinforce that being part of the study is voluntary.

Thank you for your careful consideration about participating in this study.  
See you next week!

If you have any questions about your rights or complaints towards your treatment as a research subject, please contact the IRB at 414-229-3173.

Thank you for your careful consideration about participating in this study.

#### **Student Participant Recruitment Script-Second Invitation**

Instructions: Please read the following script to the student participants. Write on board: In the top right corner, please write your self-generated identification code consisting of seven

elements: gender (M or F), month and day of mother's birth; number of older brothers; number of older sisters; and first initial of mother's first name.

As we discussed last week, Teresa Hamilton is conducting a study as part of her dissertation on how student participants learn cultural competence, and you are invited to participate. Your participation is completely voluntary. You do not have to participate if you do not want to. Participation or nonparticipation will not affect your course grade, or progress or standing in the program.

In the envelopes there are two instruments: a demographic survey and the Inventory for Assessing Cultural Competence-Student Version. There is also a consent form. If you agree to participate, please complete the consent form and instruments, and in the top right corner of the instruments, please write your self-generated identification code consisting of seven elements: gender (M or F), month and day of mother's birth; number of older brothers; number of older sisters; and first initial of mother's first name, place all papers back in the envelope, and return the envelope to me. If you do not wish to participate, return the envelope to me.

Consent forms will be separated from the instruments before Ms. Hamilton receives them.

If you have any questions about the study, please contact the student Principal Investigator, Teresa Hamilton at 951-343-4956 or [hamilt59@uwm.edu](mailto:hamilt59@uwm.edu)

If you have any questions about your rights or complaints towards your treatment as a research subject, please contact the IRB at 414-229-3173.

Ms. Hamilton is very appreciative of your careful consideration about participating in this study.

### **Standardized Patient Recruitment Script**

Instructions: Please read the following script to potential standardized patients.

Teresa Hamilton is conducting a study as part of her dissertation at the University of Wisconsin, Milwaukee, and you are invited to participate. She is interested in learning more about how student participants learn cultural competence.

Your participation is completely voluntary. You do not have to participate if you do not want to.

If you agree to participate, you will be asked to portray either a patient or family member for an 8 hour workshop on **Friday, June 12**. If you are the patient, you will be provided a hospital gown and lie in a hospital bed while student participants will be assessing your abdomen. You will have the opportunity to give anonymous feedback to student Participants and demographic information will be collected.

Ms. Hamilton hopes you will be part of this study – but she wants to reinforce that being part of the study is voluntary.

Thank you for your careful consideration about participating in this study.

## Appendix L

### Student Participant Informed Consent

#### University of Wisconsin – Milwaukee Consent to Participate in Research

**Study Title: Influencing cultural competence among baccalaureate nursing student participants with Transcultural Humility Simulation Development**

**Person Responsible for Research:**

Student PI: Teresa Hamilton, RN, MSN, Assistant Professor  
California Baptist University, School of Nursing  
8432 Magnolia Avenue, Riverside, CA 92504  
P 951-343-4956 E [thamilton@calbaptist.edu](mailto:thamilton@calbaptist.edu)

PI: Karen Morin, RN, PhD, Professor Emeritus  
University of Wisconsin, Milwaukee, College of Nursing  
E [morin@uwm.edu](mailto:morin@uwm.edu)

The student PI is a doctoral student at University of Wisconsin, Milwaukee and the PI is the chair of the dissertation committee who will oversee the study.

**Study Description:** The purpose of this research study is to understand cultural competence among graduating baccalaureate nursing student participants and determine whether participation in a researcher-designed intervention, Transcultural Humility Simulation Development, will improve cultural competence. Approximately 60 subjects will participate in this study. If you agree to participate, you will be randomly assigned to the intervention group or the comparison group.

**Activities:** If you agree to participate you will be assigned to the comparison group or the intervention group.

If you are assigned to the comparison group, you will be asked to complete a “pretest” survey, demographic survey, and a “posttest” survey.

If you are assigned to the intervention group, you will be asked to complete a pretest survey, a demographic survey, an online activity (15 minutes), and come to a workshop on campus on one Friday in June from 0815 to 1700, and meet with the Student PI on campus or at a mutually agreed upon public location one time between June and August.

Workshop activities include a matching card game, and then participation in three stations. In one station, student participants will engage in a faculty-facilitated lecture and group discussion, and complete a free-write. In one station, participants will watch a video and complete a written reflection in silence. In one station, student participants will participate in simulation with the

standardized patients and debrief. The day will end with a whole group wrap up of the day and completion of a written evaluation of the intervention.

Digital audio and video recordings of the simulation and debrief will be done to capture actions during simulation and comments during debrief which will only be used as qualitative data, pertaining to the study, not your individual performance. If you refuse to be digitally audio and video recorded, you may not participate because activities will be done in groups.

