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Effects of International Service Learning on Development of Intercultural Competence

Sharon M. McCloskey
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Effects of International Service Learning on Development of Intercultural Competence

Submitted by:
Sharon M. McCloskey

Dissertation Advisor:
Karla I. Loya, Ph.D.

Dissertation submitted to the Doctoral Examining Committee Doctoral Program in Educational Leadership College of Education, Nursing, and Health Professions, University of Hartford, in partial fulfillment of the requirements for the degree of Doctor of Education 2019
Abstract

Title of Dissertation: Effects of International Service Learning on Development of Intercultural Competence

Name of Candidate: Sharon M. McCloskey
Doctor of Education

Dissertation Directed By: Karla I. Loya, PhD, Assistant Professor, Department of Educational Leadership College of Education, Nursing, and Health Professions, University of Hartford

As the United States becomes an increasingly multicultural society (Colby & Ortman, 2014; Perez & Hirschman, 2009), there are greater opportunities for cross-culture interactions, especially in settings for healthcare practitioners. The profession of occupational therapy demands future practitioners understand culture and become skilled in the delivery of culturally competent care (AOTA, 2014). The purpose of this study was to examine the effects of international service learning (ISL) on the development of intercultural competence in graduate occupational therapy students. Inquiry for this research followed a mixed-methods explanatory sequential design. Study participants were graduate occupational therapy students who engaged in an international service-learning experience. The quantitative data were collected utilizing a self-report measure, the intercultural developmental inventory (IDI; Hammer, 1999, 2009, 2011). This instrument is aligned with the developmental model of intercultural sensitivity (DMIS; Bennett, 1986, 1993), and identifies specific orientations that range from an ethnocentric mindset to a more ethnorelative, or intercultural mindset. The qualitative data were collected through semi-structured interviews and reflective journals, examining the participants’ perceptions about the ISL experience and the development of intercultural competence. Grounded theory data analysis protocols were utilized to systematically analyze the qualitative data and further explain the quantitative findings.

The findings of this study were mostly derived from the qualitative data. Except for a few changes in specific orientations of intercultural competence, the quantitative findings revealed the group’s developmental level of intercultural competence remained relatively unchanged before and after the ISL. The qualitative phase of the study revealed a number of interesting findings about the effects of an ISL experience and confirmed an ISL’s influence on the development of intercultural competence. From participant perspectives, an ISL experience is considered a valuable and transformative pedagogy in occupational therapy education. The ISL experience did result in perspective-shifting for participants. The grounded theory model that emerged revealed four interdependent components, cultural consciousness, cognitive dissonance, connecting, and confidence, that influence and shape the core theoretical category, intercultural competence development through relatedness. Results of this study have implications for occupational therapy education. Recommendations for future research include further inquiry of ISL as a pedagogy, and the development of intercultural competence, with use of this emerged grounded theory model.
Dedication

To my wonderful, kind, and grown children,
Rachel, St. John, and Alex

“My mission in life is not merely to survive, but to thrive;
and to do so with some passion, some compassion, some humor, and some style.”
Maya Angelou

“… and always with a smile”
From your mum

One time I was asked “How have your parents shaped you?” Straight away I knew what I wanted to say, they created a context of unconditional love and unwavering support for me, even to the point of giving me confidence, and wings to fly away. I left home a very long time ago, but home never left me.

Being an immigrant, my life has always been about story-telling and all the funny cross-cultural interactions I’ve experienced. You, my children, have grown up in a family with two cultures. Your Dad and I have always had one foot in the home country of Ireland, and one foot in the new country, being America. We have raised you to be wonderful in the world, to be understanding, kind, accepting, and compassionate towards everyone, regardless of their circumstances or where they come from. “Home” for me now, is not so much tied to a place, but being and belonging as a family. Just so you know, you are my home.

I wake up every day with gratitude in my heart, because of the love and unwavering support you give to me. Thank you. I wanted to finish my studies to be able to better support you in your lives, and your education, but I could not have done any of it without you. I am so grateful to God for blessing me with the three of you. Each one of you has been a joy in my life, and a tremendous support. Thank you. You go through life wondering ‘what is my purpose?’, ‘what is life all about?’ But at the end of the day, I’d say it's all about family, the love and connection we have between us, even when things get a little crazy! I think life is also about the love, warmth, and caring we have to share with others. May you find your passion, be confident, resilient, intellectually daring, act with integrity, serve others, and find joy in all you do. And may you always have a sense of belonging and ‘home’ in your heart, wherever that might be.

All my love
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CHAPTER 1: INTRODUCTION TO THE STUDY

The purpose of this study was to examine the effects of international service learning (ISL) on the development of intercultural competence in graduate occupational therapy students. The profession of occupational therapy demands practitioners understand culture, be skilled in intercultural competence, and deliver culturally responsive care to persons of diverse and multicultural backgrounds (Flecky & Gitlow, 2011; Kale & Hong, 2007; Mu, Coppard, Bracciano, Doll, & Matthews, 2010; Munoz, 2007; Suarez-Balcazar & Rodakowski, 2007; Talero, Kern, & Tupe, 2015). Research has shown that ignorance of cultural differences contributes to inequalities in the delivery of care, and scholarship of this issue indicates that understanding a patient’s culture leads to better health outcomes (Institute of Medicine [IOM], 2003). There is a growing commitment to the development of intercultural competence among healthcare providers and intercultural competence has become a critical component of education for health professionals and practice (IOM, 2003). ISL is an experiential pedagogy that immerses students in another country, culture, and social context, and integrates community service with structured learning activities and reflection (Bringle & Hatcher, 2011). ISL in education for health professionals is a growing trend across colleges and universities in the United States (Blessinger & Cozza, 2017). However, there is a limited understanding of the outcomes of ISL and its influence on the development of intercultural competence (Loftin, Martin, Branson, & Reyes, 2013; Short & St. Peters, 2017; Suarez-Balcazar et al., 2009). Additionally, after a thorough review of the literature, there are very few studies exploring the intersection of ISL pedagogy in occupational therapy education and its impact on the development of intercultural competence (Mu et al., 2010; Short & St. Peters, 2017), confirming the need for more research on this topic. In response to this gap in the literature, this mixed-
methods study will explore the effect of ISL on occupational therapy students and intercultural competence.

The United States is becoming an increasingly multicultural society. In 2013, the U.S. population was reported at 316,128,839 (U.S. Census Bureau, 2015). Between 2000 and 2013, the population grew by 12.1%, with more than half of this growth being related to an increase in the Hispanic population. In 2013, more than 40 million people in the U.S. were identified as foreign-born and represented 14% of the total population. Projections have indicated that by 2050, non-Hispanic whites, who had made up 67% of the population in 2005, will only represent 47% of the U.S. population (Passel & Cohn, 2008).

According to Wright (2008), demographic changes in the United States suggest that one out of every four clients accessing healthcare services will be of a different ethnic, cultural, or linguistic background as the healthcare provider. Health disparities, defined as the differences in health outcomes that are linked with social, economic, and environmental disadvantage, are often driven by the social conditions in which individuals live, learn, and work (Fenelon, Chinn, & Anderson, 2017). These health disparities present significant challenges to healthcare providers in the delivery of care to clients who may not speak the same language; may have differing beliefs, values, or behaviors; or may have a different understanding of the nature of health and wellness. In fact, there are persistent and well-documented health disparities that exist between diverse groups of people in the United States, and ignorance of cultural differences contributes to inequalities in the delivery of care, with the result that health equity remains elusive (IOM, 2003).

This chapter serves as an introduction to this study, outlining the context and purpose, as well as the key research questions that were examined. The reader will be introduced to the topic
of intercultural competence in higher education, the importance of this topic in healthcare and occupational therapy education, conceptual models of cultural competency, and the research design and methodology of the current study.

Problem Statement

As the United States becomes an increasingly multicultural society (Colby & Ortman, 2014; Perez & Hirschman, 2009), U.S. colleges and universities are strategically engaging in internationalization and global learning initiatives to meet the demand for greater intercultural competence in college students for the future demands of work across society (American Council on Education [ACE], 2017). In a multicultural society, there are greater opportunities for cross-culture interactions, especially for healthcare workers. Cultural factors contribute to healthcare delivery and health outcomes (Betancourt, Green, Carrillo, & Ananeh-Firempong, 2003). Culture presents a unique challenge in the education of healthcare professionals, as students are required to look at themselves, their personal biases and prejudices, and understand the views of others who are different, along with understanding diverse perceptions, values, beliefs, and behaviors.

There are well-documented health disparities that exist between diverse groups of people in the United States (Fenelon et al., 2017; IOM, 2003; Wright, 2008). Culturally diverse racial and ethnic minority groups in the United States are at disproportionate risk of being uninsured, underinsured, having a lack of access to care, and often experience unfavorable health outcomes from preventable and treatable conditions (IOM, 2001; 2003). There is an identified need to develop intercultural competence and competence in intercultural communications in future healthcare providers and health care systems to reduce health disparities and improve the outcomes of healthcare in the United States (IOM, 2003).
Multiculturalism is increasingly relevant in occupational therapy education and practice, as occupational therapy is a value-laden profession that emphasizes the delivery of culturally relevant, culturally competent, and client-centered care (Bonder & Martin, 2013; Doll, 2011; Wells, Black, & Gupta, 2016). Understanding context, occupation, and the lived experience of the client is critically important in the education of occupational therapy practitioners (Domina & Doll, 2013). Education for health professionals, including occupational therapy education programs, are increasingly utilizing ISL as a pedagogy in student development of intercultural competence (Domina & Doll, 2013). The purpose of this study was to explore the effects of a short-term ISL on occupational therapy students, specifically examining the development of intercultural competence.

**Theoretical Framework**

This study is framed from two theoretical perspectives. First, experiential learning is the theoretical lens which provides a frame of reference from which to understand the possible outcomes of the effects of a short-term ISL experience. Second, the developmental model of intercultural sensitivity (DMIS; Bennett, 1986, 1993) will be the conceptual framework guiding the proposed research questions and analysis of findings.

**Experiential Learning**

Experiential learning is a process of teaching and learning through which new knowledge is constructed from real-life experiences (Knecht-Sabres, 2013). The theoretical roots of experiential learning and service-learning are based on the works of Dewey (1938, 1964). Dewey asserted that all education comes through experience and that learning is a continuous process that includes “learning from experience, reflective activity, citizenship, community, and democracy” (Giles & Eyler, 1994, p. 77). In addition to Dewey, other theoretical insights, such
as Kolb’s (1984) experiential learning cycle, Mezirow’s (1991) transformational learning approach, and Freire’s (1974) emphasis on education for critical consciousness, have influenced the development and revisions of many theoretical and pedagogical approaches in experiential learning (Flecky & Gitlow, 2011).

Experiential learning principles of teaching, learning, critical reflection, and principles of transformation frame the design of the short-term ISL in this study. As a frame of reference, experiential learning theory contributes to this study in the following ways: design of the service-learning experience, selection of participants, design of the research methodology, and the research analysis.

**Bennett’s DMIS**

Many conceptual models and frameworks of intercultural competence have been developed to frame key concepts and relationships between cultural awareness and sensitivity, attitudes, knowledge, and skills (Arasaratnam-Smith, 2017; Deardorff, 2006, 2009; Spitzberg & Chagnon, 2009). The DMIS (Bennett, 1986, 1993) was utilized as the conceptual framework to guide this study. The primary assumption of the DMIS is as one experiences cultural differences in complex cultural interactions, the greater the development of intercultural competence. Bennett (1986, 1993) identifies a continuum of cultural worldviews in response to cultural difference, whereby individuals from monoculture socializations relate to others from the perspective of their own cultural worldview, progressing to a more ethnorelative worldview, while being able to adapt and integrate other cultural worldview perspectives. The DMIS is a linear process conceptual model, aligned with an assessment tool, the Intercultural Development Inventory (IDI; Hammer, 1999, 2009, 2011), that measures individual orientations toward cultural differences along the DMIS continuum.
The DMIS (Bennett, 1986, 1993) identifies a continuum of six stages of development that progress along a continuum of the experience of cultural difference, moving from an ethnocentric worldview (how one sees his own culture as central to reality), to an ethnorelative worldview, (how one values the culture of another and the experience of culture from another’s cultural perspective; see Figure 1; Bennett, 1986, 1993). The three ethnocentric stages are as follows: a) denial; the belief that one’s own cultural view is the real one, the only one, b) defense; a view of one’s culture as being the only viable one versus others’ cultures, and c) minimization; seeing one’s own cultural worldview as being universal, others’ cultures are viewed relative to one’s own view. The three ethnorelative stages are as follows: a) acceptance; the recognition that one’s own culture is just one of many equally valid cultures, b) adaptation; one is thinking or acting in order to accommodate the other’s culture, and c) integration; the internalizing of another’s culture and worldview into one’s own sense of identity and culture.

![Figure 1](image.png)

*Figure 1.* Representation of Bennett’s developmental model of intercultural sensitivity (DMIS; 1986, 1993). Adapted from Hammer, M. R. (2011).

The DMIS (Bennett, 1986, 1993) has been extensively studied in its contribution as a framework and in its assessment of intercultural competence (Hammer, Bennett, & Wiseman, 2003; Hammer, 2012). Bennett’s DMIS framework is widely recognized and has been used in
education and trainings across varied industries and disciplines for the purpose of intercultural competence development (Arasaratnam, 2014). In 1991, Bennett and Hammer created the first version of the IDI based on Bennett’s DMIS (1986, 1993). Hammer (1999, 2009, 2011) continued to refine the use of the IDI as a “premier cross-culturally valid and reliable measure of intercultural competence” (Hammer, 2009, p. 246). In this study, Bennett’s DMIS guided the research questions, the instrumentation for measurement (specifically, the use of the IDI), and guided the analysis of the development of intercultural competence. The selection of the DMIS as a conceptual frame fit with the purpose of this study, which was the examination of the effects of a short-term ISL experience on the development of intercultural competence in occupational therapy graduate students.

**Overview of the Literature**

Chapter Two will include a review of three bodies of literature: the development of intercultural competence; service-learning and ISL; and occupational therapy education. These three areas of scholarship connect with the purpose of this study, exploring the impact of a short-term ISL experience on the development of intercultural competence in graduate occupational therapy students. The following section is a summary of these literatures.

**Intercultural Competence**

The shifting demographics of the United States brings opportunities and challenges for institutions of higher education in the preparation of students for living and working in an increasingly diverse America (Griffith, Wolfeld, Armon, Rios, & Liu, 2016). The United States has become a complex multicultural society, with many subcultures within the dominant culture, based on race, ethnicity, religion, linguistics, social class, and geography (Jandt, 2018). In general, there is an increased demand for greater intercultural competence in college graduates
(Griffith et al., 2016). In particular, intercultural competence is considered an important outcome of health professions education (Suarez-Balcazar & Rodowski, 2007).

There is extensive literature on intercultural competence across many disciplines. Among the scholars are Camphina-Bacote (2002), Deardorff (2006, 2009, 2011), and Suarez-Balcazar et al. (2009). A review of the literature on intercultural competence revealed a number of key themes. First, it is important to note that there is no real consensus across the literature on terminology around intercultural competence (Arasaratnam, 2014; Deardorff, 2006, 2011; Spitzberg & Chagnon, 2009). The literature also reveals that the process of intercultural competence development is complex and occurs over time (Campinha-Bacote, 2002; Deardorff, 2006, 2011; Spitzberg & Chagnon, 2009). For example, some studies indicate that over time, students afforded opportunities for intercultural experiences and deliberate reflection can develop intercultural competence to some degree (Arasaratnam, 2014; Deardorff, 2006, 2011; Suarez-Balcazar et al., 2009). It was also found that intercultural competence can be developed and can be both qualitatively and quantitatively assessed (Deardorff, 2006, 2011; Griffith et al., 2016; Loftin et al., 2013). Lastly, even though ISL is a growing pedagogical approach in the development of intercultural competence in occupational therapy programs, there is a significant gap in the literature about the impact of ISL on the development of intercultural competence in occupational therapy students (Domina & Doll, 2012; Mu et al., 2010; Short & St. Peters, 2017; Suarez-Balcazar & Rodawaski, 2007).

**Service Learning and International Service Learning (ISL)**

ISL is a form of experiential education, a particular type of service-learning, and is a specific type of pedagogical approach. For the purposes of this study, this researcher explored both service-learning and ISL in the previous literature, taking a broad view of scholarship on
service-learning. The literature on ISL as a pedagogical approach itself is not as robust as that of service-learning, therefore ISL literature is included as part of the service-learning literature review. The pedagogy of ISL is conceptualized as the intersection of three different educational domains: service learning, study abroad, and international education (See Figure 2; Bringle & Hatcher, 2011). ISL links classroom learning to real-life situations in multicultural and multinational settings. Learning outcomes and meaningful service activities are of reciprocal benefit to the student and community and are defined collaboratively between educators and community partners (Bringle & Hatcher, 2011). A key component of ISL pedagogy is the integration of structured critical reflection at defined periods before, during, and after the experience. ISL is considered a transformative pedagogy that produces deep and meaningful change within students from many perspectives, such as personal growth and development, academic knowledge and skills, intercultural competence, and civic engagement (Bringle, Hatcher, & Jones, 2011).

![Figure 2. Interpretation of ISL based on Bringle and Hatcher’s (2011) conceptualization.](image)

Scholars such as Astin, Vogelgesang, Ikeda, and Yee (2000), Celio, Durlak, and Dymnicki (2011), and Kiely (2004) have contributed to extensive literature which indicates service-learning and ISL generally have positive benefits and effects on college students. A number of positive student outcomes are identified in the literature, namely: academic and
cognitive (Astin et al., 2000; Celio et al., 2011; Marby, 1998), personal and affective (Astin et al., 2000; Davis, 2013; Kiely, 2004), civic (Astin et al., 2000; Dahan, 2016; Marby, 1998), and diversity outcomes (Holsapple, 2012).

**Occupational Therapy Education**

The practice of occupational therapy enables people to live life to its fullest, engaging in all the everyday activities that a person wants and needs to do, no matter what physical or psychological barriers stand in the way (World Federation of Occupational Therapy [WFOT], 2013). In occupational therapy, culture influences a person’s engagement in occupations, not only what a person chooses to do, but also how a person engages in these activities and occupations. Consideration of a client’s cultural context is considered a central concept in the *Occupational Therapy Practice Framework: Domain and Process* (*Framework*; American Occupational Therapy Association [AOTA], 2014), as one’s cultural context impacts an individual’s “identity and activity choices” (AOTA, 2014, p. 28). In occupational therapy, culture is emphasized as being personally relevant to clients, as contributing to human occupations and choice of daily activities, to identity, and to a general sense of health, well-being, and participation in life (Wells et al., 2016).

Experiential learning, service learning, and ISL are common pedagogies in occupational therapy curricula (Battaglia, 2016). In the context of occupational therapy education, students require hands-on learning opportunities to apply the knowledge and skills learned in the classroom to actual real-life practice situations and environments (Knecht-Sabres, 2013). In the experiential learning process, students construct knowledge and meaning from the experience and develop knowledge and skills (Eyler & Giles, 1999; Flecky & Gitlow, 2011). Service learning and ISL are forms of experiential learning “where the learning occurs through a cycle of
action and reflection… applying what they are learning to community problems” (Eyler & Giles, 1999, p. 14).

The number of health profession students participating in short-term ISL programs is rising steadily (Domina & Doll, 2013). It is imperative that occupational therapy faculty understand the impact such programs have on students’ intercultural competence. Occupational therapy educators have a responsibility to prepare future practitioners for cross-cultural interactions and the delivery of culturally competent-care (Flecky & Gitlow, 2011; Mu et al., 2010; Munoz, 2007; Murden et al., 2008). Limited research exists for the effectiveness of teaching intercultural competence (Arasaratnam-Smith, 2017; Griffith et al., 2016; Kiely, 2004). In particular, there is limited understanding of the outcomes of ISL as an experiential pedagogy and its influence on the development of intercultural competence (Kiely, 2005; Loftin et al., 2013; Suarez-Balcazar & Rodawaski, 2007). It is critically important that institutions of higher education and health profession programs prepare healthcare students for cultural diversity, and that students be prepared to respond effectively to the needs of culturally diverse client populations.

The occupational therapy literature indicates that service-learning pedagogy fits very nicely with occupational therapy education and the philosophies of occupational participation, social justice, and equity (Flecky & Gitlow, 2011). There are a number of studies on the impact of service learning on occupational therapy students (Atler & Gavin, 2010; Govender et al., 2017; Hansen, 2013; Maloney, Myers, & Bazyk, 2014; Murden et al., 2008; Sanders, Van Oss, & McGeary, 2016). In the select occupational therapy literature, service-learning methodology and designs used by scholars vary, sample sizes are relatively small, and many of the measures employed are subjective in nature. In particular, it appears that measuring the development of
intercultural competence in occupational therapy education is somewhat problematic for two reasons. First, there is lack of clarity about what constitutes intercultural competence and its components (Boggis, 2012; Castro, Dahlin-Ivanoff, & Martensson, 2014; Govender et al., 2017). Second, there are a lack of valid measures to assess the development of intercultural competence, specifically for occupational therapy students (Knechts-Sabres, 2013; Loftin et al., 2013; Suarez-Balcazar et al., 2009).

From the studies reviewed, it is apparent that there are some unanswered questions about the impact of ISL as a pedagogy on the development of intercultural competence in the education of occupational therapy students. In conclusion, the current study was proposed to a) fill a gap in existing knowledge about ISL, and b) inform both occupational therapy educators and practitioners about the development of intercultural competence and its importance in the delivery of culturally responsive care.

**Operational Definitions**

Due to the complexity of the topic and the many terms used in this study, a list of key terms will be provided in this section. The key terms that will be used for this study are defined as follows:

**Culture:** There have been numerous definitions proposed to describe the broad and complex construct of culture (AOTA, 2014; Keesing & Strathern, 1998, in Helman, 2007). In 2009, Spitzberg and Changnon defined *culture* as a term concerned with “enduring yet evolving intergenerational attitudes, values, beliefs, rituals/customs, and behavioral patterns” (p. 6). Culture offers a basis for people to create and share meaning in relation to beliefs and values, along with race and ethnicity, diversity within social groups, from a number of perspectives, historical, behavioral, symbolic, structural and normative (Wells et al., 2016). For the purpose of
this study, culture refers to a particular belief system that is comprised of customs, values, traditions, and behaviors that are related to individuals of a group, whether the group is racial or ethnic, religious, or a social group (Cross, Barzon, Dennis, & Issacs, 1989).

**Cultural Competence:** “A set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations” (Cross et al., 1989, p. 13). The authors emphasize that cultural competence implies “having the capacity to function effectively” among people with “the integrated pattern of human behavior that includes thoughts, communications, actions, customs, beliefs, values, and institutions of racial, ethnic, religious, or social group” (Cross et al., 1989, p. 28). Cultural competence in the context of nursing is defined as “the ongoing process in which the health care provider continuously strives to achieve the ability to effectively work within the cultural context of the client (individual, family, community)” (Camphina-Bacote, 2002, p. 181). Becoming culturally competent involves the integration of cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire (Camphina-Bacote, 2002).

**Intercultural Competence:** Refers to the “ability to communicate effectively in cross-cultural situations and to relate appropriately in a variety of cultural contexts” (Bennett & Bennett, 2004, p. 149). Deardorff (2006) broadly defined intercultural competence as the effective and appropriate behavior and communication in intercultural situations. The terms cultural competence and intercultural competence are often used interchangeably across the literature (Arasarastnam-Smith, 2017; Camphina-Bacote, 2002; Deardorff, 2006, 2009; Spitzberg & Chagnon, 2009). In this study ‘intercultural competence’ is the preferred term for use.

**Service-learning:** Defined as “a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities
Service learning is both a teaching and a learning strategy, which includes community service, engagement, and reflection. Service-learning is “where the learning occurs through a cycle of action and reflection… applying what they are learning to community problems” (Eyler & Giles, 1999, p. 14).

**International Service Learning (ISL):** A pedagogical method that combines academic learning and community service in an international context (Crabtree, 2008). Bringle and Hatcher (2011) defined ISL as a specific pedagogy, conceptualized in three domains: service learning, study abroad, and international education (see Figure 2). For the purpose of this study, ISL refers to a structured academic experience in another country which addresses identified community needs and incorporates student reflection on the context and student learning (Bringle & Hatcher, 2011).

**Occupational Therapy:** “A client-centered health profession concerned with promoting health and well-being through occupation” (WFOT, 2013, p. 3). More specifically, occupational therapy enables and promotes an individual’s engagement and participation in everyday activities they want to, need to, or are expected to do in life, regardless of disability or dysfunction.

**Worldviews:** “Sets of beliefs and assumptions that are deeply embedded and largely implicit in how cultures interpret and explain their experience” (Tilburt, 2010, p. 78). In this study, worldviews are considered a component of the experience of culture difference. More specifically, worldviews can be thought of as a mindset, interconnected perceptions, assumptions, and beliefs at the individual level or within a cultural group, which has to do with
one’s view of self or view of others from a different culture or context. For the purposes of this study the term ‘worldview’ is used interchangeably with the word ‘mindset’.

**Research Questions**

The primary research question that guided this study was: What is the influence of an ISL experience on graduate occupational therapy students, and the development of intercultural competence? To address the primary research question, the following sub-questions were also proposed and addressed in this study:

1. What is the measured effect of change on levels of intercultural competence in graduate occupational therapy students?

2. What are graduate occupational therapy students’ reports about the effects of an ISL experience?

3. What are the contributing factors to changes in levels of intercultural competence, if any?

4. How do graduate occupational therapy students describe the effects of an ISL experience on intercultural competence?

**Overview of Research Design**

Inquiry for this research followed a mixed-methods explanatory sequential design. The central premise of a mixed-methods design is that the use of both quantitative and qualitative data will provide a deeper understanding of a phenomenon (Creswell & Plano Clark, 2007). The quantitative data was collected using an assessment of intercultural competence, while the qualitative data was follow-up questions further exploring the concept and development of intercultural competence. An explanatory sequential design refers to a design where the qualitative data will build on the quantitative data (see Figure 3; Creswell & Plano Clark, 2007),
along with providing a more in-depth understanding of the initial quantitative data results from the first phase of the study. This study included a two-phase design: the quantitative data was gathered first and analyzed, followed by the qualitative data collection and analysis. The rationale for this design was that the qualitative data would provide a greater understanding of ISL pedagogy and the development of intercultural competence.

