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UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

THE IMPACT OF SERVICE-LEARNING EXPERIENCES ON BACCALAUREATE NURSING ALUMNI

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

Stephanie Joy Matthew

College of Natural and Health Sciences
School of Nursing
Nursing Education

May 2022

This Dissertation by: Stephanie Joy Matthew

Entitled: *The Impact of Service-Learning Experiences on Baccalaureate Nursing Alumni*

has been approved as meeting the requirement for the Degree of Doctor of Philosophy in the College of Natural and Health Sciences in School of Nursing, Program of Nursing Education.

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ABSTRACT

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The purpose of this research study was to explore the long-term impact of international service-learning (ISL) experiences taken by nursing students in Bachelor of Science in Nursing (BSN) programs and how their current nursing practice might be affected by these experiences. A sequential explanatory mixed methods case study design was used to survey and interview BSN alumni about their cross-cultural experiences. The quantitative survey data used the Cultural Capacity Scale (Perng & Watson, 2012) to compare scores of 93 BSN alumni who did and did not have an ISL experience during nursing school. Then the qualitative portion utilized semi-structured interviews with alumni who had taken ISL trips during nursing school. Nurses who went on an ISL trip in school had higher total Cultural Capacity Scale scores than nursing alumni who did not have those experiences. Themes in the interview narratives included remembering personal benefits from their experiences, developing a broader worldview, experiencing profound gratitude, and feeling overwhelmed by needs. These findings were integrated to describe the long-term impacts of ISL experiences both personally and professionally in current nursing practice.

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DEDICATION

This study is dedicated to my students who inspire me on a daily basis with their passion for nursing and the profound, genuine care they provide their patients. You are the reason I started this PhD program because I wanted to learn how to be a better teacher for you. Thank you for joining this profession and sacrificing so much in the service of others. In particular, this study is for the students with whom I have had the great privilege of traveling internationally on service and cultural trips over the past decade. Thank you for braving the unknown and for being willing to step out of your comfort zones. I hope we can travel again soon.

I would also like to dedicate this work to my family. My parents are incredible educators, and they have always modeled a tremendous love of learning and teaching. My sister was my first "student" when I came home from elementary school and tried to teach her the lessons we had learned that day. My grandparents saved and sacrificed for a college fund for each grandchild, and I hope that someday I can be as cool of a professor as my grandfather was. My husband was the catalyst who encouraged me to finally apply for doctoral programs and has supported me endlessly while writing this manuscript. Finally, but certainly not least, this study is dedicated to my daughter who was born in the middle of this dissertation journey. It is my sincere prayer that she will always be curious about the world around her and continue to excitedly learn about it.

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CHAPTER I

INTRODUCTION

This dissertation is a sequential explanatory mixed methods case study evaluating the long-term impact of international service-learning experiences (ISL) taken by nursing students in Bachelor of Science in Nursing (BSN) programs. This chapter introduces the problem and challenges of assessing cross-cultural educational experiences, particularly evaluating for their long-term effects. By examining intercultural work through the context of ISL experiences, nursing alumni were asked to reflect upon their cross-cultural experiences. This study explored how a trip taken in school might affect alumni in their current work as nurses. This study provided an analysis of the impact of nursing students' ISL experiences among baccalaureate nursing alumni throughout the United States. Cultural competence, as measured by the cultural capacity scale (CCS) was compared among nurses who had gone on an ISL in nursing school and those who had not. These findings might assist nursing programs to implement or re-assess service-learning programs and might allow for experiences to be developed more intentionally and effectively for future long-lasting benefits.

Background

Nursing care requires cross-cultural interactions on a daily basis, and health care is increasingly affected by globalization and cultural mingling (Ray, 2016). Nurses must care for growing numbers of culturally and linguistically diverse patients, even when they might not be familiar with a particular patient's background, traditions, and preferences (Handtke et al., 2019). A person's cultural background impacts how they interact with healthcare services, both as

patients and as healthcare providers (Spector, 2017). Within this context, the National League for Nursing (NLN, 2015) identified diversity as one of its core values and highly prioritized cultural competence education for nurses.

Cultural Competence

The American Association of Colleges of Nursing (AACN, 2008) defined cultural competence as “the attitudes, knowledge, and skills necessary for providing quality care to diverse populations” (p. 1). Campinha-Bacote (1999), a distinguished nurse researcher on the topic, believed that “cultural competence is an essential component in rendering effective healthcare services to culturally and ethnically diverse clients” (p. 206). The cultural competence of healthcare providers correlates positively with the health outcomes of patients (Institute of Medicine, 2002; International Council of Nurses, 2013).

Nurse educators therefore strive to provide cultural competence training for nursing students to expand their abilities to navigate intercultural interactions in efforts to improve patient care (AACN, 2021; Horvat et al., 2014). Underserved populations in the United States continue to increase, and health inequities can occur when healthcare workers do not provide culturally competent care (Blanchet Garneau, 2016; Isaacson, 2014). As intercultural interactions in health care become increasingly diverse, limitations, confusions, and inequities develop when there are cultural or language barriers between patients and healthcare providers (Giger, 2013; Gozu et al., 2007; Oregon Health Authority, 2013). At both national and institutional levels, providing culturally and linguistically appropriate services in health care might be discussed in policies and guidelines but often remains as an unfulfilled goal (Spector, 2017).

The expectations of increasing the cultural competence of nurses has led to an increased focus on multiculturalism within nursing education (Jeffreys, 2016; McFarland & Wehbe-

Alamah, 2018; Oermann & Gaberson, 2017). Many nursing programs attempt to provide instruction in cultural competence through varying clinical rotations, simulation experiences, and coursework focused upon specific cultural differences. Some schools even have international cross-cultural study abroad experiences for their students, although these are typically optional (Amerson, 2014; Browne & Fetherston, 2018; Caldwell & Purtzer, 2015; Julie et al., 2015; Kohlbry, 2016). Many nursing programs provide their own international cross-cultural experiences for their students as they prepare for future careers requiring cultural competence with patients from a wide variety of backgrounds (Amerson, 2014; Julie et al., 2015; Long, 2014).

Service-Learning

While study abroad programs could provide excellent exposure to new cultures, an added element of cultural learning occurs when these international trips have an intentional "service-learning" focus (Crawford et al., 2017). Service-learning occurs in a specific cultural context, which is often different than the cultural background of the participants. International service-learning experiences frequently involve nursing students traveling to the developing world and providing health education, basic assessments, or assistance to local healthcare workers (Gillis & Mac Lellan, 2010; Kohlbry, 2016). Within such a purposeful experience, students are immersed in interactions with another culture through service with local people instead of passively viewing situations as tourists (Gallagher & Polanin, 2015; Kohlbry, 2016). In healthcare disciplines, international service-learning trips can give students and healthcare providers a chance to interact with other cultures for mutual learning and growth.

Many of these international experiences are evaluated with various measurement tools of cultural competence (Gallagher & Polanin, 2015; Kohlbry, 2016; McFarland & Wehbe-Alamah,

2018). It might be easily assumed that an international trip would increase a person's cultural competence. However, this belief is not necessarily supported by published evidence, particularly with regard to the long-term impacts of such an experience (Choi & Kim, 2018; Gallagher & Polanin, 2015). While international service experiences have been shown to help nursing students become socialized into their professional roles as nurses (Smith & Curry, 2011), the influence on nurses later in practice is largely unknown. The long-term impact of international service-learning experiences has not been extensively studied in the literature; this research study was an attempt to fill this gap.

Problem Statement

The general purpose of this study was to explore the long-term impact of ISL experiences during BSN education on registered nurses and their current practice. Many quantitative studies looked at individual trips with a pretest and immediate posttest measuring aspects of cultural knowledge but long-term follow-up was rare (Julie et al., 2015). The implications of service-learning experiences after participants returned home and had time to reflect on a trip have been generally unknown. Qualitative research of service-learning predominately discussed reflections either during or directly after a trip had occurred. Taylor et al. (2018) suggested a student's recognition of their learning could change after they had had time to more fully ponder ISL experiences. Additionally, the literature did not yield many comparative studies between service-learning trips at different institutions because these experiences had many variables. Preparations, locations, populations, and durations of international service-learning trips were not standardized and might have influenced results of larger-scale studies comparing multiple ISL experiences (Kohlbry, 2016).

This gap in the literature was addressed with this mixed methods study to provide a holistic view of the experience of ISL trips during nursing school. Quantitative methods provided a broad overview of comparing nurses with ISL experiences to those who had not served internationally during nursing school. Then qualitative methodology provided specific examples of the long-term impact of ISL trips at the individual level. This mixed methods study addressed three main research questions. The overarching umbrella question of assessing the long-term impacts of ISL experiences in nursing school was explored by specific quantitative and qualitative research questions that support the overall question. Through quantitative data analysis, this study discerned ISL impacts on cultural competence shown through CCS scores. Through qualitative analysis of interview data, self-perceptions of how trip participants felt their ISL impacted them were explored.

Research Questions and Hypotheses

Research Questions

Q1 Umbrella Question: What are the perceived long-term impacts of a past international service-learning experience in nursing school on current nursing practices of BSN alumni?

Q2 Quantitative Question: Is there a difference between the cultural competences of nurses who have had past international service-learning experiences compared to those who have not, as measured on the cultural capacity scale (CCS)?

Q3 Qualitative Question: How does a service-learning experience in nursing school affect a BSN nurse's self-perception and practice?

Hypotheses

The following hypotheses were developed for the quantitative (QUAN) portions of this mixed methods study.

H01 Alumni who went on international service-learning experiences as students would not show a significant difference in CCS scores compared to the control group of students who had not participated in these trips.

H1a BSN alumni who participated on service-learning trips as students, would have higher scores on the cultural capacity scale than alumni who did not have an international service-learning experience while in school.

Other personal experiences or attributes might influence CCS scores. It has been suggested that having more cross-cultural interactions or cultural encounters would correlate with higher cultural competence scores (Cruz, Aguinaldo et al., 2018). Therefore, it was also hypothesized that:

H1 Total CCS scores will be higher for individuals who participated in ISL experiences after nursing school than for those who did not.

H2 Total CCS scores will be higher for respondents who have had culture-related training in the past twelve months than for those who had no such training.

H3 Total CCS scores will be higher for nurses who recently (within the past six months) cared for patients from diverse cultural backgrounds than for those who did not.

H4 Total CCS scores will be higher for respondents who grew up in a diverse community than for those who did not live in a diverse community in their childhood.

H5 Total CCS scores will be higher for respondents who currently live in a diverse community than for those who do not currently live in a diverse community.

H6 Cultural capacity scale scores will correlate positively with the amount of time spent working as a nurse.

H7 Cultural capacity scale scores will correlate positively with respondent ages.

H8 Cultural capacity scale scores will correlate positively with the total number of international trips taken by a respondent.

Theoretical Framework

This study was based upon the theoretical perspectives of Madeleine Leininger's (2002) culture care diversity and universality theory and Campinha-Bacote's (1999) process of cultural competence in the delivery of healthcare services. The quantitative tool utilized in this study was

called the Cultural Capacity Scale (CCS) and was based upon the work of both of these theorists (Perng & Watson, 2012). This tool is further discussed in Chapters II and III.

In this mixed methods model, the quantitative survey responses were clarified by semi-structured interviews with volunteer respondents who participated in a qualifying international service-learning experience. Qualitative analysis was based on the recommendations of Creswell and Plano Clark (2018) as responses were analyzed and coded for recurrent themes (Crotty, 2015). The mixed methods integration of this quantitative and qualitative information fit under the framework of Leininger's (2002) culture care theory which spoke to the need for a large view of cross-cultural research (Creswell & Plano Clark, 2018; McFarland & Wehbe-Alamah, 2018; Wehbe-Alamah & McFarland, 2020).

Professional Significance

The findings of this study might help provide evidence in support of developing or continuing ISL experiences for nursing students. There was a significant gap in the literature regarding any study of long-term benefits for these types of cross-cultural experiences. There were also concerns about the true benefits of these experiences and whether they were worth the financial and logistical effort (Levi, 2009; Steffes, 2009). This study attempted to fill this research gap by studying the relationship between past ISL trips and current cultural competence perceptions of nurses.

In the profession of nursing, numerous organizations (AACN, 2021; Institute of Medicine, 2002; International Council of Nurses, 2013; NLN, 2015) strove to increase the cultural competence of healthcare workers to help improve cross-cultural patient care. For training nursing students in cultural competence, specific desired outcomes need to be identified

and measured. This study contributed to the body of knowledge regarding the assessment of these cultural competence outcomes in nurses (the CCS tool is discussed in Chapters II and III).

Definitions

Nursing alum(na) was any individual who completed a BSN program in the United States. Participation in other nursing programs before or after baccalaureate nursing (such as advanced practice training) was not exclusionary, but these questions were targeted toward a service-learning experience occurring specifically during BSN training.

QUAN referred to the quantitative survey portion of this mixed methods study. The people answering the survey questions were called respondents.

QUAL refers to the qualitative portion of the study and the interviewees were called participants with abbreviations of P1, P2, etc.

International service-learning experience was abbreviated as ISL and referred to visiting a country different than their own for at least one week and performing community service activities there related specifically to health or nursing care. This definition was included on the quantitative surveys to clarify the question for participants, and they had the opportunity to subjectively describe their activities if they were not sure whether their trip qualified under this definition or not. The timing of one week or more was selected to provide some standardization of these experiences and to avoid the confusion of whether a short weekend-type of experience could compare to living abroad for months. In studies on cultural competence development, short-term trips of one week or more were discussed more often than quick one-day or weekend international visits, which might not result in significant cross-cultural interaction (Knecht & Fischer, 2015; Smith & Curry, 2011; Wall-Bassett et al., 2018). Leininger (2002) repeatedly asserted that cultural

competence required time, intentionality, and familiarity with a culture (McFarland & Wehbe-Alamah, 2018).

“Long-term” impact of service-learning experiences was defined as a trip occurring at least six months prior to the survey.

Cultural competence might have multiple definitions depending on the source material referencing the term. The authors of the measurement tool used in this study defined cultural competence as “the ability necessary for professional health personnel to provide safe and effective health services to clients with different cultural contexts” (Perng & Watson, 2012, p. 1678). More recently, the AACN (2021) updated their definition of the term to say cultural competence was “the ability to work effectively within the client’s cultural context” (p. 57).

Summary

This study examined the perceived long-term impacts of an ISL experience in nursing school on the current nursing practice of bachelor’s-prepared (BSN) nurses. Through the mixed methods integration of a quantitative survey using the cultural capacity scale and qualitative interviews with trip participants, these experiences were discussed and explored. Professional significance and potential applications of this study included developing or adjusting cultural competence training programs and service-learning experiences for nursing students. A list of definitions was provided to provide clarity about the terminology in this document.

CHAPTER II

REVIEW OF THE LITERATURE

This review of the literature explored recent and foundational publications related to the concepts of ISL experiences and cultural competence of nurses. The process of the literature review included searches through the following databases: University of Northern Colorado library, Cumulative Index to Nursing and Allied Health Literature (CINAHL), EBSCO Information Services, and Cochrane Reviews. The following search terms were utilized: cultural competence, cultural humility, cultural sensitivity, nursing + service-learning, international service, international service-learning, ISL, short-term medical, study abroad + nursing, immersion + nursing, cultural + exchange + nursing, cultural capacity scale, Leininger, Campinha-Bacote, culturally and linguistically diverse (CALD), and cross-cultural health care. The main focus was on publications from the prior five years but early foundational writings of theorists were often included.

Terminology

Numerous definitions, phrases, and concepts within conversations about cultural competence and transcultural nursing could cause confusion or limitations in literature reviews about service-learning experiences. Ballestas and Roller (2013) studied cultural competence of 18 baccalaureate nursing students on a short-term service trip to Costa Rica for six days. The students were given the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Revised and there was statistical improvement in the pre-trip and post-trip scores for these students. The authors discussed how the varying definitions of terms such as

cultural competence, *cultural awareness,* etc. used in publications could make a literature review difficult (Section 5). The study abroad experience itself, also had confusing terminology in the literature. An international trip might be called a service-learning experience, an immersion trip, an exchange program, or several other labels (Isaacson, 2014). Another difficulty of studying cultural competence was when articles describing specific trips and training programs did not share enough of the objectives and implementation details of the preparations to have future replication or full evaluation.

Cultural self-efficacy, cultural awareness, or cultural humility were other terms frequently found in the literature of cross-cultural learning. Use of these concepts varied with some articles focusing on cultural learning within one specific experience while others focused broadly on improving future patient encounters (Amerson, 2014). Botelho and Lima (2020) suggested the phrase "cultural respect" might be better than "cultural competence" since it did not imply a one-time goal being reached. Cultural respect might also be better understood in general conversations. Recently, the phrase "cultural safety" has also been suggested, particularly as healthcare practitioners wrestle with inequities, biases, and disparities within healthcare systems. Curtis et al. (2019) discussed the various definitions of cultural safety in 59 articles and summarized their findings in the following definition:

> Cultural safety requires healthcare professionals and their associated healthcare organisations to examine themselves and the potential impact of their own culture on clinical interactions and healthcare service delivery. This requires individual healthcare professionals and healthcare organisations to acknowledge and address their own biases, attitudes, assumptions, stereotypes, prejudices, structures and characteristics that may affect the quality of care provided. In doing so, cultural safety encompasses a critical

> consciousness where healthcare professionals and healthcare organisations engage in ongoing self-reflection and self-awareness and hold themselves accountable for providing culturally safe care, as defined by the patient and their communities, and as measured through progress towards achieving health equity. Cultural safety requires healthcare professionals and their associated healthcare organisations to influence healthcare to reduce bias and achieve equity within the workforce and working environment. (p. 14)

With the ever-growing number of suggestions for alternative terminology describing cross-cultural patient care, the inability to completely define or describe the desired outcomes became apparent.

While each newly suggested term included aspects of prior cultural competence definitions, each one had a slightly different focus. The term cultural humility implied the need for deliberate self-examination and allowed healthcare workers to provide care to people from any background without any sense of judgment or negative attitude (Isaacson, 2014). Similar to any of the vocabulary connected to cultural competence, cultural humility could be difficult to measure due to the varying definitions. The new AACN (2021) Essentials for nursing education added the expectation for nursing students to “demonstrate cultural sensitivity and humility in practice” (Essential 9.2e, p. 50) and defined cultural humility as “a lifelong process of self-reflection and self-critique whereby the individual not only learns about another’s culture, but also examines her/his own beliefs and cultural identities” (p. 57). Hook et al. (2013) also attempted to explain cultural humility by creating a short Cultural Humility Scale that included broad reflections to be answered both by the participant and by another individual describing the participant. Cultural humility has often been associated with reflective journaling to help

individuals process their emotions and growth in this area of cross-cultural learning (Foronda et al., 2015; Schuessler et al., 2012).

Service-learning experiences could help develop cultural learning such as cultural competence and cultural humility, which have the potential to improve patient interactions both locally and abroad (Jeffreys, 2016; Kools et al., 2015). Often, cross-cultural immersion experiences improve student attitudes, beliefs, and knowledge of cultural competence, even in a relatively short amount of time (Diesel et al., 2013). Preparation for these experiences should include cultural awareness and sensitivity training for the trip leaders as well as for the participants (Cone & Haley, 2016). There has been some debate between proponents of the concepts of cultural competence compared to cultural humility (Isaacson, 2014). Recently, Campinha-Bacote (2019) attempted to reconcile these two frameworks by proposing a new combination term: “cultural competemility” (para. 9). Unfortunately, this solution might only add to the vocabulary confusion and conceptual overlap within the realm of transcultural research.

In this study, the term “cultural competence” was used when discussing the concepts described above. This term is commonly utilized by regulatory bodies associated with nursing education (AACN, 2021; International Council of Nurses, 2013; Oregon Health Authority, 2013). The connection of cultural competence and the CCS quantitative measurement tool of this study is further explained in Chapter III.

When discussing nurse interactions with patients of various backgrounds, the terms “cross-cultural” and “culturally and linguistically diverse” (CALD) were utilized in this study. Cross-cultural could refer to any experience different than one’s own culture or different than the majority culture at the time. In one sense, every nurse-patient encounter is a cross-cultural

interaction because the nurse should not assume the patient's experience is the same as their own. The term CALD describes patient populations with inherent diversity, both culturally and across language barriers.

Theoretical Perspectives

This study was based upon the theories of Madeleine Leininger's (2002) culture care diversity and universality theory and Josepha Campinha-Bacote's (2002) model of cultural competence in healthcare delivery (McFarland & Wehbe-Alamah, 2018). Campinha-Bacote's concepts are built on Leininger's foundational transcultural work (Wehbe-Alamah & McFarland, 2020). Both of these theories illustrated the importance of the concept of caring and the recognition that all patient-nurse interactions are inherently intercultural.

Leininger's Culture Care

Madeleine Leininger (2002) developed the culture care diversity and universality theory with the purpose of giving "meaningful and culturally congruent care" (p. 190). She believed this care should be based on research findings and she predicted that culturally congruent care would increase the health and well-being of patients or to help them face illness or death more smoothly. This theory provides a framework for nurses to discover what specific care phenomena are relevant and meaningful to the culture and lifeways of particular patients in order to provide culturally congruent care (Leininger, 2007, p. 9). This emphasis on culturally congruent care was present throughout Leininger's writings, and she supported it with numerous studies identifying specific care constructs from research in multiple cultures (McFarland & Wehbe-Alamah, 2018). Providing culturally congruent care was the overall goal for this theory and directly related to the goals of many service-learning experiences.

Leininger (2002) defined and described her terminology carefully. She saw clear distinctions among transcultural nursing, cross-cultural nursing, and international nursing (McFarland & Wehbe-Alamah, 2018). Transcultural nursing is a specific discipline to train nurses to integrate cultural concepts into their nursing care (Leininger, 2002). Cross-cultural nursing could happen in almost any context or nurse-patient encounter, while international nursing is specific to a nurse leaving their own country (McFarland & Wehbe-Alamah, 2018). Leininger would likely want to emphasize that discussions of providing culturally congruent care would not be not identical to cultural competence as the term is often used today. However, these constructs could be conceptualized similarly as a desired outcome for cross-cultural nurse-patient interactions.

Leininger's (2002) theory and the associated conversations about transcultural nursing and culturally congruent care begin with the recognition that every person has their own culture, which influences their actions (McFarland & Wehbe-Alamah, 2018). The worldview or personal paradigm of a nurse impacts the care they give to patients and the perspective of the patient determines how this care was received. Influencing factors upon care include environmental context, language, and ethnohistory and these are further broken down into the interrelated circumstances of technological factors, religion/philosophical factors, kinship/social factors, cultural values/beliefs/lifeways, political and legal factors, economic factors, and educational factors (Leininger, 2002, p. 191). Together and individually, these factors influence the care expressions, patterns, and practices related to health (Leininger, 2008). Appendix A provides a model of Leininger's Sunrise Enabler that illustrates the interconnected concepts of providing culturally congruent care.

The foundation of much of Leininger's research involved the researcher being physically present within the cultural context of the study (Wehbe-Alamah & McFarland, 2020). She described the experiences of cultural immersion and entering another person's world to let them share their experiences in their own words and methods. When Leininger (2008) began her nursing career, there was very little consideration of a patient's culture with regard to their health or their nursing care. She was the first nurse theorist to combine the concepts of culture and care and to discuss the need for ethnocentric awareness. Leininger said many of the nursing ideas about cross-cultural patient care were "too restrictive for open discovery about culture and care" (p. 3). Her anthropological focus kept the subject (or the patient) at the center of the research and served as an ongoing reminder of the potential dangers of ethnocentrism within cultural competence studies (Botelho & Lima, 2020).

Since the 1940s, Leininger described caring as "an essential human need and the essence of nursing" (cited in McFarland & Wehbe-Alamah, 2018, p. 14). Caring is defined as the "action mode to help people" and the care of patients should be guiding the decisions within nursing (Leininger, 2008, p. 2). Leininger's (2008) theory predicted that providing culturally congruent care would improve the health and wellbeing of patients. If nurses could understand the culture of a patient, then the care needs could be met more effectively and the patient-nurse interaction could be more meaningful.

Leininger (2002) also pointed out the often-overlooked fact that nurses themselves are also influenced by their own cultural norms and ethnocentrism. Relationships between a person and their own culture need to be recognized, utilizing deep self-evaluation to assess for potential biases in order to give culturally congruent care (Leininger, 2007). Culturally congruent care could influence the decisions made by nurses and other healthcare workers and these decisions

would likely affect the health status of the patient. Providing culturally competent interactions between nurses and patients is essential for patient safety and health. This study explored how short-term ISL experiences might affect cross cultural interactions between nurses and patients.

Campinha-Bacote's Process of Cultural Competence

Several other scholars developed theories and models related to Leininger's foundational work (McFarland & Wehbe-Alamah, 2018, p. 221). Campinha-Bacote's (2002) process of cultural competence in the delivery of healthcare services model was based on Leininger's discussions of transcultural nursing. This model was first developed in 1991 and included four constructs for describing the concept of cultural competence: cultural awareness, cultural knowledge, cultural skill, cultural encounters (Campinha-Bacote, 2011). In 1998, the model was revised to be less linear and a fifth construct of cultural desire was added. Each of these constructs were explicated in her writings with specific definitions and examples for each item (Campinha-Bacote, 1999).

Campinha-Bacote's (2002) model included five main assumptions (as explained in Appendix B) beginning with the statement that cultural competence is a process and not a single event. This model was used to develop multiple associated measurement tools such as the Inventory for Assessing the Process of Cultural Competence Among Healthcare Professionals. The student version of this tool has been utilized in several areas of health education, particularly in nursing and physical therapy (Ballestas & Roller, 2013; Transcultural C.A.R.E. Associates, 2015).