**Risks / Benefits:** Risks that you may experience from participating are considered minimal. There are no costs for participating. There are no benefits to you other than to further research. Your response will contribute to future developments around cultural competency and patient care.

You will not be compensated for taking part in this research study. If you are assigned to the intervention group, breakfast, lunch, and snacks will be provided on the day of the intervention.

**Confidentiality:** A self-generated identification code consisting of seven elements: gender (M or F), month and day of mother's birth; number of older brothers; number of older sisters; and first initial of mother's first name will be used for research purposes to link data collected. Your responses will be treated as confidential and all reasonable efforts will be made so that no individual participant will be identified with his/her answers. The research team will remove your identifying information after linking data and all study results will be reported without identifying information so that no one viewing the results will ever be able to match you with your responses. Data from this study will be saved on a password protected computer in a locked room at the student primary investigator's place of employment for three years, and then destroyed. Only the student primary investigator will have access to your information. However, Dr. Karen Morin, the Institutional Review Board at California Baptist University or UW-Milwaukee or appropriate federal agencies like the Office for Human Research Protections may review this study's records. Aggregate data from one instrument only, the Inventory for Assessing the Process of Cultural Competence-Student Version will be submitted to the theorist, Dr. Josepha Campinha-Bacote, but will include no personal information.

**Voluntary Participation:** Your participation in this study is voluntary. You may choose not to take part in this study, or if you decide to take part, you can change your mind later and withdraw from the study. You are free to not answer any questions or withdraw at any time. Your decision will not affect your grades or change any present or future relationships with California Baptist University or the University of Wisconsin Milwaukee. There are no known alternatives available to participating in this research study other than not taking part.

**Who do I contact for questions about the study:** For more information about the study or study procedures, contact Teresa Hamilton at [hamilt59@uwm.edu](mailto:hamilt59@uwm.edu) or 951-343-4956.

**Who do I contact for questions about my rights or complaints towards my treatment as a research subject?** Contact the UWM IRB at 414-229-3173 or [irbinfo@uwm.edu](mailto:irbinfo@uwm.edu).

**Research Subject's Consent to Participate in Research:**

To voluntarily agree to take part in this study, you must be 18 years of age or older. By signing the consent form, you are giving your consent to voluntarily participate in this research project.

\_\_\_\_\_  
Printed Name of Subject/Legally Authorized Representative

\_\_\_\_\_  
Signature of Subject/Legally Authorized Representative

\_\_\_\_\_  
Date

**Research Subject's Consent to Audio/Video/Photo Recording:**

It is okay to digitally audio and video record me while I am in this study and use my digitally audio and video recorded data in the research.

Please initial: \_\_\_\_Yes \_\_\_\_No

## Appendix M

### Student Participant Written Reflection

Self-Generated ID \_\_\_\_\_

#### Student Participant Reflection Following Matching Card Game

Directions: Please write your self-generated identification code will consist of seven elements: gender (M or F), month and day of mother's birth; number of older brothers; number of older sisters; and first initial of mother's first name. Describe your feelings during this experience. You may use words, phrases, sentences, or drawings in your reflections, anything that will help you express yourself.

Self-Generated ID \_\_\_\_\_

#### Student Reflection during Silent Rotation

Directions: Please write your self-generated identification code will consist of seven elements: gender (M or F), month and day of mother's birth; number of older brothers; number of older sisters; and first initial of mother's first name. Describe your feelings during this experience. You may use words, phrases, sentences, or drawings in your reflections, anything that will help you express yourself.

Self-Generated ID \_\_\_\_\_

#### Student Participant Reflection at the End of the Day

Directions: Please write your self-generated identification code will consist of seven elements: gender (M or F), month and day of mother's birth; number of older brothers; number of older sisters; and first initial of mother's first name. Describe your feelings during this experience. You may use words, phrases, sentences, or drawings in your reflections, anything that will help you express yourself.

## Appendix N

### Example Audit Trail

Participant 12	F122300P
Reflection after Matching Card Game	Well, this sure was interesting to do in card form. Most people wrote or picked a card how they felt about certain things. I was annoyed at playing the game. No category cards for me. Nobody likes what I had picked as description. I need coffee. And the cards hurt my burnt finger.
Reflection after Video	The few words that I have for this is how frustrating a translator can be. Culture and religion are so cherished and precious. I am upset because no one told Mr. Koschi about the options of chemotherapy. The doctor only spoke of the pump and the translator did not speak of options. Misunderstandings all across the board. Obviously Mr. Koschi would've taken oral chemo and shots. He said that, but when it was too late. This gives me a newfound discovery of my job as a nurse. Make a plan for one person to be the informant. Education is highly important. Culturally cared for people are wet nurses and doctors should strive for.
Rubric	Introduced self to patient and family member Recognized discomfort
Free Write after Lecture	Culture is learned and shared. How I act towards others is something that I learned from my mother and father. I treat others the way my mom and dad to, with respect and dignity. I took my test and I learned that I am/view others the same as I do myself. Culture is passed down. My cultural anthropology class plays a big part in understanding humans. Me, personally like to know about what different cultures do and feel equals better nurse and nursing judgments.
Reflection End of Day	This definitely opened my eyes to myself. I want all my patients to feel comfortable with me and be able to provide great care. Language barriers are often the problem between healthcare providers and patients. The miscommunication is so deftly, and can be fatal. I feel that I will be able to be a better healthcare provider if my patients are properly equipped to help themselves. This starts with me. I need to be aware of any stereotypes and may have and deal with them.