![Image](image.png)

*Figure 3. Representation of a mixed-methods explanatory research design.*

**Quantitative, Phase 1**

In the first, quantitative phase of this study, participants were required to complete the IDI (Hammer, 2011) both before and after the ISL experience. The intent of using the IDI was to obtain numerical measures of intercultural competence, and to determine any change in intercultural competence of the graduate occupational therapy students as a result of the short-term international experience. This study sought to understand the development of intercultural competence; and therefore, the IDI was utilized in the collection of quantitative data (before and after the ISL experience).

**Qualitative, Phase 2**

The second, qualitative phase of this study, was conducted with the intention of building upon the results of the quantitative results gathered in phase one. This qualitative phase administered an invitation to all participants (expected to be approximately 20 students) who participated in the ISL experience. In this follow-up phase, the impact of ISL and the development of intercultural competence was tentatively explored through interview and journal
analysis. The reason for the qualitative follow-up phase of the quantitative IDI results was to help explain the overall findings of the study.

Grounded theory is a specific systematic approach to qualitative data collection and analysis that explains the phenomenon of interest (Creswell, 2013). This study utilized a grounded theory approach for the qualitative data analysis. Following grounded theory data analysis protocols, particularly Charmaz’s (2006) social constructivist approach to grounded theory, interview data was systematically analyzed. Following the ISL experience, participants in this study were invited to participate in a follow-up, one-to-one interview, utilizing a semi-structured, open-ended process (Maxwell, 2013). Questions and dialogue addressed the students’ views about the ISL experience and students’ perception of change in intercultural competence. The interviews lasted approximately 50 minutes. The researcher recorded all interviews and took notes during the interview. Relevant concepts and categories were identified, along with an examination of the patterns and variations in the data (Charmaz, 2000, 2006; Strauss & Corbin, 1998). In addition to the analysis of the qualitative interview data, all students were invited to voluntarily share their reflective journals. Four participants shared their journals in this study and these journals were also systematically analyzed and coded for emerging concepts and themes on the ISL experience and intercultural competence. The journal data complemented the interview data.

**Research Site and Participants**

The study took place at a College of Health Professions, at a mid-sized institution of higher education, in the Northeast, United States. The participants were students in the health professions, specifically graduate occupational therapy students. All study participants engaged in a short-term ISL experience in the Fall of 2018. Participants for phase one (quantitative
phase) was 18 participants, while the subject sample for phase two (qualitative phase) was 13 participants. The students were all in their second year of graduate studies, and participation in the ISL was voluntary. Participation in this study was also voluntary. The investigator is a faculty member at the graduate occupational therapy program; however, participants were safeguarded from any conflicts of interest or power relations, as this faculty member was not directly involved in teaching or advising any of the participants.

**Significance of the Study**

The significance of this study relates to a number of issues applicable to the education of students in the health professions, in particular, occupational therapy graduate students. This study contributes to knowledge about the pedagogy of ISL, the influence of a short-term ISL on occupational therapy graduate students, the development of intercultural competence, and can be used to inform institutional decisions with respect to the value of ISL in relation to student outcomes.

Intercultural competence has become a critical component of education for health professionals and for practice (IOM, 2003). There is also a growing trend in the use of ISL in the teaching of intercultural competence (ACE, 2017), including occupational therapy students. However, the use of ISL is poorly understood (Arasaratnam-Smith, 2017; Boggis, 2012; Bringle & Hatcher, 2011; Deardorff, 2006, 2009, 2011; Griffith et al., 2016). The results of this study contribute to the understanding of ISL as a pedagogy in occupational therapy education, and its influence on intercultural competence development.

As the United States becomes an increasingly multicultural society, it has become widely recognized that Americans receive unequal healthcare (IOM, 2003). Health disparities are persistent and often exacerbated by differences in ethnic, cultural, and linguistic challenges
between the patient and the healthcare provider (IOM, 2003). In the delivery of effective and quality health outcomes, health care providers must learn to communicate and deliver care in an effective and culturally appropriate manner. Developing intercultural competence is a critical aspect of health professions education, in particular, occupational therapy education (AOTA, 2014; IOM, 2003). This study provides further information as to how an ISL has the potential to impact intercultural competence development, and consequently lead to improved health care delivery and patient outcomes.

U.S. colleges and universities are also strategically engaging in internationalization and global learning initiatives to meet the demand for greater intercultural competence in students, particularly students in the health profession (ACE, 2017). The Association of American Colleges and Universities (AACU) has developed a series of initiatives to help with internationalization and recommends that global learning and the development of intercultural competence be a priority for students. The results of this study can help inform institutions about the influence of ISL on students’ intercultural competence, and may help impact future decisions about the use and value of ISL in education for health professionals.

With the increasing diversity of the U.S. population, occupational therapists increasingly encounter clients from diverse cultural backgrounds. There is a professional demand to become interculturally competent and deliver culturally competent care (AOTA, 2014). However, the process of intercultural competence development is poorly understood in education and practice. There is a need for a clear understanding of the development of intercultural competence. The results of this study can contribute to occupational therapy education, and provide a greater understanding about the development of intercultural competence in relation to a short-term ISL experience.
Summary

The purpose of this mixed-methods study was the exploration of the impact of ISL on the development of intercultural competence in graduate occupational therapy students. The development of intercultural competence is a critical aspect of education for health professionals, and ISL as a pedagogy is a growing trend in the teaching of intercultural competence, especially occupational therapy programs. However, a lack of clarity about the effect of ISL and the development of intercultural competence in graduate occupational therapy students exists. With the results of this study, the researcher is hopeful to contribute to the advancement of knowledge and understanding of ISL and intercultural competence, and the intersection of these two components in occupational therapy education.

The research proposal is presented in the first three chapters of the paper. Chapter 1 introduced the study, discussed a brief contextual background regarding the issue and importance of intercultural competence development, offered an overview of ISL and the conceptual model used to guide this study, and described the research design. Chapter 2 will present three bodies of literature: intercultural competence, service-learning and ISL, and occupational therapy education. Chapter 3 will describe the research design and methodology that was used for this study. Chapters 4 and 5 will discuss data analysis, interpretation, and conclusions. Specifically, Chapter 4 will present the study findings. Lastly, Chapter 5 will present conclusions, recommendations for future study, and implications of the study.
CHAPTER 2: REVIEW OF THE LITERATURE

There is increased global integration of people and cultures, resulting in a demand for greater intercultural competence in college graduates (Griffith et al., 2016). The United States is becoming an increasingly multicultural society (Colby & Ortman, 2014; Perez & Hirschman, 2009). Intercultural competence is broadly defined as effective, appropriate behavior and interpersonal communications in intercultural situations (Deardorff, 2006). Intercultural competence is an identified and required core component of healthcare professional education and practice (IOM, 2003). Healthcare professions encompass a number of professions, such as doctors, nurses, physical therapists, and occupational therapists, engaged in both preventative and curative care for patients (World Health Organization [WHO], 2006). For all health care providers in a multicultural society, there are greater opportunities to encounter individuals from diverse backgrounds, with increasing opportunities for cross-culture interactions.

As society trends towards greater multiculturalism, it is essential that occupational therapists become culturally competent practitioners (Flecky & Gitlow, 2011; Suarez-Balcazar & Rodakowski, 2007; Wells et al., 2016). In the delivery of quality and effective care in occupational therapy, it is important for practitioners to be able to relate and communicate with persons from cultures different from their own (Flecky & Gitlow, 2011; Suarez-Balcazar & Rodakowski, 2007). Occupational therapy educators should integrate cultural competence content into the curriculum and evaluate its effectiveness in producing culturally competent graduates. Many occupational therapy programs design and integrate experiential learning experiences, including service-learning and ISL opportunities, into the curricula to promote the development of intercultural competence as a student learning outcome.
Service-learning is a type of experiential learning that is a common pedagogy in the occupational therapy curricula (Battaglia, 2016). In the context of occupational therapy education, students require hands-on learning opportunities to apply the knowledge and skills learned in the classroom to actual real-life practice situations and environments. Experiential learning is a teaching approach through which learners are transformed by real-life experience (Kiely, 2005; Whitely, 2014). In the experiential learning process, students construct knowledge and meaning from the experience and develop knowledge and skills (Eyler & Giles, 1999; Flecky & Gitlow, 2011; Yardley, Teunissen, & Dornan, 2012).

From a broad perspective, experiential learning and service learning are similar types of pedagogical approaches to education; however, the key distinguishing features of service-learning are reflection and engagement in community service (Giles & Eyler, 1994). Service-learning, in general, has the potential to affect students’ personal and professional development through community engagement and service. ISL is a distinct form of experiential learning and service-learning that is conceptualized from three domains: service-learning, study abroad, and international education (Bringle et al., 2011). Service-learning and ISL hold the potential to be transformational for students’ development and professional formation (Bringle et al., 2011; Kiely, 2005; Mezirow, 2000).

The purpose of this literature review is to explore scholarship of intercultural competence development and service-learning in general, along with exploring the intersection of these two topics in relation to scholarship of teaching and learning in occupational therapy education. This review includes a wider examination of intercultural competence development in college students, as there is little research on intercultural competence in occupational therapy education and practice. The literature of ISL as a pedagogy is included in the review of service-learning.
scholarship. The literature of ISL and intercultural competence development is sparse in the
field of occupational therapy education; therefore, this review explores service-learning studies
more broadly and includes some literature of service-learning within international communities.
This review connects with the purpose of this study which is an exploration of the influence of
international service-learning on the development of intercultural competence in graduate
occupational therapy students.

The first section of this review opens with select literature on the development of
intercultural competence. This section includes conceptual frameworks, attempts to
operationalize ways of examining intercultural competence development in students. The second
section of the literature review presents empirical studies on service-learning as a pedagogy.
There is a scarcity of literature on ISL, one type of service-learning pedagogy, therefore, the
focus of the review is primarily on service-learning from a broad perspective. This second
selection of literature examines conceptual frameworks and explores the literature on the impact
of service-learning on students. The third section of select literature explores studies of teaching
and learning in occupational therapy education, with an emphasis on experiential learning and
service-learning. The final section of the literature review identifies gaps in the literature and
proposes the need for future study.

**Intercultural Competence**

Despite the challenge of defining and conceptualizing intercultural competence with
clarity (Arasaratnam, 2014; Arasaratnam-Smith, 2017; Deardorff, 2006, 2011; Griffith et al.,
2016; Perry & Southwell, 2011; Spitzberg & Changnon, 2009), the first section of this review
attempts to synthesize the research literature, including some literature from the health
professions, and presents an understanding of intercultural competence in higher education. This
section attempts to address four questions: What is intercultural competence? Can intercultural competence be developed? If so, can intercultural competence be measured? Lastly, why is the topic of intercultural competence important in health professions education? These particular questions will provide some understanding of the concept of intercultural competence and connect with the purpose of this study: the influences of pedagogy such as service-learning on the development of intercultural competence in occupational therapy students.

The research on intercultural competence revealed a wide variety of definitions from a wide range of fields (Arasaratnam, 2014; Arasaratnam-Smith, 2017; Deardorff, 2006, 2011; Griffith et al., 2016; Perry & Southwell, 2011; Spitzberg & Changnon, 2009; Suarez-Balcazar & Rodawoski, 2007; Suarez-Balcazar et al., 2009). Deardorff (2006) has written extensively about a research-based approach to defining the term ‘intercultural competence’ (for examples of this see Deardorff, 2006, 2009, 2011). “The ability to communicate effectively and appropriately in intercultural situations based on one’s intercultural knowledge, skills, and attitudes” (Deardorff, 2004, p. 184). Spitzberg and Changnon (2009) discuss more than 20 different definitions identified in the literature. Disciplines such as business, education, psychology, health, and international relations utilize different terms to designate to the concept of intercultural competence (Deardorff, 2006; Perry & Southwell, 2011; Spitzberg & Chagnon, 2009).

Terms for intercultural competence include cultural competence, global competence, intercultural communication competence, multicultural competence, multiculturalism, cross-cultural adaptation, intercultural sensitivity, and global citizenship. For the purposes of this review, the term *intercultural competence* is the preferred term for use; however, *cultural competence* may be used interchangeably, dependent upon the scholarship from specific disciplines. Studies of intercultural competence generally refer to “the appropriate and effective
management of an interaction between two people who…. represent different or divergent, affective, cognitive, or behavioral orientations to the world” (Spitzber & Changnon, 2009, p. 7). In the literature for healthcare and health professions, cultural competence is the term that is most widely used and refers to an “ongoing process in which the healthcare provider continuously strives to achieve the ability to effectively work within the cultural context of a client (individual, family, or community)” (Campinha-Bacote, 1999, p. 203).

Conceptualizing Intercultural Competence

Our current understanding of intercultural competence has been shaped by research in many fields (Arasaratnam, 2014; Perry & Southwell, 2011; Suarez-Balcazar & Rodawoski, 2007). From the literature, it appears there are two components in defining intercultural competence; namely, the effectiveness and appropriateness of interactions between two persons of different origins (Arasaratnam-Smith, 2017; Deardorff, 2006, 2011; Peiying, Goddard, Gribble, & Packard, 2012; Spitzberg & Chagnon, 2009; Suarez-Balcazar & Rodawoski, 2007).

Generally, intercultural competence has been studied as a phenomenon residing within a person, and as an outcome of contextual intercultural interactions (Arasaratnam-Smith, 2017). There are five primary models or frames through which we examine and understand intercultural competency: compositional, co-orientational, developmental, adaptational, and causal (Arasaratnam, 2017; Griffith et al., 2016; Spitzberg & Chagnon, 2009). Generally, models and frameworks of intercultural competence emerged from the field of intercultural communication. For example, the pyramid model of intercultural competence is a compositional model that describes characteristics of competence; knowledge, skills, and attitudes of intercultural competence (Deardorff, 2006). Co-orientational models are described by Griffith et al. (2016) as the models which frame the components or processes of a successful intercultural interaction.
Adaptational models combine the developmental components of intercultural competence relative to an interactional context and the adaptation to a foreign culture (Griffith et al., 2016). Causal-path models (such as described in Arasaratnam, 2014; Deardorff, 2006; Hammer, Bennett, & Wiseman, 2003) integrate characteristics of intercultural competence and how to predict the development of intercultural competence within intercultural interactions.

Understanding cultural competence, intercultural competence, and intercultural competence development is important in higher education, particularly in health professions education. Scholars of different disciplines adopt a particular discipline-specific lens with which to conceptualize intercultural competence. There are a number of theoretical and methodological models of cultural competence from the field of nursing (Shen, 2015). Some examples from the nursing literature include the culturally competent model of care (Campinha-Bacote, 2002), the cultural competence and confidence model (Jeffreys, 2010), and the Purnell model of cultural competence (Purnell, 2003, 2008). From the occupational therapy literature, examples of models include the process-model of culturally responsive caring (Munoz, 2007) and the model of culturally responsive care in occupational therapy embedded in service-learning (Talero, Kern, & Tupe, 2015). For the purposes of this review of the literature, intercultural competence is explored more broadly and not from a particular disciplinary perspective.

The conceptual elements of intercultural competence vary widely across disciplines (Perry & Southwell, 2011; Suarez-Balcazar & Rodawoski, 2007; Suarez-Balcazar et al., 2009). As an example, Campinha-Bacote (2002) named the following constructs of cultural competence: cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire. These particular constructs of cultural competence (Campinha-Bacote, 2002) are also identified by Suarez-Balcazar et al. (2009). In contrast to Campinha-Bacote (2002) and
Suarez-Balcazar et al. (2009), Hammer, Gudykunst, and Wiseman (1978) conducted a study that included a factor-analysis and identified three dimensions of intercultural competence: the ability to deal with psychological stress, the ability to communicate effectively, and the ability to establish interpersonal relationships. Generally, the research indicates that awareness, attitudes, knowledge, skills, and behaviors contribute to conceptualizing intercultural competence (Arasaratnam, 2014; Arasaratnam-Smith, 2017; Deardorff, 2006, 2011; Griffith et al., 2016; Peiying et al., 2012; Perry & Southwell, 2011; Spitzberg & Changnon, 2009; Suarez-Balcazar & Rodawoski, 2007). Conceptualizing intercultural competence is valuable to health profession educators in designing teaching and learning experiences for student success in effective and appropriate cross-cultural interactions (Arasaratnam, 2017; Suarez-Balcazar et al., 2009).

Identified Themes of Intercultural Competence

From the literature, a number of themes emerged about intercultural competence. Firstly, there is no real consensus across the literature on terminology around intercultural competence (Arasaratnam, 2014; Arasaratnam-Smith, 2017; Deardorff, 2006, 2011; Griffith et al., 2016; Spitzberg & Chagnon, 2009; Suarez-Balcazar & Rodawoski, 2007). There is, however, consensus on the conceptual and theoretical frameworks from which many models of intercultural competence have emerged (Arasaratnam-Smith, 2017; Deardorff, 2006, 2011; Griffith et al., 2016; Hammer et al., 1978; Spitzberg & Chagnon, 2009). According to Arasaratnam-Smith, there are many examples of conceptual models identified in the literature including the pyramid model of intercultural competence (Deardorff, 2006) and the developmental model of intercultural sensitivity (Bennett, 1986, 1993). The second theme to emerge from the literature was that the process of intercultural competence development is complex and occurs over time (Arasaratnam-Smith, 2017; Campinha-Bacote, 2002; Deardorff,
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2006, 2011; Griffith et al., 2016; Hammer et al., 1978; Peiying et al., 2012; Perry & Southwell, 2011; Spitzberg & Changnon, 2009; Suarez-Balcazar & Rodawoski, 2007; Suarez-Balcazar et al., 2009). Studies suggest that the development of intercultural competence is an ongoing process that occurs across the life-span (Campinha-Bacote, 2002; Suarez-Balcazar & Rodawoski, 2007). Thirdly, intercultural competence encompasses a number of interrelated elements: knowledge, attitude, skills, and behaviors (Arasaratnam, 2014; Arasaratnam-Smith, 2017; Campinha-Bacote, 2002; Deardorff, 2006, 2011; Griffith et al., 2016; Peiying et al., 2012; Perry & Southwell, 2011; Suarez-Balcazar & Rodawoski, 2007; Suarez-Balcazar et al., 2009). Lastly, intercultural competence can be developed and it is a phenomenon that can be assessed (Arasarastnam-Smith, 2017; Campinha-Bacote, 2002; Deardorff, 2006, 2011; Griffith et al., 2016; Hammer et al., 2003; Loftin, Martin, Branson, & Reyes, 2013; Perry & Southwell, 2011; Spitzberg & Chagnon, 2009). Intercultural competence development can be intentionally addressed and measured in higher education through the curriculum and through experiential learning (e.g., service-learning and study abroad; Campinha-Bacote, 2012; Deardorff, 2006, 2011; Griffith et al., 2016; Peiying et al., 2012; Perry & Southwell, 2011; Suarez-Balcazar et al., 2009).

Development of Intercultural Competence

The development of intercultural competence is a process that occurs on a developmental trajectory, over time, either individually or relationally, or both (Arasaratnam-Smith, 2017; Campinha-Bacote, 2002; Deardorff, 2006, 2011; Hammer et al., 2003; Perry & Southwell, 2011; Spitzberg & Changnon, 2009; Suarez-Balcazar & Rodawoski, 2007; Suarez-Balcazar et al., 2009). While there is a significant volume of articles on models and frames (Arasarastnam-Smith, 2017; Deardorff, 2006; Griffith et al., 2016; Perry & Southwell, 2011; Spitzberg &
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Changnon, 2009), one of the most widely accepted developmental models is Bennett’s developmental model of intercultural sensitivity (DMIS; Arasaratnam-Smith, 2017; Deardorff, 2006; Perry & Southwell, 2011; Spitzberg & Changnon, 2009). The DMIS is a process conceptual model that highlights a continuum of six developmental stages of an individual’s worldview related to cultural difference (Bennett, 1986, 1993). The DMIS has been widely utilized in empirical research as a conceptual model and the development of a measure of intercultural competence. The IDI (Hammer, 1999, 2009, 2011) was developed as a measurement instrument of intercultural competence, utilizing the constructs of the DMIS. The IDI possesses high cross-cultural reliability and validity and is widely utilized in higher education in the evaluation of intercultural competence development (Arasaratnam-Smith, 2017; Griffith et al., 2016). This particular finding from the literature supports the purpose of this study as a possible means of measuring the development of intercultural competence in occupational therapy students.

Measurement and Assessment of Intercultural Competence

As there are wide-ranging models and conceptualizations of intercultural competence, so too are there a wide variety of assessment processes and measures (Arasaratnam-Smith, 2017; Deardorff, 2006, 2011; Griffith et al., 2016; Loftin et al., 2013; Suarez-Balcazar & Rodawoski, 2007). In a recent study by Griffith et al. (2016), 32 assessment measures of intercultural competence were identified and reviewed in terms of reliability and validity. The findings of this study indicated a number of problems with the measurement of intercultural competence. Firstly, it is challenging to measure the requisite skills and abilities that contribute to intercultural competence when there is little consensus about terminology across the disciplines (Arasaratnam-Smith, 2017; Deardorff, 2011). Secondly, many of the measures of intercultural
competence rely on self-report methods that do not adequately capture the entire construct being evaluated (Loftin et al., 2013; Suarez-Balcazar & Rodawoski, 2009). Finally, only a small number of measures possess the psychometric properties to withstand further rigorous investigation and provide evidence that the measure relates to the outcome being examined (Arasaratnam-Smith, 2017; Deardorff, 2011; Griffith et al., 2016).

**Intercultural Competence in Health Professions Education**

Providing culturally competent care is essential to the practice of healthcare (IOM, 2003; Loftin et al., 2013; Suarez-Balcazar et al., 2009). While there is considerable literature on intercultural competence in higher education in general, a significant number of studies relate to intercultural competence in undergraduate education (Deardorff, 2006, 2011; Griffith et al., 2016) and there is not robust literature on intercultural competence development in health professions students. There is considerable literature on cultural competence in nursing education and practice (Loftin et al., 2013); however, many other health professions have not created a comprehensive examination of intercultural competence within their specific health professions (Suarez-Balcazar et al., 2009).

While there is agreement across the literature that intercultural competence is a developmental process, there are a wide variety of approaches regarding the education of intercultural competence (Deardorff, 2006, 2011; Griffith et al., 2016; Perry & Southwell, 2011; Suarez-Balcazar & Rodawoski, 2007). Teaching intercultural competence requires the development of cultural awareness and cultural knowledge (Arasatarnam, 2014; Campinha-Bacote, 2002; Peiying et al., 2012; Perry & Southwell, 2011; Suarez-Balcazar & Rodawoski, 2007; Suarez-Balcazar et al., 2009). Personal qualities, such as empathy, global attitude, and the ability to listen well in conversation have been identified in the literature as having influence on
the development of intercultural competence (Arasaratnam, 2014; Campinha-Bacote, 2002; Deardorff, 2006, 2011; Griffith et al., 2016, Hammer et al., 1978; Peiying et al., 2012; Perry & Southwell, 2011; Suarez-Balcazar et al., 2009). The literature indicates that over time students afforded opportunities for intercultural experiences and deliberate reflection can develop intercultural competence to some degree (Arasaratnam, 2014; Deardorff, 2006, 2011; Hammer et al., 2003; Loftin et al., 2013; Suarez-Balcazar et al., 2009).

Critique of the Literature on Intercultural Competence

Numerous methodological strengths were noted across the literature (Arasaratnam, 2014; Loftin et al., 2013; Suarez-Balcazar et al., 2009); however, as intercultural competence is challenging to define and conceptualize with clarity (Arasaratnam, 2014; Arasaratnam-Smith, 2017; Deardorff, 2006, 2011; Griffith et al., 2016; Perry & Southwell, 2011; Spitzberg & Changnon, 2009; Suarez & Rodawoski, 2007), this lack of clarity impacts the quality of research on intercultural competency. Many studies on intercultural competence are based on case studies (Peiying et al., 2012; Perry & Southwell, 2011; Suarez-Balcazar et al., 2009), meta-analyses of studies (Griffith et al., 2016; Spitzberg & Changnon, 2009), and volumes of collected studies (Arasaratnam-Smith, 2017). According to Griffith et al. (2016), there are a number of issues regarding the measurement of intercultural competence development, and consequently, measurement and assessment of this phenomenon is challenging (Griffith et al., 2016). There is also limited literature available on the empirical outcomes of specific teaching methods and outcome measures. In the next section of this literature review, service-learning will be explored from a theoretical and practice perspective as a pedagogical approach to influence the development of intercultural competence. There is also sparse literature that identifies and describes effective instruments that measure cultural competence in health professions students.
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(Loftin et al., 2013; Suarez-Balcazar & Rodawoski, 2009) even though this is an identified need in health professions education, including occupational therapy education (Suarez-Balcazar & Rodawoski, 2007; Suarez-Balcazar et al., 2009).

Service-Learning

There is sparse literature on ISL, a particular type of service-learning pedagogy, therefore, the focus of this review is primarily a more expansive view of service-learning literature. The focus of this second literature topic is service-learning from two perspectives. Some studies in this review examine key concepts and frameworks (Bringle & Hatcher, 2011; Bringle, Clayton, & Hatcher, 2013; Kiely, 2005; Whitely, 2014), while some studies examine pedagogy and practices in higher education (Astin, Vogelgesang, Ikeda, & Yee, 2000; Celio, Durlak, & Dymniki, 2011; Dahan, 2016; Davis, 2013; Eyler et al., 2001; Holsapple, 2012; Kiely, 2004; Marby, 1998; Warren, 2012; York, 2016). Service-learning is a type of experiential learning that is widely utilized across all post-secondary settings and across many disciplines such as anthropology, health professions, public health, business, sociology, and psychology (Bringle et al., 2013). Much of the literature on service-learning is comprised of case studies of courses or programs, meta-analyses of studies, and volumes of collected studies (Warren, 2012; Whitley, 2014). While the extant research literature is not as robust as it could be, this literature review connects to the purpose of this study, which was the examination of the impact of service-learning, and in particular the impact of an ISL experience, on the development of intercultural competence in graduate occupational therapy students.