Some researchers removed the cultural encounters construct from her model and then used this framework to assess cultural competence trainings and interventions that might not involve specific cross-cultural encounters at the time. A recent example of using Campinha-

Bacote’s (2002) model without the cultural encounters construct was a study by Burns (2020) involving a survey of 152 nursing faculty in the California State University system. This study found correlations among cultural competence awareness, knowledge, skills, and desire descriptors with specific transcultural teaching behaviors of nursing faculty members. Additional predictive variables were studied for correlations to cultural competence. These variables, such as speaking another language or having continuing education in cultural competence, were significant for affecting the cultural competence scores but other personal or professional characteristics were not. Burns did not study the impact of ISL specifically in this study. However, inferences could be made from these various types of cultural competence trainings and the cross-cultural learning that could occur on an international experience.

The idea of cultural competence as a continuous process (rather than reaching a specific level that would designate competence) was essential to Campinha-Bacote’s (2002) discussions about cultural learning. With the focus on cultural competence as a dynamic and diverse relational process, this model provided the necessary flexibility for cross-cultural research where protocols and procedures could be extremely culture-dependent (Botelho & Lima, 2020). When nurses learned about providing culturally-competent care, having specific expertise about one individual culture could be helpful but was probably not as important as having an overall mindset of curiosity in recognizing and respecting cultural differences and various worldviews (Laffoon, 2020).

Albougami et al. (2016) compared four models of transcultural nursing research: Leininger’s Sunrise Enabler, Giger and Davidhizar’s transcultural assessment model, Purnell’s model for cultural competence, and Campinha-Bacote’s model of cultural competence in healthcare delivery. This comparison concluded that each model had contributed to nursing

education and practice and none was clearly superior. However, their conclusion stated that "overall, the Campinha-Bacote model is sufficiently comprehensive to guide empirical research and the development of educational interventions. This model's five components can be used to strengthen the cultural competence of nurses practicing in countries all over the world" (p. 4).

Service-Learning Experiences

Service-learning occurs in the context of actively serving and working with another group of people, often across cultural differences (Kohlbry, 2016). Nursing schools often consider offering these cross-cultural experiences for their students either for credit or as an extra-curricular activity to prepare for intercultural nursing interactions with patients and other healthcare workers (Amerson, 2014; Julie et al., 2015). While it was been shown a cross-cultural experience by itself does not necessarily equip nurses with the skills to give culturally competent care (Alpers & Hanssen, 2014), several studies showed short-term improvements in various quantitative measures of cultural competence (Caffrey et al., 2005; Diesel et al., 2013; Kohlbry, 2016). However, there was no standardization for the cultural training and preparation that occurs before a service-learning experience. With the varied conceptual aspects of cultural competence, pre- and post-test comparisons for one particular trip might provide only a limited perspective on the scope of actual cultural learning and would not be generalizable to the larger population of nursing programs with international service-learning (ISL) experiences.

International travel and cross-cultural work can be highly emotional experiences, and the full impact on the people involved might not be captured on a quantitative measurement scale alone (Larsen, 2017). Qualitative or mixed methods studies have explored the emotions and perceptions of participants on ISLs (Long, 2014; Taylor et al., 2018). Beckman and Christenson (2016) studied the perceptions of 15 U.S. college students in their two-week ISL experience in El

Salvador. The researchers analyzed journal entries, field notes, and group reflection conversations during the experience along with semi-structured interviews up to four months afterward. This qualitative analysis allowed for all of the participants to share that the experience impacted their personal and professional lives and it increased their global awareness. These impacts included reevaluating their career paths, increasing their sense of self-efficacy, rethinking consumption, and gaining a broader perspective.

Crawford et al. (2017) shared similar results when studying service-learning experiences with students including physical therapy, occupational therapy, and speech pathology in developing countries. In this study, 30 students completed a questionnaire one month after their trips to either Vietnam or Timor Leste. The questions included both quantitative and qualitative queries and were analyzed thematically. The students shared that their ISL trip provided personal successes, helped them to see the world differently, and aided their development as health professionals. These studies highlighted the usefulness of mixed methods research with ISL but also pointed out the need for further work to explore the personal and professional impacts of ISL experiences.

Comparing Multiple International Service-Learning Experiences

Large scale research studies on cultural competence and service-learning experiences in nursing education across multiple academic institutions were difficult to find. One of the few examples in recent years of comparing multiple international experiences for nursing students in multiple nursing programs was a regional study comparing ISL experiences at three universities in southern California. Kohlbry (2016) studied cultural competence in 121 BSN students with Campinha-Bacote's Inventory for Assessing the Process of Cultural Competence Among Healthcare Professionals-Student Version (IAPCC-SV) and the Cultural Self-Efficacy Scale.

These tools were given to the students before and after their service-learning experiences. Unfortunately, the study did not provide details regarding the types of ISL or the locations and durations of these specific experiences.

Kohlbry's (2016) mixed methods study was a rare example of evaluating multiple ISL trips together, and the author utilized triangulation of both quantitative and qualitative approaches to assess these varied experiences. Preparations for these trips were not consistent and the influences of local demographics and other curricular differences among the three institutions might have influenced the results of this research. Within these limitations, the findings indicated an increase in the IAPCC-SV scores after the trips compared to scores beforehand. Two of the five domains in this instrument showed a statistically significant increase in the means after the ISL experience compared to beforehand: Cultural Knowledge (p = .001) and Cultural Skill (p = .005). The integration of qualitative interview data led to the conclusion that nursing programs could utilize immersive ISL experiences to improve cultural competence of nursing students.

Long-Term Impact of International Service-Learning Experiences

A significant gap existed in the literature regarding the long-term impact of ISL experiences and, particularly, how nurses in practice might be influenced by cultural learning opportunities in their past. Jones and Abes (2004) examined the long-lasting effects of service-learning on the shaping of student identities. Eight students were interviewed two, three, or four years after completing a course on service-learning. The service-learning course was associated with developing empathy, more open-mindedness, and making commitments to socially-responsible work. Their study claimed to be researching the "enduring influences" of service-learning; however, it did not extend past the timeframe of being enrolled as students (p. 149).

Taylor et al. (2018) performed a longitudinal study with seven graduate students and five undergraduate students who had a three-week ISL experience in Ecuador. Their "longitudinal" study collected data before, during, and immediately after the trip, but also did a follow-up one year later (p. 246). They found students reflected differently about an international service-learning experience after time had passed, and these authors suggested short-term studies might miss valuable, time-enhanced insights about student learning.

In the few studies of long-term ISL impact, the findings showed mixed results about whether the benefits were long-lasting or not. Wu et al. (2020) completed a small follow-up study of 16 nurses from China six months after their one-year international nursing experience. The authors concluded the influence on one's professional role and clinical practice might not endure as time passes after this type of experience. They suggested the influence of one's current culture and surroundings might supersede the benefits and personal growth that occurred during past experiences.

In the literature, evidence was lacking to deeply compare and analyze the effects of past and present cross-cultural experiences. If long-term impact is assessed only six months after a cross-cultural experience, is this truly evaluating long-term effects? In many studies about cultural competence, the conclusions and recommendations for further research stated that longer-term studies were needed (Kohlbry, 2016; Smith & Curry, 2011). Exploring the reflections about service-learning experiences years afterward (rather than months) might reveal new understandings about the lasting impact of ISL experiences. Robust studies about the long-term influences of service-learning could add to the research surrounding cultural competence interventions.

Caldwell and Purtzer (2015) questioned whether short-term study abroad programs truly provided long-term benefits for the participants. Their qualitative study assessed 41 nursing students and professionals at least one year after their cultural immersion experience in Honduras. The resultant themes about long-term learning included embracing the other, gaining cultural competencies, experiencing an ethnocentric shift, and negotiating ethical dilemmas. Cultural competencies were defined as including "a sense of humility and sensitivity, cultural awareness, and recognizing stereotyping" (p. 580). The authors suggested further research was needed on the perspective of the host community about the long-term impact of having short-term trips from visiting nursing students and nurses.

Current International Service-Learning Recommendations from the Literature

Repeatedly, recommendations about ISL experiences encouraged the development of a long-term relationship with the people being visited (Corbett & Fikkert, 2009; Diesel et al., 2013; Foster, 2009; Steffes, 2009). This not only provides a greater opportunity of cross-cultural interaction and even the potential of deep cultural immersion for the trip participants but it could diminish some of the negative effects of "medical voluntourism" where good intentioned visitors might not actually be helping the local communities as much as they think they are (Corbett & Fikkert, 2009; Levi, 2009). As further research is performed in nursing education for developing cultural competence, ISL experiences should be assessed carefully and frequently, and perhaps the influences of these long-term relationships could be better studied from all stakeholders involved. More work is needed in this area to improve the effectiveness of ISL experiences.

Cultural Competence in the Literature

Many conversations about service-learning in nursing utilized the phrase "cultural competence" as a goal or desired outcome, largely related to regulatory bodies utilizing this

terminology in their guidelines and recommendations within our increasingly diverse society (AACN, 2008; International Council of Nurses, 2013; Oregon Health Authority, 2013). The AACN (2008) formerly defined cultural competence within the context of "providing care to diverse populations" (p. 1). The 2021 update to the AACN Essentials expanded the terminology to include separate definitions of cultural awareness, cultural competence, cultural and linguistic competence, culturally sensitive, and cultural humility (p. 57). The updated definition to cultural competence is now "the ability to work effectively within the client's cultural context" (p. 57).

The concept of cultural competence had a variety of definitions and uses in the literature (Botelho & Lima, 2020; Curtis et al., 2019; Shen, 2015). It has been suggested that the term cultural competence might be outdated because it implies reaching a specific outcome or endpoint (Isaacson, 2014). Campinha-Bacote (2002) frequently emphasized that cultural competence is a constant and ever-developing process rather than a one-time goal to reach. Therefore, no single quantitative measurement tool can capture everything about cultural competence, and mixed methods research is ideal for exploring the nuances of this concept and associated processes.

Cultural Competence in Nursing Education

A systematic review and meta-analysis by Gallagher and Polanin (2015) of interventions to increase the cultural competence of nurses concluded various training programs have shown mixed effectiveness. Twenty-five studies met the inclusion criteria of evaluating an intervention meant to increase cultural competence of nursing students or professional nurses. These studies had a quantitative component of measuring cultural competence, typically before and after the intervention. The most common cultural competence measurement scale was the IAPCC based on Campinha-Bacote's (2002) model. Other scales included the Transcultural Self-Efficacy Tool

and the Cultural Self-Efficacy Scale, and some study authors created their own measurement systems or added qualitative questions as well. This meta-analysis attempted to control for the potential of publication bias and estimated effect sizes for each study evaluated. Of the 25 studies, only four showed a decrease in cultural competence after the intervention. Most of the studies with a pretest/posttest model had a statistically significant moderate effect. Gallagher and Polanin found several limitations within these studies and commented that the varying definitions of cultural competence were a hindrance to research related to this topic.

It has been reported that current cultural education in nursing curricula is not sufficient to significantly improve students' cultural competence past a short-term benefit directly after the course or experience (Choi & Kim, 2018; Lin et al., 2015). More studies about the longer-term impact of these trainings and experiences are needed. Additionally, the various measurement tools for cultural competence are not often specific for nursing students or nursing education. Loftin et al. (2013) reviewed cultural competence scales available in nursing and concluded that currently there was no adequate objective measurement for culturally competent nursing care. They emphasized that cultural competence is extremely subjective and it might be helpful to hear patient perspectives about the cultural competence of their nurses. Current cultural competence instruments rely almost exclusively on the subject's self-reflection. When using a quantitative self-assessment tool for cultural competence, the results might be skewed due to inaccurate self-perception, either rating oneself falsely too low or naively too high (Kim et al., 2016).

International service-learning has been implemented in several nursing programs although service-learning can also occur locally. Some researchers claimed local service-learning experiences had similar outcomes to international trips. Research in these types of local service-learning experiences with nursing students revealed several similar findings as on international

intercultural experiences. Knecht and Fischer (2015) identified five themes after a domestic, inner-city service-learning experience with 10 BSN students: shattering stereotypes, feeling overwhelmed by need, transitioning to community caregiver, advocating, and reciprocal benefits. Qualitative studies of ISL trips often mentioned similar comments from trip participants and these similar outcomes suggested service-learning experiences could be cross-cultural even without significant travel (Alpers & Hanssen, 2014; Crawford et al., 2017; Diesel et al., 2013).

Cultural Competence Measurement

Multiple instruments exist for measuring cultural competence. In a literature review yielding 4,389 citations about cultural competence measurement, Gozu et al. (2007) found 45 separate instruments for measuring cultural competence and related factors but the majority had not undergone rigorous psychometric analysis. Of the 45 instruments evaluated in the review, 30 did not have data about reliability or validity in their articles and only six articles reported both reliability and validity (Gozu et al., 2007). Researchers in several studies questioned whether these measures could accurately record the meanings of cultural competence, particularly because cultural competence was an ongoing process rather than a specific goal to be attained once (Perng & Watson, 2012). According to the review, many of the tools would have limited use because they were not accessible by the authors attempting to re-evaluate them. Others were asking users about specific cultural knowledge such as the Cultural Self-Efficacy Scale by Bernal and Froman or were tools asking questions about specific countries or language details (Gozu et al., 2007). Assessing cultural competence was difficult because of the varied emphases of individual measurement tools. Without precise definitions or common understandings of this concept, comparisons between measurement tools and the ability to analyze trip preparation and cultural trainings remains nebulous and individualized.

Shen (2015) examined 18 models and 15 instruments about cultural competence and transcultural nursing. The definitions for cultural competence have changed over the years and throughout various publications (see Table 1 on page 310). However, Shen concluded that most nurse researchers in this area were actually discussing similar concepts and domains within these various models but the specific terminology was different. Collaboration was recommended to identify commonalities amongst cultural competence researchers for refining the models and instruments to develop more consistency. As Gozu et al. (2007) discussed, many cultural competence instruments need more rigorous psychometric testing before they can be widely applicable to healthcare practice (Shen, 2015).

In 2014, Horvat et al. completed a Cochrane Review about measuring cultural competence in education programs for healthcare professionals. Out of 10,915 citations in initial literature searches, only five studies met the criteria of being a quantitative, randomized control trial; having training for health professionals; and, ultimately, assessing patient outcomes. This suggested little quantitative research has been rigorously performed in the realm of cultural competence in health care and long-term outcomes. This review created a conceptual framework for classifying health competence education interventions and defined 32 specific outcomes to be assessed in the reviewed studies. While some outcomes did show improvement in individual studies, the overall review found cultural competence training did not correlate with improved patient outcomes in any statistically significant way. The authors noted that cultural competence studies were difficult to compare because the definitions and measured outcomes might not be directly equivalent, and the methodologies of cultural competence training and measurement varied widely. They did not recommend specific measurement tools but stated that better evaluations of training programs in cultural competence might show stronger statistical

significance than what they found. Assessment tools aligning well with the outcome of a training program would provide more robust data than they collected during their systematic review.

Limitations of Self-Reflection

Research about cultural learning predominantly relies upon self-reflection and self-assessment and trip participants might need assistance in how to perform these activities well. During a short trip with six nursing students to Swaziland, Murray (2015) noted the development of cultural knowledge felt uncomfortable for students at the time but it led to intentional reflection, which resulted in significant personal and professional growth. This discomfort during the trip was described as being part of the "cognitive dissonance" of encountering cultural stressors of attitudes, values, and beliefs different than their own (p. S67). The post-trip interviews, one month after the ISL experience, discussed the process of navigating this discomfort. The interview analyses identified reflection themes of transition, perceptions, internalization, and incorporation to resolve the cognitive dissonance.

Reflection during and after an ISL trip was often mentioned as a recommendation for helping participants process what they were experiencing (Amerson, 2014; Steffes, 2009). Caldwell and Purtzer's 2015 study concluded that short-term cultural immersion programs needed more intentional instructions for students to help them to critically reflect upon their international and service experiences. Training students to take the time for deep reflection during ISL trips could build the foundation for a healthy discussion about the ethics of short-term service experiences.

A weakness of most cultural competence studies in the literature was the requirement of self-assessment. Most ISL studies required a well-developed sense of self-awareness from the subject taking the survey (Gozu et al., 2007; Isaacson, 2014). If a pretest/posttest model of self-

assessment was utilized, the data might demonstrate the cognitive bias of the Dunning-Kruger effect (Kruger & Dunning, 1999). People might rate themselves highly on a self-assessment before an intercultural experience because they do not recognize their own incompetence (Kim et al., 2016). After a formative experience, participants might rate themselves lower on the same self-assessment because their learning revealed how much they did not know and had left to learn (Kruger & Dunning, 1999).

Alpers and Hanssen (2014) wanted to study this potential limitation of poor self-assessment skills of hospital nurses in relation to cultural competence and the care of CALD patients. Their mixed methods study revealed a sense of inadequacy of the nurses regarding their intercultural knowledge. Self-reflection surveys about caring for ethnic minority patients were completed by 145 medical unit nurses and 100 psychiatric unit nurses. In this survey, nursing experience did not appear to correlate with the ability to assess patients accurately or to provide culturally competent care. The authors concluded cultural competence training should be an ongoing process throughout nursing education and practice with constant reinforcement, self-reflection, and opportunities for feedback since self-assessment might not always be accurate.

Cultural Capacity Scale

Amidst the questionable validity of the currently available cultural competence measurement tools, Perng and Watson developed a Nurse Cultural Competence Scale (NCCS) that was published in 2012. This tool measures four domains: Cultural Awareness, Cultural Knowledge, Cultural Sensitivity, and Cultural Skills. These were similar to constructs and subcategories mentioned in other models of cultural competence and aligned well with Campinha-Bacote’s (1999) Process of Cultural Competence in the Delivery of Healthcare Services. Originally this scale was written in Chinese and evaluated by four linguistic and

cultural experts during development (Marzilli, 2016). The original NCCS included 41 questions and the Cronbach's alphas were between 0.78 and 0.96 with reliability between 0.79 and 0.89 (Marzilli, 2016; Perng & Watson, 2012).

Perng and Watson (2012) then used Mokken scaling to remove repetitive queries and selected 20 questions from the original 41. This resultant 20-question survey is now titled the Cultural Capacity Scale (CCS) and includes three of the original four domains with all of the cultural awareness domain items being removed. The CCS 20-item scaled tool had a reliability rho of 0.97 and statistical significance of $p < .001$ in the original study with Taiwanese nursing students. The three domains within the CCS are Cultural Knowledge, Cultural Sensitivity, and Cultural Skills (see Appendix C for the question text and these grouping designations). The CCS is graded on a 5-point Likert scale of *Strongly Disagree* (1), *Disagree* (2), *No Comment* (3), *Agree* (4), and *Strongly Agree* (5; Perng & Watson, 2012). The total score for the 20-item scale is out of 100 possible points; however, this number is only meant to be used for comparisons and is not a direct rating of what would be considered cultural competence or not (Perng & Watson, 2012).

Cultural knowledge was defined by the tool's creators as "the nurses' knowledge of obtaining information about diverse groups and their culture, such as health beliefs, cultural values" (Perng & Watson, 2012, p. 1680). Cultural sensitivity referred to "appreciation of the client's beliefs, valuing their culture and respecting its influence on client's behaviours" (Perng & Watson, 2012, p. 1680). The concept of cultural skills was described as the ability to carry out the cultural assessment for a client (patient), communicate effectively with clients by using helpful resources, and providing appropriate care without individual prejudice. The awareness of personal prejudice and bias was mentioned repeatedly in these concept discussions and paralleled

the frameworks of both Leininger and Campinha-Bacote who emphasized the need for honest self-reflection (Perng & Watson, 2012).

International Use of the Cultural Capacity Scale

In this context of assessing cultural competence, a strength of this survey tool was how it has been utilized in multiple cultural contexts and validated in several languages including Chinese, Arabic, English, Spanish, Turkish, and Polish (Cruz, Aguinaldo et al., 2018; Zarzycka et al., 2020). Researchers reported it took respondents 5-15 minutes to answer the 20 questions in Arabic and 5-10 minutes in the Turkish version (Cruz et al., 2017; Gözüm et al., 2016). These language translations were verified by local experts and appeared to be well-understood by the participants because they completed the 20-question survey quickly. This could imply the respondents did not need to spend significant time reading or interpreting the survey questions. However, it is important to remember that reading speed might not correspond to comprehension.

The NCCS and CCS have been translated into English, although they have not been utilized significantly in the United States at present (Cruz, Aguinaldo et al., 2018). Marzilli (2016) used the full NCCS scale to assess cultural competence in 89 Texas nursing faculty members in the framework of Purnell's model of cultural competence. Unfortunately, reliability data were not reported in this study, although the descriptive statistics were compared with qualitative data that consistently supported the findings.

Tool Statistics

The original pilot study of the CCS involved 172 nursing students in Taiwan and it has been reassessed in multiple non-Western countries such as 235 nurses in Turkey, 332 BSN students in three nursing schools in the northern Philippines, 200 nursing students in Saudi

Arabia, and 506 nursing students in Chile (Cruz et al., 2016, 2017; Cruz, Machuca Contreras et al., 2018; Gözüm et al., 2016). Then Cruz, Machuca Contreras et al. (2018) evaluated the CCS in nine different countries with 2,163 BSN students. The Arabic version was used in Iraq, Oman, Saudi Arabia, and Sudan; the English version was used in India, the Philippines, and South Africa; the Spanish version was used in Chile; and the Turkish version was used in Turkey. Each language version had been previously validated in other individual studies with Cronbach's alpha scores of 0.95 and 0.96. In the large combination study across nine countries, the Cronbach's alpha of the tool was 0.94 overall (Cruz, Aguinaldo et al., 2018, p. 94). The recent Polish version had a Cronbach's alpha of 0.94 with subscale values between 0.72-0.95 (Zarzycka et al., 2020). Additionally, a medical center in Iran used this tool to compare cultural competence with the caring behaviors inventory (CBI-42) and found a significant correlation between CCS scores and care behaviors (Khachian et al., 2020).

Other Influences on Cultural Capacity Scale Scores

Cruz, Aguinaldo et al. (2018) identified several potential influences on cultural competence scores. While administering the CCS, the authors asked participants about their gender, age, year of study, cultural-related experiences, attendance at cultural-related training within the past 12 months, taking care of culturally diverse patients or special population groups in the past 12 months, and living in a culturally diverse environment (Cruz, Aguinaldo et al., 2018, Table 4.1). Means, standard deviations, independent-samples *t* tests, one-way analysis of variances (ANOVAs), and multiple regression analyses were run on the data comparing these potentially-influencing variables to total CCS scores.

In the overall sample of 2,163 nursing students across nine countries, the cultural competence scores varied by country, and all of the tested demographic characteristics or cultural

experiences were shown to be significant factors influencing the scale results at p values of <.001 (Cruz, Aguinaldo et al., 2018). Cultural competence scores had a positive correlation with the age of the respondent, and ANOVA F-tests showed an influence of the student's country of origin and their year in nursing school on CCS total scores. The dichotomous variables showed a significant difference of mean CCS scores with each grouping, particularly with having cross-cultural patient interactions within the last 12 months and living in a culturally diverse environment (Cruz, Aguinaldo et al., 2018, p. 97). The multiple regression determined that all of the tested variables could potentially influence or be predictors of CCS scores. The conclusions of the authors focused upon cultural competence being a multifaceted concept with numerous influencing factors.

Tool Selection for This Study

Following the suggestions of Dunemn et al. (2017), the CCS tool was assessed by this researcher for each component of their step-by-step instrument appraisal outlined in Table 3 of their article (Perng & Watson, 2012, p. 80).

Instrument Availability and Access

A full copy of the CCS tool was available for use without fees, unlike several other cultural competence assessments that would have been cost-prohibitive for this study. There was no copyright on the tool and the authors gave permission for its use in the study (Perng & Watson, 2012; see Appendix D). This researcher did not require special training or certification to use the tool.

Instrument Background

The purpose of the CCS tool is to measure cultural competence in nurses (Perng & Watson, 2012). The CCS aligned with the focus of this study and was built within the context of

Campinha-Bacote's domains of cultural competence. The tool has been used to study nurses in multiple countries and languages with consistently high Cronbach's alpha scores for internal consistency and reliability (Cruz, Aguinaldo et al., 2018). The CCS did appear to measure what it claimed to measure. However, it is important to note these high reliability numbers might have also indicated redundancy in the assessment items (Tavakol & Dennick, 2011). This researcher owns the data collected with the CCS instrument.

Variables Previously Measured

The CCS (Perng & Watson, 2012) has been used in multiple descriptive studies for discussing the current levels of cultural competence of nurses or nursing students (Cruz et al., 2016; Gözüm et al., 2016). The tool could also be used comparatively. Cruz, Aguinaldo et al. (2018) used this tool to measure and compare CCS scores of nurses and nursing students in various countries. They also looked at other variables such as age, cultural-related training, interactions with CALD patients, etc. to assess for their influence on CCS scores.

Sampling

The CCS (Perng & Watson, 2012) has most commonly been used for evaluating cultural competence in nursing students as the sampling population (Cruz, Aguinaldo et al., 2018). However, sample populations using the CCS have also included working nurses and nursing faculty members (Marzilli, 2016; Zarzycka et al., 2020). When studies used the CCS to compare cultural competence scores of nurses, the sample populations of nurses were similar to those in this current study. However, most uses of the CCS to date have not involved nurses in the United States.

Measurement and Analysis

The CCS (Perng & Watson, 2012) uses 5-point Likert scales on 20 items to provide a total CCS score out of 100 possible points. The tool does not have a scoring rubric for assigning meaning or levels to specific scores. However, it could be utilized to compare CCS scores between groups. Likert scales themselves are ordinal data; however, the total scores could be considered as interval data. The instrument appeared to mainly be used for one-time measurements. However, there is no reason why it could not be used to assess repeated measurements over time, particularly in a pretest/post-test model to evaluate an intervention proposed to increase cultural competence.

Other Considerations

Respondent burden was minimal as it was expected to take between 5 and 15 minutes to answer the 20 questions (Cruz et al., 2017; Gözüm et al., 2016). It was the opinion of this researcher that the tool could be used ethically for this study.