## Appendix O

### Institutional Review Board Amendment Approval, University of Wisconsin, Milwaukee



UNIVERSITY of WISCONSIN

Department of University Safety & Assurances

Melissa Spadanuda  
IRB Manager  
Institutional Review Board  
Engelmann 270  
P. O. Box 413  
Milwaukee, WI 53201-0413  
(414) 229-3173 phone  
(414) 229-6729 fax

#### Modification/Amendment - IRB Expedited Approval

<http://www.irb.uwm.edu>  
[spadanud1@uwm.edu](mailto:spadanud1@uwm.edu)

**Date:** January 21, 2016

**To:** Karen Morin, PhD  
**Dept:** College of Nursing

**Cc:** Teresa Hamilton

**IRB#:** 15.294

**Title:** Influencing Cultural Competence Among Baccalaureate Nursing Students with Transcultural Humility Simulation Development

After review of your research protocol by the University of Wisconsin – Milwaukee Institutional Review Board, your protocol has received modification/amendment approval for:

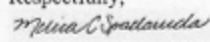
- Addition of follow-up interview

IRB approval will expire on April 26, 2016. If you plan to continue any research related activities (e.g., enrollment of subjects, study interventions, data analysis, etc.) past the date of IRB expiration, a Continuation for IRB Approval must be filed by the submission deadline. If the study is closed or completed before the IRB expiration date, please notify the IRB by completing and submitting the Continuing Review form in IRBManager.

Any proposed changes to the protocol must be reviewed by the IRB before implementation, unless the change is specifically necessary to eliminate apparent immediate hazards to the subjects. The principal investigator is responsible for adhering to the policies and guidelines set forth by the UWM IRB, maintaining proper documentation of study records and promptly reporting to the IRB any adverse events which require reporting. The principal investigator is also responsible for ensuring that all study staff receive appropriate training in the ethical guidelines of conducting human subjects research.

As Principal Investigator, it is also your responsibility to adhere to UWM and UW System Policies, and any applicable state and federal laws governing activities which are independent of IRB review/approval (e.g., FERPA, Radiation Safety, UWM Data Security, UW System policy on Prizes, Awards and Gifts, state gambling laws, etc.). When conducting research at institutions outside of UWM, be sure to obtain permission and/or approval as required by their policies.

Contact the IRB office if you have any further questions. Thank you for your cooperation and best wishes for a successful project.

Respectfully,  
  
Melissa C. Spadanuda  
IRB Manager

## Appendix P

### Student Participant Consent for Re-Interview

**University of Wisconsin – Milwaukee**

**Consent to Participate in Research**

IRB#: 15.294-Expires April 26, 2016

**Study Title: Influencing cultural competence among baccalaureate nursing students with Transcultural Humility Simulation Development**

**Person Responsible for Research:**

Student PI: Teresa Hamilton, RN, MSN, Assistant Professor

California Baptist University, School of Nursing

8432 Magnolia Avenue, Riverside, CA 92504

P 951-343-4956 E [thamilton@calbaptist.edu](mailto:thamilton@calbaptist.edu)

PI: Karen Morin, RN, PhD, Professor Emeritus

University of Wisconsin, Milwaukee, College of Nursing

E [morin@uwm.edu](mailto:morin@uwm.edu)

The student PI is a doctoral student at University of Wisconsin, Milwaukee and the PI is the chair of the dissertation committee who will oversee the study.

**Study Description:** The purpose of this research study is to understand cultural competence among graduating baccalaureate nursing students and determine whether participation in a researcher-designed intervention, Transcultural Humility Simulation Development, will improve cultural competence. 20 subjects will be invited to participate in additional interviews for this study.

**Activities:** Participants will be contacted by phone or University Email. If you agree to participate you will meet in a mutually agreed upon location to be re-interviewed using a Semi-Structured Interview Guide. Interviews will be digitally recorded and transcribed.

**Risks / Benefits:** Risks that you may experience from participating are considered minimal. There are no costs for participating. There are no benefits to you other than to further research. Your response will contribute to future developments around cultural competency and patient care.