Service-learning in higher education pedagogy, practice, and research has grown significantly over the past thirty years (Bringle et al., 2013; Giles & Eyler, 2013; Warren, 2012; Whitley, 2014; York, 2016); however, scholarship in this area is notably underdeveloped
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(Clayton, Bringle, & Hatcher, 2013; Giles & Eyler, 2013; Holsapple, 2012; Kiely, 2005; Warren, 2012; Whitley, 2014; York, 2016). There is an extremely large body of service-learning research focused on how community service and engagement impacts students, primarily White advantaged students (Holsapple, 2012; York, 2016). This body of knowledge about the impact of community engagement and service is inclusive of international service-learning (Bringle, Hatcher, & Jones, 2011; Clayton et al., 2013; Holsapple, 2012; Kiely, 2004, 2005). Mostly unexamined in the literature are issues related to faculty, institutional implications and practices, and most notably absent is the impact of service-learning on communities (Clayton et al., 2013; Whitley, 2014). While there is large body of knowledge about the positive benefits of service-learning as a teaching strategy for college students (Astin et al., 2000; Bringle & Hatcher, 2011; Bringle et al., 2013; Celio et al., 2011; Clayton et al., 2013; Dahan, 2016; Davis, 2013; Eyler et al., 2001; Giles & Eyler, 2013; Holsapple, 2012; Kiely, 2004, 2005; Marby, 1998; Whitley, 2014; York, 2016), most empirical studies focus on different aspects of the impact on students and most studies are related to short-term courses and experiences. This second section review opens with conceptions of service-learning, followed by service-learning themes identified in the literature in general, across disciplines, an examination of research methodologies, and the identification of areas for future research on this topic.

**Conceptualizing Service-Learning**

Service-learning is one form of pedagogy in higher education. It is both a teaching and learning approach and is considered a form of experiential learning (Dahan, 2016; Kiely, 2004; Whitley, 2014). Definitions of service-learning vary across the literature; however, there is a general consensus that service-learning is comprised of four key components: academic learning goals, participation in relevant service activities, critical thinking and reflection, and being built
on community-based partnerships and collaborations (Eyler & Giles, 1999). Students learn and develop by active participation in activities of community-engagement. There is a widely accepted definition of service-learning:

A course or competency-based, credit-bearing, educational experience in which students (a) participate in mutually identified service activities that benefit the community, and (b) reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of personal values and civic responsibility (Bringle & Clayton, 2012, pp. 114-115).

The terms service-learning and service learning are both used in the literature. According to Giles and Eyler (2013), some scholars emphasize the use of the hyphen as it symbolizes the symbiotic relationship between service and learning. One key component of service-learning is actual ‘service to’ a group, and there is reciprocity between the server and the group being served (Astin et al., 2000; Bringle et al., 2011; Bringle et al., 2013; Celio et al., 2011; Eyler et al., 2001; Giles & Eyler, 2013; Marby, 1998; Steinberg, Bringle, & McGuire, 2013). As a form of experiential learning, service-learning is based on the pedagogical principle that reflection is a key component to learning from experience (Celio et al., 2011; Clayton et al., 2013; Dahan, 2016; Kiely, 2004; Marby, 1998; Whitley, 2014). Critical reflection of cross-cultural experiences is often an important aspect of service-learning (Clayton et al., 2013; Marby, 1998). The structure of service-learning varies greatly across colleges and universities, from the type of coursework, to in/out of class experiences, to the duration of the service-learning course, and/or immersive experience. Depending on the structure of the service-learning program and the population or group being served, different service-learning programs emphasize different
types of student learning goals, such as academic, personal, ethical, civic, social-justice, or cross-cultural (Whitely, 2014). International service-learning is a type of service-learning that encompasses all of the above, except that the learning experiences are connected to groups and populations abroad and there is a greater commitment to student intercultural competence development (Kiely, 2004, 2005).

**Conceptual Frameworks and Research of Service-Learning**

Research is most beneficial when guided by a framework or theory and when the evidence gathered supports, develops, refines, or revises a theory (Steinberg, Bringle, & McGuire, 2013). Early scholarly work on service-learning often cite education and social philosopher John Dewey as the ‘grandfather’ of service-learning theory (Giles & Eyler, 1994). The theoretical roots of service-learning in John Dewey’s work include “learning from experience, reflective activity, citizenship, community, and democracy” (Giles & Eyler, 1994, p. 77). In addition to Dewey, other theoretical insights, such as Kolb’s (1984) experiential learning cycle, or Fiere’s (1973) emphasis on education for critical consciousness, have influenced the development and revisions of many theoretical and pedagogical approaches in service-learning (Flecky & Gitlow, 2011). Many of the studies in this review are theoretically grounded (Astin et al., 2000; Bringle et al., 2013; Celio et al., 2011; Davis, 2013; Eyler et al., 2001; Giles & Eyler, 2013; Kiely, 2004; Marby, 1998; Whitely, 2014; York, 2016); however, it is apparent that there is a need for more structured frameworks and more research (Whitely, 2014). Clayton et al. (2013) present a number of different conceptual frameworks with which to examine service-learning; however, the theoretical aspects of each framework are related to different outcomes
(e.g., cognitive, affective, cultural competence outcomes). This indicates that service-learning research is currently strengthening its theoretical base (Steinberg et al., 2013).

**Benefits of Service-Learning**

Reviews of service-learning studies generally indicate the positive benefits and effects of service on college students (Astin et al., 2000; Bringle et al., 2013; Celio et al., 2011; Davis, 2013; Eyler et al., 2001; Giles & Eyler, 2013; Kiely, 2004; Marby, 1998; York, 2016); however, many studies have small sample sizes, and some indicate mixed results (Astin et al., 2000; Eyler et al., 2001; Davis, 2013; Holsapple, 2012; York, 2014). A number of positive student outcomes are identified in the literature, namely: academic and cognitive (Astin et al., 2000; Celio et al., 2011; Davis, 2013; Eyler et al., 2001; Marby, 1998; York, 2016), personal and affective (Astin et al., 2000; Celio et al., 2011; Dahan, 2016; Davis, 2013; Eyler et al., 2001; York, 2016), civic (Astin et al., 2000; Celio et al., 2011; Dahan, 2016; Marby, 1998; York, 2016), and diversity outcomes (Holsapple, 2012).

While many studies do not distinguish the type or structure of the service-learning, students who participate in service-learning demonstrate gains in academic learning and performance relative to comparative groups (Astin et al., 2000; Celio et al., 2011; Davis, 2013; Eyler et al., 2001; Marby, 1998; York, 2016). Academic performance measures often include grade point average and course grades. For example, Astin et al. (2000) collected longitudinal data from 22,236 college undergraduates and measured 11 outcome variables, one of which was academic performance. “Benefits associated with course-based service were strongest for the academic outcomes, especially writing skills” (Astin et al., 2000, p. ii). Studies by Celio et al. (2011), Eyler et al. (2001), Davis (2013), and York (2016) included empirical studies of a small number of subjects or were meta-analyses of larger data sets. Examining this literature
collectively and over time, shows that there is a strong positive correlation between service-learning and academic performance. An older empirical study of 144 undergraduate students (Marby, 1998) examined different pedagogical and methodological approaches to service-learning. This study identified positive student outcomes of service-learning; however, the levels of positive academic and civic outcomes were dependent upon the frequency and type of service-learning activities, along with the frequency and type of reflection activities embedded in the service-learning course (Marby, 1998).

There is support for the positive affective and personal outcomes of short-term service-learning (Astin et al., 2000; Celio et al., 2001; Dahan, 2016; Davis, 2013; Eyler et al., 2001; Peiying et al., 2012; York, 2016). Service-learning is positively associated with student growth and development (Astin et al., 2000; Peiying et al., 2012; York, 2016). Critical reflection and critical thinking (Marby, 1998; Whitley, 2014) are foundational components of service-learning and are strongly associated with positive personal and affective change in students (Astin et al., 2000; Celio et al., 2001; Davis, 2013; Eyler et al., 2001; Giles & Eyler, 2013; Marby, 1998; York, 2016). However, measures of personal and affective outcomes rely heavily on self-report data and generally incorporate the use of continuous reflection before, during, and after the experience, which then is coded utilizing varied methodology.

Civic awareness and engagement are reliant upon effective interpersonal and social skills, and within service-learning, is the active participation of the student on behalf of the community recipient (Astin et al., 2000; Celio et al., 2011; Dahan, 2016; Marby, 1998; York, 2016). Interpersonal, social, and civic outcomes are described in various terms across the literature. A recent mixed-methods study by York (2016) included an overall student sample of 5,270 cases from 87 private and public institutions across the United States. Results from the quantitative
data indicated that service-learning participation had a mixed impact on social and civic awareness outcome goals (York, 2016). This finding is in evidence across many other studies (Astin et al., 2000; Eyler et al., 2001; Holsapple, 2012; York, 2016). From this review of studies on civic outcomes, only one study included a description of social and civic engagement (Celio et al., 2011). The authors conducted a meta-analysis of 62 studies involving 11,837 students and examined five service-learning outcomes. Civic engagement was the term given to any outcome oriented towards the community (i.e., altruism, social attitudes, civic awareness and responsibility, current and future voting behaviors). The results of this study indicated no statistically significant change in social and civic outcomes.

In 2012, Holsapple conducted a critical review of 55 studies on the impact of service-learning participation specifically on diversity outcomes. Many other studies refer to diversity outcomes as an effect of service learning (Astin et al., 2000; Eyler et al., 2001; Giles & Eyler, 2013; Kiely, 2004; Whitley, 2014; York, 2016), but measures of diversity outcomes are often not clear. Holsapple (2012), however, identified six specific diversity outcomes: tolerance of difference, stereotype confrontation, recognition of universality, knowledge of the served population, interactions across difference, and belief in the value of diversity. The findings of the Holsapple (2012) study indicate and validate that diversity outcomes are common from service-learning participation (Astin et al., 2000; Eyler et al., 2001; Giles & Eyler, 2013; Kiely, 2004; Whitley, 2014; York, 2016); however, Holsapple (2012) identified the greatest effects observed in diversity outcomes are stereotype confrontation, knowledge about the served population, and belief in the value of diversity.
Critique of Literature on Service-Learning

The literature revealed that there has been a substantial increase in the quantity and quality of research on service-learning in higher education over the past 30 years (Bringle et al., 2011; Bringle et al., 2013; Giles & Eyler, 2013; Kiely, 2005; Whitley, 2014); however, measurement is an underdeveloped component of the research on service-learning (Clayton et al., 2013; Kiely, 2004; Steinberg et al., 2013; Whitley, 2014). For example, in the studies of Davis (2013) and York (2016), the service-learning experiences presented were designed, implemented, and measured differently. Davis (2013) conducted a study of 263 students enrolled for one semester in a psychology course. The purpose of the Davis study (2013) was to examine cognitive and affective outcomes between students who participated in a short-term service-learning experience and students who observed a video exemplar of service to others. The Davis (2013) study was a qualitative study and the data gathered was through reflective papers and survey. York (2016) conducted a mixed-methods study with low-income, first-generation students over the course of a year and a half at three institutions. The quantitative data set included 5,270 participants and the qualitative data set was comprised of seven students. The study examined a number of student outcomes to determine if there were any correlations between service-learning, several academic, and affective outcomes and examined an overall increase in student academic success. Taking these two studies as an example (Davis, 2013; York, 2016), it is apparent that measurement of the impact of service-learning on students is complex, as the structure of the service-learning experience and outcome indicators can be from a variety of sources (students, independent observers), take a variety of forms (perceptions, actions), and that the data can be gathered in a variety of ways (survey questions, reflective papers, assessment instruments).
Examination of the literature on service-learning reveals that many studies are based on case studies of courses or programs, meta-analyses of studies, and volumes of collected studies (Bringle et al., 2013; Whitley, 2014). It is noted that there are weaknesses in both conception and methods of approach to service-learning and service-learning research (Bringle et al., 2013; Dahan, 2013; Giles & Eyler, 2013; Kiely, 2005; Whitley, 2014). Although many studies are theoretically grounded and indicate the benefits of service-learning, none of the studies included in this review used experimental or quasi-experimental designs that utilized a comparative control group, and none of the studies addressed an approach to properly control for selection bias.

**Occupational Therapy Education**

The focus of this next and last section of the literature review is to provide the reader with a selection of literature on occupational therapy education. This section opens with a brief introduction to the profession of occupational therapy to situate the discussion of literature on occupational therapy education. Included in this section are studies that emphasize the scholarship of occupational therapy education, along with studies of experiential learning and service-learning. This literature review connects to the purpose of this study, exploring the impact of service-learning pedagogy on the development of intercultural competence in graduate occupational therapy students.

**Professional Formation and Pedagogy**

Occupational therapy is a health and rehabilitation profession that is uniquely focused on occupation (World Federation of Occupational Therapy, 2013). *Occupation* is defined as the everyday activities a person wants to, needs to, or are expected to do, regardless of disability or dysfunction (AOTA, 2014). Occupational therapy is a health profession that supports a person’s
health and engagement in daily occupations (World Federation of Occupational Therapy, 2013). Occupational therapy’s philosophy is that participation in meaningful occupations influences health and well-being. The profession of occupational therapy has its own body of literature, theories, and models of practice rooted in biomedical and psychosocial sciences (Hooper & Woods, 2002). Values of the profession include occupational participation, social justice, and equity (Drolet & Desmormeaux-Moreau, 2015). Occupational therapy’s professional education programs prepare students in skills, competencies, attitudes, and behaviors defined by the profession (Flecky & Gitlow, 2011). The practice of occupational therapy is both an art and a science, and occupational therapy education relies heavily on clinical practice education (Crist, Scaffa, & Hooper, 2010).

Pedagogy is understood as the teaching methodology an educator selects in order to impart knowledge, skills, or attitudes to students (Schulman, 2005). Pedagogies most often used in occupational therapy education include active learning, relational learning, and contextualized learning (Mitchum, 2014). Schulman (2005) defined pedagogy as “the types of teaching that organize the fundamental ways in which future practitioners are educated for their new professions” (p. 52). There is no one signature pedagogy (Battaglia, 2016; Shulman, 2005) that frames occupational therapy education. A variety of pedagogies are utilized in occupational therapy education, including case-based learning, problem-based learning, interprofessional education, and experiential learning (Coker, 2010). Experiential education is considered a very important aspect of the occupational therapy curriculum (Knecht-Sabres, 2013). Experiential learning is considered hands-on learning, delivered in a context that affords students the opportunity to experience, reflect, and utilize knowledge and skills acquired in didactic course work. Service learning is one pedagogical approach that is a type of experiential learning.
“Similar to the philosophy that underlies occupational therapy educational practice, service-learning promotes learning by doing” (Flecky & Gitlow, 2011, pp. 27-28). Many occupational therapy programs design and integrate experiential learning experiences, including service-learning, into the curricula to promote the development of skills, attitudes, and behaviors required of future practitioners.

**Scholarship of Teaching and Learning in Occupational Therapy**

Occupational therapy education scholarship has historically been focused on student outcomes and is predominantly descriptive in nature (Coker, 2010; Goldbach & Stella, 2017; Hooper, 2016; Knecht-Sabres, 2013; Knightbridge, 2014; Nielsen, Jedlicka, Hanson, Fox, & Graves, 2017; Phillips, 2017). Much of the research on occupational therapy education, while theoretically grounded, focuses on the impact of learning experiences, often examining students’ perceptions of learning when engaged in innovative course design or programs (Hooper, 2016). While descriptive scholarship, student perceptions, and outcomes are important to the scholarship of teaching and learning, occupational therapy education research that is “inherently embedded in local, complex social conditions can limit generalization and contributions to theory building, which in turn can slow the cumulative knowledge building process” (Hooper, 2016, p. 2).

There is a small number of studies that focused on faculty scholarship of occupational therapy education (Gupta & Bilics, 2014; Hooper, King, Wood, Bilics, & Gupta, 2013; Hooper, 2016; MacNeil & Hand, 2014). These research studies aimed to contribute to a larger, more organized, inter-related body of information about various approaches to teaching and learning in occupational therapy (Hooper, 2016), but it is apparent, there is a continued need to broaden education research for this profession. Gupta and Bilics (2014) custom-designed a survey which
was mailed to 2,225 occupational therapy faculty. Of those who received the survey, 520 occupational therapy educators participated in the study. Findings identified a need to build research capacity for education research and more diversification of education research topics, including professional socialization and competencies. This finding of Gupta and Bilics (2014) is aligned with the findings of other studies. For instance, Hooper et al. (2013) conducted a systematic mapping review of identified topics in teaching, research designs, levels of impact, and themes across occupational therapy educational scholarship. This study included a data set of 129 articles published between 2000 and 2009. The results of Hooper’s systematic review identified the need for more educational research in occupational therapy education. This study identified the need to diversify studies of local learning situations, develop profession-specific conceptual frameworks for learning, and measure outcomes beyond student views of the learning activity, so as to inform educational practices. The MacNeil and Hand (2014) study was a one-year evaluation of faculty from a master of science in an occupational therapy program. The purpose of the study was to examine curriculum content and pedagogical practices as a way to gauge program preparedness to move to a clinical doctorate program. The results of this study included the need for more educational research in occupational therapy pedagogy and curriculum design.

**Experiential Learning in Occupational Therapy Education**

Inquiry of experiential learning in occupational therapy education indicates positive benefits and impact on students (Coker, 2010; Goldbach & Stella, 2017; Gupta & Bilics, 2014; Hooper, 2016; Knecht-Sabres, 2013; Knightbridge, 2014; Nielsen et al., 2017; Phillips, 2017). Studies relating to student impact indicate that outcomes generally focus on students’ personal and professional development, as well as readiness for clinical practice. Six themes of student
impact have been identified from the literature: personal growth and development, essential competencies for occupational therapy practice, communications, clinical reasoning, theory to practice application, and value of occupation.

The literature indicates that personal and professional development measures include gains in self-confidence, empowerment, teamwork and communication skills, and interpersonal competencies (Goldbach & Stella, 2017; Knecht-Sabres, 2013; Knightbridge, 2014; Nielsen et al., 2017; Phillips, 2017). Experiential learning approaches provide occupational therapy students with opportunities to be with clients in different settings, consequently applying theory to practice. Students rehearse and apply the knowledge and skills learned in the classroom; thus providing a way to “improve the personal and professional attributes and skills needed to be an effective clinician” (Knecht-Sabres, 2013, p. 23). Three studies have examined the engagement of occupational therapy students in alternative, non-traditional, practice settings (Goldbach & Stella, 2017; Knightbridge, 2014; Nielsen et al., 2017). Although the settings were different, each of these three studies indicated positive outcomes on the students’ personal and professional development. For example, in the Goldbach and Stella study, occupational therapy students were working in a community-based, pro-bono clinic setting with patients who presented with a variety of diagnoses. The study by Nielsen et al. focused on occupational therapy students working with refugee individuals and families in a community-based setting. The Knightbridge study had students engaged in a variety of alternative practice settings: a community garden, a forensic setting, and a community senior center. All three studies (Goldbach & Stella, 2017; Knightbridge, 2014; Nielsen et al., 2017) demonstrated the positive benefits of experiential learning on occupational therapy students. Two additional studies conducted by Knecht-Sabres (2013) and Phillips (2017) examined the impact of experiential learning on occupational therapy
students with elderly clients in community-based living situations. These studies also demonstrated the positive effects of experiential learning on occupational therapy students’ personal and professional development.

Clinical reasoning and critical thinking skills are essential skills required of occupational therapy practitioners. A study by Coker (2010) examined the effects of a one-week, experiential, hands-on learning program on clinical reasoning and critical thinking skills. The study involved 25 occupational therapy students providing daily constraint-induced movement therapy (CIMT) to children with hemiplegic cerebral palsy. This quasi-experimental, pre-test and post-test design utilized two instrument measures: The Self-Assessment of Clinical Reflection and Reasoning (SACRR; Royeen, & Salvatori, 1997) and California Critical Thinking Skills Test (CCTST; Facione, Facione, Blohm, & Giancarlo, 2002). This study found that the students’ clinical reasoning skills (22 of the 26 items) showed statistically significant positive change from pre-test to post-test, particularly in the areas of theory to practice application, use of clinical protocols, decision-making, and clinical judgment in evaluation and interventions. Students in this study also demonstrated positive post-test outcomes in critical thinking skills. The findings of this study indicated that experiential learning can improve clinical reasoning and critical thinking skills of occupational therapy students. These findings have also been validated a number of times by other inquiries of experiential learning with occupational therapy students, albeit different experiences and study designs (Goldbach & Stella, 2017; Knecht-Sabres, 2013; Knightbridge, 2014; Nielsen et al., 2017; Phillips, 2017).

The concept of occupation is core to learning occupational therapy, yet how it is conveyed through education is not well understood. Experiential learning is one type of pedagogical approach that affords students opportunities to engage in occupation-based practice
Occupation-based practice reflects the foundational values of the occupational therapy profession and students use client-relevant occupations as their primary means to achieve goals related to performance. The literature indicates that experiential learning utilizing occupation-based strategies has a positive impact on occupational therapy students’ perception of the value of occupation (Goldbach & Stella, 2017; Knecht-Sabres, 2013; Knightbridge, 2014; Nielsen et al., 2017).

Service Learning in Occupational Therapy Education

Scholarship of service-learning in occupational therapy education indicates a range of positive benefits for students that align with general findings on service-learning identified in the previous section of this literature review: academic and cognitive, personal and affective, as well as civic outcomes (Astin et al., 2000; Bringle et al., 2013; Celio et al., 2011; Davis, 2013; Eyler et al., 2001; Giles & Eyler, 2013; Kiely, 2004; Marby, 1998; York, 2016). The occupational therapy literature indicated that service-learning pedagogy fits very nicely with occupational therapy education and the professions’ philosophies of occupational participation, social justice, and equity (Flecky & Gitlow, 2011). There are a number of studies on the impact of service learning on occupational therapy students (Atler & Gavin, 2010; Govender et al., 2017; Hansen, 2013; Maloney, Myers, & Bazyk, 2014; Murden et al., 2008; Sanders, Van Oss, McGeary, 2016; Short & St. Peters, 2017); however, many of the studies examine different aspects of service-learning outcomes.

Atler and Gavin (2010) examined 43 occupational therapy students’ perceptions of their knowledge, skills, and abilities to provide evidence-based interventions to persons with neurological conditions over a one semester service-learning course. This was a triangulation,
mixed-methods research design. The study findings indicated that engagement in service-learning can positively impact students’ perceptions of their knowledge, skills, and confidence; however, at varying levels. Hansen (2013) demonstrated a link between clinical reasoning, the use of occupational justice theories, and service-learning. Fifty-four fourth year occupational therapy students participated in this qualitative study over a two-semester clinical reasoning course that incorporated the pedagogy of service-learning (Hansen, 2013). A particularly interesting finding from Hansen (2013), was that students who engaged in service-learning with vulnerable populations learn new skills and strengthen their attitudes and engagement in advocacy for vulnerable populations. Another qualitative study conducted by Maloney et al. (2014) examined the influence of service-learning on students’ feelings of civic engagement and responsibility. Civic responsibility was defined as a “sense of membership in one’s society and a need to personally contribute to society’s preservation and future development” (Maloney et al., 2014, p. 2). Another triangulation, mixed-method design study, similar to the Atler and Gavin (2010) study, was conducted by Sanders et al. (2016). This study examined 65 occupational therapy students enrolled in a service-learning course. The researchers probed for a number of outcomes, primarily examining personal growth, self-efficacy, and community self-efficacy (Sanders et al., 2016). For the quantitative component, a quasi-experimental design was employed using pre- and post-test measures with a control group and an experimental group. Qualitative outcomes were explored with the use of structured student reflections and non-structured reflections within different groups. The findings of this study identified positive benefits of service-learning in promoting personal growth and self-efficacy. An interesting finding of the Sanders et al. (2016) study results indicated that students who engaged in writing
structured reflections showed significantly increased quantitative measures of personal growth and personal self-efficacy, whereas those using non-structured reflections showed no change.

There was a small number of studies that explored the impact of service-learning, including international service-learning, on the development of cultural competence in occupational therapy students (Govender et al., 2017; Murden et al., 2008; Short & St. Peters, 2017). Murden et al. (2008) conducted a mixed-methods study examining occupational therapy students’ perceptions of cultural awareness utilizing a quantitative measure, a modified Cultural Awareness and Sensitivity Questionnaire (CASQ; Cheung, Shah, & Muncer, 2002), and a qualitative analysis of reflective journals. This study explored occupational therapy students’ self-rated level of cultural competence pre and post service-learning experiences. Purposive sampling was used in this study and included 72 students at four stages of learning. The findings of this study indicated that exposure to cultural differences positively influenced students’ level of cultural awareness, along with levels of confidence in intercultural interactions. Govender et al. (2017) conducted an explorative qualitative study of 24 final year occupational therapy students at an occupational therapy program in South Africa. This study identified seven themes of cultural competence development in occupational therapy students: culture has an influence on occupational therapy interventions, language can have a positive and negative impact on interventions, both culture and language affect the outcomes of interventions, crossing the cultural and language divide is important in the effectiveness of occupational therapy interventions, the use of translators during the occupational therapy process was viewed as having a negative influence on the therapeutic relationship between client and occupational therapy practitioner, occupational therapy students view language and culture as having a dynamic influence on each other, and cultural competence is important in effective service
delivery of occupational therapy, but was found to be a challenge to students. Short and St. Peters (2017) examined the development of cultural intelligence (CQ; Earley & Ang, 2003) in 12 occupational therapy doctoral students who had experienced a short-term cultural immersion in Haiti. While some of the findings specific to the development of CQ were inconclusive, the overall results supported the inclusion of ISL experiences in occupational therapy education as an approach to develop intercultural competence in future practitioners (Short & St. Peters, 2017).

**Critique of Literature on Occupational Therapy Education**

This select review of research on occupational therapy education focuses on two types of literature: a) the scholarship of teaching and learning in occupational therapy education, and b) the impact of experiential learning and service-learning on occupational therapy students. The scholarship of teaching and learning in occupational therapy education was sparse; however, the literature reviewed indicated a need to broaden educational research in occupational therapy pedagogy (Gupta & Bilics, 2014; Hooper et al., 2013; Hooper, 2016; MacNeil & Hand, 2014). Inquiries into the impact of experiential learning and service-learning on students all indicated positive outcomes; however, all studies utilized a small convenience sample of students, based on a single institution (Goldbach & Stella, 2017; Knecht-Sabres, 2013; Knightbridge, 2014; Nielsen et al., 2017; Phillips, 2017). Most of the studies were also conducted at U.S. institutions of higher education (Goldbach & Stella, 2017; Knecht-Sabres, 2013; Nielsen et al., 2017; Phillips, 2017), although one study was conducted at a British university (Knightbridge, 2014), and one was conducted at a South African university (Govender et al., 2017). All studies in this review of student impact were a mixed-method research design (Goldbach & Stella, 2017; Knecht-Sabres, 2013; Knightbridge, 2014; Nielsen et al., 2017; Phillips, 2017), and only one
study included deductive quantitative content-analysis of data (Knightbridge, 2014). There were a number of studies on the impact of service learning on occupational therapy students (Atler & Gavin, 2010; Govender et al., 2017; Hansen, 2013; Maloney et al., 2014; Murden et al., 2008; Sanders et al., 2016; Short & St.Peters, 2017); however, the service-learning methodology and designs were very different from each other, sample sizes were relatively small, and many measures employed were subjective in nature. In particular, it appears that measuring the development of cultural competence in occupational therapy education is somewhat problematic for two reasons. Firstly, there is a lack of clarity about what constitutes intercultural competence and its components, and secondly, there is a lack of valid measures to assess the development of cultural competence in occupational therapy students.