A Culture-General Tool

The creators of the CCS described it as a “culture-general” tool as opposed to other tools assessing knowledge of specific cultures or people groups (Perng & Watson, 2012, p. 1682). The authors believed this tool could be utilized to assess the levels and individual differences in cultural competence between people or across time. Recently, nurses in Poland utilized the tool to assess their cultural competence adaptation as they had noted their traditionally monocultural society was becoming more multicultural (Zarzycka et al., 2020). The researcher appreciated that this tool was specifically designed to be used by nurses and was not limited to assessing culture-specific knowledge.

As Horvat et al. (2014) mentioned in their systematic review, many quantitative studies on cultural competence interventions did not have statistically significant findings, which might be the result of the instrument tool not specifically measuring the desired concept. The CCS was developed specifically for nurses and had clear definitions of the concepts and domains being assessed (Perng & Watson, 2012). This helped strengthen the reliability, consistency, sensitivity, and specificity of the quantitative measurements.

Summary and Future Research

Many studies evaluated individual service-learning experiences for the benefits and cultural learning of student participants. However, these studies were often done during or immediately after the experience, presumably while the information was fresh in the students' minds and before their graduation departure, which would make follow-up more difficult. The long-term impact of student service-learning experiences has not been thoroughly evaluated in BSN students, particularly related to how student perceptions of themselves as nurses might change over time because of their trip. Further research is needed to provide substantive evidence to justify the funding and time spent in service-learning programs beyond anecdotal individual stories. This current exploration with alumni from multiple nursing programs allowed for the assessment of overarching themes and current trends related to service-learning beyond one individual institution at a time. Further research evaluating service-learning in nursing at the regional level might help increase evidence in support of these programs and provide insight on how to make these experiences more effective in the ongoing development of cultural competence.

CHAPTER III

METHODOLOGY

This chapter provides an overview of the design and implementation of this research project. The sequential explanatory mixed methods case study plan is explained, the recruitment plan for participants is described, and the data collection and analysis procedures are outlined. Ethical considerations are discussed including participant risks/benefits, data security, and researcher bias.

The Research Project Design and Description

This study used a mixed methods case study methodology because it was exploring the specific issue and context of service-learning experiences in nursing school (Creswell, 2013). A survey was sent to baccalaureate-prepared nurses to measure cultural competence. Respondents who had attended service-learning trips during nursing school were then invited to elaborate on these experiences through qualitative interviews. These semi-structured interviews helped explain the findings on the survey and created an explanatory case study describing the long-term impacts of participating in an international service-learning (ISL) experience in nursing school.

Mixed Methods Overview

This study was a mixed methods design to allow for both quantitative and qualitative components. Mixed methods research has been expanding since the 1950s and allows for the limitations of one research method to be balanced by the strengths of the other (Creswell & Plano Clark, 2018). Quantitative research provides correlations (and possible causation) with

generalizability but the detailed voices and explanations of individual participants are not heard. Similarly, qualitative research provides significant nuance about a specific context but is not generalizable to a larger population. By combining these two research paradigms, researchers can develop a more thorough understanding of a concept (Plano Clark & Creswell, 2008). Mixed method designs often address one overarching research question: the "Umbrella Question" (Larkins, 2019). Then there were specific research questions for both the quantitative and qualitative focus areas individually that informed the response to the umbrella question.

Mixed methods research has been used effectively for service-learning assessment in prior studies. Kohlbry (2016) found the qualitative post-trip interviews confirmed the findings of the quantitative instruments used for evaluating cultural competence within two weeks of a short-term international service trip. The QUAN findings comparing scores of cultural knowledge, skills, awareness, sensitivity, self-efficacy, and barriers were further explicated with the QUAL components of that study through post-trip semi-structured interviews.

Explanatory Case Study Design

In a sequential explanatory mixed methods design, the quantitative and qualitative components are performed one after the other rather than concurrently. One of the two components is often the main focus and is therefore capitalized as QUAN or QUAL while the other would be written in lower case (Larkins, 2019). If a quantitative survey is directly answering the umbrella question and the subsequent qualitative interviews provide clarity, then a sequential explanatory design might emphasize the survey with QUAN and qual abbreviations. In this particular study, both components were considered equally in the analysis and provided important information for addressing the umbrella question. The qualitative interviews provided new information beyond what was discussed within the survey itself in order to answer the

overall question of long-term impact of service-learning experiences. Therefore, both components were abbreviated with capitalized letters as QUAN and QUAL where applicable.

In this sequential explanatory case study design, the concept of ISL was studied both quantitatively and qualitatively to explore the long-term impact and self-reflections related to these experiences. The format was sequential because the quantitative (QUAN) survey was administered first to be followed by qualitative (QUAL) semi-structured interviews to explain or expand upon the quantitative findings (Plano Clark & Creswell, 2008, p. 179). The QUAN survey responses and themes were discussed in the QUAL interviews as the interview question list expanded based on the ongoing QUAN analysis. Unfortunately, due to limited initial response rates, the QUAN survey was kept open for additional responses even after interviews began. This was done in an attempt to respond promptly to respondents being willing to be interviewed. The initial interviews were based upon the QUAN analysis at that point in time and then the complete analysis occurred with the full data set at the closing of the QUAN questionnaire.

Mixed methods case study designs are typically regionally-bound or with a specific population being described in the case study (Creswell & Plano Clark, 2018). A case study could describe a specific situation in greater detail or compare two cases. In this study, the case of participating in ISL experiences during nursing school was compared to the case of not participating in ISL as a BSN student. Then the long-term effects of the experience were further explicated in the QUAL interviews. The integration of this data together addressed the overall umbrella question of the impact of ISL experiences. This particular case study was meant to be regionally-bound in the Pacific Northwest portion of the United States. However, low response

rates to the survey led to a revision and expansion of the study to potentially include BSN-prepared registered nurses from the entire United States.

Mixed methods research is more than simply running two different research methodologies. The most important aspect is the integration of the QUAN and QUAL together; in this type of explanatory case study, the connected integration occurred at the conclusion of the data gathering in the interpretation of both sets of results together (Creswell & Plano Clark, 2018; Curry & Nunez-Smith, 2015). Both data sets informed each other and provided a more thorough picture of this concept of international service-learning. The initial quantitative survey results helped formulate the questions asked in the qualitative portion of interviews, and then the qualitative findings helped to provide a possible rationale for those survey findings.

The Research Setting

The setting of this research project occurred predominantly on the Internet with initial contact occurring through e-mail or social media. The QUAN survey setting was online within the Qualtrics program accessible through a shared link. Then the QUAL interview settings were either on Zoom, the phone, or via e-mail based on the participant's preference.

The Research Population

The general research population was registered nurses from Bachelor of Science in Nursing (BSN) programs. Initially, this was expected to be limited to registered nurses from nursing programs in Oregon and Washington states but was later expanded to include the entire United States. These nursing alumni were expected to be a wide variety of ages but it was anticipated the majority would be fairly recent graduates and traditional nursing students. Traditional nursing students are typically defined as individuals enrolled in their first formal nursing program, who identify the student role as their major social responsibility, are between

the ages of 18 and 23 years, and who mostly depend upon their parents for financial and other support (Strayer & Beitz, 2010). While many programs have non-traditional older students, the National League for Nursing (NLN, 2017) survey reported that only 18% of BSN students are over the age of 30; thus, it was expected that most respondents would be younger than 30 years old as recent nursing school graduates might be more likely to still read e-mails from their alumni institutions.

The Research Sampling and Recruitment of Participants

Initially, convenience sampling was utilized by targeting BSN programs in the Pacific Northwest geographic region of the researcher. This was done to simplify the interview arrangements for the QUAL component of the study and to allow in-person interviews if the subject desired. When response rates were low, the sample strategy was changed to snowball sampling from the general population of BSN alumni in the United States. Any alum from a U.S. BSN program could participate in the survey whether or not they had ISL experience. Then the interview participants were survey respondents who had participated on a service-learning trip during nursing school. The initial e-mails requested the local nursing schools to send the survey link to their BSN alumni. This link was later shared directly on social media sites such as Facebook. The principal researcher had also planned to attend two nursing conferences to ask attendees to complete the survey on-site with the permission of the conference organizers. However, COVID-19 shutdowns changed these conferences to virtual events.

One inclusion criterion of the sample was registered nurses (RNs) who graduated from BSN programs in the United States. Survey responses were excluded if respondents obtained their RN licensure through a Master of Science in Nursing (MSN) program and not a BSN or if they did not specifically answer the inclusion criterion question. Additional requirements for

participation were the ability to read and write English and having an electronic device to access the survey. Responses were excluded if the entire survey was not completed, particularly the CCS questions at the end.

The study identified registered nurses who had participated in an ISL experience in nursing school. To be included in the research variable group, the participant needed to describe their ISL experience, which needed to have occurred more than six months prior to the survey in order to evaluate long-term impacts rather than immediate memories. If the respondents described service trips that did not fulfill the specified criteria (particularly if it was not international or had no nursing-service component), they had not yet worked as registered nurses, or if the service experience occurred within six months of the study, they were excluded from the research variable group of ISL alumni.

Quantitative Data Collection

The questionnaire for the QUAN portion of this study was created in the Qualtrics online survey system. It began with 14 demographic and characteristics questions including the respondent's age, their work as a nurse, and confirming their graduation from a BSN program. The text of the entire survey questionnaire from Qualtrics is shown in Appendix E. Several potential influences of cultural competence were considered and included in these queries to address the alternative hypotheses in this study. Based on the suggestions of Cruz, Aguinaldo et al. (2018) of factors potentially influencing CCS scores, respondents were asked if they had worked with patients of different cultural backgrounds in the prior six months, if they lived or grew up in a culturally diverse community, and if they had received any formal cultural competence training in the past 12 months. The questionnaire then included the 20 survey items from the CCS tool by Perng and Watson (2012).

The eight alternative hypotheses in this study evaluated personal attributes or experiences that might affect cultural competence. These attributes provided demographic information about the study sample but they were also utilized as other variables in the study to compare to the total CCS scores. Five of these variables (ISL trips since nursing school, culture-related training, caring for CALD patients, growing up in a diverse community, and currently living in a diverse community) were dichotomous questions where the respondents could answer Yes or No. A few of these questions also asked for optional text-entry if the respondent wanted to provide any comments, and the culture-related training question also provided options to select from a list of examples. Then the remaining three alternative hypotheses assessed linear variables of age, time working as an RN, and the number of ISL trips respondents had taken since nursing school. These variables were selected because they could have provided significant cross-cultural interactions that might also influence the CCS cultural competence scores in addition to the main variable in the study of an ISL experience in nursing school.

The CCS (Perng & Watson, 2012) tool was selected by the researcher based on the instrument collection criteria of Dunemn et al. (2017). The researcher first reviewed the CCS for content validity based on their personal expertise leading ISL trips with nursing students. The researcher then sought permission from the original tool authors to use the CCS tool for this study. Dr. Watson, one of the tool's creators, gave permission and shared that the tool was not copyrighted (see Appendix D).

Prior to this study, the face validity of the CCS (Perng & Watson, 2012) was strengthened by running two pilot studies of the survey with current nursing students. The students provided feedback about the question phrasing, and the second pilot group confirmed the Qualtrics links to the additional surveys (the interview link and the raffle drawing) were

functioning. The respondents in the pilot studies shared that the questions did appear to measure the cultural capacity constructs but multiple respondents mentioned the terminology felt confusing at times. As a result of the pilot feedback, the questions for this study were amended from the original CCS survey in two ways. First, the descriptor of *clients* was changed to *clients/patients*. This was done to help clarify the questions with terminology the participants were more used to recognizing. Secondly, the word "effective" was added to item 19 to say, "I can use effective communication skills with clients/patients of different cultural backgrounds."

After Institutional Review Board (IRB) approval (see Appendix F), the data collection began with e-mailed requests to lead nursing school administrators and faculty, based on their website information. The e-mail included a link to the secure Qualtrics questionnaire which did not require any personal identification. The consent form was included in the original email and at the start of the survey itself. Consent was acknowledged by their completion of the survey (shown in Appendix E). The link to this survey was later shared on social media for further distribution as described in the research sampling and recruitment methods.

As the questionnaire was shared amongst current registered nurses, the results were initially reviewed within the Qualtrics system itself to look for response trends the QUAL interview questions could begin to address. When survey response rates slowed down despite repeated efforts to share the questionnaire link, the survey was then closed and the data results were downloaded from Qualtrics to SPSS for analysis. Within SPSS, the data were initially cleaned to remove incomplete survey responses. Additionally, responses not meeting the inclusion criterion of having a BSN were removed.

For any respondent who answered Yes to the key question (Question 5 of participating in a service-learning experience during nursing school), the Qualtrics survey revealed additional

questions where the respondent was asked to describe the details of their specific ISL experience (Questions 7-10). If the trip description did not match the definition requirements of an ISL experience (i.e., if it was not outside of the United States or was less than one week in length), then their answer to this key question was changed from Yes to No.

Answering Yes to Question 5 also triggered the concluding survey questions asking if the respondent would be willing to be interviewed about their ISL experience. If the respondent answered Yes to this interview question, the initial survey was concluded and the Qualtrics system was then linked to an independent survey for collecting personal information to arrange the interview.

Answering No to Question 5 bypassed the question asking about ISL trip details; instead, it asked (Question 6) about why the respondent did not participate in an ISL experience during nursing school. This question included prompts determined by the researcher's own experience with nursing students but also included a write-in answer if desired. Appendix E shows the Qualtrics survey text and conditional requirements for questions to appear to respondents.

Qualitative Data Collection

The questionnaire asked if the nurse had participated in a service-learning trip as a BSN student and based on this response, the respondent received a follow-up question with either a qualitative reflection about their experience or a list of potential reasons why they did not participate on a trip. Answering Yes to this question also triggered a separate question at the end of the survey requesting a follow-up semi-structured interview for the qualitative portion of this study. The QUAL interview questions were intended to provide further detail and clarification about the QUAN findings. The original interview script (see Appendix G) asked ISL alumni to

share further details about their service-learning experience in nursing school and how their reflections about this trip (or trips) might have changed over time.

The interviews were arranged after the principal researcher received notification of interest and after initial survey analysis. The interview participants were contacted through the information shared at the end of the survey. They were given options for how to have the conversation and a separate consent form was shared with these individuals and reviewed verbally at the start of the interview. The audio conversations were recorded and transcribed with the interviewee's permission. An Internet transcription service was utilized for initial interview transcription with artificial intelligence technology (Temi, 2019). The transcriptions were then reviewed by the researcher with the original recordings and amended as needed for accuracy before being uploaded to the NVivo program for data organization and thematic analysis.

The QUAL interviews were semi-structured and Appendix G has a list of the initial questions and then a second list with additional questions based on the QUAN results. The conversations began with asking the participant to describe their service-learning experience during nursing school. These ISL alumni were then asked to share why they initially signed up for the experience and their main memory from the trip. This was an attempt to help participants reflect upon their experiences, which might have been several years earlier. Requesting a recall of one main memory also revealed a prioritization of which particular types of details of these experiences were the most memorable for long-term reflection. Participants were queried about their initial thoughts when they returned home from the trip and then if any of those reflections changed as time passed. Participants were then asked how their experiences affected them—not only now as nurses but also perhaps in their personal lives as well.

Based on the methodology of an explanatory sequential design, additional interview questions were added based on the results of the quantitative questionnaire. As QUAN data accumulated about ISL alumni taking subsequent international service trips, the interview questions were adjusted to also ask whether these individuals would likely go on a similar trip again. Also, during preliminary analysis of the QUAN data, it was not clear whether there would be a statistically significant difference in the CCS scores for ISL alumni compared to RNs who did not have an international service-learning experience in nursing school. This prompted the addition of a question about whether ISL alumni would recommend these experiences to be included within nursing education programs.

Data Analysis Methods

Data analysis is the process of exploring and studying the findings of the data collection (Creswell, 2014). In an explanatory sequential mixed methods case study design, quantitative and qualitative data are analyzed separately but can be used to inform each other. In this study, the preliminary data analysis of the QUAN surveys informed the questions being asked in the QUAL interviews. The following sections describe the analysis procedures for both sets of data.

Procedure for Quantitative Data Analysis

Quantitative data analysis began after data were imported from Qualtrics into SPSS and cleaned. The 20 CCS responses were graded on the 5-point Likert scale with the following points assigned to these responses: *Strongly Disagree* (1), *Disagree* (2), *No Comment* (3), *Agree* (4), and *Strongly Agree* (5; Perng & Watson, 2012). The CCS scores were then added together for each respondent for a total CCS score possible of 100 points. The CCS data were then analyzed for reliability and internal consistency by running Cronbach's alpha tests with SPSS reliability statistics.

Any dichotomous questionnaire items that could be answered Yes or No were given codes within SPSS for analysis. The answer to Question 5 was the research or grouping variable for answering the main QUAN question. Responses of participating in an ISL experience were coded as a 1 and responses for not participating received a code of 2. Normality was assessed for this grouping variable compared to total CCS scores. Responses to Question 5 were compared to the dependent variable of the CCS scores (both to the total CCS score and to the 20 individual items) to address the main QUAN question and hypothesis.

Cultural Capacity Likert Scale Analysis

Likert scales within individual questions are typically considered to be ordinal data because the numeric ratings are arbitrarily chosen by the person and do not have set intervals between them for direct comparisons (Plichta & Kelvin, 2013). However, total scores from a set of Likert scales can be interpreted as interval or scaled data. Depending on the usage, Likert scale results might not fulfill all of the assumptions for parametric tests that require a normal distribution of interval or ratio-level data. Likert scale items therefore might need to be analyzed with nonparametric tests such as Mann-Whitney U statistics and Spearman's correlation coefficient. However, it is common for parametric *t* tests to be run on Likert scale data, particularly for total scores within larger sample sizes that increase the chances of having a normal distribution.

An extensive analysis by de Winter and Dodou (2012) found running *t* tests and Mann-Whitney-Wilcoxon tests on the same sets of Likert data had equivalent power as long as the data were not significantly skewed or in a peaked distribution. The Type I error rate (of rejecting a null hypothesis which was actually true or claiming that a finding was significant when in reality it is not) was close to the standard 5% for both testing methods in this data set. The authors

suggested the sums of Likert scores would often be in a normal distribution and a *t* test could be run confidently for Likert total scores. In this study, parametric tests were run on the CCS Likert scale data after assessing for normalcy.

Means, standard deviations, *t* tests, *p* values and effect sizes were computed for the results of the dependent variable, total CCS score, and each of the 20 CCS item scores individually. An independent two-tailed *t* test was utilized to compare the means of the two independent variable groupings (ISL participation in nursing school or not). A two-tailed test was selected rather than one-sided because the direction of any potential relationship was not yet known (Plichta & Kelvin, 2013). Any *p* values less than .05 were considered to show a statistically significant difference between the two groups. A *p* value of less than .05 was considered to be evidence for rejecting the null hypothesis that alumni with ISL experience in nursing school would not have a significant difference in CCS scores compared to students who did not have an ISL trip.

Demographic and Other Variable Coding

The other demographic and informational variables from the questionnaire were coded as direct numbers when applicable (years since graduation, age, etc.). Nominal responses in the select-all-that-apply questions were totaled for type of work employment, experiences, ethnicity, and gender.

For the other variables in the study to address the additional hypotheses, the most common nominal responses in each question were re-coded as dichotomous variables for comparison to the CCS scores. Question 11 asked whether the respondent had participated in an ISL since being an RN; Yes responses were coded as 1 while No was coded as 2. Question 12 asked about culture-related training during the prior 12 months with a list of examples of

common trainings. The final option (Question 12_6) was for respondents who had not had any training during the past 12 months. Any other options for this question (essentially answering Yes) were coded as a 2 and SPSS grouping variables were reversed for this analysis. Question 14 asked about the care of CALD patients within the past 6 months; Yes responses were coded as a 1 while No was coded as 2. Then Questions 16 and 17 asked about growing up in a diverse community and living in a diverse community, respectively, with Yes answers as a 1 and No as 2.

To address the additional hypotheses, the other variables were compared to the total CCS scores. Total Likert scale scores were interpreted as interval data rather than ordinal. Therefore, *t* tests were performed to compare the dichotomous variables to the total CCS scores. While running multiple individual *t* tests might increase the risk of compounding a Type I error, these data did not meet the assumptions for running an ANOVA because the various groupings were not mutually exclusive. Similarly, multiple analysis of variance (MANOVA) testing could also help reduce the risk of compounding errors. However, these data were focused on analyzing CCS scores as the main dependent variable. A MANOVA test is better utilized for analysis of multiple dependent variables, which was not the focus of this study (Plichta & Kelvin, 2013).

The remaining three other variables for the additional hypotheses described linear data: the amount of time working as a nurse (Question 3), age (Question 18), and the number of ISL trips taken since becoming an RN (a written response to Question 11_1). Bivariate correlations were run to compare these linear variables to the CCS item scores and to the total score.

Procedure for Qualitative Data Analysis

The qualitative component of this project utilized the thematic analysis model explained by Creswell and Plano Clark (2018) and Merriam and Tisdell (2016). Individual perspectives

added depth and further elaboration to the quantitative data. The qualitative portion of the study was not generalizable for large group comparisons but it provided additional insight on the topic (Houghton et al., 2012). The perspectives of the trip participants provided themes of how the long-term impact of service-learning affected them and their nursing practice personally.

The qualitative data from the recorded semi-structured interviews were transcribed with the online Temi (2019) transcription service, reviewed by the researcher and edited for accuracy, and uploaded into the NVivo program for thematic analysis. Initially, each interview transcription was coded for answers to the 10 main questions (see Appendix G for the interview question list). The participant responses to each interview question were collected together and compared for common themes. Summaries of the responses to each question were shared with peer reviewers and are available in Appendix H. Combining the responses to each question together allowed the researcher to be immersed in the data and look for commonalities, patterns, and potential themes.

In qualitative data analysis, it is important to approach the information without pre-conceived notions and not read more into the data than what it showed (Creswell, 2013). In following the qualitative analysis process outlined by Merriam and Tisdell (2016) and Creswell and Plano Clark (2018), category construction included reading each transcript individually to begin coding potential themes. In the initial readings, this was open coding in an attempt to capture any patterns that might be emerging.

Then the interviews were each read again with the purpose of coding quotes that seemed relevant to any emerging patterns and themes. This followed the qualitative data analysis procedure described by Merriam and Tisdell (2016). This required repeated readings and codings as different codes were created in later interviews, which then necessitated re-reading earlier

transcripts with those new codes in mind. At first, deliberate attempts were made to allow themes to emerge directly from the QUAL data without directly incorporating the QUAN findings. After themes were identified and discussed with a peer reviewer, the data were re-examined for integration with the QUAN results. Codes were then created for the CCS domains (Cultural Knowledge, Cultural Skills, and Cultural Sensitivity) from the survey. Other components of Campinha-Bacote's model (Cultural Desire, Cultural Encounters, and Cultural Awareness) were also coded. Overarching constructs from Leininger's Culture Care Sunrise Enabler (see Appendix A) were coded as well.

The accuracy and trustworthiness of qualitative research findings can be supported with multiple techniques throughout the research process. Creswell (2014) suggested the term "validity strategies" could be used while discussing the rigor of qualitative research (p. 201). Strategies to increase validity and trustworthiness of qualitative data included (a) Triangulation; (b) Member checking or respondent validation; (c) Adequate engagement in data collection; (d) Self-reflection by the researcher for potential bias; (e) Peer review; (f) Audit trail; (g) Rich, thick descriptions; and (h) Maximum variation (Merriam & Tisdell, 2016, Table 9.2, pp. 257-258). Creswell's qualitative research validity strategies aligned with these eight techniques of Merriam and Tisdell (2016) and were utilized in this study.

In the QUAL portion of the study, the accuracy of the findings was strengthened by being immersed in the data for several months and analyzing the interviews for themes multiple times. Data immersion and the mixed methods integration of data provided triangulation (a) of multiple data sources. Member checking (b) was performed by sharing the conclusions and main themes with the interview participants. Extensive time was spent with the data collection and analysis process and interviews were hosted until data saturation was reached and no new themes

appeared to be emerging (c). The researcher also had significant experience with leading ISL trips for nursing students in the past. The researcher recognized the potential for bias (d) and how their own background as a nursing instructor leading international trips could potentially influence the thematic extraction. Every reasonable attempt was made to bracket assumptions and biases to approach the data without pre-conceived ideas.

The transcripts and thematic extraction were peer-reviewed (e) by a doctoral-prepared nurse educator. Additionally, a doctoral-prepared professor of education who specialized in qualitative research and ISL experiences reviewed each transcript and provided feedback about emerging patterns and themes. Throughout the process, the NVivo program was used to organize the data for the researcher to identify the incidence and frequency of patterns and potential themes. The program and a research journal helped to establish an audit trail (f) of the analysis process. Interviewees were asked to describe their ISL experiences and to share specific stories when applicable. These thick and rich descriptions (g) are shared in Chapter IV and helped the study results to have more context and realism. The final strategy from Merriam and Tisdell (2016) for increasing validity was to have as much variation or diversity in the sample selection as possible (h). The interviewee sources came from the QUAN questionnaire respondents and when survey and interview numbers remained low, the survey was then expanded to being shared nationally rather than regionally. This expanded the potential sample selection size, although diversity was limited by the people choosing to respond to the survey.

Creswell (2014) included another strategy for increasing validity: presenting negative or discrepant information (p. 202). Comments that might not describe ISL trips favorably were shared and discussed. Reliability of the data itself was another strategy Creswell discussed for qualitative data trustworthiness. The transcripts were reviewed along with the original audio

recordings to look for transcription errors. The coding in the NVivo system included specific definitions for each code (see Appendix I) to hopefully avoid drift where the meaning of codes might change over time. The interviews were coded for initial themes as they were completed; when interviews were no longer supplying responses leading to new codes or potential themes, it was determined that data saturation had most likely been reached. When the interviews had been finalized, each interview was reviewed again for a full analysis to apply any of the codes that had been created up to that point. Some of codes were then combined to start the consolidation process of forming themes. Then the transcriptions were reviewed an additional time to apply codes based on the QUAN findings of this mixed methods study. These techniques throughout the process of qualitative research helped increase the trustworthiness of the findings.