**Confidentiality:** Your responses will be treated as confidential and all reasonable efforts will be made so that no individual participant will be identified with his/her answers. The research team will remove your identifying information after linking data and all study results will be reported without identifying information so that no one viewing the results will ever be able to match you

with your responses. Data from this study will be saved on a password protected computer in a locked room at the student primary investigator's place of employment for three years, and then destroyed. Only the student primary investigator will have access to your information. However, Dr. Karen Morin, the Institutional Review Board at California Baptist University or UW-Milwaukee or appropriate federal agencies like the Office for Human Research Protections may review this study's records. Aggregate data from one instrument only, the Inventory for Assessing the Process of Cultural Competence-Student Version will be submitted to the theorist, Dr. Josepha Campinha-Bacote, but will include no personal information.

**Voluntary Participation:** Your participation in this study is voluntary. You may choose not to take part in this study, or if you decide to take part, you can change your mind later and withdraw from the study. You are free to not answer any questions or withdraw at any time. Your decision will not affect your grades or change any present or future relationships with California Baptist University or the University of Wisconsin Milwaukee. There are no known alternatives available to participating in this research study other than not taking part.

**Who do I contact for questions about the study:** For more information about the study or study procedures, contact Teresa Hamilton at [hamilt59@uwm.edu](mailto:hamilt59@uwm.edu) or 951-343-4956.

**Who do I contact for questions about my rights or complaints towards my treatment as a research subject?** Contact the UWM IRB at 414-229-3173 or [irbinfo@uwm.edu](mailto:irbinfo@uwm.edu).

**Research Subject's Consent to Participate in Research:**

To voluntarily agree to take part in this study, you must be 18 years of age or older. By signing the consent form, you are giving your consent to voluntarily participate in this research project.

Printed Name of Subject/Legally Authorized Representative

Signature of Subject/Legally Authorized Representative      Date

**Research Subject's Consent to Audio/Video/Photo Recording:**

It is okay to digitally audio and video record me while I am in this study and use my digitally audio and video recorded data in the research.

Please initial: \_\_\_\_Yes    \_\_\_\_No

## Appendix Q

### Written Reflection and Free Write Responses Addressing Research Question 1

It sheds light on my own need to improve on being culturally competent, esp. in practice as a nurse. It's impossible to know everything and anything about each culture but we have to at least try. I think we could each work towards being equipped with certain tools to learn to approach each situation.

It has allowed me to open my eyes and to be more culturally aware and sensitive. I have not stopped to think what I would do if I were to encounter a patient that has other language needs, especially if an interpreter is not readily available for them.

my preconceived ideas, beliefs, values and definitely biases  
great experiences to help us reflect on our role in that as professionals

how important it is to understand other cultures/religions and to respect them  
importance of a translator  
see someone's world from their perspective  
so much more we can learn

reflect upon my values and beliefs.  
learned about the importance of culturally competent care. I definitely think that I will feel more comfortable delivering care to patients from a different culture/background than my own. I need to actively seek out information on other cultures and religions to provide the best possible care to future patients.

the importance of using a hospital's translator.  
stereotype when it came to the cultural diet. Something to consider when you are assuming what someone of another culture would want.  
I'm not going to waste time trying to get them to understand my question about pain, nor touch them which may be a violation of their cultural and spiritual beliefs before I take the time to handle the language barrier. Both me and my patients deserve better than that. If I want to build my patients trust and not give them unneeded stress and frustration, I need to make sure we can properly understand each other.

I think they really needed to focus on the patient's needs/desires and not so much on the family's (while they are still important in the care).  
I gained a better understanding on what (or how I should approach) a patient with the language barrier.

I learned as a healthcare provider. We should try to learn multiple culture and languages.

learned that there were several cultures that I did not know much about  
I believe that in order to raise the level of care, we have to create a healthcare team that is compassionate to the struggles of all individuals and respects differences among patients.  
I hope that as I go into my career I will be able to recognize these boundaries and address them in a timely manner to provide more patient centered care.

could have asked a couple more questions to find out why  
I'm intrigued to dig further into healthcare barriers and educate myself on ways to help my patients.

Whenever I encounter people from different cultures than myself, especially in the hospital, I make sure I get an idea as to what I hardly know about the culture, but that I also recognize that although two people may be from the same culture, they more than likely had different upbringings so they won't be exactly the same. I like to think I recognize the individuality of each patient/person I interact with.

I got a little bit of insight as to how it will be with patients from other cultures that I am familiar with.

This gives me a newfound discovery of my job as a nurse. Make a plan for one person to be the informant. Education is highly important. Culturally cared for people are wet nurses and doctors should strive for.

I want all my patients to feel comfortable with me and be able to provide great care. Language barriers are often the problem between healthcare providers and patients.