**Summary**

The purpose of this literature review was to examine the development of intercultural competence, service-learning and ISL, and occupational therapy education. This literature review connects to the purpose of the study, the examination of the impact of service-learning pedagogy and international service-learning on the development of intercultural competence in graduate occupational therapy students.

Intercultural competence is an identified and required core component of healthcare professional education and practice (IOM, 2003); however, the literature is sparse in relation to the development of intercultural competence in occupational therapy. Service-learning and international service-learning hold the potential to be transformational for students’ development and their professional formation (Bringle et al., 2011; Kiely, 2005; Mezirow, 2000; Short & St. Peters, 2017). The literature indicated that service-learning had an impact on the development of intercultural competence (Arasaratnam-Smith, 2017; Dahan, 2016; Deardorff, 2006; Eyler et al.,
EFFECTS OF ISL ON INTERCULTURAL COMPETENCE

2001; Kiely, 2004; Short & St. Peters, 2017). Intercultural competence has been identified as critically important for healthcare professionals to ensure equitable and effective delivery of care (AOTA, 2014; IOM, 2003; Suarez-Balcazar & Rodawoski, 2007; Suarez-Balcazar et al., 2009).

In the context of occupational therapy education, students require hands-on learning opportunities to apply the knowledge and skills learned in the classroom to actual real-life practice situations and environments (Coker, 2010; Goldbach & Stella, 2017; Gupta & Bilics, 2014; Hooper, 2016; Knecht-Sabres, 2013; Knightbridge, 2014; Nielsen et al., 2017; Phillips, 2017). Experiential learning, specifically service-learning and international service-learning, as a type of pedagogy, offers hands-on learning opportunities and generally promotes positive benefits and effects on college students in general (Astin et al., 2000; Bringle et al., 2013; Celio et al., 2011; Dahan, 2016; Davis, 2013; Eyler et al., 2001; Giles & Eyler, 2013; Holsapple, 2012; Kiely, 2004; Kiely, 2005; Whitley, 2014; York, 2016), and in particular, promotes benefits for occupational therapy students (Atler & Gavin, 2010; Govender et al., 2017; Hansen, 2013; Maloney et al., 2014; Murden et al., 2008; Sanders et al., 2016; Short & St. Peters, 2017). From the studies reviewed, it is apparent that there are some unanswered questions about the impact of service learning as a pedagogy, and especially about the impact of international service-learning, on the development of intercultural competence in the education of occupational therapy students.

In conclusion, this study was conducted to fill a gap in the existing knowledge about service-learning and inform both occupational therapy educators and practitioners about the importance and development of intercultural competence. The next chapter gives a description of the research design and methods used in this study. It includes a discussion on the
philosophical stance adopted by the researcher and explains both phases of the mixed-methods design.
CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

This chapter provides a description and explanation of the sequential explanatory design that will be utilized in this study. This research sought to better understand the impact of a short-term ISL experience on graduate occupational therapy students, with particular examination of intercultural competence development. Included in this chapter is a discussion of the research paradigm, a re-statement of the problem, the research questions, a description of the mixed-methods methodology, and a description of the qualitative methods of analysis that will be rooted in constructivist grounded theory. This study adopted a pragmatic method and system of investigation and includes two phases of inquiry. Phase one of the study was the quantitative phase of the investigation. This chapter includes a description of the methodology, measures to be used, sampling strategies, and data collection for this phase. Phase two of the study was the qualitative mode of inquiry. The qualitative phase included data gathered through semi-structured interviews and journals. Analysis of the qualitative data utilized a grounded theory approach, and in a systematic way, uncovered participants’ experiences and perspectives. Data collection and analysis processes in relation to verification procedures and grounded theory will be described for both the quantitative and qualitative phases of the study.

Re-Statement of the Problem

The profession of occupational therapy demands practitioners understand culture, be skilled in intercultural competence, and deliver culturally responsive care to persons of diverse and multicultural backgrounds (Flecky & Gitlow, 2011; Munoz, 2007; Suarez-Balcazar & Rodakowski, 2007; Talero et al., 2015). Research has shown that ignorance of cultural differences contributes to inequalities in the delivery of care, and scholarship of this issue indicates that understanding a patients’ culture leads to better health outcomes (IOM, 2003). ISL
in health professions education is a growing trend across colleges and universities in the United States (Blessinger & Cozza, 2017). However, there is a limited understanding of the outcomes of ISL and its influence on the development of intercultural competence (Loftin et al., 2013; Suarez-Balcazar et al., 2009). The purpose of this study was the examination of the impact of a short-term ISL experience on the development of intercultural competence in graduate occupational therapy students.

**Research Questions**

The primary research question that guided this study was: What is the influence of an ISL experience on graduate occupational therapy students, on the development of intercultural competence? The analytical questions were as follows:

1. What is the measured effect of change on levels of intercultural competence in graduate occupational therapy students?

2. What are graduate occupational therapy students’ reports about the effects of an ISL experience?

3. What are the contributing factors to changes in levels of intercultural competence, if any?

4. How do graduate occupational therapy students describe the effects of an ISL experience on intercultural competence?

**Research Design**

**Philosophical Stance**

This study adopted an epistemological assumption whereby the researcher tried to get as close as possible to the participants being studied, with the belief that knowledge is developed and known through individual views based on experiences (Creswell, 2013). The theoretical
positioning and paradigmatic orientation of this study was an interpretive framework that utilized a social constructivist approach to understand the complex phenomenon of intercultural competence development in relation to a short-term ISL experience on graduate occupational therapy students.

This research utilized a mixed-methods sequential explanatory design which involves the collection and analysis of quantitative and then qualitative data, in two consecutive phases within one study (Creswell & Plano Clark, 2007). Quantitative research consists of deductive reasoning (Gray, 2018). In quantitative research, the dominant epistemological paradigm is one of positivism, reality is assumed to be external to oneself, and quantitative investigation seeks to objectively measure this reality through scientific inquiry. Quantitative research emphasizes a reductionist approach to the inquiry of a problem and involves the collection of numerical data and statistical analysis to define, test, support or refute an objective reality (Creswell & Plano Clark, 2007). Qualitative research, on the other hand, consists of an inductive process of inquiry (Gray, 2018), utilizing rich data gathered from individuals or groups who experience the phenomena under investigation in given contexts. The qualitative researcher utilizes an interpretive approach to guide the process of data collection and analysis, constructs themes, patterns, and generalizations, along with interactively learning from participants and interpreting participants’ views about a particular phenomenon.

According to Gray (2018), however, quantitative or qualitative methods or deductive and inductive research processes, are not mutually exclusive and multiple paradigms can be used to address the same research problem. Grounded theory is a particular type of approach in which the researcher generates a general explanation of phenomena, engages in the development of theories (Glaser & Strauss, 1967), and can include both quantitative and qualitative methods.
Grounded theory moves the research paradigm from a positivist assumption of an objective external reality towards postpositivism and constructivism, giving voice to participants’ views in an unbiased approach to data collection and analysis (Charmaz, 2006, 2014). According to Strauss and Corbin (1990), theories should be “grounded” in data gathered from participants, and while grounded theory is often qualitative in nature, it can also include quantitative methods.

Quantitative and qualitative research methods have traditionally been associated with conflicting research paradigms (Bryman, 2012); however, complex research problems call for “answers beyond simple numbers in a quantitative sense or words in a qualitative sense” (Creswell & Plano Clark, 2007, p. 13). This study benefited from the use of “multi-strategies” (Bryman, 2012, p. 628) to provide a better understanding of the phenomenon than if just one approach (i.e., quantitative or qualitative) or methodology was utilized (Creswell, 2013; Johnson, Onwuegbuzie, & Turner, 2007). In this study, the primary question is complex, and the sub-questions are different types of questions, some fitting a quantitative approach and the others a qualitative approach. The primary question of this study required both deductive and inductive reasoning, and for richer, more nuanced research findings, the combining and integration of both quantitative and qualitative findings will be of greater value. The quantitative method included in the study sought to understand the relationship of intercultural competence, as measured by the IDI (Hammer, 1999, 2009, 2011), and the impact of a short-term ISL experience. The qualitative methods of this study provided a more in-depth understanding of participants’ perspectives regarding intercultural competence development in relation to the experience of a short-term ISL experience. The multiple methods used helped to balance any potential weaknesses in the data collection of each method if used alone.
Research Design – Mixed-Methods

A sequential explanatory research design is a two-phased mixed-methods research design (see Figure 3). In the current study, this researcher initially collected and analyzed the quantitative data utilizing a specific quantitative cross-cultural assessment of intercultural competence, the IDI, before and after the short-term ISL experience. Following analysis of the quantitative data, the qualitative data was collected and analyzed using grounded theory methods. According to Creswell and Plano Clark (2007), this type of research design intentionally builds upon quantitative findings by utilizing qualitative data to help explain initial quantitative results. The purpose and benefits of this type of design are expansion, using the qualitative data to help explain, expand, and refine the results of the quantitative findings, as the intention of this study was to increase the breadth and range of inquiry (Gray, 2018).

Phase One: Quantitative Data Description

The first phase of this study began with the collection and analysis of quantitative data utilizing the IDI (Hammer, 1999, 2009, 2011). This individual assessment tool measures levels of intercultural competence along a continuum of development, levels that range from a more monocultural worldview, to a more global mindset (Bennett, 2004). The purposive sample of participants in phase one of this study were a group of graduate occupational therapy students who participated in a short-term ISL experience in the Fall of 2018. For the quantitative data set, each participant in this study completed an individual IDI at two points in time. The first IDI was completed prior to any pre-training for the ISL experience in the spring/summer of 2018 (a standard practice of the Global Studies Department at the institution). This researcher invited all participants of the ISL to complete a second IDI within one week of return from the ISL.
experience. The pre-post quantitative data elicited from both sets of IDI assessments were analyzed prior to the qualitative data collection and analysis.

The IDI (Hammer, 1999, 2009, 2011) was selected as the quantitative measurement of choice for this study. The IDI is a 50 item, online questionnaire that takes approximately 25 minutes to complete. This instrument measures levels of intercultural competence, defined as one’s ability to appreciate differing cultural perspectives and appropriately adapt behaviors and interactions to cultural differences and commonalities (Hammer, 2011). This instrument was selected for a number of reasons, namely:

- The IDI is a developmental measure which measures increasing or decreasing levels of an individual’s intercultural competence.
- The IDI applies across a wide range of cultures and has been validated to provide an accurate profile of respondents’ orientations toward a wide range of “other culture” groups.
- The IDI is a psychometrically tested instrument that has been found to possess strong construct, content, and predictive validity, as well as strong reliability across diverse cultural groups (Hammer, 2009, 2011; Paige, Jacobs-Cassuto, & Yershova, 2003).
- Few other researchers have utilized the IDI when studying intercultural competence in health care professionals, and specifically, there are only two studies in the occupational therapy education literature where the IDI was administered with occupational therapy students and practitioners (Bogis, 2012; Munoz et al., 2009).
There are standard procedures for administration of the IDI. Once a participant has completed the IDI, individual reports can be generated and it is possible to conduct pre and post experience assessments of intercultural competence. Pre-experience IDI reports were provided by the host institution (Global Studies Department), with the post experience IDI generated by this researcher. Interpretation of the IDI’s findings can only be conducted by a certified interpreter. This researcher became a certified administrator of the IDI before this study commenced. Results of both the pre and post experience IDI reports were compared, with the intention of answering the quantitative research questions regarding anticipated changes in levels of intercultural competence. These results were then utilized to inform the qualitative phase of the study.

**Phase Two: Qualitative Data Description**

The second phase of this study flowed from the first phase of the study and consisted of the collection and analysis of student perceptions about their experience utilizing two qualitative methods: inquiry stemming from semi-structured interviews and analysis of individual ‘service-learning journals.’ Constructivist grounded theory methods were utilized for data analysis of the interviews and journals as the purpose of this study was to investigate intercultural competence from the perspective of the participants on a short-term ISL experience. The intention was to build a more holistic picture of the impact of a short-term ISL on graduate students by qualitatively examining their experiences, along with utilizing the detailed views of participants through interviews and journal analysis. In this sequential explanatory research design, the qualitative data were used to expand on the quantitative results (Creswell & Plano Clark, 2007).

Recruitment of a purposive sample for this second phase of the study was through an invitation to all of the original group of participants who went on the short-term ISL experience.
However, some students declined to participate in phase two of the study. Participants of phase two were invited for an interview and to share their journals. The semi-structured interview was utilized using an iterative manner, consistent with grounded theory methodology, and this same methodology was utilized for analysis of the qualitative data. Interview data were analyzed and coded. As journals are a requirement of faculty instructors for students participating on an ISL experience, the participants were invited to share their journals, and it was hoped that student’s reflections would reveal a greater depth of understanding of the ISL experience, along with their thoughts about changes in self as a result of the experience. Only four participants shared their journals with this researcher. The journal data were considered supplemental to the interview data and both sets of qualitative data, interview and journal data, were merged following the separate analyses.

Grounded theory is an inductive and systematic approach to data collection and analysis that explains a phenomenon of interest (Charmaz, 2014; Corbin & Strauss, 2007; Glaser & Strauss, 1967). The original grounded theory method was developed by Glaser and Strauss (1967) for the purpose of building theory from data (Corbin & Strauss, 2007). According to Charmaz (2006), grounded theory is constructivist in nature, the data are constructions of experiences, and grounded theory methods provide “systematic, yet flexible guidelines for collecting and analyzing data” (p. 2). The phenomenon of interest for this study was the development of intercultural competence and the impact of a short-term ISL experience. The intent of this study was to move beyond a description of the experience and delve deeply into the participants’ views about the ISL experience to seek a “unified theoretical explanation” (Corbin & Strauss, 2007, p. 107) for the process of intercultural development and the impact of an ISL experience.
Design Considerations to Ensure Quality of Research

The quantitative phase of this study emphasized the measurement of intercultural competence with the use of a rigorously validated assessment tool, the IDI (Hammer, 2009, 2011). The IDI identifies the orientations of intercultural competence along a continuum, from a monocultural mindset to an intercultural mindset (Hammer, 2009, 2011). Validity testing of this instrument included a confirmatory factor analysis which resulted in the named orientations. Psychometric testing demonstrated alpha coefficient reliabilities of the subscales to fall between $\alpha = .71$ and $\alpha = .83$ (Hammer, 2009, 2011). This instrument was used to measure levels of intercultural competence both before and after the short-term ISL experience. Approaches to administration, data management, and analysis were previously standardized and were followed closely in the current study.

To ensure design quality and validity of the qualitative phase of this study, emphasis was placed on strategies that ensured the trustworthiness of this study (Lincoln & Guba, 1985). Strategies to ensure trustworthiness of qualitative methods include credibility strategies, peer debriefing, member checks, reflexive journaling by the investigator, and conformability strategies. Credibility, or the confidence in the findings (Gray, 2018), was established through prolonged engagement of the researcher with the study participants and their stories collected via interviews and journals. The development of a trusting relationship and allocation of adequate time to uncover participants’ open and honest views over time was important. Peer debriefing is a process of analytical probing by a peer. The researcher identified a peer (an occupational therapy educator) and had them help identify any biases or positioning concerns for her as the investigator. Lincoln and Guba (1985) consider member checks as the single most important consideration to ensure the strength of a study’s credibility. In this study, opportunities for both
formal and informal member checks were made, including allowing participants to review the interpretations made by the researcher to ensure the accuracy of content. Accuracy was important for the researcher; therefore, the researcher adopted a reflexive stance as she conducted this study to critically reflect on any influence she had on the research process (Lincoln & Guba, 1985). The researcher developed a reflexive diary where she made regular entries about research decisions and reflected on her own thoughts and ideas about the research process. This reflexive diary was a separate journal from all of the notations that demonstrated conformability with the research design (e.g., records of what was being done throughout the research process, maintenance of raw data, data reduction and analysis notes, process notes, and copies of forms and schedules).

**Procedural Design Considerations**

The decision-making process in the selection of this design followed Creswell and Plano Clark’s (2007) decision-tree model and considered decisions about both the quantitative and qualitative phases of the study.

**Timing Decision**

Timing refers to the temporal relationship between the quantitative and qualitative elements of the study (Greene, Caracelli, & Graham, 1989). This study’s timing was sequential, with collection and analysis of the quantitative data first, followed by the collection and analysis of the qualitative data.

**Weighting Decision**

Weighting refers to the importance the researcher has attributed to the quantitative and qualitative strands to answer the research questions (Creswell & Plano Clark, 2007). As previously discussed, this study used both qualitative and quantitative measures to explore the
research questions; however, as the research progressed, more emphasis was placed on the qualitative data in the study due to the constructivist perspective of the study and the focus on the perspectives of the participants.

Mixing Decision

The quantitative and qualitative data were collected and analyzed separately from each other during the study. The quantitative phase of data collection and analysis was conducted first and the quantitative findings guided the qualitative phase of data collection and analysis. The qualitative phase of data collection and analysis began after all quantitative data was collected and analyzed. The point of interface was when the quantitative and qualitative built on one another in an explanatory sequence. In this study, the point of interface was when phase one and phase two of the study were completed in full, and then the two data sets were examined and connected together. In other words, the quantitative findings were expanded upon by the qualitative data.

Research Site and Participants

This study took place at a mid-sized institution in the Northeast of the United States. At this institution, occupational therapy graduate students had the opportunity to participate in a short-term ISL experience, based in two locations in Central America and one location with a Native American tribe on a reservation in South Dakota. This ISL experience was attached to a capstone course, and even though the ISL experience itself was only 7 days in duration, the course took place over two semesters in the second year of the students’ course of study. The occupational therapy students volunteered to participate in service learning as part of their capstone course. There is generally one experienced faculty member to every group of six students to participate in ISL. Students were required to complete an individual IDI and debrief
prior to the experience. In addition, students were required to complete structured reflection journals before and after the experience and participate in pre-training and post ISL experience debriefings. Table 1 provides an overview of the proposed sampling considerations.

Table 1

*Proposed Mixed-Methods Sampling Considerations*

<table>
<thead>
<tr>
<th>Research Process</th>
<th>Sampling Procedures and Considerations for Quantitative Phase</th>
<th>Sampling Procedures and Considerations for Qualitative Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sampling procedure</td>
<td>• Purposive, homogeneous sample</td>
<td>• Purposive, homogeneous sample</td>
</tr>
<tr>
<td></td>
<td>• All OT students who participate in Fall 2018 ISL will be invited to participate in this study</td>
<td>• All OT students who participate in Fall 2018 ISL will be invited to participate in this study</td>
</tr>
<tr>
<td>Sample size</td>
<td>• 20 students</td>
<td>• 15 students</td>
</tr>
<tr>
<td>Permissions needed</td>
<td>• Eligibility includes permissions needed</td>
<td>• Eligibility includes permissions needed</td>
</tr>
<tr>
<td></td>
<td>• Students representative of OT students</td>
<td>• Students participating in Fall 2018 ISL</td>
</tr>
<tr>
<td></td>
<td>• All will have completed a pre-ISL IDI in Spring/Summer 2018 semester (college requirement)</td>
<td>• Students who have completed both pre and post ISL IDI</td>
</tr>
</tbody>
</table>

*Note.* OT = occupational therapy.

This researcher is a full-time faculty member at the graduate program of occupational therapy. However, I was not the capstone instructor or advisor of the students in the Fall of 2018. The participants were graduate occupational therapy students in their second year of study. Prior to the study beginning, it was hoped that at least 20 students would participate in the ISL experience during the Fall semester of 2018.
**Instruments and Data Collection**

Quantitative and qualitative measures were utilized to answer the research questions.

Table 2 provides an overview of the measures used.

Table 2

*Mixed-Methods Study Data Collection Phases*

<table>
<thead>
<tr>
<th>Quantitative Data Collection</th>
<th>Research Process Phases</th>
<th>Qualitative Data Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purposive sampling – all students who participated in ISL</td>
<td>Sampling procedures</td>
<td>Purposive, convenient sample drawn from original sample</td>
</tr>
<tr>
<td>At least 20 students</td>
<td></td>
<td>At least 15 students</td>
</tr>
<tr>
<td>Consent from participants</td>
<td>Permissions</td>
<td>Consent from participants</td>
</tr>
<tr>
<td>IRB approval process</td>
<td></td>
<td>IRB approval process</td>
</tr>
<tr>
<td>Individual IDI on all student participants</td>
<td>Data to be collected</td>
<td>Open-ended, semi-structured interviews</td>
</tr>
<tr>
<td>Demographic forms</td>
<td></td>
<td>Journals (included structured reflections)</td>
</tr>
<tr>
<td>Confidentiality</td>
<td>Data recording</td>
<td>Pseudonyms to ensure confidentiality</td>
</tr>
<tr>
<td>Standard procedure for administration and recoding</td>
<td></td>
<td>Interview Protocols</td>
</tr>
<tr>
<td>Instrument and scores managed through IDI software</td>
<td></td>
<td>Pilot process for interviews (not included in results)</td>
</tr>
<tr>
<td>Group reports</td>
<td></td>
<td>Interviews recorded</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Journal analysis</td>
</tr>
</tbody>
</table>

**Quantitative Instrument**

The theoretical framework used in this study was Bennett’s DMIS (1986, 1993), which proposes that experiences of cultural differences range from a monocultural mindset at one side of the continuum to an intercultural mindset at the other. The IDI (Hammer, 1999, 2009, 2011) is aligned with the DMIS and presents five developmental orientations of intercultural
competence: Denial, Polarization, Minimization, Acceptance, and Adaptation. The IDI is a 50-item online questionnaire that examines levels of cross-cultural awareness and intercultural competence (Hammer, 2011). This assessment takes approximately 25 minutes to complete. The IDI generates both individual and group reports. Only IDI group reports were included in this study, to maintain participants’ anonymity. The quantitative research question was used to examine the range of cultural developmental orientations in graduate students both before and after the ISL experience. Specifically, in this study, the IDI assessed the collective group’s responses related to perceived orientation (where participants believe they fall on the continuum) as well as developmental orientation (where participants actually fall on the continuum) before and after the ISL experience.

**Qualitative Tools**

While the quantitative data was useful in examining levels of intercultural competence specifically, this study included qualitative data collection and analysis to further explore the impact of an ISL experience on graduate occupational therapy students. All students who participated in the Fall 2018 ISL experience were invited to participate in a semi-structured interview (see Appendix A). The interview questions were guided by the findings from the quantitative phase of the study, and included students’ views about culture and intercultural competence, views about the ISL experience, and the impact the experience had on the participant. The interviews were recorded using a recording phone app and lasted between 45 minutes to 60 minutes in duration.

All students who participated in the short-term ISL experience were required to engage in journaling before, during, and following the ISL experience. The journaling activity was semi-structured, with suggested prompts available to participants. Journal prompts included
participants perspectives about their experience, the physical and social environment, as well as views about interactions and learning from the people of the host location. All students who participated in the semi-structured interview process were also invited to share their respective journals for analysis.

**Sequential Data Analysis Procedures**

This study used a sequential explanatory research design (Creswell & Plano Clark, 2007). The quantitative phase of the study took place first, followed by the qualitative phase. Based on individual responses, the IDI data was aggregated and generated a measure of how culturally competent the collective group perceived themselves, as well as how competent the group actually was, and all data was provided in the form of an IDI group report. For the purposes of anonymity, only group reports were utilized in this study. Administration of this instrument was online and participants completed the assessment both before and after the ISL experience. In this study, there were two sets of group reports, a report before and after the ISL experience. Analysis of both sets of reports on each group took place immediately after the ISL experience in the Fall of 2018. The IDI pre and post reports were compared. The findings of the pre and post IDI were reviewed and informed the interview protocol for the qualitative phase of the study.

A constructivist grounded theory method of analysis (Charmaz, 2014) was utilized in the qualitative phase of this study. Analysis of interviews took place first, followed by an analysis of participants’ journals, which helped to expand and explain some of the quantitative findings. Steps in constructivist grounded theory begun with the coding of interview transcriptions. This open-coding provided an examination of each line of the interview data and lead to the identification of action codes, whereby this researcher begun to make connections, initial categories, or axial codes. Axial codes were then examined using category matrices, and
explanations of concepts begun to emerge. Memo writing occurred during this process as well and reflected analytical thinking and interpretation through the coding process. As categories were refined and developed, the researcher went back to some of the participants to fill in any gaps in the data and to look for more accurate information in the development of the emerging theory. These steps of a constructivist grounded approach were utilized in the analysis of participants’ journals as well. Once the interview and journal data were analyzed, the researcher made linkages between the datasets.

NVivo is a software program that organizes and manages rich, unstructured data for the purpose of data analysis. This program supports researchers in classifying, sorting, and arranging information and is designed to examine relationships between data, along with uncovering findings. Both the quantitative and qualitative data collected in this study were imported into NVivo to assist in the process of uncovering the phenomena of intercultural competence and the experience of an ISL, addressing the overarching purpose of this study and providing answers to the specific research questions.

Protection of Human Subjects

This study followed all ethical procedures that have been established and approved by the University of Hartford. Ethical approval was also collected from the host institution from where the participants were selected. Prior to the beginning of this study, the researcher completed all online modules of The Collaborative Institutional Training Initiative (CITI Program), which are specifically designed to educate investigators on the protection of human subjects in research.

Participation in this study was voluntary. To be included in this study, participants were invited to participate in the study (see Appendix A) and had to provide informed consent (see Appendix B) should they choose to participate. After the University of Hartford’s Human
Subjects Committee gave approval for the study, with the modification to utilize group IDI reports instead of individual IDI reports, invited participants were given sufficient information about the study in order to make the decision if they wished to participate. Participants received an email, introducing the researcher, an outline of the study, along with contact information so that potential participants could ask questions of the researcher or her dissertation advisor. Participants could also freely withdraw from the study at any time.