Procedure for Mixed Methods Integration

The data analysis continued with combining the quantitative and qualitative data. This mixed methods approach allowed the qualitative interview responses to provide context and possible explanations for the responses in the quantitative survey (Creswell & Plano Clark, 2018). Mixed methods study designs inherently utilize triangulation techniques during the integration phase of combining QUAN and QUAL data (Plano Clark & Creswell, 2008, p. 21). Methodological triangulation utilizes both QUAN and QUAL data to study the same phenomenon. Triangulating evidence multiple information sources could increase the justification for themes (Creswell, 2014).

The QUAL interview themes were compared to the QUAN findings from the CCS scores and the commonalities and differences were discussed. The integration of these findings is discussed in Chapter V. A summary of these findings was shared with the interview participants requesting feedback on the resultant themes and conclusions discussed. This technique of

member checking asked participants to validate whether or not the conclusions appeared to be accurate (Creswell, 2014). This combination of techniques helped to ensure the trustworthiness, validity, and reliability of the mixed methods findings.

Ethical Considerations

Researchers must be aware of the ethical considerations of conducting research with human subjects (Creswell & Plano Clark, 2018). Subjects should be informed of any known risks or benefits prior to beginning their participation. Consent forms were provided to each participant through the request e-mails, at the start of the survey, and verbally at the beginning of each interview. Participants were given the option to discontinue at any time during the survey or the interview. The data were de-identified and stored securely (see Data Security section). This study was approved by the University of Northern Colorado IRB on October 4, 2019 and a revision was granted on April 14, 2020 for expanding the recruitment of survey participants (IRB Approval Letters are shown in Appendix F and were shared along with the survey link emails sent to BSN nursing programs in the Pacific Northwest).

Risks and Benefits to Participants

The risks to the participants were minimal. The survey was confidential without requiring personally-identifying information and participants self-selected to be interviewed by selecting a link to a separate survey to enter their contact information. Through data mining, it was possible to link the interview participants to their original survey responses based on the descriptions of their international experiences. This information was utilized in providing a demographic summary of the interviewee participants.

The survey or interview questions were not of a sensitive nature, although they could have possibly reminded students of personal memories or thoughts that were unpleasant. The

main risk was the use of their time to complete the survey and interview. The potential benefits included time to reflect on their service-learning experience, potentially gaining insight about their learning, and the possibility of helping prepare future nursing students for other service-learning experiences. At the conclusion of each interview, the participant received a $25 Amazon gift card e-mailed to the address they provided to thank them for their time.

Data Security

Various computer programs were utilized for secure and thorough data management and analysis. Qualtrics through the University of Northern Colorado housed the survey itself online but it was password-protected so only the primary researcher had access. Results were then exported to SPSS (Mac version 27.0.1) for statistical analysis of quantitative data and numeric identifiers were utilized for each respondent. Respondent names were not recorded with the survey or interview transcription unless respondents wrote their name in the contact information at the end of the survey when agreeing to be interviewed. Data were backed up with Microsoft Excel files and Microsoft Word documentation of a research journal. All survey data and analyses were stored on the researcher's personal password-protected computer or on a secure external hard drive kept in a locked office when not in use. Data will be deleted three years after the project's conclusion.

For qualitative data management, the researcher was the only person viewing the given contact information and arranging the interviews. The interview conversations were audio recorded with the permission of the participant and the participant's name was not mentioned during the recording. Each audio file and transcript were assigned a participant number (P1, P2, etc.) rather than using their name. The recordings were uploaded to an online transcription service, which is a fully-automated system using TLS 1.2 encryption for data security (Temi,

2019). The NVivo program utilized for QUAL data management is an application on the researcher's computer and the company does not collect any details from the data researchers are using within the program itself (QSR International, 2020). For peer review purposes, interview transcripts (de-identified) were shared with two peer-reviewers via Google Drive but will also be deleted three years after the project is completed along with the audio recordings and transcripts of interviews.

Researcher Bias

The researcher has led service-learning trips with nursing students and non-nursing university students and therefore might have been biased in favor of these experiences continuing. At the micro level, the researcher has seen evidence of these experiences changing the personal and professional lives of students but is now seeking larger-scale data at the national level by looking at overall trends across both the Pacific Northwest region of the United States and the entire country. Another potential bias was the surveys, which were sent to institutions where the researcher was known personally, might have induced respondents to be tempted to answer more positively.

It was assumed by the researcher that the majority of survey participants would not have experienced an ISL trip as students. For those who did, the researcher expected them to speak positively about the experience in the qualitative interviews. Based on prior experiences and anecdotal evidence, the researcher knew these types of trips could provide motivation to students to further their nursing education or to clarify their career path. It was also anticipated that trip participants would report having increased awareness of needs and a sense of responsibility to care for the underserved. The researcher assumed the participants would want to continue to

participate on more service-learning experiences in the future compared to respondents who did not travel on international service trips.

The researcher strove to objectively bracket these assumptions, particularly during the interview process and the qualitative analysis of the interview data. Bracketing refers to deliberately recognizing one’s own assumptions, prejudices, and biases to temporarily set aside these potential influences on the research process (Merriam & Tisdell, 2016, p. 26). In the researcher’s journal, potential assumptions were listed and reviewed throughout the process in order to keep an open mind for thematic analysis. As Leininger mentioned frequently, ethnocentrism is pervasive in transcultural nursing research so the researcher’s opinions need to be withheld or suspended so the voices and ideas of the informants are expressed and interpreted accurately (Leininger & McFarland, 2006, p. 54).

Summary

This study explored the impacts of international service-learning experiences through a explanatory sequential mixed methods case study design. Respondents were recruited for the QUAN survey through e-mails to BSN programs and social media snowball sampling. Based upon analyses of these survey results, semi-structured interview questions were formed. Interview participants were requested within the survey and QUAL interviews were recorded, transcribed, and analyzed for themes. The researcher adhered to the policies and procedures required by the IRB of the University of Northern Colorado.

CHAPTER IV

ANALYSIS

This chapter describes the data analysis of this explanatory, sequential mixed-methods case study, exploring the long-term impacts of international service-learning experiences (ISL) on nursing alumni. A quantitative survey was sent to BSN alumni in the United States and the results were compared between those who went on an ISL trip during nursing school (28 people) and those who did not (65 people). Then the qualitative results of interviews from trip participants were analyzed for common patterns and themes. The interviews elaborated on elements of the quantitative survey.

The following research questions guided this study:

Q1 Umbrella Question: What are the perceived long-term impacts of a past international service-learning experience in nursing school on current nursing practices of BSN alumni?

Q2 Quantitative Question: Is there a difference between the cultural competence of nurses who had a past international service-learning experience compared to those who have not, as measured on the Cultural Capacity Scale (CCS)?

Q3 Qualitative Question: How does a service-learning experience in nursing school affect a BSN nurse's self-perception and practice?

Quantitative Results

The QUAN question of cultural competence scores being affected by an ISL experience in nursing school was explored through an internet-based survey to registered nurses. The survey found higher total CCS scores of BSN alumni who had participated on a service-learning trip during nursing school compared to alumni without this experience. Two of the three CCS

subscale domains also showed a significant difference between these two research groups. Six of the 20 individual CCS items also showed statistically higher scores for respondents with ISL experience. The survey findings are discussed in the following sections.

Survey Details

The quantitative survey was delivered online within the Qualtrics program from November 2019 to December 2020. There was initially a total of 125 responses but 23 of these respondents did not complete the CCS questions at the end of the survey; thus, these responses were removed from further data analysis. Of the 102 complete surveys, three respondents did not answer whether or not they had BSN degrees and three said they did not; therefore, those six sets of responses were also removed from the full analysis. In addition, three individuals said they were graduating in 2021 from their nursing programs. Respondents were completing this survey in 2020; as a result, their responses were also removed since the people were presumably still current students and not alumni at the time. This led to a final number of 93 surveys for complete statistical analysis. Throughout the QUAN data collection, data trends were monitored within Qualtrics for consideration of creating additional QUAL interview questions but the full QUAN data analysis occurred within SPSS when the survey was closed.

The key research variable for this study was identified with Question 5, asking whether or not the respondent had traveled on an ISL trip during nursing school. Twenty-eight respondents answered Yes and 65 answered No to this question. One person had originally answered Yes but their trip description was only in the United States; as this did not meet the full inclusion criterion for this variable, their answer was changed to No. Question 5 was the main grouping variable for the initial SPSS analysis of CCS scores to answer the QUAN research

question whether ISL participation in nursing school affected cultural competence as measured by the CCS.

Description of Sample

With the 93 official survey respondents, the age range was between 23 and 77 with an average age of 32.58 years (standard deviation [*SD*] 10.36). The mode of ages was 23 (with 12 people at that age). Unfortunately, seven people declined to answer the age question. The mean number of years working as a nurse was 7.11 (*SD* 9.17 and Range 0-45 years) and the average number of years since their BSN graduation was 7.35 (*SD* 9.46). The respondents were from 27 different schools of nursing (although one person declined to answer this question) and the range of graduation years was from 1975-2020 with the highest frequencies in 2016 (14 people), 2017 (11 people), and 2018 (15 people). Table 4.1 provides more detailed demographic information.

Table 4.1

Sample Demographics

Demographic Topic	Number of Responses (% of *N* = 93)
Gender	
Female	84 (90.3)
Male	9 (9.7)
Non-binary	0 (0)
Prefer not to answer	0 (0)
Racial Identity	
Hispanic or Latinx	8
Black or African American	4
Asian	10
American Indian or Alaskan Native	1
Native Hawaiian or Other Pacific Islander	3
White	81
Other	3
Prefer not to answer	0
Current Employment	
Acute Care	60 (64.5)
Nursing Education	15 (16.1)
School Nursing	9 (9.7)
Advanced Practice	8 (8.6)
Community Health	4 (4.3)
Home Health	3 (3.2)
Not currently working as a nurse	5 (5.4)
Other	11 (11.8)
Culture-Related or Cultural Competence Education in the Past 12 Months	
Employer-required trainings	53
Online Modules	48
Conference sessions	16
Graduate classes	13
Other	7
None	12
Other Intercultural Experience Besides Service-Learning Trips	
Personal tourism travel	83
Other international service	23
Military service	2
Other	18
Care of Patients of Different Cultural Background in the Last Six Months	
Yes	82
No	11
Grew Up in Diverse Community	
Yes	51
No	42
Currently Live in Diverse Community	
Yes	47
No	45
Unanswered	1

International Service-Learning Trip Details

The survey reported that 28 BSN alumni went on a service-learning trip while in nursing school. For 13 of these respondents, their trip was within the past one to two years; for nine people, their trip was between three and five years ago; one person traveled between 6 and 10 years ago; and five people traveled more than 10 years ago. For these participants, the most common timeframe of their trip during nursing school was immediately before or during the final year in their program. These trips were in 13 different countries (see Table 4.2) and typically involved health education sessions, working alongside local health workers, setting up a temporary clinic, and/or assisting at a local clinic or hospital.

Table 4.2

International Service-Learning Experiences of Participants

	# of responses
Locations	
Kenya	9
Haiti	5
Nicaragua	4
China	3
Western Samoa	3
Mexico	2
Nepal	2
Canada, France, Guatemala, Honduras, India, Japan	1 each
Service-Learning Details	# of responses (% of $N = 28$)
Health Education Group Sessions	20 (71.4)
Health Fairs	8 (28.6)
Assisting a local clinic or hospital	16 (57.1)
Setting up a temporary clinic	17 (60.7)
Working alongside national health workers	20 (71.4)
Wound Care	11 (39.3)
Other	5 (17.9)

Note. Some participants went on multiple trips during nursing school.

Reasons for Not Participating in International Service-Learning

For the 65 respondents who did not participate in ISL experiences during nursing school, Table 4.3 lists reasons given for this decision.

Table 4.3

Reasons for Not Participating in a Service-Learning Experience in Nursing School

Reasons	# of people responding (out of 65)
Could not afford	30
The option was not available	24
A trip would have taken too much time	13
Other: Could not leave family	9
No desire to serve in another country	3
Other: Needed to work full time in summers to afford school	2
Worry about comfort or safety in another country	1
Personal health prevented it	1
Other (written in): • I knew the option was there, but didn't view it as something practical while in school. • I completed an international experience unrelated to my BSN program • Did not know the language • Limited openings for participants • School was too crazy to begin with to even think about leaving • I liked the other options for clinicals; I was nearby [sic] place of residence working in a cross cultural environment	1 each

Review of Study Hypotheses

The null hypothesis of this study was that alumni who went on ISL experiences as students would not show a significant difference in CCS scores when compared to the control group of students who had not participated in these trips. The alternative hypothesis was BSN

alumni who participated on service-learning trips as students would have higher scores on the CCS than alumni who did not have an ISL experience while in school.

Additional hypotheses were made about other variables, such as personal experiences or attributes, that could influence the CCS scores. These other variables were studied based upon the findings of Cruz, Aguinaldo et al. (2018) that a nurse's country of residence, gender, age, year of study, attendance at cultural-related training, experience of taking care of CALD patients, and living in a multicultural environment could all affect cultural competence as measured on the CCS. Additional hypotheses for this study were as follows:

H1 Total CCS scores will be higher for individuals who participated in ISL experiences after nursing school than for those who did not.

H2 Total CCS scores will be higher for respondents who have had culture-related training in the past twelve months than for those who had no such training.

H3 Total CCS scores will be higher for nurses who recently (within the past six months) cared for patients from diverse cultural backgrounds than for those who did not.

H4 Total CCS scores will be higher for respondents who grew up in a diverse community than for those who did not live in a diverse community in their childhood.

H5 Total CCS scores will be higher for respondents who currently live in a diverse community than for those who do not currently live in a diverse community.

H6 Cultural capacity scale scores will correlate positively with the amount of time spent working as a nurse.

H7 Cultural capacity scale scores will correlate positively with respondent ages.

H8 Cultural capacity scale scores will correlate positively with the total number of international trips taken by a respondent.

Cultural Capacity Scale Validity and Reliability

The main dependent variable of this study was cultural competence as measured by the CCS. The reliability of this survey tool was assessed first before full analysis of the data occurred. The Cronbach's alpha for the CCS total score was .92, indicating strong internal consistency. Interpretation of specific alpha values could vary but numbers higher than .84 are generally considered to have high reliability (Taber, 2018). If alpha numbers are higher than .90, this might indicate a test is too long or has redundancy between certain items (Tavakol & Dennick, 2011). For the 20 items in this scale, the range of Cronbach's alphas if one was deleted was between .91 (from Question 15) to .926 (Question 18).

On the inter-item correlation matrix for the 20 CCS items, Question 18 did have one negative value with another question and with three other scale items, the correlation with Question 18 was less than .15, which suggested the answers to this question were not as well-correlated to the others in the tool. The wording of Question 18 might have been confusing for the survey-takers. Overall, these reliability numbers were consistent with other reports of this survey tool (Cruz, Aguinaldo et al., 2018). The CCS was previously scaled down from its initial version to try and limit redundancy. However, the alpha scores continued to be fairly high, which might indicate repetitiveness in the assessment tool (Perng & Watson, 2012; Tavakol & Dennick, 2011).

Cultural Capacity Scale Scores

Of the 93 complete responses, the average total score on the CCS was 73.15 (*SD* of 10.512). The possible score range for the CCS tool was 20-100, and the range of total scores of the survey respondents was 46 to 100. The highest scoring CCS item was Question 17 ("I usually actively strive to understand the beliefs of different cultural groups") with a mean score of 4.31

out of 5 (*SD* of 0.766). The lowest scoring item was Question 13 ("I can easily identify the care needs of clients/patients with diverse cultural backgrounds") with a mean score of 3.29 (*SD* of 0.892). Appendix J provides the mean scores for each of the 20 CCS items.

Effects of a Bachelor of Science in Nursing Service-Learning Experience

The main independent variable of participating on an ISL trip during nursing school was compared to the CCS scores. Before running *t* tests to compare differences of the means, the data were tested for normality. One of the assumptions for running parametric tests on Likert data was the data should be in a normal distribution.

Tests for Normality

The normality of these data was assessed within SPSS by comparing total CCS scores with the grouping variable (Question 5) of attending a service-learning trip during nursing school. The mean of total CCS scores (out of 100) for the 28 respondents who did have a service-learning experience was 77.18 (standard error 2.00). These data had a skewness z-value of -.104 and a kurtosis z-value of -.045. These were both close to zero and indicated the data did not differ significantly from normality. The Shapiro-Wilk *p* value was .987 and the histogram appeared moderately normal.

The mean CCS total for those who did not travel for ISL during nursing school was 71.42 (standard error 1.25). These data had a skewness z-value of -.205 and a kurtosis z value of -.172. Both of these were close to zero. The *p* value here was .613 and the histogram did not appear to differ significantly from normality. Both data sets for comparing the main research variable of ISL trips in nursing school had a slightly negative skew; however, the values were close to zero and the histogram plot appeared normal. These findings supported keeping the normality null

hypothesis that these data had a normal distribution (Plichta & Kelvin, 2013). These findings allowed for parametric testing to be run on the Likert scale data.

Testing the Research Variable

The CCS measurement tool used Likert ratings ranging from 1 to 5, which provided ordinal data within each item and interval data for comparing total scores (see the tool discussion in Chapter III). After testing for normalcy and whether the data fulfilled the assumptions for parametric tests, *t* tests were performed to compare the dichotomous grouping variable with the total CCS score and the individual CCS item scores. The two-tailed independent-samples *t*-test showed a statistical difference in the means of total CCS scores between the two research groups: ISL alumni and those who did not have an ISL experience in nursing school. The *t* score for comparing the total CCS scores was 2.49 with a *p* value of .014. This *p* value was less than .05, which indicated the null hypothesis could be rejected. The Cohen's d value was .564, which indicated this had a moderate effect size (Plichta & Kelvin, 2013).

The 20 items of the CCS tool were divided into three domains: Cultural Knowledge, Cultural Skills, and Cultural Sensitivity. The scores within each domain were totaled and compared to the independent variable to ascertain if a significant difference of the means existed for any specific domain here. Table 4.4 describes these findings. The most significant difference in means was within the Cultural Knowledge domain. Six of the CCS items were in this category and the score range for this domain was between 6 and 30. When comparing the Cultural Knowledge scores of BSN ISL participants to those without ISL experience, the *t* score was 2.493 with a *p* value of .006 and a moderate effect size of .638. The Cultural Skills domain also showed a significant difference between the two groups, although the *p* value was not as strong at .042. The third domain of Cultural Sensitivity only had two items included (Questions 17 and

20), and although the ISL group did have a higher mean than the non-ISL group, this was not statistically significant (the *p* value was .051).

Table 4.4

Results of International Service-Learning Experience as Bachelor of Science in Nursing Students Compared to Cultural Capacity Scale Scores

	M for ISL participants	*SD* of *M*	*M* for BSN students without ISL	*SD* of *M*	*t* score (independent, two-tailed)	*p* value for significance	Effect size (Cohen's d)
CCS Total: 20 questions Score Range: 20-100	77.179	±10.583	71.415	±10.071	2.493*	.014	.564
Cultural Knowledge Domain: 6 questions Score Range: 6-30	22.929	±3.453	20.615	±3.698	2.821**	.006	.638
Cultural Skills Domain: 12 questions Score Range: 12-60	46.179	±6.639	43.339	±5.845	2.063*	.042	.466
Cultural Sensitivity Domain: 2 questions, Score Range: 2-10	8.071	±1.086	7.462	±1.469	1.974	.051	.446

Note. *SD* = Standard Deviation, *M*= Mean. Yes: *n* =28, No: *n* = 65, df = 91.
* = significant at alpha level of .05. ** = significant at alpha level of .01.

Appendix J shows the results of comparing the means for each CCS item between the 28 ISL alumni and the 65 alumni without ISL trips in nursing school. The parametric tests comparing the *t* statistic of the difference between the means had two associated *p* values for significance: one assuming equal variance and the second which assumed unequal variance.

Levene's test for equality of variances was run on each item to determine whether equal or unequal variance should be assumed. Individual CCS Items 3, 7, 9, and 18 had significant Levene's *F* tests (with *p* values less than .05), which implied there was no homogeneity of variance for those particular survey questions. These four items had degrees of freedom different than 91, and their *t* scores and *p* values were different than if equal variance had been assumed. However, in this sample, all of the *p* values that showed a statistically significant difference of the means were less than .05 whether or not equal variance was assumed. The CCS items with a significant difference in means between the two groups included the total CCS score and individual CCS Items 3, 6, 7, 13, 15, and 18.

Participants who went on an ISL experience during nursing school appeared to show significantly higher total scores on the CCS when compared to alumni who did not have that experience during nursing school. Additionally, six specific question items with the CCS showed statistically significant differences between the means of the two groups. These CCS items are listed here in order from the highest *t* score (indicating a greater difference between the means) to the lowest; the tool's domain category assigned to that item is listed:

13. "I can easily identify the care needs of clients/patients with diverse cultural backgrounds." $t(91) = 2.86$, $p = .005$—Cultural Knowledge domain
7. "I can teach and guide other nursing colleagues about the cultural knowledge of health and illness." $t(61.4) = 2.519$, $p = .014$—Cultural Skills domain
3. "I can use examples to illustrate communication skills with clients/patients of diverse cultural backgrounds." $t(66.7) = 2.428$, $p = .018$—Cultural Knowledge domain

18. “When caring for clients from different cultural backgrounds, my behavioral response usually will not differ much from the client’s/patient's cultural norms.” *t*(38) = 2.404, *p* = .021—Cultural Skills domain

6. “To me, collecting information on each client’s/patient's beliefs and behavior about health and illness is very easy.” *t*(91) = 2.4, *p* = .018—Cultural Skills domain

15. “I can explain the possible relationships between the health/illness beliefs and the culture of the clients/patients.” *t*(91) = 2.26, *p* = .026—Cultural Knowledge domain

Influences of Other Variables

To explore the many potential variables that might also influence the CCS scores (as suggested by Cruz, Aguinaldo et al., 2018), respondents were asked about other personal attributes or experiences that may affect cultural competence. In this research study, eight additional hypotheses were tested (see list above) to compare potentially-influencing variables to the total CCS scores. Five of the variables were dichotomous (essentially a Yes or No question) and three were linear (time working as an RN, age, and number of ISL trips). These variables were selected because they could have provided significant cross-cultural interactions, which might influence the CCS cultural competence scores.

For the five dichotomous variables, *t* tests were run to compare these other groupings to the total CCS scores. Several of these variables were rather skewed with unequal groupings (such as 82 respondents caring for CALD patients in the past six months and only 11 did not), which could decrease the likelihood of having a statistically significant difference of the means. However, the potential influences of these alternative variables should not be overlooked even if these findings did not show a significant difference in CCS total scores. Only one variable

(participating in an ISL since being an RN) showed a statistically significant difference in the means with a p value of <.001. Table 4.5 summarizes these tests.

Table 4.5

t Tests of Other Dichotomous Variables Compared to Cultural Capacity Scale Total Score

Other Grouping Variables Compared to CCS Total Scores	Number of Responses	Mean Total CCS Score ±*SD*	*t* statistic (df 91) assuming equal variances	*p* value (two-sided)
Participated in an international service trip since being an RN (Q11-1)	21 yes 72 no	80.23 ±8.14 71.08 ±10.26	3.753*	< .001
Culture-related training in the past 12 months (Q12-6, with SPSS groupings reversed because the question was phrased in the negative)	81 yes 12 no	73.43 ±9.94 71.25 ±14.16	.669	.505
Care of CALD patients of a different cultural background than their own in the last 6 months (Q14)	82 yes 11 no	72.5 ±10.78 78.0 ±6.81	-1.644	.104
Grew up in diverse community (Q16)	51 yes 42 no	74.24 ±10.08 71.83 ±10.99	1.098	.275
Currently live in diverse community (Q17)	47 yes 45 no	74.98 ±9.15 71.31 ±11.68	1.681	.096

* = corrected $p < .01$.

Running multiple t tests could increase the chance of a compounding Type I error where data might appear to have a significant difference in means when it actually did not (Plichta & Kelvin, 2013). To minimize this risk, a Bonferroni correction was calculated to adjust the p value for determining statistical significance. The original desired alpha level of .05 was divided by the

number of comparisons (five in this case). The corrected *p* value for significance here would then be $p < .01$. The one comparison variable with a statistically significant *t* score had a *p* value smaller than this adjusted alpha level, indicating the null hypothesis for the first of the eight alternative hypotheses could continue to be rejected.

Following the steps of Cruz, Aguinaldo et al. (2018) who identified potential predictors of CCS scores, multiple regression was also run to compare these variables to the total CCS score. However, none of the variables had significant *p* values in the regression analysis. Additionally, these variables did not meet the assumptions for running ANOVA testing because they were not mutually exclusive groupings for comparisons.

International Service-Learning as a Registered Nurse

The only significant difference of the means with these alternative variables was whether the individual had participated in an international service trip since becoming a registered nurse ($t(91) = 3.753$, $p < .001$). Twenty-one respondents reported participating in an ISL after becoming a registered nurse and 72 did not. The incidence of ISL trips as RNs did appear to be higher for those who went on an ISL in nursing school compared to those who did not.

Of the 28 questionnaire respondents who went on an ISL trip during nursing school, 12 of them (42.86%) went on ISL trips again later after becoming registered nurses. Nine of these BSN alumni went on one ISL trip after nursing school, one person went twice, one went three more times, and one went on four additional ISL trips. Of the 65 respondents who did not go on an ISL trip during nursing school, nine (13.85%) had an ISL experience after they became registered nurses. Four of these RNs went on one ISL trip, two went twice, one went four times, and two people went on five trips later. The respondents were not asked to describe these subsequent trips

so the experiences might not have fully met the inclusion criterion of ISL experiences as defined in this study.