I feel that I will be able to be a better healthcare provider if my patients are properly equipped to help themselves. This starts with me. I need to be aware of any stereotypes and may have and deal with them.

It is eye-opening to see how much is lost in translation when it comes to having a patient of different culture that speaks a different language. It is difficult as a patient to have a healthcare provider that doesn't understand all of your needs. The only thing that can be done is to try to communicate and understand each other by respecting each other's beliefs.

This helped me understand a little bit more about being more tolerant and respectful to a person's cultural/religious wishes.

All you can do is stand besides the person in need.

I feel that today I learned to be even that much more aware, especially in the healthcare setting, because these are people's lives.

always use a translator

verify patients fully understand the info they are receiving as well as all their options provided

To the LGBT community, all should be treated equally and with respect.

gain more experience

When I see different culture my first instinct is to ask questions. I hear dialect that I do not recognize I want to know more. I think by asking questions it shows interest instead of judgment. more accepting and tolerant of different cultures

communication errors

making sure the patient understands his/her disease process, asking what's important to them, and what their goals are.

I feel that I will be more attentive to culture, ethnicity, race, and language.

A translator or is absolutely crucial to have the family and patient understand all options. It made me realize that getting a cultural background on a patient is absolutely necessary to provide care.

the language barrier is extremely difficult

It is important to give all options to the patient. You never really know why people decide things until you ask. Communication can save lives.

I was not aware of how many people couldn't follow (to me seemed like simple directions) but many were unable to follow drug directions. This is a huge issue that I feel not many people in the healthcare setting are aware of. It was a huge eye open and I will remember this for when I'm in my own practice.

- This has showed me how important it is to take the time and teach patient. It's important to take the time to explore and figure out what exactly they are comprehending. This is important also because if they are illiterate it needs to be written in their chart so all their healthcare providers are aware.
- My grandpa is almost completely blind and he knows his medication and dosage well so maybe I should ask him how he does it so I can use that in my own practice
- This makes me want to be a different nurse. I want to be the nurse that takes the time to make sure her patients understand the information they are given

I really see how important communication is. When speaking with any and everyone you really have to take the time to make sure what is said is understood.

The video really makes me want to be aware of my patients truly understand me and every task and performing for them. I cannot assume people will ask questions if they don't understand.

I see the cultural barriers all the time now with my patients.

made me want to take a step in the right direction and learn Spanish because it is the second most used language in California.

makes us think about how we perceive and judge others.

showed me how an "outsider" really feels when faced with the language challenge. As a new nurse it has given me the confidence to be culturally competent regardless of the obstacles I might face.

taught me how I should treat others in my practice.

My concerns, for myself is how do I block these emotions to a degree so I do not end up with compassion fatigue.

Begin building rapport with patient and family

I feel the frustration of attempting to communicate with someone whose primary language is not the same as mine.

I can feel the tension between the different values between their culture and my culture.

We are unique and different in every way. It is important to ask the patient what their ideal health is. By learning to understand other cultures and beliefs on healthcare, it is the first step in providing the best care possible.

As health professionals, cultural, education, religion and all factors that pose as barriers must be considered in providing a better healthcare. Communication is the basis of understanding each other or human beings. It is very important to be effective at communication to understand or provide health care.

Use simple terms to ask about their background/language.

Effective line of communication is necessary for effective patient centered care

highlighted important considerations that should be considered when taking care of culturally diverse patient. The simulation demonstrated that there are barriers and frustrations providing consistent care that should be tailored to the patient's cultural needs.

## Appendix R

### Semi-Structured Interview Responses Addressing Research Question 2

In clinical I was working in OB and I was caring for a Pakistani couple. In the Pakistani culture the man is at the forefront. I talked with him and her back to him and her and then he relaxed. The OB came in and asked the man “has mom farted yet?” The dad laughed and translated and she giggled and said “no I have not farted”. I was surprised that he used such colloquial language rather than pass gas.

He kissed me on my cheek. It was really nice to see this expression in his culture. Since my husband is from Argentina I know that this is culturally appropriate.

I actually enjoyed the language barrier in the simulation because it challenged me to reach out to my resources (calling a translator).

I had to assist the patient and his family with my nonverbal cues as I continued to speak and explain things to them. It made me think outside the box.

It is really important to use a translator.

I have to establish that relationship.

I also know how important it is to find a trained interpreter.

Just how important cultural humility is. I like that you called it that. Humility.

So our patient population is primarily Hispanic.

So most of my patients are Hispanic and speak only Spanish.

So I have to use interpreters all the time.

Some people just speak Spanish as good as possible.

But I cannot speak any Spanish.

So I have to call the interpreter.

So sometimes it takes a long time for one to come. Sometimes 30 or 40 minutes.

So you are just there, looking silly, not able to communicate.



So I really want to learn Spanish.

Many people in room, very loud. The charge nurse told me to close the door.