Confidentiality safeguards were also addressed throughout the study. Once the study began, this researcher established trust with the participants and protected the anonymity of participants’ private information, responses, and behaviors by securing all raw data in any form, and maintaining this level of detail from the beginning of the study to the end. During both phases of data collection and analysis, all participant identifying information was removed and pseudonyms were utilized to protect information. All electronic data was encrypted and password protected. Audio recordings of interviews were immediately transcribed and all hard copies of data, including participant journals, were kept in a locked cabinet in the researcher’s locked office. Risks of distress or discomfort for participants was unforeseen. During this study, participants could refuse to answer any questions, refuse to share their reflective journals, or withdraw at any time.

**Limitations**

As discussed by Creswell and Plano Clark (2007), explanatory sequential research designs present some challenges. Firstly, there is a primary limitation of an overall small sample size of research subjects. This study was initially limited by the number of students engaging in an ISL experience as there could be no more than 20 students participating in the ISL experience at this specific site. It was also not guaranteed that all students would participate in the study, let
alone that participants would participate in both phases. The second limitation of the study was having a different number of participants in the quantitative phase from the qualitative phase of this study. Unequal samples greatly limited the ability to complete any statistical analysis for the quantitative data. For instance, a t-test could not be performed to assess statistically significant differences due to the unequal groups and the small sample size.

One limitation of the current study was that the ISL experience under investigation was of very short duration, and this may or may not have been long enough to have an impact on the development of intercultural competence, which is one of the primary areas of inquiry. In addition, this limitation could have also impacted the generalizability of the results. This study only recruited participants that had experienced a one-week ISL experience. Assessing participants that had longer experiences or assessing participants that had varying durations of ISL experiences could have increased the generalizability of this study. In addition, the participants were all occupational therapy students, at one graduate program in the Northeastern part of the United States. Researchers should be cautious generalizing these findings to students from other health professions or to other regions in the United States.

Another limitation of the current study was that participants self-selected the ISL location and self-selected for participation in the different phases of this study. This fact made the researcher wonder about participants telling their stories, emphasizing what they thought the researcher might want to hear about. For example, perhaps the participants that chose to participate had a more positive ISL experience than those who did not choose to participate, which could bias the results.

Lastly, the position of this researcher could be a limitation in this study. As the researcher, I could have had unintentional research biases in the design of my interview
questions, as I have had the experience of being a faculty facilitator on short-term ISL experiences in the past. However, when designing the interview protocol, the questions were rooted in the quantitative findings about intercultural competence from the IDI and guided by the literature. In terms of biases, this researcher was aware that she possessed some personal biases. For example, this researcher is an immigrant to the United States and has had personal experiences of feeling like a ‘cultural outsider’. This researcher is also an occupational therapy educator. When collecting and analyzing the data, the researcher took precautions to limit her own biases. For instance, before starting with the interviews or data analysis, this researcher wrote down her own beliefs of intercultural competence and consciously chose to put aside her own beliefs and be open to the participants’ beliefs and thoughts about intercultural competence. However, although this researcher was careful and meticulous to put aside bias, bias could have still guided or influenced the interpretation of the study’s results.

Summary

This chapter provided a restatement of the problem and the research questions, situating the issue for investigation, which is the development of intercultural competence and the impact of a short-term ISL experience. This researcher’s philosophical stance was articulated as a means to justifying the research design. The sequential explanatory mixed-methods design was described, along with the methods, measures, sampling procedure, data collection and analysis, verification procedures, and measures to protect human subjects. The next chapter will reveal the findings of this study.
CHAPTER 4: RESULTS

The purpose of this two-phase mixed-methods study was to explore the effects of an ISL experience on the development of intercultural competence in graduate occupational therapy students. The purpose of this chapter is to present the research findings of both phases of inquiry. Firstly, this chapter restates the research questions, along with providing a brief overview of the ISL locations, the methodology, and procedures. Next, the findings of the quantitative phase of the study are presented: the pre and post assessment of intercultural competence using the IDI (Hammer, 1999, 2009, 2011). Secondly, phase two of the study will be discussed in detail and contains the analysis of the qualitative data from semi-structured interviews and supplemental journal reflections, which were assessed in an iterative manner, consistent with grounded theory methodology. Lastly, a summary of salient findings relative to the research questions will be provided.

Research Questions

The primary research question that guided this study is: What is the influence of an ISL experience on graduate occupational therapy students, and the development of intercultural competence? The analytical questions are as follows:

1. What is the measured effect of change on levels of intercultural competence in graduate occupational therapy students?

2. What are graduate occupational therapy students’ reports about the effects of an ISL experience?

3. What are the contributing factors to changes in levels of intercultural competence, if any?
4. How do graduate occupational therapy students describe the effects of an ISL experience on intercultural competence?

**Overview of Study Methodology**

Inquiry for this research followed a modified, two-phase mixed-methods sequential explanatory design. The central premise of a mixed-methods design is that the use of both quantitative and qualitative data will provide a deeper understanding of a phenomenon (Creswell & Plano Clark, 2007). In this study, the quantitative findings helped identify specific variables of interest for exploration in the qualitative phase of the study and guided the qualitative interview questions. Qualitative data were analyzed utilizing a constructivist grounded theory approach (Charmaz, 2006, 2014), which aimed for an interpretive understanding of the studied phenomenon. The primary research question was addressed through the four analytical questions, with research question one addressed by quantitative methods, and research questions two, three, and four addressed through qualitative methods. The phenomenon under investigation was intercultural competence as influenced by an ISL experience.

**Recruitment of Participants**

Criteria for selection of participants were as follows: (a) a graduate occupational therapy student, second-year, (b) a participant of an ISL experience, and (c) previous completion of a pre-trip IDI prior to any pre-training or orientation to the ISL experience. Eighteen subjects were recruited via email invitation while they were on the ISL experience. Next, follow-up invitation phone calls on return from the ISL and one-to-one introductory meetings with prospective participants who had follow-up questions or concerns were completed. Out of the 18 recruited, 13 subjects agreed to participation and provided written consent.
Data Collection

Both quantitative and qualitative data were collected for the present study. Quantitative data was collected using the IDI to assess intercultural competence (Hammer, 1999, 2009, 2011). To determine whether there were changes in intercultural competence, a pre- and post-test IDI were compared. Specifically, for the pre-test, an IDI was filled out prior to the ISL experiences, while the post-test included an IDI that was filled out after the ISL experiences. The pre-test data consisted of 18 completed IDI assessments, while the post-test data only consisted of 13 completed IDI assessments. For both the pre- and post-test IDIs, the data were aggregated into group reports to ensure participant anonymity. In other words, each individual completed an IDI assessment, but individual data were aggregated to generate a group report that profiled the way the group collectively experienced and responded to cultural differences; therefore, keeping individual responses anonymous.

The intention of employing a mixed-methods design was for the qualitative data to build on the results of the quantitative data by providing a more in-depth and subjective understanding of the topic (Creswell & Plano Clark, 2007). More specifically, the qualitative data were used to further explore the participants’ views about the ISL experience and the development of intercultural competence. The qualitative data were collected through semi-structured interviews. The semi-structured interviews allowed the researcher to follow specific questions for each participant, but also allowed the researcher to ask new questions depending on the participants’ responses. Through the use of semi-structured interviews, this study attempted to focus and reveal participants’ experiential views, understandings, and meanings about the phenomenon and the impact of an ISL. Additionally, participants were given a choice about whether or not they wanted to share their ISL reflection journals. Four participants chose to do
so; therefore, journal reflections were also included in the qualitative data analysis and were considered supplemental to the qualitative data.

**Sample Demographics**

The study sample was comprised of second-year occupational therapy students who participated in a short-term ISL experience through the graduate occupational therapy program at a private institution in the Northeastern part of the United States. The subject sample for phase one (quantitative data set) was 18 participants, while the subject sample for phase two (qualitative data set) was 13 participants. All participants were occupational therapy students who enrolled for the ISL experience in the summer of 2018 through the Global Health Programs at the private institution. All 18 subjects who self-selected to complete the pre-trip IDI were invited to participate in this study; however, some subjects declined the invitation to participate, with a final group of 13 subjects. This group of 13 subjects was recruited within one week of their return from the ISL experience.

The majority of the sample was U.S. born, Caucasian females who spoke English as their first language and were under the age of 30. See Table 3 for the characteristics of the sample. The 18 pre-trip study participants completed the IDI at least 12 weeks prior to the ISL experience, and prior to any pre-trip trainings facilitated by the ISL faculty. The 13 post-trip participants self-selected for participation in the study and were from the original sample group of 18 student participants, and they completed the post-trip IDI two weeks following the ISL experience.
### Table 3

**Study Participant Demographic Characteristics by Phase**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Phase One (N = 18)</th>
<th>Phase Two (N = 13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Frequency</td>
<td>Percent (%)</td>
</tr>
<tr>
<td>Male</td>
<td>3</td>
<td>16.70%</td>
</tr>
<tr>
<td>Female</td>
<td>15</td>
<td>83.30%</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>Frequency</td>
<td>Percent (%)</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>1</td>
<td>5.56%</td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>16</td>
<td>88.90%</td>
</tr>
<tr>
<td>Multiracial</td>
<td>2</td>
<td>5.56%</td>
</tr>
<tr>
<td>Age Category</td>
<td>Frequency</td>
<td>Percent (%)</td>
</tr>
<tr>
<td>61 and over</td>
<td>1</td>
<td>5.56%</td>
</tr>
<tr>
<td>51-61</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>41-50</td>
<td>2</td>
<td>11.11%</td>
</tr>
<tr>
<td>31-40</td>
<td>1</td>
<td>5.56%</td>
</tr>
<tr>
<td>22-30</td>
<td>14</td>
<td>77.78%</td>
</tr>
<tr>
<td>18-21</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>17 and under</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Total time you have lived in another country:</td>
<td>Frequency</td>
<td>Percent (%)</td>
</tr>
<tr>
<td>Over 10 years</td>
<td>2</td>
<td>11.11%</td>
</tr>
<tr>
<td>6-10 years</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>3-5 years</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>1-2 years</td>
<td>1</td>
<td>5.60%</td>
</tr>
<tr>
<td>7-11 months</td>
<td>1</td>
<td>5.60%</td>
</tr>
<tr>
<td>3-6 months</td>
<td>1</td>
<td>5.60%</td>
</tr>
<tr>
<td>Less than 3 months</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Never lived in another country</td>
<td>13</td>
<td>72.22%</td>
</tr>
<tr>
<td>Education Level (completed):</td>
<td>Frequency</td>
<td>Percent (%)</td>
</tr>
<tr>
<td>Ph.D. or equivalent level</td>
<td>1</td>
<td>5.56%</td>
</tr>
<tr>
<td>M.A. degree or equivalent</td>
<td>2</td>
<td>11.11%</td>
</tr>
<tr>
<td>University graduate</td>
<td>15</td>
<td>83.33%</td>
</tr>
<tr>
<td>Secondary (high) school graduate</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Is English your first language?</td>
<td>Frequency</td>
<td>Percent (%)</td>
</tr>
<tr>
<td>Yes</td>
<td>18</td>
<td>100.00%</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Have you previously participated in an international experience (more than a week)?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
International service-learning locations. The short-term ISL experiences were designed as service-learning opportunities for graduate health profession students to promote global health awareness, cultural competence, provide service through related professional skills with individuals and communities, and engage in social justice initiatives. All of the ISL experiences were designed for students to engage with impoverished communities in need of health services. The locations were as follows:

- Haiti – rural communities in the northern mountains of Haiti
- Guatemala – marginalized communities, surrounding a small city in the central highlands of Guatemala
- Native American Reservation – impoverished and isolated community in South Dakota (identified as a global health experience because of the extreme differences in Lakota culture)

Phase One

Quantitative Data - IDI Developmental Orientation Group Profiles

The IDI is a 50-item, electronically administered instrument that measures levels of intercultural competence along a developmental continuum (Hammer, 1999, 2009, 2011). As discussed in Chapter 2, “the IDI is an empirical measure of the theoretical concepts defined by the Developmental Model of Intercultural Sensitivity (DMIS) originally proposed by Milton Bennett” (Hammer, 2014, p. 26). The IDI was designed to measure an individual or group’s capability to shift their cultural perspectives and appropriately adapt behaviors to cultural differences and similarities. This capability is conceptualized in terms of developmental ranges
of orientation along a continuum, the IDC (Hammer, 2009, 2011). The IDC, as previously discussed in Chapter 2, is adapted from a conceptual framework, the DMIS (Bennett, 1986, 1993). The IDI describes a set of orientations toward cultural competence, aligned with the DMIS, that are positioned along a continuum from a more ethnocentric, monocultural mindset of Denial and Polarization, through a transitional mindset of Minimization, to the ethnorelative or intercultural mindset of Acceptance and Adaptation (Hammer, 2012).

The IDI generates both individual and group profiles revealing an individual’s or a group’s capability for shifting cultural perspectives and adapting interpersonal behaviors toward cultural differences and commonalities. When discussing the results of phase one of this study, the quantitative phase, it is important to emphasize that only reports on group measures, through aggregating the data, were included to maintain participants’ anonymity. More specifically, the group profile provided information showing the group’s approach to dealing with cultural differences and how the group made sense of and responded to cultural differences and commonalities. Specifically, a group’s Perceived Orientation reflects where the group places itself along the intercultural development continuum, the Developmental Orientation indicates the group’s actual orientation toward cultural differences and commonalities, and the Orientation Gap is the difference between the Perceived and Developmental Orientations.

**Quantitative Findings**

Both the pre- and post-test IDI’s were generated through the IDI company website. The IDI is a copyrighted instrument. This researcher is a certified qualified administrator of the IDI, licensed to use the instrument; however, due to intellectual property rights, reports could only be produced through the company website.
Figure 4 is a visual representation of the Perceived Orientation, Developmental Orientation, and the Orientation Gap ranges of the collective pre- and post-test groups.

Figure 4. Group Pre- and Post-Test Orientations.

As can be seen in Figure 4, the first, top bar-line in the figure is named Perceived Orientation. The Perceived Orientation scores indicated where the group rated its self-perceived level of intercultural competence. The second bar-line in Figure 4 is named Developmental Orientation, and these scores represent the groups’ actual developmental orientation towards cultural similarities and differences. Figure 4 also includes bar-graphs for pre- and post-test Orientation Gap scores, and these scores indicate the difference between the Perceived and Developmental Orientation scores. Based on the pre- and post-group profiles, Table 4 describes the pre- and post-test scores for the collective group’s Perceived Orientation, Developmental Orientation, and Orientation Gap.
As shown in Table 4, the Perceived Orientation score, where respondents placed themselves along the IDC (Hammer, 2011), advanced from 120.28 on the pre-test, to 120.81 on the post-test, with an increase of 0.53 points. This score generally indicates the group’s perception of cultural perspectives and reflects a group perception of abilities to change behaviors in culturally appropriate and authentic ways. Pre- and post-test measures placed the groups’ Perceived Orientation in the Acceptance range, indicating that the group perceived itself as possessing the ability to shift cultural perspectives and readily adapt behaviors to the cultural context.

The Developmental Orientation score reflects the groups’ primary orientation toward cultural differences and commonalities along the IDC (Hammer, 2011). The results of the Developmental Orientation score indicate that the group level of intercultural competence shifted from a pre-test profile score of 91.84 to a post-test score of 91.86, an increase of 0.02 points. This indicated that no significant difference was shown in group levels of intercultural competence, as measured by the IDI. Results demonstrated that the group’s primary orientation toward cultural differences was within the Minimization orientation range. As discussed previously, Minimization is a transitional stage of intercultural competence development, between ethnocentric and ethnorelative orientations, and reflects a tendency for the group to highlight commonalities across cultures. This level of intercultural competence indicated that
the group may not have possessed a deeper recognition of important cultural differences in values, perceptions, and behaviors during cross-cultural interactions.

The Orientation Gap score, the numerical difference between the Perceived and Developmental Orientations, increased from 28.44 points on the pre-test to 28.95 points, indicating a slight widening of the orientation gap between the participants perceived and developmental orientations. Gap scores of 7 points or higher between the Perceived and the Developmental Orientation scores can be considered a meaningful difference. The results indicated an overestimation by the group of its level of intercultural competence both before and after the ISL experience. Figure 5 provides a visual representation of the percentage change within each of the Developmental Orientations.

![Figure 5. Pre- and Post-Test Ranges of Development Orientation.](image)

The results indicated that the collective group shifted in its Developmental Orientations and levels of intercultural competence. The percentages shown in Figure 5 indicate that some members of the collective group moved positively in their respective Orientations, with some participants shifting out of an ethnocentric mindset (i.e., Denial) and others shifting toward a more ethnorelative mindset (i.e., Acceptance). However, not all shifts between the group’s
Developmental Orientations were in a positive direction. The percentage of participants who fell into the Polarization Developmental Orientation was greater in the post-test group profile, which indicated that some participants experienced a negative shift in their Developmental Orientation and levels of intercultural competence. The Polarization Developmental Orientation can take the form of Defense (an uncritical view of one’s own culture and practices), or Reversal (an overly critical view toward one’s own culture, and uncritical view toward other cultural practices).

Without examination of individual IDI scores, it is not possible to examine the exact shifts between a more Defense or Reversal position within the Polarization Orientation. There was a narrowing in the spread of Orientation ranges in the post-test, which indicated that even though the group had both monocultural and intercultural mindsets when confronted with cultural differences and similarities, the collective group shifted towards greater consistency in cultural perspectives and behaviors after the ISL experience. Table 5 identifies the percentage of change within each of the IDI developmental orientations, along the IDC (Hammer, 2011).

Table 5

<table>
<thead>
<tr>
<th>IDI Developmental Orientations</th>
<th>Pretest (N=18)</th>
<th>Posttest (N=13)</th>
<th>Change in Pre-and Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial</td>
<td>5.60%</td>
<td>0.00%</td>
<td>-5.60</td>
</tr>
<tr>
<td>Polarization</td>
<td>22.20%</td>
<td>30.80%</td>
<td>+8.60</td>
</tr>
<tr>
<td>Cusp of Minimization</td>
<td>5.60%</td>
<td>7.70%</td>
<td>+2.10</td>
</tr>
<tr>
<td>Minimization</td>
<td>55.60%</td>
<td>53.80%</td>
<td>-1.80</td>
</tr>
<tr>
<td>Cusp of Acceptance</td>
<td>11.10%</td>
<td>0.00%</td>
<td>-11.10</td>
</tr>
<tr>
<td>Acceptance</td>
<td>0.00%</td>
<td>7.70%</td>
<td>+7.70</td>
</tr>
<tr>
<td>Adaptation</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Note. Denial = denied that cultural differences exist; Polarization = viewed cultural differences from an “us versus them” perspective; Minimization = trivialized cultural differences; focused on similarities; Acceptance = recognized cultural values and differences; Adaptation = took the other person’s cultural point of view and communicated accordingly.
• Pre-test results indicated that 5.60% of the group fell within the Denial Developmental Orientation. This demonstrated that prior to the ISL experience, a small percentage of the collective group presented with a more limited capability for understanding and responding to cultural differences. Results of the post-test IDI showed a shift out of a Denial Orientation, with 0.00% of the participant scores in this orientation. This indicated a mindset shift towards greater intercultural competence following the ISL experience for some participants of the group.

• The percentage of participants within the Polarization Developmental Orientation increased from 22.20% to 30.80%, showing that more of the collective group shifted in the direction of this ethnocentric, monocultural orientation. An increase in the Polarization Orientation percentage indicated a positive shift for some participants out of Denial; however, a negative shift towards Polarization also occurred for some participants. Rather than disinterest or avoidance of other cultural groups, the mindset of Denial, the Polarization Orientation, is more of an evaluative mindset. This mindset indicated the group recognized cultural differences; however, the group’s collective view of cultural differences was from an “us versus them” perspective. The group may have showed a tendency to overemphasize differences without fully understanding differences. This negative shift in mindset for some participants was an intriguing and unexpected finding.

• Results indicated there was almost no change between pre- and post-test measures in the combined range of scores for Cusp of Minimization and Minimization Developmental Orientations. The percentage of change in the collective group for these Developmental Orientations combined was 61.2% of the group at pre-test and 61.5% of the group at
post-test. The fact that there was no meaningful change within the group’s level of intercultural competence in relation to a Minimization Orientation shows that the collective group had a relatively consistent transitional mindset, between an ethnocentric and a more ethnorelative, intercultural mindset. This mindset indicated the group’s limitations in understanding of cultural differences, the highlighting of cultural similarities, and the trivializing of the ‘other’ culture.

- The combined percentages of group participants who fell between the Cusp of Acceptance and the Acceptance Developmental Orientation indicated a post-test increase of 7.70%, with a shift in the collective group moving towards Acceptance. This result indicated that a small percentage of group participants shifted positively towards a more intercultural, open mindset with abilities to recognize and appreciate patterns of cultural difference.

- Results indicated a slight widening of the Orientation Gap scores. The pre-test Orientation Gap score was 28.44 and the post-test score was 28.95. This showed an increase of 0.53 points and indicated that the group perceived itself further along the IDC continuum than their actual Developmental Orientation scores revealed. This discrepancy between Perceived and Developmental Orientation was greater following the ISL experience.

- The pre- and post-test group IDI results indicated that the group as a whole remained at the Minimization Developmental Orientation, and did not demonstrate a fully developed ethnorelative mindset, capable of fully appreciating another cultural point of view, and responding accordingly.
Summary of Quantitative Findings

The quantitative aspect of this study was used to address research question one: measuring the effect of change in levels of intercultural competence. To address this question, IDI group profile results before and after the ISL experience were compared. To summarize, the pre- and post-test results indicated that overall there was no change in the group’s collective level of intercultural competence. Before and after the ISL experience, the group’s collective level of intercultural competence remained in the Minimization Developmental Orientation range. However, there were some shifts within some of the levels of intercultural competence, as seen in the shifts between the Developmental Orientations. Results did show some positive shifts towards a greater intercultural mindset. For example, there was a collective positive shift out of a Denial Orientation and a collective positive shift towards Acceptance. On the contrary, as an example, there was also a negative shift in the collective group towards Polarization.

The finding of a negative shift in intercultural competence for some members of the collective group towards a Polarization Orientation, a more monocultural mindset, was surprising and unexpected. From the literature review, as presented in Chapter 2, it was expected that the ISL experience would generally have a positive effect on participants, and in particular, positively affect the development of intercultural competence. From the IDI group profiles, the exact nature of the shift towards the Polarization Orientation could not be determined. Results indicated the collective group shifted towards this more judgmental orientation, but the researcher questioned whether this shift was more from a Defense position or a Reversal position. It could be that some participants shifted towards being more critical of their own culture. The researcher reflected on this negative shift and made the decision to include this finding to guide some of the qualitative research questions.
Phase Two

The quantitative findings were used to further assess the phenomenon of intercultural competence development through the qualitative exploration and interpretation of student reports about their ISL experience. As discussed in the previous section, the quantitative findings demonstrated that the pre- and post-test IDI group measures of intercultural competence showed small, but insignificant measures of change. In other words, the IDI, as a measure, did not appear to fully capture the effect of the ISL on the development of intercultural competence. The insignificant change in the quantitatively measured effect of an ISL experience on intercultural competence was not too surprising, as the ISL experience was a short-term experience and the timeframe of the experience may not have been long enough to capture a measured effect. However, the quantitative findings did demonstrate some shifts between the developmental orientations within the collective group. The qualitative aspect of this study was used to further explore the shifts in developmental orientations of intercultural competence, and further understand the influence of the ISL experience on intercultural competence.

Qualitative data were collected through semi-structured interviews. One-to-one, face-to-face interviews were conducted in the privacy of the researcher’s office. On average, the interview time was 52 minutes in duration. Participants were asked broad questions about prior cross-cultural experiences, their definitions of culture and cultural competence, any prior multicultural education, and their level of preparedness for an ISL experience. Students were also asked a series of open-ended questions exploring their thoughts and feelings about the context of the respective ISL experiences, along with their observations, thoughts, and perceptions of the ISL experience (see Appendix C). Interviews were recorded through a phone recording application. Transcription took place immediately following the conversation, with
the use of a transcription services company. During the recruitment process and at the closing of each interview, participants were invited to submit any journal reflections they had completed during the ISL experience to serve as supplemental data for analysis. Four of the 13 participants offered their journal reflections. Some reflections from participant journals are included through the use of illustrative quotes in the qualitative analysis. To protect anonymity and maintain confidentiality, all participants were assigned pseudonyms. See Table 6 for the list of pseudonyms and corresponding locations of the ISL experiences.

Table 6

*Phase Two Study Participants*

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Gender</th>
<th>ISL Location</th>
<th>English First-Language</th>
<th>Previous participation in ISL experience for more than one week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lila</td>
<td>F</td>
<td>Guatemala</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Anna</td>
<td>F</td>
<td>Guatemala</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Jack</td>
<td>M</td>
<td>Guatemala</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Stephanie</td>
<td>F</td>
<td>Native American Reservation</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Lilly</td>
<td>F</td>
<td>Native American Reservation</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Danni</td>
<td>F</td>
<td>Native American Reservation</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Joan</td>
<td>F</td>
<td>Native American Reservation</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Michael</td>
<td>M</td>
<td>Native American Reservation</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Mary</td>
<td>F</td>
<td>Haiti</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Cathy</td>
<td>F</td>
<td>Haiti</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Laura</td>
<td>F</td>
<td>Haiti</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Sally</td>
<td>F</td>
<td>Haiti</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Vicki</td>
<td>F</td>
<td>Haiti</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

As previously stated in Chapter 3, the theoretical and paradigmatic lens of this study was an interpretive framework, utilizing a social constructivist approach to understand the complex phenomenon of intercultural competence as influenced by an ISL experience. In this study, grounded theory was the systematic approach utilized in the data analysis (Charmaz, 2006, 2014;
Corbin & Strauss, 2008; Glaser & Strauss, 1967). The process of data analysis in grounded theory is characterized by initial coding, focused coding, axial coding, memo writing, and theoretical coding. This researcher purposefully utilized a constructivist grounded theory approach due to its flexibility with the analysis and its emphasis on the active and reflexive role of the researcher (Charmaz, 2006). The process of grounded theory and the analytical deconstructions of the way in which participants experienced the ISL, how participants constructed their realities of that experience, together with the reflexive stance of this researcher, allowed the researcher to create an interpretive portrayal of the phenomenon of intercultural competence development in the context of an ISL experience.