Culture Training

The second additional hypothesis in this study was the total CCS scores would be higher for respondents with recent culture-related training. The questionnaire included a list of examples respondents could select from and had an "other" write-in option as well as a distinct selection choice: "I have not had official cultural education within the past 12 months." Twelve respondents had no formal culture training. Unfortunately, because of the way this question was written in Qualtrics with the multiple response options, the negative answer became the SPSS column for running this test, and the grouping was reversed compared to the other SPSS tests for questions answered in Yes or No dichotomy without other options. There was no statistically significant difference in total CCS scores between these two groups. The lack of significance was likely due to the vastly uneven division between the two groups.

Culturally and Linguistically Diverse Patients

The third alternative hypothesis involved nurses caring for CALD patients. Eighty-two reported taking care of patients of culturally diverse backgrounds different than their own in the last six months and 11 answered No to this question. This was the only dichotomous variable with a negative t statistic where the mean CCS score was higher for those who had not cared for CALD patients recently compared to those who did. However, this difference was not significant statistically and might have been due to the large difference in group size. Of the 11 respondents who selected they had not taken care of CALD patients in the prior six months, six of these RNs selected they were currently employed as nurse educators. Nurse educators might not be involved in direct patient care on a regular basis. Three more of these 11 respondents said they

had retired from nursing but the time since retirement was not specified. Retirees might not have cared for any patients in the prior six months.

Diverse Communities

The fourth and fifth hypotheses suggested CCS total scores would be higher for people who had lived in communities with a lot of ethnic and cultural diversity. When asked if they had grown up in a culturally diverse community with ethnicities, races, and cultural backgrounds different than their own, 51 said Yes and 41 answered No. Forty-seven respondents said they currently lived in a culturally diverse community, 45 said they do not, and one did not answer the question. These groupings were more evenly divided than the other additional variables being tested. However, neither showed a statistically significant difference between their means of total CCS scores.

Time Working as a Registered Nurse

Most of the demographic questionnaire data were nominal or dichotomous. However, some questions had linear data that could be compared with correlations. Pearson (parametric) correlations were run as SPSS bivariate correlations to compare the amount of time working as an RN (Question 3) to the CCS scores (both the total scores and the individual items). The Pearson correlation for this comparison was .127 ($p = .227$). This p value was greater than .05, which indicated no significant correlation between the time employed as an RN and the total CCS score.

There were a few slightly significant correlations between the time working as an RN and specific CCS items. However, there were also a few negative correlations for certain items. For years worked as an RN (Question 3), Pearson's correlation was significant for the following CCS items: Question 4 (.213, $p = .041$) and Question 8 (.219, $p = .036$). These few item correlations

with statistical significance had small correlation coefficient numbers and were not indicating a strong relationship (Plichta & Kelvin, 2013).

Age

There was also a potential correlation of the respondent's age and the CCS scores as Cruz, Aguinaldo et al. (2018) suggested in their study about the CCS scale. Presumably, higher age would correlate with more cultural encounters and the potential for more opportunities to develop cultural knowledge, skills, and sensitivity, which might lead to higher CCS scores. Bivariate Pearson correlations were run comparing age (Question 18) to the total CCS score and each of the 20 items. Only 86 of the 93 respondents specified their age and the mean age was 32.58 years (*SD* = 10.36) with a mode of 23. None of the correlations between age and CCS items showed statistical significance (all *p* values were higher than .05) and a few scale items had slightly negative correlations although this could be statistical noise. The respondent's age compared to the total CCS score had a Pearson's correlation of .037 with a *p* value of .735. These weak correlations did not show statistical significance between age and CCS scores.

Number of International Service-Learning Trips

The dichotomous data above showed international trips since being an RN appeared to influence the total CCS score significantly. A correlation comparison was set up between the actual numbers of trips taken (rather than the numbers of people saying they went on a trip) from the text-entry in question 11_1 and the CCS scores, both total and individual. The Pearson's correlation results are shown in Table 4.6 below. Higher number of trips was correlated positively with higher scores on the CCS for the majority of the tool and for the total score. However, not all survey items showed significant relationships. The correlations with statistical significance were not particularly strong (they were not close to ±1.00). The largest correlation

was for the total score with a correlation of .339. With an individual CCS question, the highest correlation was with Question 18 where the Pearson's *r* was .336.

Table 4.6

Number of Trips Since Working as a Nurse and Cultural Capacity Scale Scores

CCS Item	Pearson's *r* Correlation with numbers of trips (N = 93)	*p* value significance (2-tailed)
Total Score	**.339****	**.001**
Q1	**.220***	**.034**
Q2	**.235***	**.023**
Q3	**.251***	**.015**
Q4	**.285****	**.006**
Q5	.190	.068
Q6	**.316****	**.002**
Q7	.101	.335
Q8	.178	.087
Q9	**.286****	**.006**
Q10	**.310****	**.002**
Q11	**.238***	**.022**
Q12	**.213***	**.040**
Q13	**.310****	**.002**
Q14	**.207***	**.046**
Q15	.161	.122
Q16	.162	.121
Q17	.062	.555
Q18	**.336****	**.001**
Q19	.009	.929
Q20	.193	.064

Note. Significant correlations are bolded. * = $p < .05$, ** = $p < .01$

Summary of Quantitative Results

Traveling on an ISL experience during nursing school was associated with significantly higher total scores on the CCS. Six scale items (Questions 13, 7, 3, 18, 6, and 15) also showed higher scores for ISL alumni compared to those without ISL trips in nursing school. Three of

these items were from the Cultural Knowledge domain and three from Cultural Skills domain. For the eight other variables being evaluated for their potential influence on CCS scores, only one had a statistically significant difference in the means for CCS total scores. Participation in ISL trips after becoming an RN was associated with significantly higher total CCS scores compared to RNs who had not gone on ISL experiences.

Qualitative Results

The qualitative portion of this mixed methods study addressed the question: How does a service-learning experience in nursing school affect a BSN nurse's self-perception and practice? The QUAL information came from semi-structured interviews after the quantitative survey had been completed. Sixteen individuals answered the survey question of agreeing to be interviewed about their service-learning experience in nursing school. However, only 12 responded to repeated attempts to reach them. The majority requested to have a Zoom interview, although one preferred a phone conversation and two were interviewed with back-and-forth e-mails.

The 12 interview participants were from five different academic institutions. Their ages ranged from 23 to 47, and the length of time since their ISL in nursing school ranged from two to 25 years. Table 4.7 outlines the information about the interview participants. Although mixed methods research often includes the use of pseudonyms for interview participants when utilizing a case study methodology, this researcher was concerned the pseudonyms might introduce cultural or other biases into this data analysis (Creswell & Plano Clark, 2018). Thus, the interviewees were identified as Participant1, Participant 2 etc. or labeled as P1, P2, etc.

Table 4.7

Interview Participant Demographic Information

Participant # and Interview Type	Age and Gender	Grad Year	Work as a Nurse	Trip(s) and Time Spent In-Country	Years since trip	CCS Total Score
P1 on Zoom	30yo M	2017	3 years in Acute Care	Haiti. 2 weeks	4	70
P2 on Zoom	23yo F	2018	2 years in long term care and Acute Care	Kenya, 2 weeks	2	76
P3 on email	29yo M	2016	3 years in Acute Care	Nicaragua, 1 week	4	84
P4 on phone	36yo F	2016	3.5 years in Acute Care	Nicaragua, 4 weeks	5	74
P5 on Zoom	27yo F	2019	1 year in school nursing, public health	Haiti x2, 10 days	4, 2	86
P6 on Zoom	47yo F	1997	22 years in Home Health, Acute Care, Nursing Education, and Advanced Practice	Los Cabos, Mexico, 3 weeks	25	81
P7 on Zoom	32yo F	2003	17 years in Acute Care, Consulting, and Nursing Education	Kenya, 6 weeks & China, 6 weeks	19, 17	69
P8 on Zoom	28yo F	2015	5 years in Acute Care	Nicaragua, 1 week	5	92
P9 on Zoom	23yo F	2020	1 year in Acute Care	Western Samoa, 2 weeks	2	84
P10 on Zoom	31yo F	2020	1.5 years in Acute Care	Western Samoa, 2 weeks	2	92
P11 on Zoom	35yo F	2007	14 years in Acute Care and Nursing Education	Guatemala, 3 months	15	83
P12 on email	25yo F	2020	0.5 years in Acute Care	Kenya, 2 weeks	2.5	68

Emerging Patterns and Themes

As interviews were completed, transcribed, and uploaded to the NVivo application, initial coding of themes began. Each new code was given a definition and these were reviewed frequently to avoid drifting in the code selection. The NVivo code book definitions used for the thematic analysis are provided in Appendix I. After 12 interviews, no new codes were being

created so it appeared data saturation had been reached. At that point, the participant responses to each question were grouped and reviewed together. A summary of participant responses to the main semi-structured interview questions is provided in Appendix H.

In the initial analysis of the data, emerging themes were coded without applying any of the CCS or Campinha-Bacote categories specifically. After this first round of complete coding, the codebook was examined to see if overlap of codes existed following the coding recommendations of Creswell (2014). Codes were then combined together to form a list of initial themes as shown in Table 4.8. Then the interviews were reviewed and coded again to integrate these QUAL findings with the QUAN portion of the study. The second full analysis of all of the transcripts included codes from Campinha-Bacote's model, the CCS domains, and Leininger constructs. Table 4.8 also shows how these codes often paralleled the initial themes.

Table 4.8

Thematic Analysis Process

Codes in the Initial Analysis	Combining Codes for Initial Themes	Second Analysis exploring CCS, Campinha-Bacote, and Leininger Themes
Awareness of Blessings in the U.S.	Awareness of Blessings in the U.S., Gratitude	Cultural Awareness
Benefits to Participant	Benefits included Personal Growth and Reciprocal Benefits	Cultural Desire
Bonding with Teammates	Bonding with Teammates	
Broadening Own Worldview	Broadening Own Worldview included: Empathy, What They Learned	Cultural Sensitivity; Culture Care Accommodation and/or Negotiation; Culture Care Preservation and/or Maintenance
Communication	Communication	Cultural Skills; Care Expressions/Patterns/Practices
Covid and Domestic Trips Instead	Covid and domestic trips instead	
Empathy		
Feeling helpless		
Feeling overwhelmed	Combined Feeling Overwhelmed with Feeling helpless	Cultural Encounters
Negative Aspects of ISL		
Personal Growth		
Preparation	Preparation and Expectations	Cultural Knowledge
Preparation\Expectations		
Quotes to Remember	These were reviewed and categorized with the existing codes	
Reciprocal Benefits		
Struggles on the Trip	Struggles on the trip included: Negative aspects of ISL and Struggles with Re-entry	Culture Care Repatterning and/or Restructuring
Struggling with Re-entry		
What They Learned		

The most-used thematic code was “Benefits to Participant” as the participants shared examples throughout their interviews of how their international service experience helped them in various ways. Discussions of personal benefits appeared in many of the interview question responses even if the prompt itself did not specifically ask about this. Other similar codes were later grouped under this heading including Personal Growth and Reciprocal Benefits. The second most common code was Awareness of Blessings in the U.S. Broadening Own Worldview was mentioned frequently and included the subcategories of Empathy and What They Learned. Other code combinations included grouping Feeling Overwhelmed and Feeling Helpless and Struggles on the Trip was combined with Negative Aspects of ISL and Struggling with Re-entry. These codes and patterns were condensed into four main themes: Describing Personal Benefits, Developing A Broader Worldview, Experiencing Profound Gratitude, and Feeling Overwhelmed by Needs.

Describing Personal Benefits

The dominant theme from the interviews was discussing benefits to themselves professionally and personally because of this international service experience. In these trips during nursing school, students shared they were able to see themselves as nurses and to learn more about themselves. Participant 2 (P2) shared, “I definitely learned a lot about myself and a lot about how I work in a team, how I work with patients…how you kind of handle yourself when you don't have quite the normal things that you have normally.” Additionally, P2 described personal growth and self-realization about her personal expectations of perfectionism as a nurse:

> I think the trip just really opened my eyes to how many expectations I had on myself. Like not only in that area, but just like everywhere in life and how unrealistic it was again to be striving for that perfection. And when you can't meet that perfection, I think my

> mindset a lot of the time is kind of like zero to a hundred. If I can't do it perfectly the first time, why do it? And that's not how you can live life. So yeah, just kind of like forcing me to not be perfect at something for the first time and then still doing it and getting better at it was a good experience.

The benefits of personal growth were discussed in relation to their work as nurses now but also connected with life-long learning in general. Participant 12 described the benefits of her Kenya trip in the context of learning and added, “Going outside your comfort zone pushes you and expands your understanding like almost nothing else does.” Participant 4 also recalled learning being the primary benefit of her experience in Nicaragua:

> I just felt like the learning was exceptional… I tried to set my expectations about what I can learn. What can I glean about the creativity and the industrious attitudes about the nurses who are really amazing mentors? All of them were younger than me but so awesome, positive, capable, with really good teamwork. That’s really what I focused on when I came back, I had a really good experience.

For other individuals, the learning benefit of their trip was in discerning their specific career path. Participant 5 said her first trip to Haiti showed her international nursing work was not only possible but could be her vocational calling. She is now working as a school nurse in the Dominican Republic: “I'm super thankful for that trip because I think it's the reason I'm where I am today. Even though it was only maybe eight days or seven days, I could truly say that it probably impacted the trajectory of my life.”

According to Participant 6, one reason international immersive experiences have such lasting benefits is because

> you don't really have that opportunity to go right back out of that culture back into your own culture, even for a short minute. I think being immersed in a different culture, you know, food, the way they dress, the way they've been taught, what their customs are, their tradition, all that stuff. I think it's important to not be able to escape that.

Another specific benefit for this participant was her trip to Mexico helped expand her specific cultural knowledge about patients from this region that she could carry forward to interacting with future patients from this part of the world. Participant 9 also agreed the impact of these trips was related to the immersion:

> You get to see other types of healthcare and get to experience a different culture, like be immersed in the culture. It's not just like you have one patient that you see for 20 minutes in a day. You know you get to be immersed in the culture and to see how their beliefs affect their healthcare and all the things that you're learning as far as assessment and just everything you actually get to apply it. You know, all these things that you learned about in class, you actually get to go out there and apply those things.

Developing a Broader Worldview

While discussing benefits of these experiences, almost all participants described examples of personal growth centered around expanding their worldview and perspectives. Participant 7 remembered her time in Kenya and China as leading to a paradigm shift in perspective:

> I quit looking at it from my own American worldview of we're the best, and we do it this way and that's right. And to go in to say, wow, this is all they've ever known. And they see that as right and best. And maybe there's not a 'one-way-fits-all' for certain things… I

think that having a greater sense of worldview, but bigger sense of the world you recognize how small you are in this thing makes, and I think that that's great.

Participant 10 shared similar sentiments about her travels changing how she viewed the world and the stories she heard about other places now:

> The world seems smaller once you get out and explore it. We, and especially in relation to Africa, we were talking about this thing called "Afrophobia", where we grew up here in the United States, just hearing, ‘Oh my gosh, these kids in Africa are dying by the minute, they are disease-ridden, war torn’, all these horrible things. And those things do happen for sure, but actually getting out there and even just seeing Tanzania showed me that that is not accurate. At least not in all parts. And it gave me a whole different perspective on the world and people I interact with. So even if it's not just for the sake of medical and cultural learning, just learning what the world out there is really like, it's just so powerful.

Multiple participants shared their expanded worldview was helping with patient care experiences at present. Participant 3 commented, “My experience [in Nicaragua] has helped me be able to empathize with all of my patients. We all come from different yet similar experiences and can all connect through simply being a human and having sense of self in that.” Participant 12 said international service “opens your eyes to how different life can be from your own and creates a deeper understanding of the variation of cultures you will encounter in any nursing career, no matter where you end up working in the future.” Participant 7 elaborated on how these experiences affected patient care now:

> I also think it helps with patient care. Our patients don't all look like us. They don't all believe like we do. They don't all come from the same places that we do. And to have

> that understanding, and maybe even we don't understand what we recognize. We don't understand. We're open to learning. I think it's huge. And I think there's certain parts of the country that have more diversity. There are some places that are very monochromatic in their culture. And so I think that we have to be open to looking beyond just our little pocket of a place of where we work and serve to seeing more outside the world and where we grew up.

Participant 10 noticed her worldview of healthcare expanded because of her international experiences. She suggested that if you really want to understand a culture, experiencing it as a volunteer is better than merely being a tourist: “When you're out there as a volunteer, you're seeing the good, bad, and the ugly, you're seeing the best and the worst. And that's what we really need to be aware of. So, I feel like as a nurse, it did make me a bit more aware of those kinds of things.” She described seeing the effects of a lack of health education and resources in Samoa and Tanzania and could now envision the potential background experiences of her own patients with more empathy.

Participant 11 shared her time in Guatemala helped her be more patient and understanding when working with someone who did not speak English well. She was more likely to slow down or make sure to get an interpreter for patients: “I know what it is like to be somewhere and only minimally understand the language… I have a different perspective when it comes to that. I don’t think I would’ve had that without the trip.” Participant 11 also shared they would like to travel again because of the perpetual learning that occurred: “You get to learn and hear other people’s stories about how they see the world. That can shape your perspective and give you more grace and compassion in how you see the world.” After returning home from the summer experience, P11 mentioned struggling with certain ideas and statements made by other

people and realized her own opinions on various issues had changed because of her experience. She said travel helped her not to be “so siloed in my own bubble.”

Participant 7 reiterated that international travel, and particularly service trips, helped nurses with therapeutic communication because it taught them to deeply listen to their patients: “I think that any time we can open ourselves up to seeing the world from a different point of view I think that's good.” She elaborated that if we are only able to look at situations from one point of view, we might not be effective change-makers. She wanted to remind nurses of the need to adapt their patient education to make sure patients receive and understand it.

Experiencing Profound Gratitude

Awareness of Blessings in the U.S. was a common code throughout the interviews, although the overarching theme there was one of gratitude. This was particularly evident in the conversations about initial thoughts and reflections when returning from the trips but it also appeared when discussing the situations when their international experience came to mind now. Multiple participants shared about their feelings of gratefulness in returning home to warm showers, clean facilities, and familiar food.

Gratitude was mentioned multiple times in the context of working as a nurse now and having supplies and equipment to provide quality care. Participant 12 said, “Occasionally the abundance of supplies we have at the hospital makes me think of how limited our supplies were in Kenya.” One of P4’s main memories was noticing the simplicity of the tools used in the Nicaraguan clinic compared to what is commonly available in the U.S. In the process of helping renovate an operating room in Tanzania, P10 shared, “Definitely really taught me not to take the commodities we have here for granted.” She also commented that people in the United States tended to complain about the healthcare system but that made her think of the people in Samoa

and Tanzania who did not have easy access to healthcare services. Participant 8 shared she now tried to "really remind myself to be grateful for what I have cause that it definitely shapes how you are, what sort of circumstances you are in because I have everything at my disposal."

This theme of gratitude also appeared in the discussions of re-entry (the adjustment to being back in the United States after a trip) and wishing other people could better recognize their own blessings here. Participant 1 shared feelings of discouragement when treating patients in the United States who do not seem to recognize the benefits and privileges of healthcare resources here:

> Patients here in the U.S., we have to beg them to do something that's good for them... Thinking how people die in Haiti from fever or sepsis… and they don't even know if they are septic. I keep saying to myself, but you really have it made here and many people don't have this kind of opportunity that you have. I find myself feeling discouraged cause I'm always thinking about [Haiti] and knowing that reality there.

Participant 7 had spent a summer in Kenya with only a generator for electricity, an outhouse pit toilet, and occasional showers. She shared her frustration after returning home that family members at home were wasting electricity and leaving lights on excessively. From her perspective, people were not showing appropriate gratitude for the blessing of being able to bathe whenever they wanted and having functioning plumbing. A perceived lack-of-gratitude was in stark contrast to some of the international experiences themselves. Participant 8 mentioned seeing significant expressions of gratitude from the people in Nicaragua for receiving even small gifts or services.

Feeling Overwhelmed by Needs

When discussing memories during and after their international experiences, multiple participants verbalized feeling overwhelmed or helpless about the amount of need they witnessed. Participant 1 said, "Coming back, I think I felt helpless. I felt like I didn't know what to do next, where to start or how to help." Later he added, "I still have that feeling to this day. I know the need is there, but I'm not sure how to go about it. There's so much." Participant 1 also shared about the knowledge he had gained in his subsequent employment as a registered nurse but said this knowledge made the needs in Haiti feel even greater: "The more I know, the more helpless I feel."

Participant 5 verbalized similar feelings of frustration after her trips to Haiti: "I remember being really frustrated with everything that I saw in that I couldn't do more or that in a sense, like the world couldn't do more right away." She shared the example of giving a short-term supply of blood pressure medication to a patient and how it felt overwhelming because it was not known if they would receive any type of follow-up, and the workers simply hoped the patient would continue to receive care after the team left. A short-term intervention might not do much for a long-term problem.

Participant 2 shared a story of feeling overwhelmed by everything she was trying to process and it culminated in a tearful catharsis one evening on the trip. She described the culture shock of trying to serve patients in Kenya as "huge whiplash" when she was only barely able to think of herself as a nurse at all. She also shared a specific clinic situation where she felt overwhelmed by being unable to help a patient with a stick in her eye. She wanted to be able to offer more assistance than simply arranging for the patient to be taken to the hospital. She

mentioned she had many high expectations of herself coming into the trip and this might have contributed to the feelings of helplessness.

Negative Aspects of Service Learning

While the majority of these reflections and the perceived impacts of these international experiences were favorable, some negative comments were shared as well. Participants 9 and 10 both mentioned struggles on their trips with team members being “cliquey” or complaining about the experiences, which affected many of their memories even now. Participant 9 also described struggles on the trip itself related to the personal discomforts: “The trip itself was hard being in a different country, different food, traveling all the time. It's hot, everybody's taking turns, being sick like being in cramped quarters, driving around all the time.” When asked if she would go on a trip again, she initially answered “No” and said, “The interpersonal stuff with the other students was harder than I thought it would be. You're with people you don't really know, close quarters traveling all the time. Everybody's sick, it's hot.” Later she did ask to change her answer, saying the nursing experience itself was valuable.

Other negative comments were more general about short-term international service in a broader sense. Participant 7 shared concerns that people might do international service trips with a tourist mindset or to “make myself look good.” She also added it could be harmful to approach a service trip with the expectation of making significant changes or in thinking “I’m going to give back to these people in such big way.” Participant 4 held similar reservations about these types of experiences and said she “didn’t have any expectation of making lasting changes. I feel like many times expectations are misaligned, especially if somebody doesn’t have that experience beforehand and how long it takes to offer a change.” Participant 4’s prior international work provided context to know “the little projects we did were probably not going

to be truly sustainable." However, she went on the Nicaragua trip with the goal of learning as much as she could personally and she left feeling very positive about her experience.

The "white savior complex" was mentioned by Participants 2 and 9 as a potential negative aspect to these types of trips but also as something their trips attempted to avoid. In Samoa, P9's team asked the local leaders how they could help and what was needed instead of doing their own needs assessment from their U.S. perspective. While hygiene and the lack of resources might have seemed like a higher priority issue to the visiting team members, the local people wanted assistance with tracking and analyzing their statistics about diabetes, childhood nutrition status, etc. This became the focus of their time there. Similarly, Participant 4 mentioned that the local clinic wanted informational posters as patient education, which was not what the team was expecting to do, but they went ahead and complied and it ended up being helpful. Participant 2 also added that "these people aren't just a learning experience for you" and spoke to the importance of supporting culturally-relevant health education, which could have longer-lasting effects than other types of short-term service trips.

Qualitative Patterns Related to the Cultural Capacity Scale

After the interview analysis for patterns and themes, the interviews were read again to look for connections to the quantitative portion of this mixed methods study. The QUAL analysis was intended to explicate the QUAN survey findings, and NVivo codes were therefore created for each of the three CCS domains of Cultural Knowledge, Cultural Skills, and Cultural Sensitivity. The first two of these domains are constructs of Campinha-Bacote's model that also includes Cultural Awareness, Cultural Desire, and Cultural Encounters. These constructs were coded within the interviews as well (see Appendix H).

Cultural Knowledge

When discussing how their trips impacted their current work as nurses, several participants shared stories of specific cultural knowledge that was then helpful in caring for future patients of a similar background. Participant 6 spent time in Mexico and then ended up working with many patients from Mexico in her work as a nurse. Participant 11's time in Guatemala helped her feel "more culturally appropriate" when walking into a patient's room with a Latinx family because she understood the male head of the family might be making most of the decisions for the patient. Participant 5 was reminded in Haiti how medications had different names in different countries, which could be confusing. Some people thought the medication "Paracetamol" was an antibiotic when it is simply acetaminophen (Tylenol).

Some participants discussed their trip preparations including learning about the country and specific cultural traditions that might be relevant. Before traveling to China, Participant 7 had been told people there were "stoics" and it was not a "warm culture" country where people were overtly friendly. She stated she carried that stereotype with her during the trip but learned how stereotypes were not always true at the individual level. She was able to have more personal conversations with students there when she was intentional about asking deeper questions. Participant 9 shared about the semester-long class that prepared them for traveling to Samoa. However, several things were still not understood well by the trip participants until they were experienced in person. As Participant 6 commented, "It's different to show a video or even talk to somebody from a different culture than it is to experience that culture."

Participant 1 increased his cultural knowledge about people in Haiti even though he had grown up in that country. When he was asked about his main memory of taking a service trip there during nursing school, his first response was "the overwhelming need of the people in

Haiti." He seemed surprised he was able to learn something about his own country he thought he already understood but apparently had not fully experienced yet: "I mean I knew it, but it's more surprising seeing how much one little to no knowledge about just basic things in general can make huge impact on people's day to day living."