And I did not want to. Because I thought it would be rude.

Many patients are Spanish speaking.

We have young Hispanic ladies. My youngest so far is 14.

(The simulation) really taught us that cultural competence is a work in progress. As nurses it is our duty to make sure our patient understands us and offer the patient time to discuss about anything that they feel they need to talk about their situation.

We need to be more attentive to the patient and try to humble myself in a way to try and offer the best care possible.

And I thought I could communicate with anyone easily but I realized that is not always possible. Something will catch off guard and you have to learn to cope with it.

My favorite was the simulation and debrief. It put me in a position to analyze how I would cope with a language barrier. Not just Spanish.

Well I think it is so important, you know? We really have to assess the person's background. Like the whole person, you know?

helped me see how much they expect a health care worker to be able to work with their specific language and culture, despite the slew of religions, cultures, and spiritual beliefs out there. Somehow we have to make them understand their values and how much we value them.

I learned how important it is to know how to use the resources we have available in the hospital.

and it is really important to make sure the hospital staff never fails to utilize a proper interpreter.

that is what I got out of it. That is how I will practice as a nurse.

You just have to know and use your resources to help the patient.

Well if I can't find one of the techs, I call the house supervisor. Then you have to wait until someone can come translate.

(Using a translator is) very time consuming. It is like having an extra patient.

You have to always be aware of communication and if you or the patient/family truly understand what is going on. Because understanding is key and recognizing when someone does not understand is important.

(You have to know the language and the culture).

You have to be aware in every situation. It has nothing to do with smarts. It has to do with communication. Your patient can have all the degrees in the world. Even a doctor can come take care of the patient. But if they can't communicate all the education or smarts goes out the window!

So most of the patients speak English and have been born here and are raised here. But the parents sometimes were not born here. Sometimes they were. You can't assume.

My patient just the other day. His mom was Mexican. He spoke English but she didn't. He had his appendix out. He had a fever and pain and his mom brought him to the ER. Well the PA sent him home at first. But she knew he was really sick so she brought him back.

Mom just knew he was really sick so she came back to ER the second time. They did a CT and his appendix was super swollen. So they took him to OR and his WBCs were super high! Over 20!

So they had to open him because he was overweight. Chunky guy. They opened him up and it was so hot. The surgeon said it almost burst. They irrigated the peritoneum prophylactically and started IV antibiotics since they had him open anyway. The mom was so mad because she told them he was sick.

Xavier speaks English. His mom spoke Spanish only. She was so mad that they discharged him.

had to stay for IV antibiotics. The dressing was fine but his IV kept blowing. I guess he was sick for a while so his veins were awful. I had to restart it twice just on my shift! So his antibiotics, fluids, everything was behind. And he really didn't want to get up because his little big, round tummy was hurting. But I told him he would be more sick if he didn't walk. His mom just wanted to wrap him in his blanket from home. She had the TV up really loud. But I didn't want him to spike a fever. I kept uncovering him and then she would wrap him.

Everyone is diverse.

But we have to stay calm and do our best to communicate in a way that the patients understand. We have to be confident so we can build trust and rapport aside from communication barriers. (Even if) we speak the same language but we have to work hard to listen to him and understand his point of view. We have to understand what his health means to him. What is important to him.

We have to learn to use alternative forms of communication. Like signs and nonverbal. The patients will sense my response so even when I feel confused, awkward, or unsure, reassuring them should be considered with high importance. The group discussion and video really helped me gain a better perspective hearing other people's views, feelings, and experiences that may not have occurred with me so it helped open my eyes.

The frustration of not being able to communicate because I did not even know what language they were speaking.

It is easy to figure out when someone speaks Spanish because I am used to it. But African languages are very foreign. We just have to figure how to communicate.

I will try to figure out what language, what I need to understand about that person. What is important to them. I need to compare them to themselves, not compare them to white people.

I need to understand that every patient is diverse, try to communicate, and then treat them with dignity and respect.

Because they are created in God's image.

Everyone is unique.

I learned that we should not just assume someone knows about their disease, how to take their meds or that they understand you. We really need to take the time to educate our patients in a way they understand and get an interpreter when needed.

The Chinese need health care providers that understand them and their language and customs.

So we are congruent (to give) really good care.

I was always respectful of other cultures. But I think with the simulation I realized I always assumed my diverse patients would be Latina. But they can be from anywhere. Any language, any color, any ethnicity, any religion. I have a lot of experience with cultural diversity, I thought, because I deal with patients from different cultures three times a week and it is always a learning experience.

I realized I don't have (a lot of experience).

I try to understand my own feelings and avoid stereotypes.

And I try to treat all patients as individuals and not make assumptions. I think subconsciously I do. I do make assumptions.

The not so great nurses are just going through the motions. They don't really care.