Following Charmaz’s (2006, 2014) guidelines for analyzing qualitative data, this study involved six steps. (1) The open coding of transcribed interview data began by hand, initially looking at a participant’s choice of words in an attempt to understand a participant’s sense of the ISL experience. (2) Initial coding through a line-by-line approach was completed, which segmented the data to conceptualize participant’s thoughts and ideas about their experiences. Initial codes also helped to categorize the data and the researcher began to determine the processes identified through participants’ revelations. (3) Focused coding was then implemented to assist with refinement of salient codes, followed by a synthesis of larger segments of data to separate, sort, and refine conceptual categories. Constant comparative methods were utilized to explore theoretical categories from the focused codes. Advanced memos were created and maintained by the researcher, utilizing a reflexive stance about the research process and the decisions being made. At this point, because there were abundant, rich text-based data, all qualitative data were entered into NVivo, a qualitative data analysis software program, and steps 1 through 3 were completed a second time using software to assist in this
analysis. (4) The next step was axial coding (Charmaz, 2006; Corbin, & Strauss 2008), where the data were assembled in different ways, attempting to identify central conceptual categories, along with returning to the data to explore the properties and dimensions of each focused code. From this step, the researcher began to formalize six subcategories, moving back and forth between the data. (5) With use of the NVivo software, substantive categories were identified through further analysis and all themes and patterns were absorbed into the five theoretical categories: one central core category and four related theoretical categories. The process of distinguishing the relationships between the categories began and connections between the categories were made around a single and core category: ‘intercultural competence development through relatedness.’ (6) The final stage of this systematic approach was naming the four key theoretical categories, and the central core category. Diagramming then occurred to show the four theoretical categories and their interdependencies in relation to the central core component, intercultural competence development through relatedness, and the process of development in the context of an ISL experience. Diagrams and further details of the theoretical categories will be presented in subsequent sections.

Qualitative Findings

All 13 interviewees told their respective stories and shared their views of different ISL experiences with very different ways of telling, and consequently, there were a significant number of initial codes. Initial codes also included some data that emerged from the journal reflections. With more focused coding, the early focused codes that emerged were: (a) critical thinking about culture, (b) preparedness, (c) intercultural communications, (d) emotions and personal growth, (e) professional identity, and (f) benefits of international service learning.
These six focused codes were further analyzed and refined. Table 7 shows the early focused codes and the identified properties that emerged from the data.

Table 7
*Focused Codes with Properties*

<table>
<thead>
<tr>
<th>Focused Codes</th>
<th>Properties from within Focused Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Thinking</td>
<td>Cultural awareness – thinking about self in relation to a different context, different people, and different ways of life; different ways of being different ways of being Cultural knowledge – what I don’t know about this place and people? Suspending judgments about people and context Self-concept, cultural expectations, openness, curiosity Questioning about the context and the culture, questioning socio-political and historical dimensions of culture</td>
</tr>
<tr>
<td>Preparedness (readiness)</td>
<td>Past experiences, cross-cultural interactions Educational preparedness – prior cultural learning and trainings, acquired cultural knowledge, and specific cultural training for the trip</td>
</tr>
<tr>
<td>Intercultural Communications</td>
<td>Interpersonal communications, emotional sensitivity during an interaction Emphasis on effectiveness and appropriateness in the exchange Understanding, connecting with, and responding to the other, ‘other oriented’ Verbal and non-verbal aspects of communication Self-monitoring Language difficulties a significant barrier to connection Use of translators – not an easy process Consciousness about power and privilege, self-awareness during cross-cultural encounter Cultural competence – an essential skill to develop for effective and appropriate interactions Community engagement interaction skills, with improved abilities to partner and collaborate with groups</td>
</tr>
<tr>
<td>Emotions and Personal Growth</td>
<td>Cultural humility – feelings of privilege to learn from people and context Cultural shock – gap between prior perceptions, expectations, and reality of context; mental discomfort Feelings of being overwhelmed</td>
</tr>
</tbody>
</table>
Feelings of being a cultural outsider and shift to being more confident and relaxed
Respect, sensitivity, empathy, openness, trust, gratefulness, curiosity, appreciation, open-hearted, acceptance, desire to engage more
Feelings about spirituality – meaning and interpretation
Valuing and honoring the other

**Professional Identity**
Culture and occupation – the meaning of, and appreciation for sociocultural aspects of what persons and communities do in their daily lives
Cultural encounters and practice as an OT, with individuals and communities
Client-centered practice, therapeutic use of self
Classroom learning translated into practice in ‘real-life’ context and situations, enhanced practice skills
Significant change in professional confidence
Enhanced OT observational skills, and use of creativity in service delivery
Social justice and role of OT, occupational justice

**Benefits of International Service Learning**
Development of intercultural competence
Enhanced OT skill development – active engaged learning and practice
Behavioral flexibility and adaptability
Cultural immersion, matched with opportunities for processing and reflection, afforded a transformative experience
Eye-opening experiences, opportunities to stretch yourself and grow, opportunities to see things through the eyes and hearts of others
Interprofessional opportunities – great benefit to learning about professional roles and ways of practicing
Desire to participate in advocacy/community engagement in the future

*Note. OT = occupation therapy.*

With repeated rounds of analysis and a process of constant comparisons, refinement of the codes resulted in emergent theoretical concepts and categories. Categories included the phenomenon of intercultural competence and themes also included participants’ awareness of culture, cultural consciousness, relating to others, and the meaning of being an occupational therapy student. Data-to-data analysis, examination of the focused codes, and axial coding to identify properties and dimensions resulted in the identification of four substantive components
and a central core component. Connections and relationships were made in relation to the central core concept and the final four interdependent components were determined as cultural consciousness, cognitive dissonance, connecting, and confidence. Figure 6 shows a visual of the process of data analysis, the six focused codes, and the intersections that resulted in four interdependent components that influenced the overarching construct of intercultural competence development through relatedness.

Figure 6. Preliminary Conceptual Model

Following grounded theory analysis protocols, the qualitative data concepts and categories emerged from and were supported by the data, rather than conducting a thematic analysis that would have likely aligned closer to the DMIS framework. This researcher purposefully rooted the findings that emerged from the data. The following discussion provides a detailed account of the four substantive, interdependent components. The emergence of these components was shaped by participants’ perceptions and reports about the ISL experiences. Specific quotes are used to provide support for each component.
1. Cultural consciousness. Cultural consciousness is one component that emerged from participants’ conversations about self-awareness and cultural awareness. Many participants discussed that, despite some cultural knowledge, they were somewhat aware of their prior naivété about the other culture. Participants shared their thoughts about how they reflected on, questioned, and interpreted the differences that exist between their own and others’ cultures.

Specifically, the component of cultural consciousness emerged through cross-comparisons of three of the six focused codes, namely, critical thinking about culture, preparedness, and emotions. The properties of these three focused codes overlapped and intersected, resulting in the component of cultural consciousness. Examples of interconnections between the properties included the cognitive dimensions of cultural awareness and cultural knowledge, the preparedness and readiness related to culture, and the affective dimensions of cultural shock, cultural humility, and surprise. All of these aspects are related to an overarching degree of being aware of culture or having cultural consciousness.

One overarching aspect of how participants discussed cultural consciousness was through the description of past experiences or the previous lack of cultural consciousness. For instance, most participants shared they had limited prior experience in cross-cultural interactions, and limited experiences interacting with persons of a different race or ethnicity, socioeconomic group, or religious group. Some participants had traveled abroad, but expressed discomfort in interacting with people from another culture, and a ‘fear of not wanting to offend, or step on someone’s toes’. For example, when speaking of prior cross-cultural interactions, Lily spoke about her prior discomfort when she shared, “… they didn't speak English there. And going into it, I wasn't really thinking much about it. I just didn’t want to interact.” Danni shared similar past feelings of discomfort and stated,
I grew up in a town that was mostly white people… I've never had real interactions with minorities, and most of my friends were white. I would have had a few friends who were minorities, but I honestly, I wasn’t sure. I wouldn't consider myself too comfortable when interacting .... I think my family has taught me that you have to respect others and just treat everyone how you would want to be treated. And not ask too many questions.

It seemed that prior to the ISL experience, participants were aware (conscious) of the cultural norms and conventions of their own culture, but were not necessarily prepared for, or particularly interested in, the culture of other people from different backgrounds. For example, Vicki showed a prior lack of interest in other cultures when she stated,

I wasn't super comfortable with it. Just because I'm from a small town. My town's only two square miles, and it's where I've lived my entire life, and most everyone I grew up with had the same background as me… everyone is kind of the same and had the same experiences. I’ve always liked it that way.

For some participants like Anna, there was a shift in thinking and greater acceptance of the culture and cultural patterns, “We were inside these folks’ homes sometimes, and that was… it was incredibly humbling.” Similarly, Cathy shared, “It was so different. I felt uncomfortable but privileged… privileged to be there.” Most participants talked about a greater cultural awareness and interest in cultural differences during and as a result of the ISL experience.

Participants talked about a progressive change from disinterest to interest in cultural differences, and with their greater interest, participants reported greater ease with understanding and connecting with those from other cultures. Some participants commented on the fact that they were aware of cultural differences and expressed a curiosity and appreciation for cultural
differences. For example, when speaking about a conversation with a male member of the community, and her awareness of cultural differences, Stephanie commented,

And you could tell he was already embedded in his Lakota culture, just between all the pictures he would show us, his look, and the way he would share his stories and talk about things. He was just different, there was something about his way of being. And you could tell… I just wanted to know more.

From the perspective of the collectivist culture the participants experienced, many expressed surprise at how tightly integrated, cohesive, and interdependent the communities were, along with how family and neighbor’s collective needs prevailed over individual needs. As Jack shared, “Aunts, uncles, cousins, three times removed… a friend who is also considered a family member… everyone going leaps and bounds to do anything for somebody in their family. It was one of the most amazing things.”

When speaking about awareness of cultural differences and the cultural context, many participants reported feelings of initial discomfort during their ISL experience. This particular finding was also identified in the supplemental journal reflections. Participants stated that the context was ‘nothing like expected’, and some participants found it difficult to think about the cultural context and suspend their judgments. For example, Laura was talking about her experiences of ‘Haitian time’ when she stated that she was a little irritated because, “the doctor was late, …Haitian time, so that was really frustrating because we were just sitting around and we couldn't even tell the patients or clients that "we can't treat you without a doctor.” Similarly, Vicki was taken aback by her initial impressions of her surroundings in Haiti,

The most immediate reaction that I had was the shock of how destroyed their community was. Not because of the earthquake, but because of the amount of trash that was on the
ground and just everywhere. Trash and stray animals everywhere. That was a really big shock to me.

Many participants spoke about their shock and surprise towards poverty and cultural injustices. For example, Cathy shared,

> It just struck me that, like, this is where they live, this is where multiple people and their family live. It was just very eye-opening to see that these are their homes… this is so poor … they have so little. And they’re so proud of their homes.

To summarize, cultural consciousness is inclusive of cultural awareness and self-awareness. It seemed that all participants engaged in thinking critically about cultural contexts and it seemed there was a shift in their cultural perspectives. In addition, participants expressed a greater appreciation and understanding of cultural variabilities between people and contexts.

2. **Cognitive dissonance.** Cognitive dissonance refers to a situation involving conflicting attitudes, beliefs, or behaviors; in other words, an incongruence between participants’ prior perceptions and expectations, that produces a feeling of mental discomfort, leading to an alteration in one’s attitudes, beliefs, or behaviors to reduce the discomfort and restore balance in the mind (Kiely, 2005). From this study, the component of cognitive dissonance emerged at the intersection of two focused codes, critical thinking about culture and the impact of the experience on the emotions. The experience of cognitive dissonance was universal among all participants in this study. Lila’s comment provides a good example of this dichotomous-type of thinking experienced by everyone when speaking about her perceptions of the ISL. She stated,

> I've told a number of people now, it was devastating and wonderful. And I think that that's important. I think you need to be aware and ready and open for the devastating part.
And then you can also express the wonderfulness of it. And the ‘both’ is what makes it so profoundly moving... It was an incredible experience.

Similarly, Cathy stated,

You can read all you want about a culture, but I don't think you're ever truly going to start to really understand them until you actually go and hear their individual stories and see the context of where they're living... it’s overwhelming and shocking.

In the current study, all participants described this incongruence between their prior knowledge, skills, views and expectations, and their ISL experience. For example, all participants discussed that despite prior preparation, they all experienced significant mental discomfort and some referred to cultural shock when immersed in a different culture. All participants discussed a change in their thinking about a variety of situations and experiences. An example of incongruence was shared by Joan about her discomfort when thinking about her own cultural background and knowledge of history and that of the Lakota people and culture, “Why did they have their culture ripped from them? Why have settlers and successive governments destroyed them? So that’s kind of the way I felt… It didn't make any sense to me.” When speaking about the same Lakota context, Lily stated,

… this [ISL experience] was really kind of just about the mental state of being, the mental state of being for a whole community ... living there in terrible poverty, their kids are dying, and having to deal with all these things on a day-to-day basis… this is a very tough way of life. I can’t understand.

Many of the participants expressed distress with realizations about health disparities and the difficulties in delivering health care services. For example, Lila spoke about a young Guatemalan woman whom they went to visit at home,
We think she probably has severe cerebral palsy, but maybe some brain damage issues. There was no clear diagnosis. And on the first day when we arrived, she was in a sort of wooden… sort of like an open wooden cage in the living area, and she was tied to the wall. I was shocked by what we saw.

Anna said of the same situation, “she had a leash around her waist and she was tied to the wall. That was really hard to see. I was really taken aback.” Anna goes on to describe an alteration in her thinking,

We learned… the only reason why they tied her with a leash was because she leaned against that chain door in the wooden railing, and it gave way, and she fell and hurt her head. So, that was like the ‘a-ha moment’. These people… they loved this girl so much, with her disabilities and her difficulties…. They wanted to keep her safe… It was inspiring… considering they had no resources available to them.

Another important aspect of cognitive dissonance shared by all participants was the experience of surprise due to the gap between what they expected and what occurred in the cultural context and situations. For example, Michael stated, “Especially coming from me where I'm a white male. I thought I would get the brunt of the unreceptiveness…. being the only white guy there. I thought maybe people were going to be aggressive or mean.” Michael goes on to state an alteration in his thinking, “So, I was positively surprised by the reception from both kids and adults, mostly adults… it was good. Unexpected.” Similarly, Vicki expressed a change in her thinking, initially stating, “Shunned… I felt shunned… I just felt like an outsider, just based on reactions… we were outsiders in that sense because they weren't expecting us.” Vicki goes on to state that within a few days,
They wanted us there, and they were so grateful to have us there... and them all singing to us at the end ... They sang us this big song that basically just repeated ‘thank you’ throughout the whole thing. It was really touching. I was really surprised and touched.

It is also important to note that it seemed that the ISL participants who expressed the greatest mental discomfort between prior perceptions and expectations and the actual reality of the context were the group of participants who went to the Native American reservation in South Dakota. Of all participants in this study, this particular group of participants expressed very mixed emotions, and a negative shift in thinking towards their own culture following the ISL experience. For example, Danni stated,

It mainly just made me very sad and disappointed in [my] country. People always talk about how America is the greatest country on Earth. Little do they know that there's practically a third world country right in the middle of it.

Even though the intent of this study was not to single out the effects of an ISL experience on one group participants over another, based on location, it was noted that the greatest cognitive dissonance appeared to be experienced by the participants who went to South Dakota. Perhaps this was due to the ISL experience being within the borders of the United States.

Many participants who shared their thoughts about their discomfort, expressed surprise at their newly acquired insights. Two of the four journal reflections also discussed feelings of surprise as a result of being in a different context. Participants expressed surprise regarding the levels of poverty observed, the poor health outcomes, and the health disparities experienced by the communities. All participants discussed a desire to reflect and examine their perceptions more as to alleviate these feelings of incongruence. It was also reported by the study participants
that aspects of cognitive dissonance could become less intense and distressing when participants shared in daily debriefs and group reflection. For example, Lila shared,

…there were a lot of those moments that were just not easy for a thinking, ethical, emotional person. So, you had to come back and decompress every day… and talk and hash it out, talk it through and chew on it. That was important even though it was hard… to be able to then sleep at night, and then get up the next morning and do it again.

Cathy stated,

I feel like I am slowly thinking about it now, like, looking back on it, looking back at pictures and thinking about it now… thinking about it and talking about it… like when we had the follow-up dinner last week… This time, the processing has taken longer, but then, the experiences were much more intense… and it has been important to take the time to think and reflect.

This alteration or accommodation of incongruent thoughts about the cultural context and people appeared to have contributed to the participants’ capacity to connect with individuals on a deeper level. Lila gave an example of this when she stated,

It's very easy to retreat into what's comfortable and familiar. Don’t think about what’s hard. But that's not how I want to live. I don't want to miss out on wonderful experiences with these people just because… it means that I may have to look at things, and it may be harder for me to do some of those things… but if I want to connect with people, I have to look at things and accept what is hard.

To summarize, cognitive dissonance, relating to what participants believed they would experience as opposed to what was actually experienced, was discussed frequently during the interview process. Cognitive dissonance was reported and described by all participants across all
three ISL experiences, generally regarding issues of poverty, health disparities, and social justice issues. It was noted, the mental discomfort experienced and described by participants who went to the Native American reservation centered on the same issues of poverty, lack of education and health resources, health disparities, and social justice. In addition, however, this group of student participants also talked about mental incongruencies regarding sociopolitical and historical issues, multigenerational trauma, race, white privilege, and political power.

3. Connecting. Connecting refers to both an affective mindset, as well as the interpersonal behaviors and communication skills that result in a meaningful experience of connection and success in understanding another person. All participants discussed experiencing a range of emotions that occurred during intercultural interactions and talked about the importance of connecting with people, being open, in tune with, and the process of developing successful cross-cultural interactions. Through the data analysis, the component of connecting emerged at the intersection of five focused codes, critical thinking, preparedness, intercultural communications, emotions, and professional identity. For instance, all participants discussed their thoughts and feelings about the process of having to think critically in the moment of an interaction, using all prior knowledge and experiences, the act or skill of connecting, being an occupational therapy student, and the resultant emotional effects of connection with others from another culture. Most participants identified positive feelings (i.e., empathy, humility, and open-heartedness), as well as negative feelings (i.e., initial challenges and the experience of negative feelings associated with being a cultural outsider).

For many participants, the initial challenge of connecting related to the issue of language. Most participants spoke about language differences as a significant barrier to effective communications. Specifically, the study participants of the Guatemala and Haiti ISL experiences
had to partner with an interpreter in order to communicate and connect with the people of the host community. Most participants from these two locations expressed a nervousness about early interactions with people, the need for and difficulties using interpreters, and worried about misinterpretations. As Laura shared, “I feel like the language barrier was just so hard. You want to build rapport with them and talk to them… but it was so hard to talk to them…. We couldn’t have done it without the interpreters.” Similarly, Cathy shared difficulties adjusting to the use of an interpreter,

So, the entire time in the back of my mind, I was like, "Look at the client, not the interpreter," because that's what we're taught. Yet that's very difficult when you're working with an interpreter, who's also trying to figure out what you're trying to ask. It’s hard to direct your attention fully to the client, when you want the interpreter to know your meaning first.

Sally also talked about her struggles making connections with people when using an interpreter,

I was able to give the client my full eye contact. I think though, they would have been able to understand my connection a little more clearly if only I had some words... I feel like I would have been able to get a much better rapport people, in a much shorter amount of time…. That’s it, with the interpreter, even though I needed him, it slowed down the process of connecting and engaging with the person.

Many participants reported that they were able to connect through non-verbal communication skills and demonstration of actions. For example, Mary shared,

So, a lot of it became like facial expressions and weird hand moments. We tried to convey all across to the person, as much as possible, with every means possible…
smiling… I think just being close to him and smiling. Anything you could think of to connect.

Even though the participants of the Native American ISL experience did not need a language interpreter, these study participants also reported difficulties communicating effectively with members of the community, especially in the first few days of the experience. As Lily stated, “In the beginning, they were tough… the adults. I really wish I knew how to talk with the adults. I didn't really talk that much to the adults. I just didn’t know what to say.” Challenges with communications resulted in negative emotions for most participants. Feelings of frustration and helplessness were discussed by most participants who struggled with language and had difficulties knowing how best to engage with people, even with an interpreter. Many participants talked about feeling like an outsider and were worried that they could be missing hidden or nuanced meanings in cultural encounters, as well as being concerned about offending others. For example, Vicki talked about her feelings of being an outsider, at the beginning of her ISL experience, when she described an unsuccessful interaction,

I felt like we were being shunned. No one was looking at us. You just tried to say ‘hello’, and they just walked by us. They weren't... they stared at us from afar, even though we were in their facility. And you could tell they didn’t want us there. They had no interest in working with us. We had one encounter with a woman, who kind of just waved us away as we tried to approach her. That was tough. It was confusing. I really didn’t understand.

The feelings associated with being a cultural outsider were discussed by a few of the
participants and many participants talked about the importance of self-observation and self-monitoring to improve effectiveness during interactions. For example, Sally discussed this process when she shared the following,

I feel like it took a little time to just get a handle on all of it: on using the interpreter, getting a connection with the client, watching yourself, using the correct wording, getting all the skills down that I was needing, and things like that…

Humor was also discussed as a way to connect. Laura shared a story about wanting to conduct manual muscle testing with a client, and she shared,

I had his hands in my hands and I was like, "Can you squeeze my hands as hard as you can?" The interpreter said it to the gentleman, and he was like ... because he didn't want to hurt me. So, I was like, "Oh no, it's okay. You won't hurt me. Don't worry." The man squeezed my hands and when he squeezed, I was like "Ow!", and everyone cracked up.

It was so funny, and it was cool that went over well.

Similarly, Jack shared use of humor when making connections with the children.

No matter hearing or deaf, American, Guatemalan, or European. Whatever it is, wherever you are, kids are kids. And so, bubbles make everyone laugh and run around, and ballgames make everyone laugh. So that’s what I did, played bubbles, and ballgames. The kids loved the fun, we all just laughed, and I got them moving.

Empathy, sensitivity, respect, and openness were the primary emotions discussed by all participants when describing connecting with others. For instance, Joan discussed feelings towards another person when she said, “I felt so much for this person. There was definitely a lot of empathy. I think I 100% felt a realization, a connection… I felt like I understood everything, and like I said, they fully understood me.” Jack also said, “It’s going further, really connecting
with the person, and using all your thoughts, feelings, and awareness in the moment, in all of your interactions.”

Within a few days of cultural immersion, participants reported that they could connect more easily or spoke about an increased comfort in intercultural interactions. Most participants spoke about a greater ease approaching people, regardless of whether or not they understood the language. All participants talked about their experiences related to understanding the client or community members and the approaches they utilized to effectively communicate and really understand the person of different culture. The desire to engage was reported to improve over the course of a few days, together with greater confidence in knowing how to engage successfully.

4. Confidence. In this study, confidence refers to professional confidence engaging as an occupational therapy student. Confidence is defined as a personal factor and a personal belief, referring to the knowledge, skills, and attitudes necessary to practice effectively as an occupational therapy student. Participants reported changes in their levels of confidence when contributing to the evaluation of clients, problem-solving, the use of their clinical skills, and a sense of satisfaction and accomplishment with the translation of prior classroom knowledge to real-life practice situations. This component emerged at the intersection of three focused codes, professional identity, interpersonal communication, and emotions and personal growth. All participants talked about connection and being client-centered, a therapeutic use of self, and the value of learning about the sociocultural aspects of what persons and communities do in their daily lives. Participants discussed their feelings of cultural humility and appreciation for all cross-cultural interactions, along with how these cultural encounters contributed to their feelings of confidence in their occupational therapy practice skills.
Feelings of satisfaction in relation to changes in their professional confidence were reported by all participants. When speaking about professional confidence, Jack said,

Yeah, there was definitely a shift to where I wasn’t tentative. I wasn’t second guessing myself. It felt okay… I now know this is needed for this reason or that, and let’s go with it… I was able to explain my clinical reasoning to whomever… Yeah. I think that was it, I felt like I knew how to be an OT, how to talk about what I was doing, and why.

Jack went on to say,

I'm trying to think of another word other than success…. I guess just a deeper understanding of why this or that works, and how to have the parent understand. And a sense of satisfaction, validation…. We're not just learning all this stuff just because… It does truly work, and it does make a difference. I guess that was part of it too, seeing the difference in the kids.

Many participants discussed the importance of being able to relate to clients as a contributing factor to their professional confidence. For example, Cathy said, “TUOS [therapeutic use of self] came out a lot. I really did try hard to make real connections with clients. I think, yeah, I just think understanding the other was so important to my practice as an OT.” Similarly, Joan said,

As an OT, you really want to be client-centered, and think hard about how to understand all that’s important to the person, and what is getting in the way for them doing what they need to do in life. So, to be a good practitioner, you just want to be super cautious that you’ve considered everything and be super respectful when it comes to all you have to offer and what your client wants to work on.
Many participants spoke about the importance of being able to relate to clients about spirituality and beliefs, and participants spoke about this being important to occupational therapy as a client factor that influences engagement in what’s meaningful to the client. Anna shared,

I think I can generalize this thinking more easily now… that to my clients who feel strongly about religion, I won’t avoid talking about their beliefs. I’ll be able to at least incorporate a respect for the person’s beliefs… not that I ever really worried about this before, but I think I’ll be ... I realize now I can be more comfortable with these kind of conversations, more than I thought.

Participants reported an appreciation for the way in which they learned and practiced as an occupational therapist during the ISL experience. This expression of appreciation and confidence in being like an occupational therapist was also included in journal reflections. Sally was speaking about her experiences of learning in this context, and said,

I think honestly being thrown into it was good because you just have to do it… it wasn’t like fieldwork, where you mostly just observe and are closely supervised… We were more like colleagues than students, so I think that was a pretty big shift for everyone. We all problem-solved together. It was really cool being entrusted to work independently with people… and having the alumni and faculty being nearby, just gave us more confidence.

Similarly, Mary shared,

There you are… you actually have to complete an occupational profile. You participate in real assessments, with real-life clients who have real-life problems, and who need OT. The quickest lesson in this way of learning, is like “off you go”. You’re just in it, thinking and being like an OT.
Many participants shared their thoughts about thinking like an OT, how they had to problem solve in the moment, be creative with little resources, and how they had to adapt their thinking to impoverished environments. For example, Vicki shared,

But I think this shows, when working with a client, you really do need to look at the situation as if you are in their shoes, in their setting - when you're working with a client, perhaps on cooking skills… you need to take into consideration the kinds of utensils or materials they may be using for cooking, they may have to cook on a fire, or walk miles for water, or have to gather what foods they might be cooking, or how their kitchen may be set up, and just who else is around and in their family context. I think these experiences showed me, it's a lot about looking at this big picture… What’s getting in the way for this person? Who is this client? What is their personal context? Rather than just looking at the person as a ‘condition’.