Cultural Skills

Cultural skills were defined by Perng and Watson (2012) as carrying out assessments, communicating effectively using helpful resources, and providing appropriate care without prejudice (p. 1680). Multiple participants shared that their international trips helped them learn how to assess for health literacy levels of patients and the importance of asking about the resources they had available. Participant 12 recalled a Kenyan physician who would quiz the nursing students on their assessment skills with Kenyan patients and helped her to learn that "we need to approach patients in a way of understanding them and why they do what they do in order to help them make healthy choices in their lives." Participant 2 mentioned that Kenya helped her learn how to assess her patient's health knowledge and to adjust her health education conversations accordingly. This is a skill she often still thinks about now.

Participant 11 described learning the skill of navigating a foreign healthcare system while helping friends on her trip who needed to see a physician. The experiential learning of being in the patient role indirectly has helped her in cross-cultural interactions with patients now, particularly those who do not speak English fluently. Participant 5 also mentioned the cultural skill of gaining the trust of a patient who might have very different views on health care than we do. These trips during nursing school allowed students to experience and practice skills they would later use in their nursing careers.

Cultural Sensitivity

Perng and Watson (2012) described cultural sensitivity as “the appreciation of the client’s beliefs, valuing their culture and respecting its influence on client’s behaviours” (p. 1680). The theme of cultural sensitivity was the third CCS domain and it aligned with several of the constructs in Campinha-Bacote’s model. Many of the responses labeled as the CCS Cultural Sensitivity code were also coded as Cultural Encounters or Cultural Awareness from Campinha-Bacote. As participants shared stories of their ISL experiences, if a specific cross-cultural situation or memory was described, it was coded as Cultural Encounters even when other codes were also applied to it. Similarly, when interviewees were asked about their reasons for signing up for their ISL experience, most of their answers fit under the label of Cultural Desire from Campinha-Bacote but other codes were often overlaid as well. As the literature review highlighted in Chapter II, the terminology surrounding cultural competence and service-learning experiences had significant overlap.

Many participants shared examples of learning about specific healthcare beliefs held by the patients they encountered on these trips. Similar to the quotes above about the benefits of expanding their worldviews, participants learned there were many ways health and illness could be interpreted. Participant 5 discussed “old-wives’ tales” she heard about in Haiti and how one of her most helpful experiences from that trip was learning how to respect these different ideas and not attacking or shaming the person for those views. Before her Haiti trip, she thought she would have laughed at some of the different healthcare traditions or ideas in Haiti but now she feels she can connect with people better and build relationships that might allow health education to be better-received:

> Understanding different culture norms and respecting them is way more relevant when you've been on the trip. And you are put into those situations rather than when a teacher is just teaching you that in class. And I feel like, especially with our diverse healthcare population in the United States, that that's really important with bedside nursing, the hospital, even, even if you don't plan on working abroad. Cause all those, even just in my practicums, I saw that all those case studies that we did in school are real. Like you do get the patients who don't speak English, who are from the Marshall Islands or you know, different things like that who may have those different views on healthcare and you have to gain their trust anyways. (P5)

Participant 7 shared several examples about the need for cultural sensitivity in her interactions with patients in her work as a nurse. She shared a story about a patient who was refusing to eat any meals during his hospital stay. Because of her experience in Kenya, she knew some countries charge patients for every individual service in the hospital. She was able to offer to her co-workers a possible explanation for the patient's behavior that then could allow for a more sensitive conversation with the patient himself. She also mentioned seeing several patients who had family members wanting to sleep on the floor of the hospital rooms because that was their norm.: "It [going on international service trips] has brought an awareness of so many differences that I look back and can connect to an experience I've seen in another country or something."

Participant 10 stated her trips to Western Samoa and Tanzania probably did help increase her cultural sensitivity with the diverse patients she sees now but also added there were limitations to short-term experiences:

> I've also noticed that it's made me a bit more culturally competent in some ways. I mean, two weeks in the country is not going to make you an expert on a culture, but I have treated Polynesian patients. I have treated patients directly from Eastern Africa since I've been back and just kind of understanding a little bit, some of their approaches to healthcare and family values especially have been helpful.

Participant 6 reiterated that cross-cultural interactions are going to occur for nurses practicing in the United States whether or not they have traveled abroad, and cultural sensitivity is necessary for navigating the generalizations and biases that might influence those interactions. Culture-specific learning could provide a generalized knowledge about one specific group but it is also important to remember that each patient is an individual and nurses should seek to meet them where they are and to communicate in ways that are well-understood:

> In relationship to nursing, in general you're going to run into people from different cultures, even if that culture is from the United States. For example, we are just seeing now what the culture is like for, I mean, it's become more evident this last couple of weeks with the African American community and how they're different than a white community and they have different needs, and it’s different how they deal with things differently. And so even in the United States, we have that. So, when we have people from other countries, knowing some of the generalizations of what their beliefs generally are, then you can be a lot more competent in your ability to communicate and help bring health and healing to them. I think it's definitely worth doing [international service trips] as nursing students because you do get some more competence about other cultures that we definitely need. And, you know, we're not all the same. So realizing that everybody

> else is human beings too, and treating them how they want to be treated, not how you think they should be treated.

Recommendations for Future International Service-Learning Experiences

The participants unanimously agreed they would go on a trip again and these experiences should be included in nursing education. However, two participants appeared to struggle to answer those questions, presumably based on negative aspects of their individual trip experiences. Participant 9 was hesitant at first to say she would want to travel on an international service trip again and she had previously described several difficulties on the trip with uncomfortable conditions and complaining teammates. She then changed her answer after reflecting more on the trip benefits to herself personally. Participant 2 discussed the benefit of personal growth extensively in the interview, had shared about initial hesitations in returning, and whether these trips should be in nursing education. Her main memory from the trip was an incident of feeling quite overwhelmed by her own ineptitude of being unable to complete a nursing skill. Much of her interview revolved around the revelation that perfectionism was unattainable and the realization she had been holding herself to a higher standard than she could attain. She also wondered if only senior year students should go on international trips. Her lack of self-confidence and feeling overwhelmed at the time might correlate with her apparent hesitancy in some of these answers.

Trustworthiness

Trustworthiness of the qualitative findings was strengthened through following the recommendations of Merriam and Tisdell (2016) and Creswell (2014) for validating qualitative findings. At the conclusion of the qualitative analysis, the 12 interview participants were emailed

a summary of the four main themes and the overall conclusions of this study. They were asked for feedback and invited to read the analysis in more detail if they wished. Five of these participants responded and all agreed the themes aligned with their individual interviews and sentiments. Peer review of the QUAL themes came from dissertation committee members and another doctoral-prepared faculty member who leads ISLs regularly. The peer reviewers reviewed the interview transcripts and agreed the themes appeared to be accurate.

The researcher intentionally attempted to identify and bracket assumptions related to ISL experiences. These were listed and reviewed in the research journal and included the assumptions that ISL trips were helpful for nursing students and would have long-lasting impacts on their careers and lives. It was assumed alumni would speak positively about their ISL experiences and most would have traveled again internationally.

Utilizing the NVivo program as an organization tool allowed for an audit trail of the coding process. Codes were defined and reviewed frequently. Themes were explained here with detailed descriptions and long quotes directly from the interview participants. The 12 interviewees were from five different institutions around the country, which did provide some diversity of perspectives. Lastly, negative aspects of ISLs were mentioned by several interview participants and were shared in the findings. All of these strategies helped to strengthen the rigor of this study and the validity of the findings.

Summary of Qualitative Results

The QUAL interviews were coded multiple times and four main themes emerged:

1. Describing Personal Benefits
2. Developing a Broader Worldview

3. Experiencing Profound Gratitude

4. Feeling Overwhelmed by Needs

Interview quotes were shared to provide rich descriptions of these themes. The themes were then shared with the interview participants for member checking, and the five people who responded agreed that the themes summarized their responses and thoughts about their international service-learning experiences in nursing school.

Mixed Methods Integration

The QUAN findings of the questionnaire results influenced the questions asked in the QUAL interviews. Appendix E shows how the interview questions changed from the initial plans based on the QUAN data. Participants were asked to describe their ISL in more detail because the questionnaire descriptions of their trips were quite brief. The QUAN data began to show that relatively few respondents had gone on ISL trips after nursing school and, therefore, a QUAL question was added to ask, "Would you go on an international nursing service-learning trip again if the opportunity arose (or have you)? Why or why not?" In the early analysis of survey responses, it seemed there might not be a significant difference in CCS scores between ISL alumni and those who had not participated in ISLs. This was likely due to the small sample size at the time but did prompt an additional QUAL question asking whether the participant would recommend nursing students to go on ISL experiences during nursing school.

When the survey was closed and analyzed fully, the six CCS items with significantly higher scores for ISL alumni were explored in the interviews after that point. These six survey items were from the CCS domains of Cultural Knowledge and Cultural Skills, and the researcher wanted to know if the survey respondents were thinking of specific stories or situations when they answered the survey questions. An interview question had been "Now that you have worked

as a nurse, has anything from your trip ever come to your mind as you are now working? What types of things about the trip do you often remember or reflect upon?" This question was then added: "Did anything specific come to your mind while completing the survey?"

Additionally, the QUAN information influenced the QUAL data analysis. After analyzing the interview transcripts for the initial themes, they were re-read again with the specific purpose of coding for the three CCS domains (Cultural Knowledge, Cultural Skills, and Cultural Sensitivity) and the constructs within Campinha-Bacote's model. Patterns emerged related to coding the three domains from the CCS, and there was substantial overlap between the CCS codes and the Campinha-Bacote codes (cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire). The explanation of the integration of QUAN and QUAL findings is discussed further in Chapter V.

Summary

The quantitative survey results showed a significant difference in the total CCS of BSN alumni who went on an ISL trip in nursing school and those who did not. Additionally, six particular scale items showed significant differences between these two groups of alumni; three survey items were from the Cultural Knowledge domain and three from Cultural Skills. The interview questions corroborated these findings as participants described their ISL memories and the impact of their international experiences. These nurses described personal benefits of self-awareness, increasing their sense of gratitude, and expanding their worldview. Many shared examples of these benefits carrying over into their nursing practice. In the workplace now as nurses, multiple participants described stories of how their ISL experience had increased their empathy and skills in caring for patients from any cultural background. All interviewee

participants agreed they would go on an ISL trip again and these experiences should be included in baccalaureate nursing education.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

This chapter provides a review of the study and interprets the QUAN and QUAL findings. These findings are then integrated together to show how they informed each other and provided a more thorough understanding of the topic of international service-learning (ISL) experiences. The findings of this study are integrated into the current literature. Limitations of the study are then discussed and recommendations for future related research are provided.

Overview and Summary of the Study

This dissertation utilized an explanatory case study mixed-methods approach to explore the umbrella question:

Q1 What are the perceived long-term impacts of a past international service-learning experience in nursing school on current nursing practice of BSN alumni?

The quantitative portion utilized a Qualtrics survey sent to BSN alumni to answer the question:

Q2 Is there a difference between the cultural competence of nurses who had a past ISL experience compared to those who have not as measured on the Cultural Capacity Scale (CCS)?

Then for those alumni who did have a qualifying service-learning experience in nursing school, the qualitative portion of the study included a semi-structured interview to help answer the question:

Q3 How does a service-learning experience in nursing school affect a BSN nurse’s self-perception and practice?

Interpretation of Quantitative Data

Going on an ISL experience during nursing school showed significantly higher total scores on the CCS, $t(91) = 2.493$, $p = .014$ and on 6 of the 20 survey items, specifically. This offered support for rejecting the null hypothesis that an ISL experience during nursing school would not affect cultural competence scores as measured by the CCS. There was a significant difference in the CCS total scores between the two groups being compared—an ISL trip during nursing school did appear to increase total CCS scores.

The cumulative CCS score did not have a scoring key or specific threshold to determine good or bad levels of cultural competence because this scale was developed to be used comparatively (Perng & Watson, 2012). When comparing the two groups in this study, ISL alumni had an average total CCS score of 77.18 (out of 100) and the non-ISL group had a total score of 72.42. Both data sets appeared to be normally distributed and the resultant *t* score comparisons showed a significant difference between the total scores of the two groups. International service-learning trips during school did appear to have a positive relationship with CCS scores. Based on this data, cultural competence appeared to be higher in nursing alumni who traveled on ISL experience in nursing school than for BSN alumni who did not have these experiences.

Significant Differences Within Cultural Capacity Scale Domains

For the independent variable being studied (an ISL trip during nursing school), the dependent variable of the total CCS score was significantly higher for those on an ISL compared to those who did not go on an ISL experience during nursing school. The CCS tool is divided into three subscale domains of Cultural Knowledge, Cultural Skill, and Cultural Sensitivity. These domains were also analyzed for significant differences based on the independent variable

of an ISL trip. The domain with the largest score differences for ISL experiences in nursing school was the domain of Cultural Knowledge, ($t(91) = 2.821$, $p = .006$). This domain was described by the tool creators as the ability to obtain and use information about a patient's unique cultural values and health beliefs (Perng & Watson, 2012, p. 1680). The survey results implied that an ISL experience during nursing school might help nurses improve their abilities to discern the influence of cultural values on a patient's healthcare preferences.

Six of the 20 CCS survey items had significant differences between the two independent variable groups being compared. The six significant items included identifying care needs, using examples for communication skills, matching the patient's cultural norms, collecting information about patient beliefs/behaviors, connecting the patient's health and culture together, and teaching nursing colleagues about cultural knowledge of health and illness. Three of these six items within the CCS were from the Cultural Knowledge domain and the other three were from the Cultural Skills domain. None of the Cultural Sensitivity scale items showed a significant difference in scores between the two groups being compared. This finding was consistent with the results of Kohlbry's 2016 study where pre- and post-trip studies across three universities doing ISL trips showed an increase in post-trip scores on the IAPCC-SV but only the Campinha-Bacote constructs of Cultural Knowledge and Cultural Skills had a statistically significant difference between pre-trip and post-trip scores.

One interpretation to explain these findings is the six CCS items that showed statistically significant different scores between the two groups were items asking about culture-specific concepts. The remaining items in the tool, which did not have a significant difference in the means based on an ISL experience or not, were perhaps focusing more on cultural competence as a broader concept. There was a difference between having a general awareness of the need for

cultural competence compared to having specific knowledge or skills about a particular culture or scenario. It would appear that nursing alumni who had traveled on service-learning trips during nursing school reported feeling better equipped (compared to people who did not travel internationally) to meet specific client/patient needs in cross-cultural interactions. These findings are explored more in the qualitative interviews discussed in the Interpretation of Qualitative Data section below.

Other Influencing Variables

Cultural competence is a broad concept and has multiple influences. Cruz, Aguinaldo et al. (2018) implied that potentially-influential variables on the CCS scores included age, living in a diverse community, attending culture-related training, and experience with patients of diverse backgrounds (CALD patients). In this current study sample, however, these variables did not appear to have significant relationships with CCS scores. This sample often had uneven comparison grouping, and the overall sample size was likely too small to show significant differences or to draw strong conclusions. The questionnaire would have been strengthened by clarifying the questions, particularly about caring for CALD patients. It was unclear how the respondents were defining caring for a patient of a background different than theirs. As was noted in Chapter IV, the majority of respondents answering No to this question were nurse educators or retirees. Adding a question of whether respondents had taken care of any patients in the prior six months would have added clarity to these responses.

None of the additional hypotheses about more cross-cultural encounters increasing the CCS scores was supported by this data with the exception of ISL experiences after nursing school showing an increased total CCS score. This study did not confirm the findings of Cruz, Aguinaldo et al. (2018) who had reported that age, caring for diverse patients, having recent

cultural training, and living in a culturally diverse environment significantly influenced CCS scores and were predictors of cultural competence. Cruz, Aguinaldo et al.'s study involved nurses in nine countries and concluded that the country of origin and the gender of the nurse might also influence CCS scores.

The 2018 publication of Cruz, Aguinaldo et al. was the largest study to date utilizing the CCS. They had 2,163 survey respondents and the mean age was 22.52 (*SD* 4.88). Their Pearson's correlation of age and cultural competence was $r = 0.16$ with a p value of $< .001$. In contrast, in this study of 93 nursing alumni, 86 were willing to share their age and the mean age was 32.58 (*SD* 10.36). The age range of this current study was 23 to 77 with a mode of 23, and the Pearson's correlation of age to CCS total score was $r = .037$ with a p value of .735. This did not indicate a statistically significant correlation between age and CCS scores. The age range in the Cruz, Aguinaldo et al. study was unknown but in the sampling from nine different countries, these were current nursing students and not alumni, which might explain why their average age was below the lowest age in this current study. It might be helpful to repeat the Cruz, Aguinaldo et al. study with an older population of nursing alumni to see if the "predictors" of cultural competence continued to be significant as they were for these nursing students (p. 99).

The additional hypotheses in this study were selected with the assumption that having a higher number of cross-cultural encounters in any aspect of life would correlate with high CCS scores. The age of respondents and CCS scores did not support this hypothesis and neither did living in a culturally diverse community. The amount of time working as a registered nurse (which presumably would involve more numbers of cross-cultural patient interactions) did have a few weak correlations with specific CCS scale items. However, the correlation to total CCS scores was not significant. It is unclear why Cruz, Aguinaldo et al. (2018) found such significant

relationships between these situations and CCS scores so those tests might be worth repeating in a different sample population for confirmation.

Some of the additional hypotheses in this study involved dichotomous variables that were not evenly divided within the two options being compared (see Table 4.5). For example, when comparing CCS scores and whether participants had recently cared for diverse patients of a different cultural background than their own, 82 answered Yes and 11 said No. When sample sets are not divided evenly between groups being compared, there might not be enough statistical power to reveal a significant difference in the means (Plichta & Kelvin, 2013). Interestingly, in this case, the *t* test had a negative value, indicating an inverse relationship. The 11 individuals who reported not caring for diverse patients recently had a higher total CCS score compared to the 82 who had. Further exploration is needed to explain this finding. Perhaps respondents were defining cultural diversity in various and inconsistent ways when they answered that particular question.

The one influential variable that did show a significant difference with the CCS scores was whether or not the respondent participated in other international service trips as an RN after nursing school was completed. Twenty-one respondents reported having an ISL experience after nursing school and their average total CCS score was 80.23 (*SD* ±8.14). Comparatively, the 72 respondents who did not have an ISL experience had a mean total CCS score of 71.08 (*SD* ±10.26), which did show a significant statistical difference between these means ($t(91) = 3.753$, $p < .001$). This might suggest ISL experiences at any time (whether it is during nursing school or afterwards) could affect CCS scores and the cultural competence of nurses. However, this finding should be interpreted cautiously because respondents were not asked to specify the

details of these subsequent ISL experiences after nursing school, and some of those trips might not have met the strict criterion for a healthcare-related service-learning experience.

This study did not include a hypothesis about whether an ISL experience in nursing school would increase the likelihood of participating in ISL experiences later as a registered nurse. Based on the survey data, 42.86% of the ISL participants during nursing school participated in at least one ISL trip after becoming a registered nurse while only 13.85% of those without ISL experience in nursing school went on an ISL trip as an RN. This incidental finding could be explored with further study and a survey specifically designed to analyze this potential correlation. The details of subsequent international trips after nursing school would need to be evaluated to see if they met the same inclusion criteria to be considered as ISL experiences.

All of the potentially-influencing variables explored in this study could be explored further to discern their influence on the cultural competence of nurses and upon CCS scores specifically. Cruz, Aguinaldo et al. (2018) had asserted that factors affecting CCS scores included the nurse's country of residence, gender, age, year of study, culture-related training, caring for CALD patients, and living in a multicultural environment (p. 92). However, these factors were not shown to significantly affect the CCS scores in this current study. Additional research using the CCS with a larger population of nursing students and alumni might reveal stronger relationships between these factors and CCS scores.

Quantitative Summary

Overall, the QUAN data implied that an ISL experience improved cultural competence scores on the CCS. This fulfilled the alternative hypothesis and suggested the null hypothesis could be rejected. However, it appeared the timing of a healthcare service trip was not as essential for this improvement as the experience itself might be at any time. No significant

difference was found in the total CCS scores when an ISL trip was attended during nursing school or if it was later after becoming a registered nurse. The correlations between the actual numbers of subsequent trips and the specific CCS item scores were quite varied. None of those correlations was particularly strong linearly despite their statistical significance. The other potentially-influential variables explored did not show a significant influence on the CCS scores. Therefore, the additional hypotheses about other personal experiences or attributes influencing the CCS scores were not met except for other ISL experiences correlating to higher CCS scores.

Interpretation of Qualitative Data

The qualitative portion of this study explored how a service-learning experience in nursing school affected a BSN nurse's self-perception and practice now. The 12 interview participants answered questions about their specific trips including their reasons for traveling, main memories, initial feelings after returning, and how the trip affected them both personally and professionally. Throughout these conversations, four main themes emerged: describing personal benefits, developing a broader worldview, experiencing profound gratitude, and feeling overwhelmed by needs.

Some of these interview themes paralleled themes identified in previous studies of service-learning trips such as experiencing reciprocal benefits, embracing the other (broadening their worldview), and having an increased awareness of the need for advocacy (feeling overwhelmed by needs; Caldwell & Purtzer, 2015; Knecht & Fischer, 2015). Beckman and Christenson (2016) described a similar theme of gratitude when returning home from an international service experience to El Salvador and Long (2014) highlighted themes of culture shock, gratitude for their home country, and surprise about the poverty seen on their study abroad experience in Belize. Larsen's (2017) research about the emotional responses during ISL

internship experiences in East Africa noted similar responses of gratitude, frustration at the unmet needs, and difficulties reconciling the positive and negative aspects of the experience. These themes also reinforce the findings of Crawford et al. (2017) where student outcomes from interprofessional ISL experiences in Vietnam and Timor-Leste included having personal successes, seeing the world in new ways, and developing as health professionals (p. 74).

The interview responses also aligned with components of Campinha-Bacote's (2002) process of cultural competence. When queried about their reasons for signing up for their trip, multiple participants responded with statements about wanting to see or experience a new culture, which paralleled Campinha-Bacote's construct of Cultural Desire. Cultural Desire was described by Campinha-Bacote (1999) as the motivation of healthcare providers to "want to" engage in the process of developing cultural competence and to have cross-cultural experiences (p. 205). This construct was not included within the CCS utilized in the QUAN portion of this study. Therefore, the QUAL interviews provided additional information about the motivations of individuals selecting to participate in ISL experiences. The respondents without ISL experience during nursing school were not interviewed; however, a qualitative question within the survey asked about reasons for not participating in ISL during nursing school. Three of these 65 RNs selected the option of "No desire to serve in another country" (see Table 4.3 for other responses to this question).

The construct of Cultural Desire might explain the incidental finding described above that nursing students who participated in ISL trips during nursing school were more likely to go on ISL trips as RNs. Perhaps nursing students who went on ISL trips in nursing school have higher levels of Cultural Desire scores than those who declined ISL opportunities in nursing school (if ISL trips were available). Further research could be done with exploring this construct more

specifically and to evaluate the motivation for international travel and participating in service-learning experiences. Campinha-Bacote had various measurement tools for her model of cultural competence in healthcare delivery that could be implemented in future studies on this topic (Transcultural C.A.R.E. Associates, 2015).

Many interview participants also shared specific stories they remembered about patients or other individuals on their trip that spoke to the memorable aspect of specific cultural encounters. Campinha-Bacote (1999) described "Cultural Encounters" as the experience of direct engagement in cross-cultural interactions with clients from culturally diverse backgrounds (p. 205). The interviews included numerous conversations about broadening their worldview and recognizing perspectives different than their own. These realizations could fit under the label of Cultural Awareness that Campinha-Bacote described as being appreciative and sensitive to the practices, values, beliefs, and actions of other people. Additionally, Campinha-Bacote discussed this construct with the reminder to first be aware of one's own culture, perspectives, and potential stereotypes that could influence a cross-cultural encounter. The theme of expanding a worldview included the recognition of the initial worldview which was then altered or changed.

In the qualitative interviews, participants were asked about their initial thoughts and feelings when returning home from their international experiences. They were then asked if those thoughts had changed over time. While some participants denied any change in their reflections, others mentioned having different feelings with the passage of time. This suggested short-term surveys or reflections immediately after ISL trips might not fully capture the impacts of these experiences. This added further evidence to the findings of Taylor et al. (2018) that the navigation of cognitive dissonance during cultural immersion experiences requires a significant amount of time and reflection for transformative learning to occur.

The participants all agreed they would go on an ISL trip again if given the opportunity. Additionally, the participants expressed desires for these experiences to be a more regular part of nursing education programs. The majority of the interview time was spent reflecting on the personal benefits from the experiences; this theme was apparent throughout most of the interview question responses even when the prompt was about other topics entirely. Even with the passage of time, each participant was able to quickly identify multiple positive benefits of ISL experiences.

Integration of Results

Mixed methods research integrates both QUAN and QUAL information together to build a more complete picture of the problem being investigated (Creswell & Plano Clark, 2018). In this exploration of the perceived long-term impacts of a past ISL experience in nursing school on current nursing practices of BSN alumni, the quantitative survey results implied the CCS scores of alumni with this experience were higher than those who did not serve internationally during nursing school. The survey had six particular items that were statistically different between the two groups, and the qualitative interviews attempted to explore the details and domains of those CCS questions more thoroughly. Additionally, the survey asked for reasons why respondents did not participate in a service-learning trip during nursing school but it did not include a question about the motivations for people who did participate. The interviews asked about this along with open-ended questions about the perceived impacts of the trip on their lives now.

Many of the interview conversations provided unprompted examples of the three domains measured in the CCS: Cultural Knowledge, Cultural Skills, and Cultural Sensitivity. In this survey, the domains of Cultural Knowledge and Cultural Skills showed a significant difference between the two groups of respondents for certain scale items and as domain

categories overall. In the interviews, participants elaborated on the specific cultural experiences they had on their trips where they gained cultural knowledge and skills. Multiple participants stated their time in other countries helped them during future interactions with patients from those regions of the world. They shared several stories about cross-cultural patient encounters in their work as nurses. At times, patient actions, preferences, beliefs, and family dynamics were sometimes confusing for healthcare workers to understand but the nurses with ISL experiences were able to provide context and explanations for some of these behaviors. Using this specific knowledge of cultural customs and expectations could be helpful when patients are from similar locations. However, participants were quick to acknowledge that even within a country, patient behaviors were not homogenous, and nurses should be aware of the assumptions they might be making about any patient at the individual level.