You have to look at each patient and find out what is most important to them. What is their priority? What is their value they place on how they are feeling and the events of the day.

Well I just want to not stereotype, treat patients with dignity, show care and compassion.

When I call the supervisor she usually has a list of who is on that night who speaks whatever language. So I will ask my coworkers and if nobody can help, I call whoever is on the house and ask them for an interpreter. They are supposed to come within 20 minutes. That is hospital policy. But usually it is hard for them to get away. If nobody speaks the language we need, we have a telephone service. We are supposed to upgrade to the video service soon.

Our patient was speaking an African language. I always thought about Spanish but I had not really thought about other languages. But the phone, the one we use for the telephone service, has a white card on it with writing in a bunch of languages. In every language that the service offers, the card says "Point here if this is your language" or something like that.

I have a good support system at work. We have interpreters.

Well I learned that communication is the foundation of good healthcare. Without communication, it is impossible for nurses to deliver patient centered care. I learned how frustrating it is, as the nurse, to not be able to communicate and how that barrier can seriously affect the patient's care. I learned also that I have to come up with creative ways to overcome the barriers. Like hand gestures, showing them how to breathe.

it is so important that patients understand us, both when we speak and the writing, written instructions we give them. There are disparities in healthcare. We all have to work together to stop them.

Just be aware of your assumptions so you don't stereotype, make sure you communicate, and if you don't know, ask.

Well we have to assess their background. Where are they from? What is their language? What is their family structure? What is their religion? What cultural practices are important to them? Who they live with? And then who makes health decisions. Like sometimes in the Latino cultures, you have to speak with the father or husband. Or if it is the husband that is the patient, then the whole family might be there to visit. We barely have enough room in by the patients.

So maybe we have a Muslim who want to pray. We would have to make sure we help them out of bed to face the East. Maybe we have a Catholic who want the priest. Maybe we have an Indian who needs a Shaman. All of that is very important when the person immigrated. Also, if

they don't speak English, we need an interpreter. We need to use an official interpreter, not the family.

Well we have to perform tasks while being culturally sensitive. We have to improve our assessment. We have to consider health literacy. It is important to accurately evaluate understanding of what our message is. The simulation put me out of my comfort zone. It made me learn something.

I learned new cultural terms, how different cultures feel while being cared for in the US, and that not many people understand simple instructions.

I can't assume people will understand me.

Always offer anything more than one time to Asian patients.

Yes, you always have to offer more than one time, sometimes more than two times for Asian patients. They think it is rude to say yes the first time.

Many of my coworkers speak Spanish (but I am not sure if they are official interpreters).

I listen all the time. I just try to pick out any words I know and then ask questions. It is really fun to, like, try and figure out what they are talking about.

In order to provide something better, better care, you have to know about different cultures.

(When I started working) I personally had a large demographic shift. I encounter a lot of patients who are Hispanic and African-American. They're just a lower socioeconomic status. They are so sick. There are constant readmits. They even go directly to ICU.

Other cultures, they want to feed you. You can really accept people when you are eating together.

People from other cultures assimilate better.

In the US we send (older adults) to a home. But anyone from a different culture, they live with you or at least an aunt or a nephew, or somebody takes care of you.

Well just treat others how you want to be treated.

I like to treat everyone the same.

I like to know who is important to them, who is their family, what is their influence. Is it family? Is it religion? Is it the neighborhood? You know, who matters to them? To whom do they matter?

they have inherent worth and dignity just because of who they are.

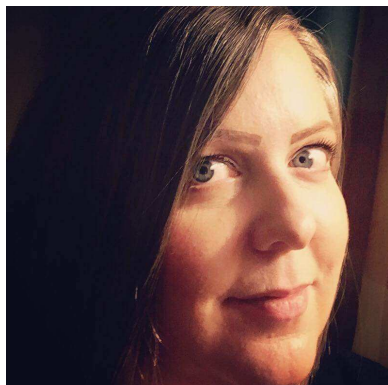
we have very diverse patient population. They are from everywhere.

I try to understand the person and where they are coming from.

Well I try to treat them the way they want to be treated.

## Curriculum Vitae

Teresa Hamilton



Place of birth: Orange, California

### Education:

Associate Degree in Nursing, Golden West College, Huntington Beach, CA  
Graduated May 1992

Bachelor of Science in Nursing, California State University, Fullerton, CA  
Graduated May 2004

Master of Science in Nursing, California State University, Fullerton, CA  
Graduated May 2007

Doctor of Philosophy, University of Wisconsin, Milwaukee  
Specialty area: Nursing  
Graduated August, 2016

### Qualifications:

Registered Nurse, RN482093  
California, First Licensed 1992

Expires 12/17

Basic Life Support for  
Healthcare Providers (CPR and AED)

Expires 09/17

### Teaching Experience:

#### **California Baptist University**

NCLEX Specialist (50%)