Responses from participants and reports about their ISL experiences indicated an interaction of these four components of cultural consciousness, cognitive dissonance, connecting, and confidence. These four interdependent components appeared to have strengthened and developed during the week of an immersive ISL experience and all four components were centered around the development of intercultural competence through relatedness.

**Intercultural Competence Development through Relatedness**

The purpose of the current study was to address the overarching research question of, “What is the influence of an ISL experience on graduate occupational therapy students, and the development of intercultural competence?” In the current study, intercultural competence was briefly defined as a range of affective, cognitive, and behavioral skills, inclusive of a positive attitude and cultural knowledge, that lead to effective and appropriate interactions with people of
other cultures. Through iterative analysis of the qualitative data using the four interdependent components, an overarching component, intercultural competence development through relatedness, was identified, and a grounded theory model emerged that reconstructs and represents 13 student participants’ collective stories of their ISL experiences. In this representative model of interdependent components from participant stories, the 4 C’s Model of Intercultural Competence Development, relatedness is conceptualized as a way of growing intercultural competence in occupational therapy students. Relatedness and the development of intercultural competence are tightly intertwined and placed at the center of this model. All four components of cultural consciousness, cognitive dissonance, connecting, and confidence interface and are dependent on one another and influence and shape the core central component of intercultural competence through relatedness (see Figure 7).

*Figure 7. The 4 C’s Model of Intercultural Competence Development*
Figure 7 is a visual representation of the grounded theory model that emerged from the participants’ perceptions and experiences. The central component, intercultural competence development through relatedness, and its relationship to the four interdependent components is visualized in the context of an ISL experience.

The central category of this model, intercultural competence development through relatedness, was strongly touched on by all the participants through their stories about the context of the ISL experience, and participants reported about the changes that occurred in their respective abilities to relate and connect in meaningful ways with people of another cultural context. More specifically, through meticulous theoretical coding it was apparent that all participants made meaning of their experiences through relatedness with others, and relatedness was consistently linked to the development of intercultural competence. This finding of relatedness in the context of an ISL experience is conceptualized to be the capacity to be fully empathetic with the other, to experience an emotional connection of warmth and caring for the other, and is not simply understanding the person from the perspective of language and meaning, but fully understanding the other as a unique human being. The process of change in intercultural competence was identified as being highly dependent on relatedness, which occurred in the interaction of the four interdependent components of cultural consciousness, cognitive dissonance, connecting, and confidence. According to Deci and Ryan (1985), people need a sense of belonging and connectedness with others; each of us is motivated and needs to connect with other people to some degree. For the purposes of this study, relatedness refers to connection with another person or group, in particular, a connection that is imbued with warmth, caring, and respect. It is considered both the state of being connected and the process of becoming a part of something.
Responses from all participants indicated that through interactions and connections with those of another culture, they became more culturally conscious or aware of themselves, as well as more aware and more interested in the other culture. Participants’ stories support a bidirectional relationship between cultural consciousness and the development of intercultural competence through relatedness. Possession of greater cultural consciousness interfaced with the process of thinking about the other culture, along with the cognitive incongruences of thought. This component of cognitive dissonance was also influenced by the development of intercultural competence through relatedness; however, this was the one relationship within the model that was not bidirectional in nature. Cognitive dissonance shapes the development of intercultural competence through relatedness, but this core category does not influence the development or strengthen students’ levels of cognitive dissonance. The overall experience of an ISL experience resulted in participants being more aware and this appeared to influence their thinking more critically about cultural contexts, especially around health disparities, poverty, and social justice issues.

The component of connecting was a key factor in this model based on the responses from participants. Previously in this chapter, connecting was referred to as the act of connection. Overall, participants referred to both emotional states before, during, and after interactions and included emotions such as humility, sensitivity, and openness. The processes participants utilized to engage with others included the use of humor, smiling, showing care, and self-monitoring of communications. All participants referred to barriers (i.e., language difficulties, use of the interpreter, lack of understanding) which interfered with connecting, and facilitators to successful interactions (i.e., acceptance, openness, responding). The component of connecting was also influenced by and dependent upon all of the other components, with a strong
bidirectional relationship to the central component of intercultural competence development through relatedness.

All participants shared that there was a strong relationship between the component of connecting, positive emotions received during intercultural interactions, and having more professional confidence. The ISL experience afforded participants to engage in occupational therapy practice with clients. With greater abilities to connect and greater intercultural competence through relatedness, participants became surer of themselves with clients, took risks in a safe context with faculty present, and began to discover their real capacities as an occupational therapy student. Due to all of the linkages in and between all the components, intercultural competence through relatedness emerged as the central category of this model.

The following are two examples of participants’ views of the effects of an ISL experience on the development of cultural competency. As Sally said,

It's like you almost have to get on their level, really put yourself in their shoes, so that you can build that bond, build that friendship, and build that comfort level. Like I know the day when we were all leaving, a big group of them came up and hugged me for so long. I knew then they understood me and I understood them. There was a rush of emotion and I knew we really had connected.

The following quote from Jack is also an example of what most participants discussed in regard to the effects of an ISL experience about relatedness and intercultural competence.

I think it just makes everything easier now in how you interact with people, how you work with people, and how you learn just to read people. You learn how to have conversations, how to connect, and not be so thrown off by what someone might say, or how someone might respond… I think it just comes more naturally now, to stand in
someone else's shoes and focus on understanding… Let’s understand each other…. Let me figure out what’s important to you, and how I can help you. And now that comes easier… this experience just had kind of an amazing effect on me… yeah, it has brought me to this point where all human connection and understanding, it's all naturally occurring, it just comes more naturally.

An ISL experience seemed to benefit participants’ development of intercultural competence through relatedness. Relatedness, the process of being and becoming connected with others who are culturally different, is intertwined with the development of intercultural competence, and is the main category of this model. Interwoven with this main category are the other 4 C’s of cultural consciousness, cognitive dissonance, connecting, and confidence. In the following section, a discussion that caters to answering the proposed research questions of the study will be provided.

**Answers to Research Questions**

This study was guided by the overarching research question of “What is the influence of an ISL experience on graduate occupational therapy students, and the development of intercultural competence?” Overall, the findings of this mixed-methods study are mostly derived from the qualitative phase of data analysis, rather than from both quantitative and qualitative data. The quantitative phase of study revealed the group’s developmental level of intercultural competence remained relatively unchanged before and after the ISL. The emerging grounded theory model proposed in this study helps to clarify participants perceptions of the ISL experience, its effects, and the overarching phenomenon of intercultural competence development. While based on a small sample of 13 study participants, this grounded theory model is helpful in understanding the experience of an ISL. To fully understand an ISL
experience, and the phenomenon of intercultural competence development, four analytical research questions were proposed. The following section will provide an overview of how the data addressed each question.

**Sub Research Questions**

**Research question one.** Research question one asked, “What is the measured effect of change on levels of intercultural competence in graduate occupational therapy students?” Results of phase one of the study indicated that there was no significant change in the group’s level of intercultural competence, as measured by the IDI. However, results did show that there were shifts within some of the subset developmental orientations. For example, there were increases from the pre- to post-test group measures in the orientations of Denial towards Polarization, and in Minimization towards Acceptance, indicating positive shifts towards a greater intercultural mindset. There was also an unexpected increase in the percentage of the group moving towards a Polarization Orientation, indicating a negative shift in levels of intercultural competence for some participants. This unexpected finding guided the interview questions, as the researcher wanted to explore and uncover the possibility of reversal in developmental levels for some group participants.

**Research question two.** Research question two asked, “What are graduate occupational therapy students’ reports about the effects of an ISL experience?” Overall, participants reported the overarching component of intercultural competence development through relatedness. As Vicki stated, “This experience was about learning about living, the reality of real living, and I learned as much about myself as I did about the people and their culture, as we related with each other”. Benefits of an ISL experience was one of the original six focused codes and from participants’ reports, an ISL had many positive effects. All participants reported that the ISL
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experience contributed to the development of intercultural competence. This particular result will be discussed further in research question four below. Many participants stated that the ISL experience influenced growth in their capacities to be flexible and adaptable, strengthened professional confidence and practice skills, and provided an opportunity to challenge oneself both personally and professionally. Many participants discussed the value of the ISL experience as a positive, active, and engaging learning experience, along with how cultural immersion was transformative. In addition, all participants talked about the benefits in interprofessional learning and practice. All participants discussed a continued desire to participate in service and community engagement following this experience and many participants spoke about their desire to engage in future advocacy as an occupational therapist on behalf of individuals or communities.

Lila summed up her thoughts about the experience, sharing positive effects similar to many other participants’ views, when she said,

There's great joy and great reward in [an ISL experience]. Guatemala for me was like an experience on steroids… like a fantastic, condensed, intense learning experience… You're ready to be an OT after this… to truly be client-centered because this experience brings you everything all at once… the place and people, and you, ready to do what you do. It is the balance of learning with sadness and joy, and devastation and wonder, and love and heartache all together. And I think that's what being in OT is all about.

**Research question three.** Research question three asked, “What are the contributing factors to changes in levels of intercultural competence, if any?” The phenomenon of intercultural competence was previously referred to as a range of affective, cognitive, and behavioral skills, inclusive of a positive attitude and cultural knowledge, that leads to effective
and appropriate interactions with people of other cultures. For example, with consideration of the developmental orientation of Denial, as delineated in the IDI, some participants exhibited an initial mindset that reflected a more limited experience and limited capability for understanding cultural differences in values, beliefs, and behaviors. In terms of a shift in levels of cultural competence, Danni stated that her attitude prior to the ISL experience was, “Well, we're all humans, and we all just have the same feelings at the end of the day.” Danni’s view shifted more positively towards Minimization and Acceptance mindset, following the ISL experience, when she stated, “I think in the way that I now understand more, and see how hard it is for some people in life.” When asked what caused the change in her views, Danni reported, “It was having long conversations with people. I felt really comfortable at the end.” This last comment is a good example of most participants’ reports about the development of intercultural competence through relatedness.

Many participants discussed the value of cultural immersion combined with opportunities to practice cross-cultural interactions and self-monitoring. All participants reported the importance of reflection, either structured or unstructured, as being contributing factors to the development of intercultural competence. For example, Sally shared,

I was fully immersed in a new culture. Being an outsider coming in… I definitely got easier on myself. I think the experience of culture, and being able to understand the person, their culture as it happens, reflecting on the immersion… when you fully emerge yourself into it, rather than just going for a one-time visit… it just leaves a lasting impression, and you’re more confident.

Some participants also reported that prior cross-cultural and past ISL experiences contributed to increasing changes in levels of intercultural competence.
**Research question four.** Research question four asked, “How do graduate occupational therapy students describe the effects of an ISL experience on intercultural competence?” All participants stated that the ISL experience had very positive effects on their intercultural competence. This was an interesting finding, as this fact did not emerge through quantitative analysis. Through the qualitative analysis process, intercultural competence through relatedness was central to participants’ experiences of an ISL experience and was positioned as the central core category in the grounded theory model. All four interdependent components influenced the development of intercultural competence and were also shaped by this core category. Participant reports indicated that intercultural competence is central to cultural consciousness, cognitive dissonance, connecting and connection, and resulted in confidence and greater effectiveness as an occupational therapy student.

Many participants identified the development of intercultural competence as influencing their practice as an occupational therapy student. Jack stated,

I think that going back to that cultural competence concept… it's a skill that you really do have to develop and acquire as an occupational therapist. Because you don't ever know who you're going to be working with…. you’re immersed and challenged by different cultural situations and it strengthens your abilities to interact, allows you to see outside of the box. It allows you to see other things differently, stretch yourself... so that when you do have someone of a different culture, belief, or background, whatever it may be in the future… you'll be well prepared to really listen, and think about that person. You are ready and open to have an understanding, so you're not like, “Uh oh, what do I do?” . You have already developed that understanding of how to connect.
To summarize, discussions about participants’ perspectives on the effects of an ISL experience and use of a grounded theory approach for the analysis of the qualitative data led to the development of the 4 C’s model of intercultural competence development. Study participants reported on the benefits of an ISL experience, including the benefit of intercultural competence development through relatedness, and participant stories resulted in the identification of the 4 C’s of cultural thinking, cognitive dissonance, connecting, and confidence.

Summary of Chapter

The purpose of this two-phase, mixed-methods study was to explore the effects of an ISL experience on the development of intercultural competence in graduate occupational therapy students. The quantitative data were gathered through use of IDI group reports, completed by participants before and after an ISL experience. The group IDI reports did not appear to fully capture a measured effect of change on the development of intercultural competence. The IDI group reports were not found to be as helpful as was originally intended. Even though the pre- and post-test group IDI reports revealed that the collective group was positioned at the Minimization Developmental Orientation before and after the ISL experience, indicating no significant change, the instrument did show some shifts within some of the subset developmental orientations. The finding of a shift within some of the Developmental Orientations were utilized to inform the qualitative phase of the study.

Through a constructivist grounded theory approach, six preliminary focused codes emerged from analysis of the qualitative data. Through continued systematic analysis of the qualitative data, four substantive codes emerged, cultural consciousness, cognitive dissonance, connecting, and confidence. From study participant’s stories, it was determined that these four components were interdependent and were influenced or shaped by intercultural competence
through relatedness. Participant stories revealed the central core category of intercultural competence development intertwined with relatedness. The grounded theory approach utilized in this study resulted in an emerging grounded theory model: The 4 C’s model of intercultural competence development. Overall, findings of this study indicated that an ISL experience, as an active, experiential pedagogy, has overall positive effects on occupational therapy students, along with positively influencing the development of intercultural competence.
CHAPTER 5: DISCUSSION

There are very few studies exploring the intersection of ISL pedagogy in occupational therapy education and its impact on the development of intercultural competence (Mu et al., 2010; Short & St. Peters, 2017). A review of the literature also revealed that there was a limited understanding of the outcomes of ISL and its influence on the development of intercultural competence (Loftin et al., 2013; Short & St. Peters, 2017; Suarez-Balcazar et al., 2009). In response to this gap, this mixed-methods study explored the effect of an ISL experience on occupational therapy students and the development of intercultural competence.

Issue Under Investigation

With increased diversity and multiculturalism in the United States, there are greater occurrences of cross-cultural interactions in the delivery of healthcare (Spector, 2017). The increasing likelihood that future health professionals will interact with persons of different backgrounds has influenced the demand for the development of intercultural competence in future practitioners, and intercultural competence is considered an essential component of occupational therapy education and practice (Flecky & Gitlow, 2011; Suarez-Balcazar et al., 2009). Past research has shown that cultural factors contribute to the outcomes of healthcare delivery (Betancourt et al., 2003). From the literature, there is an identified need to deliver culturally competent care, including the delivery of occupational therapy (Bonder & Martin, 2013; Munoz, 2007; Suarez-Balcazar et al., 2009, Wells et al., 2016). This need stems from disproportionate health outcomes for racial and ethnic minorities, with higher proportions of minorities compared to non-minorities not having access to health care, and intercultural communication difficulties leading to poor comprehension, poor adherence, and overall lower quality of care (Betancourt, Corbett, & Bondaryk, 2014). In addition, low patient literacy due to
cultural and language barriers result in negative health consequences for patients (Betancourt et al., 2003; Betancourt & Green, 2010). Therefore, multiculturalism is increasingly relevant in occupational therapy education and practice (Doll, 2011; Wells et al., 2016). Education of health professionals, including occupational therapy education programs, are increasingly utilizing ISL as a pedagogy in student development of intercultural competence (Domina & Doll, 2013). The current study sought to better understand the impact of a short-term ISL experience on graduate occupational therapy students, with a particular examination of intercultural competence development.

**Overview of Study**

The primary research question that guided this study was: What is the influence of ISL experiences on graduate occupational therapy students, and the development of intercultural competence? To fully understand the intersection of an ISL experience and the development of intercultural competence, this study addressed four sub-questions: (1) the measured effect of change on levels of intercultural competence, (2) occupational therapy students’ reports about the effects of an ISL experience, (3) contributing factors to changes in levels of intercultural competence, and (4) how occupational therapy students describe the effects of an ISL experience on intercultural competence.

The conceptual framework that guided this study was the DMIS (Bennett, 1986, 1993). This model is based on the assumption that the more cross-cultural interactions an individual or group experiences, the greater the development of intercultural competence. This conceptual model describes the sequential phases of intercultural development from a monocultural, ethnocentric mindset to a more intercultural, ethnorelative mindset. The IDI (Hammer, 1999, 2009, 2011) was selected as the quantitative measure for this study to assess intercultural
competence, as this measure was designed to align with the developmental phases in intercultural development based on the DMIS (Bennett, 1986, 1993). This framework was useful during the earlier quantitative phase of study, to guide the measurement of intercultural competence, however, it became apparent that Bennett’s DMIS (1986, 1993) did not sufficiently capture the process of intercultural competence development.

This study followed a mixed-methods explanatory, sequential design. This researcher attempted to answer questions about the complex phenomenon of intercultural competence development utilizing a specific self-report measure, along with interviews about the ISL experience from the participants’ perspective. The quantitative phase of this study guided the qualitative interview questions. The central premise of this mixed-methods design was that both the quantitative and qualitative data would provide a deeper understanding of the phenomena being investigated (Creswell & Plano Clark, 2007). The quantitative data was collected through the use of the IDI, a self-report measure of intercultural competence, while the qualitative data was collected through semi-structured interviews and journal entries, further exploring the ISL experience and the development of intercultural competence. The quantitative findings helped identify specific variables of interest related to the development of intercultural competence and helped guide the qualitative interview questions. In this study, a constructivist grounded theory approach (Charmaz, 2006, 2014) was utilized for the qualitative data analysis. The rationale for a mixed-method design was that the qualitative data would build upon the quantitative findings and would provide a greater understanding of ISL pedagogy and the development of intercultural competence.

The study sample was second-year graduate occupational therapy students who participated in an ISL experience at an institution of higher education in the Northeastern part of
United States. There was an unequal number of participants for the different phases of the study. In phase one of the study, 18 participants completed the IDI pre-test measure prior to the ISL experience. However, only 13 of those 18 participants completed the IDI post-test following the ISL. In phase two of the study, the qualitative phase, the group of 13 participants were interviewed by the researcher and four participants shared their journal reflections as supplemental data. The host locations for the ISL experiences were a Native American reservation, Haiti, and Guatemala and all ISL experiences were of one-week duration.

**Summary of Findings**

This remainder of the chapter provides a summary of the results of the study so that the findings can be explained vis-à-vis the extant literature, and that conclusions and implications can be drawn. The following section is an overview of both the quantitative and qualitative findings, organized and presented by the research sub-questions. Most of the findings presented emerged from the qualitative data and analysis, rather than an equal weighting of both the quantitative and qualitative findings.

**Research Question One**

Research question one stated, “What is the measured effect of change on levels of intercultural competence in graduate occupational therapy students?” and was addressed using the quantitative data. Collective developmental scores were computed using the group scores of the IDI, both before and after the ISL experience. The computed IDI group scores placed the groups’ levels of intercultural competence along a developmental continuum, from an ethnocentric to ethnorelative mindset, in alignment with the DMIS (Bennett, 1986, 1993). There was no significant change in the pre- and post-test group scores. The results also indicated that the group rated its perceived level of intercultural competence to be greater than its actual
developmental level. The overestimation by the group of its level of intercultural competence also increased following the ISL. Even though the group’s overall developmental level remained relatively unchanged before and after the ISL, there were some changes noted across some of the developmental sub-sections of the IDI. Some participants moved toward an increased level of intercultural competence; however, others’ intercultural competence did not vary, and some participants’ level of intercultural competence decreased following the ISL.

The quantitative findings of this study corroborate the findings of past research studies. As seen in Chapter 2, previous literature has demonstrated the challenges of measuring intercultural competence development (Arasaratnam-Smith, 2017; Griffith et al., 2016; Spitzberg & Chagnon, 2009; Suarez-Balcazar et al., 2009). For example, intercultural competence is a complex phenomenon and there is no consensus on defining and conceptualizing the elements of intercultural competence across the disciplines (Perry & Southwell, 2011; Suarez-Balcazar & Rodawoski, 2007; Suarez-Balcazar et al., 2009). According to Deardorff (2017), there is no one ‘best’ measurement tool to assess such a complex phenomenon and the assessment of intercultural competence development is not about measuring aspects of skill development, but is more about process-oriented measures over time. There are very few studies on the use of the IDI as a measure of intercultural competence in occupational therapy education or practice (Boggis, 2012; Oberle, 2014); however, previous pre- and post-test research designs using the IDI for study abroad programs of less than six weeks did show some subscale developmental orientation changes, similar to the present study (Anderson et al., 2006; Jackson, 2008). Because intercultural competence development is multidimensional, the use of one quantitative measure, such as the IDI, is not adequate enough to capture the complexity of this phenomenon. It became apparent that, conceptually, Bennett’s DMIS (1986, 1993) and the IDI attempt to
measure a specific phase or developmental orientation of intercultural competence, the model and aligned instrument did not sufficiently capture the process of intercultural competence development. To summarize, it can be concluded that the findings of this study confirm previous literature findings.

**Research Question Two**

Research question two stated, “What are graduate occupational therapy students’ reports about the effects of an ISL experience?” Recognizing there were 13 study participants, analysis of both the quantitative and qualitative data support the following overarching findings:

- The development of intercultural competence is influenced by an ISL experience. Participant stories revealed that engaging with others who are culturally different, being culturally immersed, and having opportunities for reflection supported the development of intercultural competence. The affective and behavioral aspects of being able to relate to others who are culturally different emerged as a core finding of this study. According to participants, reflection seems to have been an important factor in the development of intercultural competence. Reflection contributed to the processing of the experience, the acquisition of new knowledge, and the ability to problem-solve, interact, and relate with others. This finding emerged in the qualitative data analysis and is discussed in more detail below in a review of the 4 C’s model of intercultural competence development.

- An ISL experience resulted in perspective-shifting for participants and reports indicated that an ISL experience has the potential to influence a shift from a monocultural, ethnocentric mindset to a more intercultural, ethnorelative mindset. Student participants reported thinking differently about culture, in particular, their own culture and the ‘other’ culture. Participants talked about the effects of exposure to a different culture, culture
shock, cultural humility, and an alteration in how they make judgments about people. Increased awareness of sociopolitical and historical perspectives of the context, along with dimensions of privilege and power were also reported by participants. Overall, student participants reported increased cultural awareness, cultural knowledge, and reported an awareness of shifts in their thinking, mindset, and worldview. This finding emerged from both the quantitative changes found in developmental orientations and in the qualitative data analysis.

- The experience of cognitive dissonance (the internal struggle between prior perceptions and expectations that produces feelings of discomfort and leads to an alteration in one’s attitudes, beliefs or behaviors), was universally experienced and expressed by all participants in this study. All participants talked about the challenge of uncomfortable thoughts and feelings when faced with extreme poverty, poor health and education contextual conditions, and social and occupational injustices. It was noted by the researcher that this particular finding of cognitive dissonance appeared to be experienced more intensely by the study participants who had an ISL experience on a Native American reservation.

- An ISL experience was reported to positively influence participants’ interpersonal communications and abilities to connect and share with persons who were culturally different. It was reported that more cross-cultural interactions experienced by participants influenced a greater ability in interpersonal communications. Participants identified that language differences were a significant barrier to effective intercultural communications. Additionally, use of an interpreter was reported to be both a support, but also a barrier to effective communications. Student participants reported about
utilization of their TUOS [therapeutic use of self] skills and stated that they noticed how their abilities to interact, understand, and be understood improved during cross-cultural interactions. According to the participants, self-monitoring during cross-cultural interactions was an important aspect of successful interpersonal interactions.

- The pedagogy of ISL was viewed by study participants as a form of experiential and engaged learning that possessed the potential to be transformative for the participants. Participants reported that the reciprocal value of the experience was important and that they liked being able to offer services to individuals and the community. In addition, they were aware of the depth of learning they received from the community. From participant reports, many discussed that the ISL experience was a powerful and meaningful way of learning. Student participants reported that the value of being supported by faculty and the community members, along with being able to apply classroom and fieldwork learning to real-life practice during the ISL experience, resulted in the ability to build professional confidence and practice skills.

- The experience of an ISL was reported to enhance professional identity, professionalism, and occupational therapy clinical practice skills. Participants reported that the ISL experience helped them understand the role of occupational therapy with culturally diverse individuals and populations. Many participants expressed that they developed a greater identity with their profession and a sense of pride that occupational therapy had the potential to support communities at large.

- An ISL experience resulted in personal growth changes for participants. Affective changes reported by participants included growth in feelings of empathy, respect, gratitude, curiosity, flexibility and adaptability, open-mindedness and open-heartedness,
and a change in the desire to engage more with culturally diverse populations. Many participants reported new aspirations for the future to engage more with impoverished communities and contribute to both individual and community health outcomes.

In addition to the findings listed above, occupational therapy student reports about the effects of an ISL experience confirm many past research findings. We know from the literature that ISL is an active, engaging pedagogy, a form of service learning that supports the development of intercultural competence, along with being positively associated with student growth and development (Astin et al., 2000; Celio et al., 2001; Dahan, 2016; Davis, 2013; Eyler et al., 2001; Kiely, 2004, 2005; Peiying et al., 2012; York, 2016). From the previous literature, we also know that critical reflection and critical thinking are foundational and beneficial components of a service-learning experience (Clayton et al., 2013; Marby, 1998; Whitley, 2014). This study confirms the findings of other studies regarding the impact of service learning on occupational therapy students (Atler & Gavin, 2010; Govender et al., 2017; Hansen, 2013; Maloney et al., 2014; Murden et al., 2008; Sanders et al., 2016; Short & St. Peters, 2017).

However, there were few past studies found in the literature that included cognitive dissonance as a specific factor of an ISL experience (Kiely, 2005). This study extends the research about the importance of cognitive dissonance as an outcome of an ISL experience.

**Research Question Number Three**

Research question three stated, “What are the contributing factors to changes in levels of intercultural competence, if any?” While the findings of this study are mostly derived from qualitative data, rather than an equal weighting of both quantitative and qualitative data, analysis of data overall support the following overarching findings:
• Participant reports indicated that cultural immersion was a contributing factor to the development of intercultural competence. The ISL experience required the student participants to live, eat, sleep, and socialize with persons who were culturally different. According to participants, spending significant time in an unfamiliar physical and social context had a powerful and meaningful effect on the development of their intercultural competence.