While the CCS Cultural Sensitivity items did not individually show a significant difference between the two groups being compared in the QUAN survey, several interview comments related to this domain. The most frequently-mentioned long-term impact of these international experiences in nursing school was how it helped to expand the worldview of the participants and gave them more empathy for the cross-cultural challenges patients might be facing. Multiple studies (Knecht & Fischer, 2015; Larsen, 2017; Murray, 2015) spoke to increased empathy as an outcome of service-learning experiences. The interview responses confirmed this as a perceived benefit of these international trips and showed that empathy and an expanded worldview were benefits remembered and recognized even several years after the initial experience.

The QUAN survey asked about reasons for not participating in service-learning trips during nursing school and the most common explanations were finance concerns and lack of

opportunity for ISL. Some reported a lack of desire as well. In the qualitative interviews, the participants were asked to share their motivations for participating and the majority shared examples of Cultural Desire (Campinha-Bacote, 2002) or a sense of curiosity to learn about people in other parts of the world. Upon returning from the experience, the dominant emotion was gratitude for the trip and thankfulness for the luxuries at home that were missed during the travels. Cultural Desire was not specifically measured as a domain in the CCS quantitative survey and it is unknown whether the levels of cultural desire during nursing school or at present were different between those who went on international service trips and those who did not. The majority (70 of the 93) of survey respondents had not gone on any international service trips since nursing school.

The QUAN survey showed significantly higher scores for these six statements when individuals had participated on a service-learning experience in nursing school:

- I can easily identify the care needs of clients/patients with diverse cultural backgrounds.
- I can teach and guide other nursing colleagues about the cultural knowledge of health and illness.
- I can use examples to illustrate communication skills with clients/patients of diverse cultural backgrounds.
- When caring for clients from different cultural backgrounds, my behavioral response usually will not differ much from the client’s/patient's cultural norms.
- To me, collecting information on each client’s/patient's beliefs and behavior about health and illness is very easy.

- I can explain the possible relationships between the health/illness beliefs and the culture of the clients/patients.

The interviews provided context for many of these statements including stories of being able to help colleagues understand behaviors of culturally and linguistically diverse patients, realizing the need for clear cross-cultural communication (including health literacy assessment and clear education resources), and recognizing how a patient’s cultural context could influence their health habits and beliefs. Even when an international experience provided cultural knowledge in a specific geographic location, these nurses were able to carry that experience forward into a variety of cross-cultural patient interactions today.

Integration into the Literature

These findings added to the body of knowledge about transcultural nursing established by Leininger who emphasized the importance of nurses understanding culturally competent care (McFarland & Wehbe-Alamah, 2018). While Leininger’s research largely centered on the experiences of cross-cultural immersion, typically of several weeks or more (Wehbe-Alamah & McFarland, 2020), this study provided more insight into cross-cultural learning within shorter experiences. Most of the ISL trips described by participants in this study were short-term experiences of two or three weeks. The longest ISL trip during nursing school was a three-month experience, although one participant then followed up their six-week trip with a one-year international experience after school was completed. The amount of time in cross-cultural settings might influence the extent of the impacts of those experiences.

Cultural competence and associated concepts of cultural humility are part of the metaparadigm of providing patient-centered care in nursing (Campinha-Bacote, 2019; Ray, 2016). This study added strength to the view that cultural competence is an on-going process

rather than a specific goal to be attained (Botelho & Lima, 2020; Campinha-Bacote, 2002; Perng & Watson, 2012). Cultural competence scores, as measured on the CCS, showed comparatively higher total scores in individuals with ISL experience compared to those without. Interviews with ISL participants highlighted specific benefits from their experiences and elaborated how their increased cultural competence had helped them care for patients.

Study Limitations and Delimitations

The predominant limitation to this study was the small sample size from low response rates to surveys sent electronically. Very few nursing school contacts replied to the e-mail requests and it is unknown whether the sudden changes of the COVID-19 pandemic influenced response rates. This limitation was attempted to be addressed with an incentive for entering a raffle for a $25 Amazon gift card and then opening the recruitment nationally with social media sharing.

The most important delimitation in this study was the requirement that interview subjects needed to go on a service-learning experience in nursing school and the trip must have occurred more than six months earlier. This created a limitation of needing to keep the survey open for several months to find qualified interviewees. The 12 interview participants were only from five different educational institutions so this could have limited the diversity of the participants or the types of trips being referenced. Several of these participants who had been on an international service trip as nursing students were actually alumni of the researcher's own university, which could have biased their responses toward potentially sharing more favorable comments.

Attrition was expected between respondents saying they were willing to be interviewed and the actual coordination to have the interviews for the qualitative portion as well. However, this limitation was minimized by having flexible options (in person, by phone, or over video).

The interviews were not spontaneous and the participants knew the general topic would be about ISL. Therefore, it is possible participants were thinking about their answers to potential questions ahead of time. It is unknown whether or not the answers would have been different if interviews had been done without time for prior reflection or answering a survey about the topic first.

A potential limitation of this study was the small sample size and lack of diversity within the sample. Eighty-four respondents were female and only nine were male. Eighty-one selected “White” as an option describing their racial identity when the next most common option was 10 respondents selecting “Asian” (respondents could select more than one answer here). While respondents did come from 27 different nursing schools around the United States, 36 alumni were all from one university and 24 were from another. These two schools are both located in the same geographic area, which might not have as much cultural diversity in patient populations as other parts of the country potentially. The specific delimitation of starting the survey locally, only in the Pacific Northwest portion of the United States, might have limited the response rates. The study results might not be representative of nurses across the nation and would therefore not be generalizable.

A significant limitation to ISL research is the fact that each trip and location is inherently unique and cannot necessarily be directly compared. Each nursing school has their own curriculum pattern, which might emphasize cultural competence in different ways. The findings might be most helpful to BSN programs within similar-sized institutions to the ones included in this study or with official service-learning program taking students on trips routinely. For example, shorter or accelerated nursing programs might be less likely to have the time for an international trip in their programs; therefore, this study might have unintentionally limited itself to more traditional BSN programs of longer duration. It is unclear whether trips taken in

advanced practice nursing programs would have similar results as those taken during BSN training. Additionally, each nursing alum would have a variety of cross-cultural experiences in their subsequent employment as a nurse and it is unclear how much of an effect other cultural interactions could have on CCS scores (Cruz, Aguinaldo et al., 2018).

Recommendations for Further Study

This study focused upon the experiences of registered nurses who went on ISL experiences during their BSN nursing school training. In the survey, the 65 individuals who did not go on a trip were asked to share their reasons for not participating. While this was not the focus of the study, further research about the decision-making process for international service trips might benefit nursing programs trying to implement these experiences or programs. The decision to travel internationally can have many variables, particularly in light of recent travel restrictions and changes with the COVID-19 pandemic, and having recent survey data might help programs market themselves more effectively.

This study could be replicated or extended by also interviewing survey respondents who did not participate in ISL as nursing students. While the survey did include qualitative data asking students why they did not travel on an ISL trip during nursing school (see Table 4.2), further elaboration and explanation would be helpful. Additionally, the integration of mixed methods results would have been strengthened if interviews had occurred with both research groups (those on BSN ISL trips and those who did not) to ask the respondents to specifically explain how they were interpreting the survey questions. The interviews captured some of the perspectives of 12 ISL participants but it is unknown how the BSN alumni in the non-ISL group were interpreting the questionnaire, both for the demographic questions (e.g., growing up or living in a diverse community) and the CCS items.

Similarly, this study could be repeated to compare CCS scores of RN students doing international service and those who had cross-cultural trips or clinical experiences domestically. A study of domestic experiences would need to have extremely specific parameters for inclusion criteria due to wide variability of what is considered a clinical experience. However, in the wake of recent travel restrictions, studying the pros and cons of domestic cross-cultural interactions could still inform the development of future international programs. Additionally, it would be helpful to repeat this study with a tool other than the CCS. As discussed earlier, there are numerous scales and tools related to aspects of cultural competence; thus, further data are needed to confirm whether these findings hold true across other measurement tools.

The finding in this study of a weak correlation between the number of international service trips and the CCS scores would be interesting to explore further. It is unclear from this study whether an international service-learning experience during nursing school increased the likelihood of participating in future trips and whether a cumulative number of trips could strongly correlate to higher CCS scores. It could be helpful to design a study to compare the number of international service trips with the scores on multiple measurements related to cultural competence.

Another missing perspective from these conversations about ISL experiences was hearing from the people being visited. A significant gap in the literature existed about the long-term benefits of these short-term experiences from the perspectives of the population being served. It would be difficult to compare findings from different settings but even a one-site study of comparing the perceived and actual benefits of short-term service trips for the community could be enlightening.

A mixed methods study at the community level could include a survey of a village or region visited by a team and interviews with key stakeholders to ask about changes they had seen in their community over time. It would depend upon the work the visiting team performed but it might be possible to make correlations to their presence and influence there. If there was another similar community nearby where the visiting team did not implement any interventions, comparisons could be made between the two groups.

Conclusion

This study explored the perceived long-term impacts of a past ISL experience in nursing school on current nursing practices of BSN alumni. Nurses who went on an ISL trip in school had higher total CCS scores than those who did not have those experiences. Additionally, these nurses shared multiple examples of how international service trips had benefits both personally and professionally, particularly in the arena of expanding one’s worldview. This increased perspective allowed nurses to provide quality care to patients from any cultural background and to improve these cross-cultural interactions. Nursing organizations such as the AACN (2021) and the American Nurses Association (2009) continue to release position statements about the importance of cultural competence for nurses amidst the increasing ethnic, cultural, and socioeconomic diversity of their patient populations.

Further exploration into the topic of ISL experiences has great potential to improve the cultural competence of the nursing workforce. Trip participants were able to identify specific instances where their international travel assisted them in patient care later in their careers. The benefits from these experiences are long-lasting and memorable even if trips were taken several decades earlier. International service-learning experiences provide enduring benefits to nursing students and the future patients they will serve.

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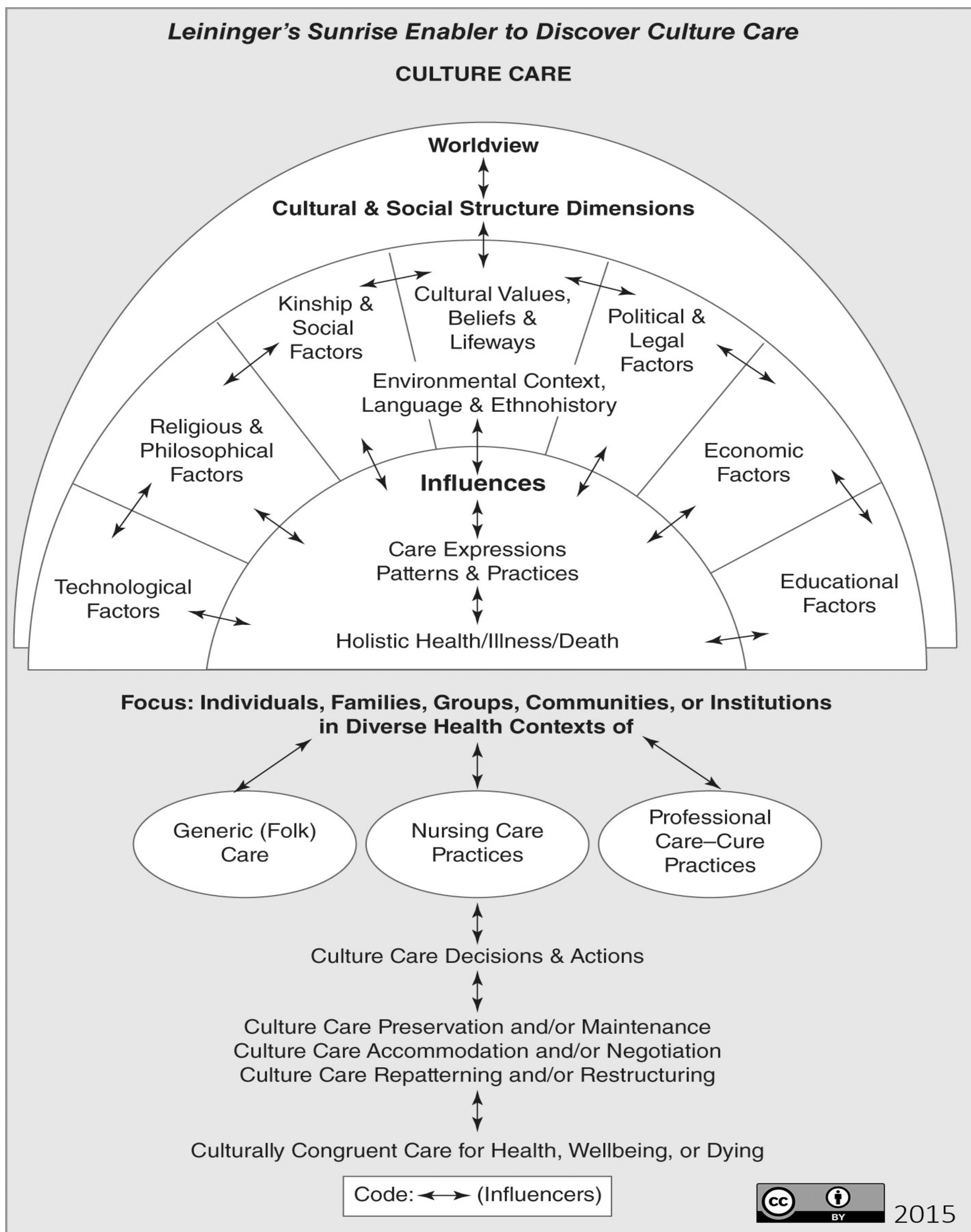
APPENDIX A

LEININGER'S CULTURE CARE THEORY ENABLER



Leininger's Sunrise Enabler to Discover Culture Care Modified by McFarland & Wehbe-Alamah, 2015 Authors: McFarland, M.R. & Wehbe-Alamah, H.B. Retrieved from http://www.madeleine-leininger.com/cc/sunrise2015.pdf

APPENDIX B

ASSUMPTIONS OF CAMPINHA-BACOTE’S MODEL OF CULTURAL COMPETENCE IN HEALTHCARE DELIVERY

1. Cultural competence was a process, not an event.
2. Cultural competence consists of five constructs: cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire.
3. There was more variation within ethnic groups than across ethnic groups (intra-ethnic variation).
4. There was a direct relationship between the level of competence of health care providers and their ability to provide culturally responsive health care services.
5. Cultural competence was an essential component in rendering effective and culturally responsive services to culturally and ethnically diverse clients.

Source: Campinha-Bacote, 2002, pp. 181-3

APPENDIX C

CULTURAL CAPACITY SCALE QUESTIONS AND DOMAINS

Bold items showed a significant difference in the means between respondents who had gone on service learning trips in nursing school compared to those who had not.

Q1. I can teach and guide other nursing colleagues about the differences and similarities of diverse cultures. (Cultural Skills)

Q2. I can teach and guide other nursing colleagues about planning nursing interventions for clients/patients from diverse cultural backgrounds. (Cultural Skills)

Q3. I can use examples to illustrate communication skills with clients/patients of diverse cultural backgrounds. (Cultural Knowledge)

Q4. I can teach and guide other nursing colleagues about the communication skills for clients/patients from diverse cultural backgrounds. (Cultural Skills)

Q5. I can explain the influences of cultural factors on one’s beliefs/behavior towards health/illness to clients and patients from diverse ethnic groups. (Cultural Skills)

Q6. To me, collecting information on each client’s/patient's beliefs and behavior about health and illness is very easy. (Cultural Skills)

Q7. I can teach and guide other nursing colleagues about the cultural knowledge of health and illness. (Cultural Skills)

Q8. I can teach and guide other nursing colleagues to display appropriate behavior when they implement nursing care for clients from diverse cultural groups. (Cultural Skills)

Q9. I am familiar with health- or illness-related cultural knowledge or theory. (Cultural Knowledge)

Q10. I can explain the influence of culture on a client’s beliefs/behavior about health/illness. (Cultural Skills)

Q11. I can list the methods or ways of collecting health-, illness-, and cultural-related information. (Cultural Knowledge)

Q12. I can compare the health or illness beliefs among clients/patients with diverse cultural backgrounds. (Cultural Knowledge)

Q13. I can easily identify the care needs of clients/patients with diverse cultural backgrounds. (Cultural Knowledge)

Q14. When implementing nursing activities, I can fulfill the needs of clients/patients from diverse cultural backgrounds. (Cultural Skills)

Q15. I can explain the possible relationships between the health/illness beliefs and the culture of the clients/patients. (Cultural Knowledge)

Q16. I can establish nursing goals according each client's/patient's cultural background. (Cultural Skills)

Q17. I usually actively strive to understand the beliefs of different cultural groups. (Cultural Sensitivity)

Q18. When caring for clients from different cultural backgrounds, my behavioral response usually will not differ much from the client's/patient's cultural norms. (Cultural Skills)

Q19. I can use effective communication skills with clients/patients of different cultural backgrounds. (Cultural Skills)

Q20. I usually discuss differences between the client's/patient's health beliefs, behavior, and nursing knowledge with each client/patient. (Cultural Sensitivity)

APPENDIX D

AUTHOR PERMISSION TO USE THE CULTURAL CAPACITY SCALE

Re: Seeking permission to use CCS for my dissertation

Roger Watson <R.Watson@hull.ac.uk>
Fri 8/16/2019 11:43 PM
To: Matthew, Stephanie <fish8736@bears.unco.edu>

Dear Stephanie

There is no copyright on the questionnaire so please feel free to use it.

Roger
Sent from my iPhone
Twitter: @rwatson1955
Skype: roger.watson3
Mobile: +447808480547

On 17 Aug 2019, at 00:43, Matthew, Stephanie <fish8736@bears.unco.edu> wrote:

> Dear Dr. Watson,
>
> I am a current PhD student in nursing education at the University of Northern Colorado in the U.S., and I've been an Assistant Professor of Nursing for 7 years. I am currently designing my proposed dissertation study for assessing the long-term impacts of international service-learning experiences with nursing students, and how these experiences may affect their future practice as nurses. I have reviewed many measurement tools for cultural competence and the various constructs, and I am seeking your permission to use the Cultural Capacity Scale (Perng & Watson, 2012) for the quantitative portion of my study. I am very impressed with your tool and the psychometric rigor of the various language versions. I have attempted to contact Dr. Perng to seek this permission, but the e-mail address for correspondence from the article bounces back to me and the website for the Tzu-Chi College of Technology in Taiwan does not appear to have current contact information for Dr. Perng (most of the website links there do not appear to work, at least not from U.S.-based servers).
>
> My request is this: May I use your 20-item Cultural Capacity Scale as part of a quantitative survey to be sent to nursing (BSN) alumni in the Pacific Northwest United States?
>
> I am happy to send you further information about my dissertation plans if that would be helpful. Thank you for your time and consideration of this request.
>
> Sincerely,
>
> Stephanie J. Matthew, MSN, FNP-C, RN, PhD student in nursing education
>
> Assistant Professor of Nursing at George Fox University

APPENDIX E

ONLINE QUESTIONNAIRE FOR NURSING ALUMNI

This survey was kept confidential and e-mailed to nursing departments requesting distribution to their nursing alumni. An incentive for an Amazon gift card raffle was offered to anyone submitting an e-mail address at the end in a second, unrelated survey.

The Qualtrics Survey Text:

Thank you for taking the time to complete this survey about service-learning experiences. This is part of my PhD dissertation project and the consent form is below. Please feel free to contact me if you have questions.

Sincerely,
Stephanie Matthew, MSN, FNP-C, RN
PhD candidate with the University of Northern Colorado
Assistant Professor of Nursing, George Fox University

CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH UNIVERSITY OF NORTHERN COLORADO
Project Title: The Impact of Service-Learning Experiences on Baccalaureate Nursing Alumni
Researcher: Stephanie Matthew, MSN, FNP-C, RN, George Fox University Department of Nursing
E-mail: fish8736@bears.unco.edu or smatthew@georgefox.edu
Research Advisor: Katherine Sullivan, PhD, University of Northern Colorado Department of
Phone Number: 970-351-1703 E-mail: 144atherine.sullivan@unco.edu

You are being asked to participate in a voluntary survey questionnaire about service learning experiences. The purpose of this study was to examine potential connections between service-learning trips taken as undergraduate students and the long-term impacts of these experiences.

The one-time survey includes questions for background demographic information and will ask about service-learning experiences. For the purposes of this survey, a "service-learning experience" was defined as visiting a country different than your own for at least one week and doing some sort of community service there which relates to health or nursing. This may include (but was not limited to): assisting with a medical clinic, providing health assessments, interviewing patients, performing community assessments, giving health education, etc. Note: This trip did not need to be sponsored or associated with an academic institution, however, for the purposes of this study, the experience (the preparations and/or the trip itself) should have occurred during your BSN program.

Any Registered Nurse from a BSN program was welcome to take the survey, whether or not they have ever participated in a service-learning trip. The survey includes questions from the Cultural Capacity Scale by Perng and Watson (2012) which were used for comparisons between those who have been on a service-learning experience and those who have not. The survey should take approximately 10 minutes to complete. Participants will have the option to be entered into a drawing for a $25 Amazon gift card. Participants who did travel on a service learning trip in

nursing school were asked if they would be willing to have a follow-up interview, however, this was completely optional.

The researcher will protect the confidentiality of the data shared. Your personal information for the gift card drawing will not be tied to your survey answers. The risks to you are minimal and include taking time to complete the survey. The benefits include helping to improve future service-learning experiences for nursing students and advancing the field of nursing research.

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please complete the questionnaire if you would like to participate in this research. By completing the questionnaire, you give your permission to be included in this study as a participant. You may keep this form for future reference. If you have any concerns about your selection or treatment as a research participant, please contact Nicole Morse, Research Compliance Manager, Office of Research, Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1910.

End of Block: Block 1

Start of Block: Default Question Block

Q1 Are you currently an alum(na) who graduated from a Bachelor of Science in Nursing (BSN) program?

- ◯ Yes (1)
- ◯ No (2)

Q2 What year did you graduate from you BSN program?

____

Q2b What was the name of the school where you completed your BSN program?

____

Q3 How many years have you worked as a nurse? (type in numeric answer)

____

Q4 In what type of setting are you currently employed? You may select more than one option.

- ▢ Acute Care (1)
- ▢ Community Health (2)
- ▢ Home Health (3)
- ▢ Advanced Practice (4)
- ▢ School Nursing (5)
- ▢ Nursing Education (6)
- ▢ Not currently working as a nurse (7)
- ▢ Other (please write in any other areas you work in as an RN currently) (8) ____

Q5 For the purposes of this survey, a "service-learning experience" is defined as visiting a country different than your own for at least one week and doing some sort of community service there which relates to health or nursing. This may include (but is not limited to): assisting with a medical clinic, providing health assessments, interviewing patients, performing community assessments, giving health education, etc. Note: This trip did not need to be sponsored or associated with your academic institution, however, for the purposes of this study, the experience (the preparations and/or the trip itself) should have occurred during your BSN program.

Did you participate in an international service-learning experience (as described above) as a BSN nursing student?

- ○ Yes (1)
- ○ No (2)
- ○ Unsure (3)

Display This Question:
If For the purposes of this survey, a "service-learning experience" was defined as visiting a country... = No

Q6 If not, why did you not participate in service-learning during nursing school (select all that apply)?

- ▢ The option was not available (1)
- ▢ Could not afford the cost (2)
- ▢ A trip would have taken too much time (3)
- ▢ No desire to serve in another country (4)
- ▢ Worry about comfort or safety in another country (5)
- ▢ Personal health issues prevented it (6)
- ▢ Other (please write other reasons): (7) ____

Display This Question (Q7-10):
If For the purposes of this survey, a "service-learning experience" was defined as visiting a country... = Yes
Or For the purposes of this survey, a "service-learning experience" was defined as visiting a country... = Unsure

Q7 If you participated in a service-learning experience as a nursing student or are unsure if your experience qualifies, where did you go on your service trip and how long were you there?

____

Q8 At what level in your nursing education were you at the time of the trip (for example: "In year 1 of 2" or "at the end of year 2 of 3")?

____

Q9 What type of service-learning were you doing? Select all that apply:

- ▢ Health education group sessions (1)
- ▢ Health fairs (2)
- ▢ Assisting a local clinic or hospital (3)
- ▢ Setting up a temporary clinic (4)
- ▢ Working alongside national health workers (5)
- ▢ Wound Care (6)
- ▢ Other (please describe😊 (7) ____

Q10 How long ago was this experience for you?

- ○ Less than a year ago (4)
- ○ 1-2 years ago (5)
- ○ 3-5 years ago (6)
- ○ 6-10 years ago (7)
- ○ More than 10 years ago (8)

Q11 Since working as a nurse, have you participated in any international service-learning trips as defined above?

- ○ Yes. Please write the number of trips since becoming an RN: (1) ____
- ○ No (2)

Q12 Have you attended any culture-related or cultural competence education in the past 12 months? Select all that apply.

- ▢ Online modules (1)
- ▢ Employer-required trainings (2)
- ▢ Conference sessions (3)
- ▢ Graduate classes (4)
- ▢ Other (please describe): (5) ____
- ▢ I have not had official cultural education within the past 12 months (6)

Q13 What other intercultural experience have you had besides traveling on international service-learning trips? Select all that apply.

- ▢ Personal tourism travel (1)
- ▢ Other international service (2)
- ▢ Military service (3)
- ▢ Other (please elaborate): (4) ____

Q14 Have you taken care of patients of culturally diverse backgrounds different than your own in the last 6 months?

- ▢ Yes (1)
- ▢ No (2)
- ▢ Optional comments: (3) ____

Q15 Which category describes your racial identity? You may select more than one.