Health Records Analyst

Skills Lab Director and Health Records

Skills Lab Director

**January 2008 to Present**

January, 2016 to Present

October, 2009 to July, 2012

October 2009 to June, 2010

January, 2008 to June, 2010

#### **Courses Taught**

Open Lab	SP 2008, 2009; SU 2008, 2009; FA 2008, 2009
NUR 201 Theoretical Foundations	FA 2013-2015; SP 2015, 2016
NUR 215 Fundamental Skills	FA 2013-2015; SP 2014, 2015
NUR 225 Pathophysiology	FA 2008, 2010, 2011; SP 2010-2013
NUR 226 Pathophysiology for the RN	SU 2014, 2015
NUR 235 Physical Assessment	FA, SP, SU 2013-2016
NUR 236 Physical Assessment for the RN	SP 2014, 2015; FA 2015
NUR 275 Pharmacology and Nutrition	SP 2010, 2012, 2013; FA 2011
NUR 301 Communication and Informatics	FA 2009, 2010, 2013; SP 2010
NUR 375 Research and Writing	SP 2015
NUR 494 NCLEX Review	SU 2016
NUR 471 Christian Leadership	SP 2012; SU 2012
NUR 499 Senior Capstone	SP 2012; SU 2012
NUR 502 Fundamentals of Nursing	SU 2009, 2015
NUR 512 Physical Assessment	SU 2014, 2015, 2016
NUR 515 Pathophysiology	SU 2008, 2010, 2012, 2014
NUR 525 Pharmacology and Nutrition	SU 2012
NUR 549 NCLEX Review	SU 2016
NUR 571 Christian Leadership	SU 2012
NUR 599 Capstone	SU 2012

**Western University of Health Sciences 2009-2010**

**Course Taught and Designed**

HSCI 5130 Foundations of US Healthcare	FA 2009; SP 2010
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**Riverside City College 2004-2007**

**Courses Taught**

Nursing 7, 8, 9 Skills Lab	FA, WI, SP, SU 2004-2007
NVN 52-L Nursing Fundamentals	SP 2005-FA 2006
NVN 61-L Pediatrics	WI 2005, 2006
NVN 71-L Advanced Vocational Nursing	SU, 2006
NRN 1-L Introduction to Nursing Concepts	SP, FA 2006
NRN 3-L Intermediate Nursing Concepts	SP 2007

Work Experience:

<b>Shadow Health, Inc.</b>	Subject Matter Expert	2014 to Present
<b>Kaiser Permanente</b> Baldwin Park	Population Care Manager Chronic Kidney Disease	2005-2007
<b>Kaiser Permanente</b> Fontana	Staff Nurse Post Anesthesia Care Unit	2001-2005
<b>Vencor Hospital</b>	Staff Nurse	1997-2000



Ontario, CA <b>St. Bernadine Med Center</b> San Bernardino, CA	Telemetry and Critical Care Staff Nurse Telemetry and Critical Care	1996-1997
<b>Corona Regional Med Center</b> Corona, CA	Staff Nurse Medical, Surgical, Telemetry	1995-1996
<b>Medistaff Registry</b> Costa Mesa, CA	Staff Nurse Medical, Surgical, Telemetry	1993-1995
<b>St. Joseph Hospital</b> Orange, CA	Staff Nurse Medical, Surgical, Telemetry	1992-1994

Presentations:

Speaker	RN-BSN National Webinar Shadow Health, Inc.	October, 2015
Speaker	“The Job and Calling of a Nurse” Multiara Indonesia Nursing School, Medan	August, 2010
Speaker	Departemen Kesehatan RI Direktorat Jenderal Bina Pelayanan Medic RSUP Ham, Adam Malak Hospital, Indonesia	August, 2010
Speaker	Fakulty of Nursing Universitas of Sumatera Utara, Medan	August, 2010
Presenter	Qualitative Inquiry in Nursing Arta School of Nursing, Indonesia	August, 2010
Speaker	Laerdal Mini SUN Conference California State University, San Marcos	December, 2009
Student Address	School of Nursing Pinning Ceremony California Baptist University	April, 2009

Professional Memberships:

President Elect	International Consortium of Parse Scholars, CA Chapter	Fall 2015 to Present
Member	Sigma Theta Tau, International Chi Mu Chapter	Inducted 2014

Member	Nursing Honor Society California Baptist University	Inducted 2012
Member	Golden Key International Honour Society	Inducted 2010
Member	International Consortium of Parse Scholars	Since 2008
Member	Sigma Theta Tau, International Upsilon Beta Chapter	Inducted 2006
Member	Nursing Honor Society California State University, Fullerton	Inducted 2004
<u>Editorial Review:</u>		
Abstract Reviewer Odyssey Conference	Sigma Theta Tau, International Upsilon Beta Chapter	2010-2011