• Self-monitoring during cross-cultural interactions, feedback from peers who observed the interactions, and self-reflection (both structured and unstructured reflection) at a later time were identified by participants as contributing factors to changes in levels of intercultural competence.

• Some participants also talked about past experiences and preparedness as contributing to further development of intercultural competence in the context of an ISL experience. Past experiences with cross-cultural interactions, particularly in an international context, seems to have had an influence on the development and strengthening of intercultural competence, according to participant reports.

The finding of cultural immersion as a contributing factor to intercultural competence corroborates previous literature (Bringle & Hatcher, 2011; Clayton et al., 2013; Holsapple, 2012; Kiely, 2004, 2005). Of the other three factors contributing to intercultural competence (self-monitoring, peer feedback, and reflection), there has been an emphasis on the importance of reflection in previous studies (Astin et al., 2000; Celio et al., 2001; Davis, 2013; Eyler et al., 2001; Giles & Eyler, 2013; Marby, 1998; York, 2016). In the extant literature, there are a number of studies about occupational therapy, the impact of a ISL experience, and the development of intercultural competence (Govender et al., 2017; Murden et al., 2008; Short &
St. Peters, 2017). These studies include a discussion about the correlation between increased opportunities for cross-cultural interactions and increased levels of interpersonal confidence, which in turn result in increased levels of intercultural competence. As shown, this study confirms the findings of previous literature.

**Research Question Number Four**

Research question four stated, “How do graduate occupational therapy students describe the effects of an ISL experience on intercultural competence?” One of the interview questions required participants to talk about their views about the benefits, if any, of an ISL experience. Overall, student participants described both personal and professional growth as a result of the experience; however, many participants reported that the experience was challenging and overwhelming. The following findings are the result of an analysis of both quantitative and qualitative data, but mostly the qualitative data:

- An ISL experience positively effects the development of intercultural competence. From participant reports, this particular benefit was attributed to a combination of pre-trip preparations with faculty, the acquisition of cultural knowledge, cultural immersion and cultural shock, followed by multiple opportunities for cross-cultural interactions and meaningful community-engagement experiences.

- According to participant reports, the ISL experience provided participants an educational context in which they could actively apply classroom learning to real-life problem-solving and situations. Structured learning opportunities, along with community-engagement activities that were meaningful and beneficial to clients were reported to foster the development of professional confidence and strengthen occupational therapy practice skills. All participants also reported that the pedagogy of an ISL contributed to
the development of intercultural competence and contributed to competencies as an occupational therapy student.

- ISL experiences that offered interprofessional education and practice opportunities were reported to be very beneficial to the participants’ learning. According to participants, the interprofessional interactions contributed to greater knowledge about interprofessional roles and practices and contributed to greater levels of comfort, which consequently contributed to interprofessional teaming. Participants reported that observing other professions interacting with culturally diverse clients also provided different perspectives and contributed to the development of intercultural competence.

- Personal and emotional growth were reported as significant benefits of an ISL experience. Participants reported that they developed increased sensitivity, empathy, openness, and self-confidence. Many student participants reported great satisfaction in their ability to “step out of their comfort zone”. According to many participants, an ISL experience was found to be eye-opening and strengthened self-efficacy. Many participants also reported greater comfort in cross-cultural interactions, along with a desire to engage in future intercultural experiences and professional advocacy.

- Intercultural competence development through relatedness, the core category found in the analysis, was central to participants’ views and was an important and identified benefit of the ISL experience (See Figure 7). In the telling of their stories, participants shared their views about intercultural competence development. The four components that emerged from participants were: cultural consciousness, cognitive dissonance, connecting, and confidence. All four interdependent components influenced the development of intercultural competence through relatedness and were also shaped by this core category,
with the exception of cognitive dissonance. Cognitive dissonance influences intercultural competence development through relatedness, but not vice versa. Participant reports indicated that intercultural competence through relatedness was interwoven with cultural consciousness, cognitive dissonance, connecting, and connection, and the interdependent relationships between the categories also influenced confidence and greater effectiveness as an occupational therapy student.

Previous literature across a number of disciplines has shown that service-learning has the positive benefit of being a high-impact, teaching approach (Astin et al., 2000; Bringle & Hatcher, 2011; Bringle et al., 2013; Celio et al., 2011; Clayton et al., 2013; Dahan, 2016; Davis, 2013; Eyler et al., 2001; Giles & Eyler, 2013; Holsapple, 2012; Kiely, 2004, 2005; Marby, 1998; Whitley, 2014; York, 2016). While there are only a few occupational therapy studies investigating the impact of an ISL experience on occupational therapy students, the findings have included positive benefits for students. For example, the development of individual, personal, and spiritual growth, along with cultural sensitivity and a student’s abilities to “stretch themselves” have been shown (Domina & Doll, 2013). Other studies have found benefits in regard to the impact of cultural shock and the consequent development of intercultural competence (Darawsheh, Chard, & Eklund, 2015). This research confirms the findings of previous studies showing the overall benefits of service-learning.

To close this section on the summary of study findings, this researcher would like to briefly discuss the finding of ‘relatedness’ as described by participants, and how it is understood to be intertwined with intercultural competence development, so the concept is clear and there is no ambiguity. From the participants’ reports, the finding of ‘relatedness’ in the context of an ISL experience is the capacity to be fully empathetic with the other, to experience an emotional
connection of warmth and caring for the other, and is not simply understanding the person from
the perspective of language and meaning, but also their illness, their occupation, their context,
and fully understanding that the individual is a unique human being with a unique story to tell.
This concept of relatedness is tightly intertwined with intercultural competence development.
Relatedness is different from simply ‘connecting’ with another person. From this researcher’s
perspective, connecting is understood to be a skill, the skill of interacting, being open, and
communicating. Connecting could be thought of as a prerequisite or component skill
contributing to relatedness, whereas relatedness is a way or state of being with a person of a
different cultural background. In other words, relatedness can be thought of as being able to “put
yourself in their shoes.”

**Implications of Study Findings**

This researcher aimed to a) fill a gap in the existing knowledge about the learning
potential of an ISL experience and the development of intercultural competence and b) inform
occupational therapy educators, practitioners, and others about the development of intercultural
competence. This study was framed from two theoretical perspectives: experiential learning was
the theoretical lens that was used to explore the impact of ISL as a pedagogy, while Bennett’s
DMIS (1986, 1993) was the conceptual framework that framed the measurement of intercultural
competence with use of the IDI (Hammer, 1999, 2009, 2011). The DMIS was designed to
explain the developmental progression of intercultural competence along a continuum ranging
from an ethnocentric mindset towards an ethnorelative mindset. The following section discusses
the implications of this study from the perspective of the conceptualizations found in the results
of this study about an ISL and intercultural competence development, and discusses the
implications of study findings for occupational therapy education, practice, and research. It is
important to note that findings of this study go beyond intercultural competence development, and as seen in Chapter 4, include some findings about an ISL as an effective pedagogy.

**ISL and the Development of Intercultural Competence.** Study findings revealed that experiential learning, with the use of an ISL experience, was an active, engaging, and transformative high-impact pedagogy and possessed a rich potential for the attainment of occupational therapy student learning outcomes. This study confirmed the value of an experiential, hands-on learning experience in occupational therapy education (Atler & Gavin, 2010; Coker, 2010; Knecht-Sabres, 2013). The research findings confirmed that an ISL experience provides a learning opportunity to form and shape a student’s critical thinking, intercultural competence, along with personal and professional growth and development.

Early in the research process, this researcher wondered about the value of cultural immersion as part of an ISL experience versus a cross-cultural service-learning experience in a domestic setting. Findings of this study reveal that cultural immersion in an international setting, even for a short duration, has a powerful and transformative effect, particularly in relation to the development of intercultural competence. This study confirms previous literature that both ISL and service-learning experiences facilitate and effect change in intercultural competence development, along with diversity outcomes (Astin et al., 2012; Eyler et al., 2001; Giles & Eyler, 2013; Holsapple, 2012; Kiely, 2004; Whitley, 2014; York, 2016). The 4 C’s model is a grounded theory model, and is a way of conceptualizing how an ISL experience impacts such change in occupational therapy students.

The DMIS provided this researcher with a framework for theorizing and measuring the development of intercultural competence. The quantitative phase of this study revealed little change in levels of intercultural competence as a result of a short-term ISL experience, as
measured by the IDI. The DMIS and use of the IDI provided conceptual stages of intercultural competence development, however, when the research moved onto the qualitative phase, participant stories revealed much more about the process of intercultural competence development. Study findings, based on 13 participants’ views of an ISL experience, resulted in the development of an alternative grounded theory model, the 4 C’s model of intercultural development, a visual representation of participants stories that frames the complexity and multidimensionality of the process of intercultural competence development. The DMIS posits a continuum of development, while the 4 C’s model proposes a process and visually represents the interdependent components of intercultural competence development. It is suggested that both the DMIS and 4 C’s grounded theory model complement each other, with the DMIS framing phases of intercultural competence, and the 4 C’s model provides one way of conceptualizing the process of intercultural competence development. From participant stories in this study, the components of cultural consciousness, cognitive dissonance, connecting, and confidence were viewed as influencing and shaping intercultural development through relatedness. These same interdependent components were viewed as contributing to the progression of perceptions and openness to a more intercultural mindset. Briefly, the 4 C’s model emerged from participant stories, and is simply a different way of explaining the components and process of intercultural competence development, and complements Bennett’s (1986, 1993) conceptualization of shift along the developmental orientation’s continuum.

Even though the quantitative findings of this study revealed little change in intercultural competence development as a result of a short-term ISL experience, the DMIS could still be a useful framework with which to explore and measure phases of intercultural competence development, with use of the IDI as the measurement tool. The one-week ISL experience
appears to have been too short a time for a perceptible change in levels of intercultural competence, as measured by the IDI. The IDI group reports were not as helpful as originally anticipated, but individual IDI reports have the potential to be more useful in measuring intercultural competence development. Findings of this study revealed that assessment of intercultural competence requires more than a single quantitative measure and that a full assessment of this complex phenomenon requires both quantitative and qualitative approaches.

**Occupational Therapy Education.** The grounded theory model that emerged from this study can contribute to occupational therapy education regarding the development of intercultural competence through engaging in an ISL experience. The development of intercultural competence is increasingly relevant to occupational therapy education and practice. In the preparation of future occupational therapy practitioners, the profession has identified the importance of intercultural competence and the delivery of culturally competent, responsive care (Doll, 2011; Flecky & Gitlow, 2011; Munoz, 2007; Suarez-Balcazar & Rodakowski, 2007; Wells et al., 2016) as being critical to effective health-related outcomes in individuals and populations. This study is relevant to the Occupational Therapy Education Research Agenda – Revised (AOTA, 2018). The profession’s research agenda for best educational practice is inclusive of the study of occupational therapy pedagogies and instructional methods, as well as processes by which occupational therapy programs educate practitioners who are effectively able to serve diverse populations. In particular, this study contributes to one specific identified research goal: “Identify and develop the best educational practices and coursework within curricula to strengthen students’ cultural critical consciousness and develop competencies to enable them to effectively promote and support diversity, inclusion, and equity… for the people and populations they serve.” (AOTA, 2018, p. 2).
The core and central category that emerged from this study, intercultural competence development through relatedness, could provide occupational therapy educators a framework with which to design curricular content for both intercultural competence development and the design of an ISL experience for students. The 4 C’s model of intercultural competence development (see Figure 7) provides a possible educational structure for intercultural competence education for occupational therapy students that includes opportunities for cross-cultural interactions, challenging and developing students’ cultural thinking and cognitive dissonance, intercultural skills for connecting, and the development of professional identity and culturally relevant practice skills. Reflection, both structured and unstructured, were identified through this study as a key consideration in the design and implementation of an ISL experience. Structured reflection could be framed using the 4 C’s grounded theory model. An integrated curriculum for intercultural competence could include experiential learning opportunities framed by the four interdependent categories of the model, developing students’ intercultural competence through relatedness. This could be addressed through classroom instruction and experiences, as well as fieldwork opportunities, and other service-learning experiences. The grounded theory model developed from this study could also aid occupational therapy educators with a framework to plan exposure to culturally diverse populations, provide key areas of assessment of student development. For example, assessment could be used to measure a student’s skills in the delivery of a therapeutic intervention plan for a client that it is inclusive of strategies to facilitate occupational performance and is client centered and culturally relevant. Areas of student intercultural development that could be framed by this model include multicultural education, with emphasis on the professional, social, cultural, political, economic, and ecological, in which occupational therapy services are provided. Intercultural competence
development could include the development of cultural knowledge and self-awareness. Cross-cultural opportunities afforded through community engagement activities, along with service-learning and fieldwork could emphasize aspects of relatedness and be inclusive of structured reflection to facilitate deeper learning. In addition, although this model was created in the context of a number of different ISL experiences, many of the findings could be useful in the design of any service-learning experience with culturally diverse populations.

In addition to applying the concepts of this grounded theory model to help occupational therapy students further develop their intercultural competence, this model could also be applied to faculty. For instance, not all occupational therapy faculty are deeply immersed in multicultural education or the teaching of intercultural competency skills. However, it is imperative that occupational therapy faculty understand the impact of service-learning and ISL on the development of students’ intercultural competence (Flecky & Gitlow, 2011). This model could be utilized for faculty, providing professional development about the pedagogy of ISL and service-learning, the design of active learning experiences, and more generally, how to frame the instruction of intercultural competence development across courses and educational experiences for occupational therapy students. A review of this model could also help faculty understand the effects of ISL and service-learning. Faculty could understand why an ISL experience, or any cross-cultural experience, is important to the development of intercultural competence in occupational therapy students, and in particular, how an ISL or service-learning experience moves students towards intercultural competence. One implication of this research, as applied to faculty, could also include the design of ISL or service-learning experiences for students involved with Native Americans. Results from this study indicate that an ISL on a reservation may require a different approach to the design of the ISL experience.
This 4 C’s grounded theory model also provides occupational therapy educators with a framework for the design of community engagement activities that could take place before, during, or after the ISL or service-learning experience. For example, prior to the experience, interactions with host community partners could include student education about the particular nuances of the community, including the historical, social, cultural, political, economic, and ecological context, so students could have a deeper appreciation and understanding for the aspects of the cultural context and environment. This model provides a framework for the development of both structured and unstructured reflection activities built into the daily ISL experiences as well. Additionally, the use of this model in the design of community engagement activities can be done in partnership with the host community. Following the ISL experience, the 4 C’s model could also frame post-ISL processing and support for students.

**Other Stakeholders.** The findings of this study could also have implications for education programs across other health profession programs. It is important for health profession programs to prepare students for cultural diversity (IOM, 2003). Intercultural competence development is a student learning objective that is embedded across many different health profession programs. For example, both nursing and other rehabilitation disciplines include intercultural competence development education within their curricula. Through collaborative faculty planning of interprofessional education experiences, emphasis on the 4 C’s grounded theory model could benefit many health profession students (e.g., nursing, physical therapy, and speech therapy students). All that has been discussed in relation to occupational therapy education and the 4 C’s model, could also be implemented within other health professions programs in the delivery of intercultural competence development curricular content.
This 4 C’s model could also have implications for administrators and leaders of higher education institutions, particularly program directors and deans of health profession education programs. Since program directors and deans participate in the development of ISL or service-learning experiences, applying this model could yield a more structured ISL experience. For example, higher education administrators could develop faculty development programs implementing ISL and service-learning experiences based on the 4 C’s model. As an example, there could be additional readings or worksheets surrounding the four C’s and this could inform the planning of ISL’s and students’ development of intercultural competence.

The findings of this study could inform occupational therapy practitioners about intercultural competence development, as this process is not well understood in occupational therapy practice (Bonder & Martin, 2012; Wells et al., 2016). Even though this study was examining the impact of an ISL experience on the development of intercultural competence in occupational therapy students, the findings about the process of intercultural competence development could be of value to occupational therapy practitioners in the delivery of culturally competent care.

**Future Research.** From the findings, it was confirmed that the development of intercultural competence is complex and evolves over time (Arasaratnam, 2014; Bennett, 1986, 1993; Bringle et al., 2013; Camphina-Bacote, 2002; Deardorff, 2006, 2009; Flecky & Gitlow, 2011; Griffith et al., 2016; Kiely, 2005; Whitley, 2014). The word competence infers a static endpoint of development; however, as this study demonstrated, intercultural competence, from an ethnocentric mindset to an ethnorelative mindset, does shift both positively and negatively along a continuum, and this finding supports the conceptual framework of the DMIS (1986, 1993). However, a short-term ISL experience could be too short of an experience to evaluate
any quantitative measure of radical and permanent shifts in students’ levels of intercultural competence. Keeping this in mind, the 4 C’s model of intercultural competence development that emerged from this study will require further evaluation and research.

First, replication of this study with a larger sample of participants and with other health profession students could confirm the findings of this study and strengthen the 4 C’s model as an emerging model. Further inquiry using larger and more diverse samples could examine each of the four components, test the assumptions inherent in the model, explore the four components as being interdependent, and contribute to the overarching concept of development of intercultural competence through relatedness. It would also be interesting to see if any difference emerges based on other health professions. Although this researcher would assume that this model could be applied across health professions, future research will be needed to test this assumption.

In addition to testing the model with a larger population that includes participants from other health professions, it could also be helpful to assess participants who have experienced ISL in different geographical locations. Although the current study had three different geographical regions, broadening the locations could further support the model. In addition, further inquiry into the particular effects of an ISL experience at a Native American reservation could be illuminating, as the results of the current study showed a significant effect in the area of cognitive dissonance, and this could be a particularly interesting area of study. Other areas of future research would be to assess the effects of an ISL experience on students outside of intercultural competence, perhaps looking at the effects of an ISL on the particular components of the 4 C’s model. Research on the effects of an ISL experience on community partners and participants could also be an interesting area of further study. As the results of this study indicated that an ISL experience has an overall positive effect on the development of
intercultural competence, it would be interesting to conduct a comparative study, examining the effects of an ISL experience on students who have traveled abroad, with the effects of a domestic service-learning experience. In particular, future researchers could assess students’ levels of intercultural competence through cross-cultural experiences that are presented in a local context.

As previously mentioned, the qualitative results of this study were able to provide a more comprehensive account of the ISL experience as compared to the quantitative results. Future research could use the model developed in this study to create a quantitative self-report instrument to assess the four C’s, along with the main component of intercultural competence through relatedness. Having a more comprehensive quantitative instrument that can assess intercultural competence could allow future researchers to more easily assess these complex constructs.

**Summary**

The primary research question that guided this study was: What is the influence of an ISL experience on graduate occupational therapy students, and the development of intercultural competence? Overall, the results of the study indicated that a short-term ISL experience has positive effects on occupational therapy students and the development of intercultural competence. Participant reports and grounded theory analysis resulted in the development of the 4 C’s model of intercultural competence development. Relatedness, the ability to be fully other-centered and connected on an emotional level with a person of a different cultural background, was identified as being central to the development of intercultural competence. Specifically, cultural consciousness, cognitive dissonance, connecting, and confidence were the four components that emerged from the study, along with the overarching core component of intercultural competence development through relatedness.
To summarize, this 4 C’s model shows that intercultural competence development through an ISL experience is a complex and multifaceted phenomenon. This model is different from Bennett’s DMIS (1986, 1993), the original conceptual framework selected for this study, in that this new model conceptualizes the development of intercultural competence in the context of an ISL experience. Aspects of the DMIS were helpful in the early stages of this study; in particular, the developmental phases described in the DMIS were used to help frame the study in the quantitative phase. However, the qualitative phase of the research study resulted in newer conceptualizations. The 4 C’s model offers a different perspective on the development of intercultural competence in occupational therapy students and has implications for occupational therapy education, practice, and research. The model developed in the current study also allows for a clearer and more direct explanation of this phenomenon by showing how cultural consciousness, cognitive dissonance, connecting, and confidence are all interdependent and crucial to intercultural competence development through relatedness.
References


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Appendix A

Invitation to Study Participants

Dear Occupational Therapy Student,

I would like to invite you to be a part of my study, which will examine the effects of an ISL experience on the development of intercultural competence in graduate occupational therapy students. This study seeks to improve our understanding of the impact of an ISL experience, particularly as it relates to the development of intercultural competence. Your participation will help improve future ISL experiences for future occupational therapy students.

My name is Sharon M. McCloskey. I am an occupational therapist by profession, and an occupational therapy educator. Currently, I am working towards a doctoral degree and completing my dissertation. This study will be a mixed methods study, and includes a measure of intercultural competence (completing a questionnaire), interviews and journal reflections.

If you chose to participate in this study, I will ask you to:

• Complete an IDI before and after the ISL experience
• Participate in an interview with me, either in person or by phone, and I will ask you some questions about your ISL experience
• Share your course-required journal reflections with me

Your participation is voluntary. You can chose to participate in any, all, or none of this study activities. You can opt out of this study at any, but I hope that you will consider participating in this study.

I will share more details with you once you reply to this invitation. If you have any immediate questions, I can be reached by phone at 1-203-216-6697, or email me at mccloskeys@sacredheart.edu.

Thank you so much. I look forward to hearing from you.

Sincerely,

Sharon M. McCloskey
Appendix B

University of Hartford. Informed Consent

The Impact of an International Service Learning (ISL) Experience on the Development of Intercultural Competence in Occupational Therapy Students

This study examines the influence of an international service learning (ISL) experience on the development of intercultural competence in graduate occupational therapy students. In this study, intercultural competence refers to the behaviors and communication in situations with other cultures. One way to measure intercultural competence is the Intercultural Developmental Inventory (IDI), a questionnaire you will be asked to complete twice as part of your ISL experience. My intent is to expand on the IDI findings by interviewing ISL participants, and examine their journal reflections. Potential benefits of this study include improving teaching and learning future occupational therapy students and faculty, ISL pedagogy in occupational therapy education, and the development of intercultural competence.

- You must be a graduate occupational therapy student engaged in an ISL experience as part of an OT education course in order to participate in this mixed-methods study.
- Participation in this study is voluntary and will not affect your grade in any course.
- Risk of participation in this study are not greater, considering probability and magnitude, than those ordinarily encountered in daily life.
- It will take you about 25 minutes to complete the IDI before and after the ISL experience; and 45 minutes for an interview. You are free to choose to submit your course-required journal reflections or not.
- Information will be used for dissertation purposes, presentations and publications.
- Your name will not be associated with your answers.
- All your answers will be grouped with the answers of others.
- The data will not be coded in any identifiable way.
- All data will be stored in a locked file cabinet.
- All data will be destroyed in no more than 5 years of IRB approval.
- If you have any questions about your rights as a research subject, please contact the University of Hartford Human Subjects Committee (HSC) at 860.768.5371. The HSC is a group of people that reviews research studies and protects the rights of people involved in research.

Thank you for participating. If you have any questions about being a study participant, you may contact:

Sharon M. McCloskey MBA OT/L DipCOT  
Clinical Assistant Professor  
Graduate Program Occupational Therapy  
Phone: 1-203-216-6697  
Email: mccloskeys@sacredheart.edu

Karla L. Loya, PhD  
Assistant Professor  
Department of Educational Leadership  
Phone: 1-860-768-5807  
Email: loyasuare@hartford.edu

Name (print) ____________________________ Date: ____________________________

Signature: _____________________________________________
Appendix C

Interview Guide

Thank you for agreeing to participate in the interview phase of this study.

1. I would like to start this conversation by asking you a few questions about yourself.
   a. Tell me a little about yourself, and your background.
   b. Tell me a little about your finding the profession of occupational therapy.
   c. Prior to your graduate occupational therapy education, how would you describe your level of comfort in cross-cultural interactions, meaning interactions with persons of different and/or multicultural backgrounds?

2. Now I would like to ask you a few questions about the words 'culture' and 'intercultural competence'.
   a. Tell me what the word 'culture' means to you.
   b. The words 'cultural competence' and 'intercultural competence' are often used interchangeably. Tell me what your understanding of 'cultural competence' might be.

3. As a student of occupational therapy, you are acquiring knowledge and skills to become an occupational therapy practitioner. One of the areas of student development that has been identified as valuable is the development of 'cultural competence'.
   a. Why do you think the development of cultural competence might be considered valuable knowledge or skill?
   b. Other than your ISL experience, can you think of any other experiences you have had in your OT training that relate to cultural competence?
   c. How prepared did you feel for the ISL experience, in terms of knowledge and skills that prepared you for cross-cultural interactions with others different from you?

4. Now I would like you to think about your recent visit to ____________, and the experience of service learning in another country.
   a. Firstly, what would you say about this place?
   b. When you first arrived, how comfortable did you feel in this place? Can you describe your thoughts and feelings?
      i. Tell me about your feelings of preparedness to be in a different place. What were your thoughts and feelings about being prepared for this place?
   c. I would like you to think of the first moment when you realized you were actually somewhere very different, working with others. Can you describe your thoughts and feelings about the experience of providing care to others and learning in a different place?
   d. I would like you to think of a moment when you had to interact with people from this place. It could have been an interaction with one person or a small group. What were your thoughts and feelings in this moment with others?
      i. Tell me about what caused your interactions to be successful/unsuccesful.
      ii. If you had to use an interpreter, what were your thoughts and feelings about this experience?
   e. Can you recall a specific moment of surprise in your interactions? Tell me something about what was surprisingly different that you learned from others in this place.
      i. What caught your attention in this moment?
      ii. What way did you respond to this surprising moment?
      iii. Describe your thoughts and feelings in this moment?
f. Can you recall a specific moment when your level of comfort changed during the ISL experience (positive or negative)?
   i. Describe the moment of change within yourself. Tell me about your thoughts and feelings in this moment.
   ii. Tell me what you think contributed to this feeling of change in your comfort level (positive or negative)?

5. My closing questions have to do with your views on an ISL experience for occupational therapy students in the future.
   a. Would you say an ISL experience has any benefits for an occupational therapy student?
   b. If so, what are some of the benefits?
   c. How does an ISL afford these benefits to students?
   d. Do you think an ISL experience contributes to the development of intercultural competence?
   e. How does an ISL experience contribute to the development of intercultural competence?
   f. Is there anything you wish you would have known about the ISL experience before you went?

6. Is there anything I haven’t asked you, that you’d like to add about your ISL experience, or your sense of development of intercultural competence?

We’ll close the conversation now, and I will switch off the audio-recorder. Thank you so much for your participation. Thank you.