- ☐ Hispanic or Latinx (1)
- ☐ Black or African American (2)
- ☐ Asian (3)
- ☐ American Indian or Alaskan Native (4)
- ☐ Native Hawaiian or other Pacific Islander (5)
- ☐ White (6)
- ☐ Other (7) ____
- ☐ Prefer not to answer (8)

Q16 Have you grown up in a culturally diverse community with ethnicities, races, and cultural backgrounds different than your own?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Optional comments: (3)

____

Q17 Do you currently live in a culturally diverse community?

- ○ Yes (1)
- ○ No (2)

Q18 How old are you?

____

Q19 What gender do you identify with?

- ○ Female (1)
- ○ Male (2)
- ○ Non-binary (3)
- ○ Prefer not to answer (4)

Thank you for completing the demographic questions. Next you will see 20 items from the Cultural Capacity Scale where you were asked to select your level of agreement with each statement. Please select the answer which best describes your current situation.

Q20 Please fill out the Cultural Capacity Scale below (by Perng and Watson, 2012) by selecting the answer which best describes how you feel right now about each statement.

	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)
1. I can teach and guide other nursing colleagues about the differences and similarities of diverse cultures. (1)	○	○	○	○	○
2. I can teach and guide other nursing colleagues about planning nursing interventions for clients/patients from diverse cultural backgrounds. (2)	○	○	○	○	○
3. I can use examples to illustrate communication skills with clients/patients of diverse cultural backgrounds. (3)	○	○	○	○	○
4. I can teach and guide other nursing colleagues about the communication skills for clients/patients from diverse cultural backgrounds. (4)	○	○	○	○	○
5. I can explain the influences of cultural factors on one's beliefs/behavior towards health/illness to clients and patients from diverse ethnic groups. (5)	○	○	○	○	○
6. To me, collecting information on each client's/patient's beliefs and behavior about health and illness was very easy. (6)	○	○	○	○	○
7. I can teach and guide other nursing colleagues about the cultural knowledge of health and illness. (7)	○	○	○	○	○
8. I can teach and guide other nursing colleagues to display appropriate behavior when they implement nursing care for clients from diverse cultural groups. (8)	○	○	○	○	○
9. I am familiar in health- or illness-related cultural knowledge or theory. (9)	○	○	○	○	○
10. I can explain the influence of culture on a client's beliefs/behavior about health/illness. (10)	○	○	○	○	○
11. I can list the methods or ways of collecting health-, illness-, and cultural-related information. (11)	○	○	○	○	○

12. I can compare the health or illness beliefs among clients/patients with diverse cultural backgrounds. (12)	○	○	○	○	○
13. I can easily identify the care needs of clients/patients with diverse cultural backgrounds. (13)	○	○	○	○	○
14. When implementing nursing activities, I can fulfill the needs of clients/patients from diverse cultural backgrounds. (14)	○	○	○	○	○
15. I can explain the possible relationships between the health/illness beliefs and the culture of the clients/patients. (15)	○	○	○	○	○
16. I can establish nursing goals according each client's/patient's cultural background. (16)	○	○	○	○	○
17. I usually actively strive to understand the beliefs of different cultural groups. (17)	○	○	○	○	○
18. When caring for clients from different cultural backgrounds, my behavioral response usually will not differ much from the client's/patient's cultural norms. (18)	○	○	○	○	○
19. I can use effective communication skills with clients/patients of different cultural backgrounds. (19)	○	○	○	○	○
20. I usually discuss differences between the client's/patient's health beliefs, behavior, and nursing knowledge with each client/patient. (20)	○	○	○	○	○

Display This Question:

If For the purposes of this survey, a "service-learning experience" was defined as visiting a country... = Yes

Or For the purposes of this survey, a "service-learning experience" was defined as visiting a country... = Unsure

Q21 Thank you for your time and effort in supporting nursing research! If you participated in an international service-learning experience as a nursing student, would you be willing to have a short conversation (30 minutes or less) about this topic? If so, please click yes below. You will be taken to an unconnected survey to enter your e-mail address or phone number there. You will

be contacted for an interview to be arranged at your convenience either in person, by phone, on video chat, or through e-mail.

- Yes I am willing to be contacted for an interview. (1)
- No I do not want to be contacted for an interview. (2)

Q22 Thank you for participating in this survey! If you would like to be included in the drawing for an Amazon gift card, please click the Yes response below, and it will link to a second, unconnected survey to enter your e-mail address or phone number.

- Yes I would like to be entered into the drawing for an Amazon gift card (1)
- No I do not want to be entered into the drawing (2)

APPENDIX F

INSTITUTIONAL REVIEW BOARD APPROVAL

DATE:	October 4, 2019
TO:	Stephanie Matthew, MSN
FROM:	University of Northern Colorado (UNCO) IRB
PROJECT TITLE:	[1496344-1] The Impact of Service-Learning Experiences on Baccalaureate Nursing Alumni
SUBMISSION TYPE:	New Project
ACTION:	APPROVAL/VERIFICATION OF EXEMPT STATUS
DECISION DATE:	October 4, 2019
EXPIRATION DATE:	October 4, 2023

Thank you for your submission of New Project materials for this project. The University of Northern Colorado (UNCO) IRB approves this project and verifies its status as EXEMPT according to federal IRB regulations.

We will retain a copy of this correspondence within our records for a duration of 4 years.

If you have any questions, please contact Nicole Morse at 970-351-1910 or nicole.morse@unco.edu. Please include your project title and reference number in all correspondence with this committee.

Stephanie - Thank you for such a well written and thorough application! Best of luck with your research!

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Northern Colorado (UNCO) IRB's records.

DATE:	April 14, 2020
TO:	Stephanie Matthew, MSN
FROM:	University of Northern Colorado (UNCO) IRB
PROJECT TITLE:	[1496344-2] The Impact of Service-Learning Experiences on Baccalaureate Nursing Alumni
SUBMISSION TYPE:	Amendment/Modification
ACTION:	MODIFICATION APPROVED/VERIFICATION OF EXEMPT STATUS
DECISION DATE:	April 14, 2020
EXPIRATION DATE:	October 4, 2023

Thank you for your submission of Amendment/Modification materials for this project. The University of Northern Colorado (UNCO) IRB approves this project modification and verifies its continued status as EXEMPT according to federal IRB regulations.

Your modification to recruit participants country wide, recruit via social media, and add an incentive for interview participants has been approved. Prior to recruiting interview participants, please add a sentence about the incentive to the interview informed consent. There is no need to resubmit the revised consent.

Thank you and best of luck with your research!

We will retain a copy of this correspondence within our records for a duration of 4 years.

If you have any questions, please contact Nicole Morse at 970-351-1910 or nicole.morse@unco.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Northern Colorado (UNCO) IRB's records.

APPENDIX G

SEMI-STRUCTURED INTERVIEW QUESTIONS

If a student agreed to answer further questions, a follow-up interview were arranged either in person, on the phone, through e-mail or over video chat. These were the initial questions:

1. Please tell me about why you signed up for your service-learning experience as a student.
2. What main memory or highlight do you remember the most from your trip? What makes this event/memory/story stand out to you?
3. When you initially returned, what were your thoughts and feelings about the experience?
4. How much time has passed since your trip? Now that you have had time to reflect upon your service-learning experience, have any of your thoughts changed?
5. How has your experience affected your work or identity as a nurse?
6. Did this experience influence your personal identity and/or motivations in any other ways? If so, how?

After preliminary analyses of the QUAN survey data, these initial interview questions were expanded to this list, but were also individualized for each participant.
Introductory verbal consent for the interview:
"You are being asked to participate in a voluntary interview about your service-learning experiences. Did you read the consent form sent to you for this interview? Do you have any questions? By proceeding with this interview you are giving your consent. You may still decide to stop and withdraw at any time."

1. For some background, please tell me about the trip(s) you took as a nursing student. What types of things did you do on the trip and why did you sign up for this service-learning experience as a student?

2. What main memory do you remember the most from your trip when you think about it now, and what makes this event/highlight/story stand out to you?

3. When you initially returned, what were your thoughts and feelings about the experience?

4. How much time has passed since your trip? Now that you have had time to reflect upon your service-learning experience, have any of your initial thoughts changed?

5. How has your experience affected your work or identity as a nurse?

6. Now that you have worked as a nurse, has anything from your trip ever come to your mind as you are now working? What types of things about the trip do you often remember or reflect upon? Did anything specific come to your mind while completing the survey?

7. Did this experience influence your personal identity and/or motivations in any other ways besides nursing? If so, how?

8. Would you go on an international nursing service-learning trip again if the opportunity arose (or have you)? Why or why not?

9. Would you recommend nursing students to go on a trip like yours during school? Why or why not?

10. Is there anything else you would like me to know about the long-term impacts of your service-learning experience as a nursing student?

APPENDIX H

SUMMARIES OF INTERVIEW QUESTION RESPONSES

1. Why they signed up for their trip in nursing school.

The majority of responses revolved around wanting to see a new culture or experience an international service trip. Three participants mentioned growing up hearing about missionaries and wanting to go on a mission trip. P6, P8, and P11 specifically wanted to improve their Spanish skills on their respective trips to Mexico, Nicaragua, and Guatemala. P8 further elaborated that nurses are still required to use medical interpreters for conversations with patients, but she has experienced great benefits from understanding medical Spanish vocabulary when she can assess the accuracy of her patient education being translated by the official interpreter.

2. Describe their main memory from their international service-learning experience in nursing school (which had occurred between 2-25 years prior to this interview).

Multiple individuals shared descriptions of the location appearance, especially focusing upon their thoughts and observations when they first arrived (P4, P5, P7, P9, and P10). P5 commented that landing in Port au Prince Haiti left a detailed impression in her mind of seeing houses stacked on top of one another. Several mentioned remembering the people, particularly kids and families (P2, P3, P7, P8, and P10) and some comments included the general contentedness of the local people despite having overwhelming needs (P1, P3). Other participants focused this response on their specific activities of the trip such as clinic work, working with local physicians, visiting hospitals, or assisting public health staff with immunizations (P4, P6, P12).

3. Initial thoughts when returning from the trips.

These responses were a mixture of feeling tremendous gratitude for having the experience and also a recognition of gratefulness for the blessings experienced at home which had been missing on the trip (P4, P5, P6, P7, P8, P9, P10, P11, and P12). Other individuals remember feeling an almost overwhelming sense of helplessness and burden in wanting to fix the problems seen on the trip but not knowing how to make lasting changes (P1, P2, P3, and P5). Several participants mentioned having difficulties navigating this time of re-entry and feeling a sense of frustration, as if life in the U.S. was unnecessarily excessive. This was epitomized by P2 sharing her experience of attending a wedding at home almost immediately after returning from her trip to Kenya. Seeing the extravagance of the ceremony was an extreme contrast to the living conditions she had observed and experience for the prior two weeks, and she stated that she probably should not have attended the wedding that soon after returning. P11 shared how awkward it felt to return home after three months in Guatemala. At the airport and on public transportation, she remembers specifically noticing that people in the U.S. seemed to be sitting very far apart and wanted their own space which was not the cultural norm in her recent experience.

4. How initial thoughts changed over time.

Many participants shared how their initial thoughts and reflections about the trip did change over time. Initially, P6 and P9 mentioned feeling grateful for simply being home, but then with time, that gratitude shifted to being grateful for the trip and opportunity itself. P2 seemed to focus on the difficulties of the trip at first, but later reported having more fond memories and recognizing how much she learned about herself through the experience. P7

mentioned feeling exhausted after her China trip, but she was able to return there for another extended experience later which helped to replace those initial memories. However, not all participants mentioned that their thoughts had changed with time. P3 specifically stated that his thoughts about the trip have not changed while P1 and P5 both shared that their initial feelings of helplessness towards the overwhelming need in Haiti, have actually intensified over time.

5. How the trip has affected them as nurses.

These responses varied, however themes here included gaining specific cultural skills for understanding patients from that particular country or region (P6, P7, P11) and increasing empathy and respect for cultural differences in general (P3, P5, P8, P9, P12). Multiple nurses shared stories of working with patients from cultural backgrounds different than their own and feeling as though their international service experience provided context for why a particular patient might be behaving in a particular way. P7 shared how a patient was trying to stand on the toilet to urinate as if it was a pit latrine and her colleagues seemed shocked and surprised by this behavior. Because she had experienced this in Kenya and recognized that this individual probably grew up in a location with similar types of toilets, she diffused the tense situation and helped educate her co-workers. P11 shared similar examples of helping her co-workers understand culture-specific behaviors of patients, particularly in the hierarchy of Latinx families and decision-making which she observed when living and working with families in Guatemala. P5 said she understands and respects patient beliefs and ideas more easily now, particularly the “old wives’ tales” regarding healthcare traditions that may seem unusual to healthcare providers of Western medicine.

These nurses frequently mentioned having a deeper understanding for the need to assess for understanding and medical literacy of patients. P8 said that her time in Nicaragua reminded her of the importance to double-check patient understanding of discharge teaching. P9 remembers her time in Samoa whenever working with any patient speaking a language other than English, and P10 stated that she feels more culturally competent to treat patients from any culture now. P3 stated that their trip created more empathy for any patient, and P12 added that, "we need to approach patients in a way of understanding them and why they do what they do in order to help them make healthy choices in their lives."

A few of these nurses mentioned that their service-learning trips comes to their mind when working with medical supplies here. P4 shared that seeing medical waste here can trigger trip memories and that opening an alcohol swab here reminds her of the smell of the giant bottles of alcohol used for cleaning in the Nicaragua clinic. Also when she works with children, she thinks of the creative ways they distracted children there during medical procedures because they had such limited resources and "it wasn't part of the culture to think about the potential trauma of a child going through this." P2 stated that anytime she has to "MacGuyver" a creative solution for something at work, it reminds her of creative supply usage during her time in Kenya. P12 also remembers the lack of supplies in Kenya when she is working in a hospital here in the U.S. now.

Additionally, multiple participants mentioned how their international trip influenced their future career decisions. P5 stated that her trip to Haiti during nursing school directly motivated her to move to another Caribbean nation and work as a school nurse there now. P1 wants to become a nurse practitioner to return to Haiti and provide rural health services there. P7 reported that her time in China led to returning there for a year of teaching English, and she enjoyed

teaching so much that she is now completing her PhD in nursing education. P6 enjoyed the public health aspects of her time serving in Mexico and worked in Home Health later, in addition to continuing her international travel with several other trips. She took her son on a medical service trip to Rwanda recently.

6. Other personal benefits of service-learning experiences.

P2 shared how her time in Kenya brought significant self-reflection of how she works in a team, handles perfectionistic tendencies, and adapts to scarce resources. P2 also mentioned that her trip is sometimes a conversation starter with her patients. Similarly, P10 shared that her time in Samoa adds to her credibility as a nurse, and she feels that people take her more seriously now because of her experience. P4 (who had done extensive international work in a previous career before nursing school) stated that her personal learning from the trip, particularly from the creative and hard-working nurses, was exceptional. P11 also appreciated the benefit of learning how other people see the world and felt that this increased her own grace and compassion for people. P7 and P12 shared similar thoughts of how these types of trips can expand our worldview and help us see how life can be lived differently than our own routines.

7. Would they go again or recommend ISL to others?

All participants agreed that they would go on a trip again. One (P9) said “No” at first, based on difficult interpersonal experience with her teammates. However, she changed her mind after verbally processing it a bit in the interview. P2 commented that she would not have wanted to return to Kenya at first, but when several months had passed after the trip, she realized she would like to go again. She expressed this as a desire to return to the same location for the

familiarity. Similarly, all participants agreed that international experiences should be an option in nursing education. One (P2) added the caveat that a trip should perhaps be limited to only senior nursing students or students about to complete their programs so that they have had more training to presumably provide more assistance.

APPENDIX I

NVIVO CODE BOOK FOR QUAL ANALYSIS

Name	Description	Files (out of 12)	References
Campinha-Bacote (Node Category Heading)	This model is based on Leininger and is what the CCS is partially based on. It includes five constructs for measuring this concept: cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire (Campinha-Bacote, 1999).	0	0
Campinha-Bacote\Cultural Awareness	The deliberate, cognitive process in which healthcare providers become appreciative and sensitive to the values, beliefs, lifeways, practices, and problem-solving strategies of clients' cultures. Cultural awareness relates to the traditional "know thyself" element of Greek philosophy. This awareness process must involve examination of one's own prejudices and biases toward other cultures and in-depth exploration of one's own cultural background (C-B, 1999 p. 204).	5	7
Campinha-Bacote\Cultural Desire	The motivation of healthcare providers to "want to" engage in the process of cultural competence. (C-B, 1999, p. 205).	9	12
Campinha-Bacote\Cultural Encounters	The process which encourages healthcare providers to engage directly in cross-cultural interactions with clients from culturally diverse backgrounds (C-B, 1999, p. 205). It is extremely important to interact directly with clients from diverse cultural groups to refine or modify one's existing beliefs regarding a cultural group. Face-to-face experiential encounters will prevent possible stereotyping that may have developed when academic knowledge was obtained.	10	14
Campinha-Bacote\Cultural Knowledge	The CCS Domain of Cultural Knowledge was used instead of this one. The process of seeking and obtaining a sound educational foundation concerning the various world views of different cultures. One's world view can be considered a paradigm or way of viewing the world and phenomena in it (C-B, 1999, p. 204).	0	0
Campinha-Bacote\Cultural Skill	The CCS Domain of Cultural Skill was used instead of this one. The ability to collect relevant cultural data regarding the clients' health histories and presenting problems as well as accurately performing a culturally specific physical assessment (C-B, 1999, p. 204).	0	0
CCS Domains (Node Category Heading)	These are the domains used in the quantitative tool (the Cultural Capacity Scale) included in the survey everyone took.	0	0
CCS Domains\Cultural Knowledge	“The nurses’ knowledge of obtaining information about diverse groups and their culture, such as health beliefs, cultural values” (Perng & Watson, 2012, p. 1680)	7	9
CCS Domains\Cultural Sensitivity	The appreciation of the client’s beliefs, valuing their culture and respecting its influence on client’s behaviours (Perng & Watson p. 1680).	8	14

CCS Domains\ Cultural Skills	The ability to carry out the cultural assessment for a client (patient), communicate effectively with clients by using helpful resources, and providing appropriate care without individual prejudice (Perng & Watson p. 1680).	7	9
Emerging Themes (Node Category Heading)	These were themes I coded as I read through the transcripts	0	0
Emerging Themes\Awareness of Blessings in the U.S.	Participant mentions comparing resources or blessings at home with items lacking in the other country, either during or after the trip.	10	16
Emerging Themes\Benefits to participant	Any discussion of a benefit to themselves personally from the experience.	10	21
Emerging Themes\Benefits to participant\ Personal Growth	Describing a benefit to themselves as an individual or learning more about themselves through this process	4	8
Emerging Themes\Benefits to participant\ Reciprocal Benefits	Benefits to both the visiting nursing students and to the people being visited.	3	3
Emerging Themes\Bonding with Teammates	Reflections mentioning the people that the participant traveled with	3	6
Emerging Themes\Broadening Own Worldview	Expanding our personal perspectives or paradigm and recognizing that other people see the world differently than I do myself.	8	15
Emerging Themes\Broadening Own Worldview\Empathy	If the participant mentions feeling like they understand their own patients better now that they've been a minority within another culture or situation.	4	9
Emerging Themes\Broadening Own Worldview\What they learned	Sharing specific lessons learned from the experience	3	3
Emerging Themes\Communication	Navigating language barriers, learning a new language	5	8
Emerging Themes\Covid and domestic trips instead	Some participants were asked how they think Covid might influence future trips like this.	7	7
Emerging Themes\Feeling overwhelmed	Descriptions of seeing needs they were unable to meet or being limited by a lack of resources/time/skill to provide meaningful aid.	5	7
Emerging Themes\Feeling overwhelmed\Feeling helpless	Similar to feeling overwhelmed, this was describing specific situations where participants wanted to help but could not.	3	6
Emerging Themes\Preparation	Descriptions about trip preparations	3	7
Emerging Themes\Preparation\ Expectations	Discussing expectations going into the trip or navigating mismatched expectations during/after the experience.	6	8

Emerging Themes\Quotes to Remember	These were selected as possible quotes for the manuscript	11	34
Emerging Themes\Struggles on the trip	Sharing about difficulties on the trip itself	2	4
Emerging Themes\Struggles on the trip\Negative Aspects of ISL	Any mention of a negative aspect of international service learning in general or specifically on their trip.	5	8
Emerging Themes\Struggles on the trip\Struggling with Re-entry	Adjusting to returning home after the trip	3	4
Leininger (Node Category Heading)	Themes from Leininger's Culture Care Model. She is foundational for almost every nursing theory related to cross-cultural work. These themes were not strongly present in the transcripts but were called out if relevant.	0	0
Leininger\Care Expressions, Patterns, Practices	Care meanings, expressions, beliefs, practices, symbols, metaphors, and daily night-and-day factors influencing health, well-being, disability, illness, and death as depicted in the Sunrise Enabler (Wehbe & McFarland, 2020, p. 338)	4	4
Leininger\Culture Care Accommodation and or Negotiation	Assistive, accommodating, facilitative, or enabling creative provider care decisions or actions that help cultures adapt [accommodate] to or negotiate with others for culturally congruent, safe, and effective care for their health, well-being, or to deal with illness, injury, disability, or dying (McFarland, 2018, p. 49)	3	3
Leininger\Culture Care Preservation and or Maintenance	"Those assistive, supportive, facilitative, or enabling professional decisions or actions that help cultures to retain, preserve, or maintain beneficial care beliefs and values or to face illness, disability, dying, and or death" (McFarland, 2018, p. 49)	3	3
Leininger\Culture Care Repatterning and or Restructuring	"Those assistive, supportive, facilitative, or enabling professional actions and mutual decisions that would help people to reorder, change, modify, or restructure their lifeways and institutions for better (or beneficial) healthcare patterns, practices, or outcomes" (McFarland, 2018, p. 49).	1	1
Main Question Responses (Node Category Heading)	These were coded initially so each answer could be compared with all of the responses together	0	0
Main Question Responses\1. What they did on the trip		8	20
Main Question Responses\1. Why Signed Up		11	13
Main Question Responses\2. Main Memory		12	15

Main Question Responses\3. Initial Thoughts and Feelings	When first returning from their trip, what did they think about the experience?	12	14
Main Question Responses\4. Later Reflections	After time passed, did their thoughts about the trip change?	11	12
Main Question Responses\5. Affected Work or Nurse ID		8	13
Main Question Responses\6. Remembering the trip as a nurse coming to mind	Has the trip come to your mind while working as a nurse?	9	12
Main Question Responses\7. Influence personal ID or motivations	Did this experience influence your personal identity and/or motivations in any other ways besides nursing? If so, how?	8	10
Main Question Responses\8. Would go again		10	16
Main Question Responses\9. Recommending or not	This was a question added later. Would you recommend nursing students to go on a trip like yours during school? Why or why not?	10	17

APPENDIX J

SURVEY STATISTICS

CCS Question	Mean Score ±SD Overall (n = 93)	Mean Score ±SD for ISL participant during nursing school (n = 28)	Mean Score ±SD for alumni without ISL in nursing school (n = 65)	t statistic (df 91 unless otherwise noted)	p value for significance	Cohen's d (Effect Size)
Q01	3.74 ±0.779	3.86 ±0.803	3.69 ±0.769	0.936	.352	.211
Q02	3.69 ±0.780	3.71 ±0.854	3.68 ±0.752	0.211	.833	.048
Q03	3.74 ±0.765	**4.00 ±0.609**	**3.63 ±0.802**	**2.428 (df 67)**	**.018**	**.493**
Q04	3.63 ±0.831	3.75 ±0.799	3.58 ±0.846	0.879	.382	.199
Q05	3.78 ±0.806	3.93 ±0.813	3.72 ±0.801	1.130	.261	.255
Q06	3.37 ±0.942	**3.71 ±0.937**	**3.22 ±0.910**	**2.404**	**.018**	**.543**
Q07	3.45 ±0.927	**3.79 ±0.787**	**3.31 ±0.951**	**2.519 (df 61)**	**.014**	**.528**
Q08	3.85 ±0.765	4.00 ±0.720	3.78 ±0.780	1.249	.215	.282
Q09	3.57 ±0.852	3.75 ±0.701	3.49 ±0.904	1.486 (df 65)	.142	.304
Q10	3.78 ±0.764	3.89 ±0.832	3.74 ±0.735	0.893	.374	.202
Q11	3.41 ±0.912	3.68 ±0.819	3.29 ±0.931	1.901	.061	.430
Q12	3.52 ±0.904	3.75 ±0.928	3.42 ±0.882	1.652	.102	.374
Q13	3.29 ±0.892	**3.68 ±0.905**	**3.12 ±0.839**	**2.861**	**.005**	**.647**
Q14	3.81 ±0.696	3.96 ±0.793	3.74 ±0.644	1.445	.152	.327
Q15	3.78 ±0.819	**4.07 ±0.813**	**3.66 ±0.796**	**2.263**	**.026**	**.512**
Q16	3.76 ±0.743	3.79 ±0.787	3.75 ±0.730	0.189	.851	.043
Q17	4.31 ±0.766	4.46 ±0637	4.25 ±0.811	1.264	.209	.286
Q18	3.31 ±0.859	**3.68 ±1.056**	**3.15 ±0712**	**2.404 (df 38)**	**.021**	**.633**
Q19	4.01 ±0.634	4.11 ±0.629	3.97 ±0.637	0.962	.339	.217
Q20	3.33 ±1.014	3.61 ±0.916	3.22 ±1.038	1.727	.088	.390
Total CCS Score	73.15 ±10.512	**77.179 ±10.583**	**71.415 ±10.071**	**2.493**	**.014**	**.564**

Note. Bold signifies statistical significance at $p < .05$
When the degrees of freedom (df) were other than 91, Levene's test indicated that equal variance could not be assumed, and the designated p value for this was then utilized.