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Videotaped Role-Play Simulation in Teaching Transcultural Self-Efficacy to Interprofessional Healthcare Students

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Abstract

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MScN, Walden University, 2009

BScN, Laurentian University, 2007

Dissertation Submitted in Partial Fulfillment

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Abstract

Increased demand for culturally sensitive healthcare services suggests that interprofessional beginning healthcare students need to gain the necessary cultural competency skills to be successful in delivering positive health outcomes for diverse patients. Bandura's theory of observational learning, Mezirow's theory of transformative learning, and Purnell's and Paulanka's model of cultural competence informed the framework for this research. The purpose of this quasi-experimental quantitative study was to determine the relationship between mode of instruction (observing role models in videotaped role-play simulation) and increased transcultural self-efficacy in cultural competence instruction. A convenience sample of 196 students enrolled in an interprofessional education (IPE) course was randomly assigned at the time of course enrollment to either control or experiment course sections. Pretest and posttest data were collected anonymously through paper-and-pencil administration of the Transcultural Self-Efficacy Tool—Multidisciplinary Healthcare Provider (TSET-MHP). Paired-samples *t* test showed that students in the intervention group had statistically higher ($p < .05$) posttest scores in perceived transcultural self-efficacy after observation of standardized patient actors in a videotaped role-play simulation than did students in the control group. These results support the use of videotaped role-play simulation for cultural competence instruction as a means to achieve improved patient care within the culturally diverse population in the healthcare system.

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Dedication

I dedicate my dissertation work to my mother, Mercedes Oduber. Your love, sacrifice, and dedication have greatly influenced my views on hard work, education, and commitment to bettering myself in anything that I do in life. Your words of wisdom and encouragement have been an immense support throughout my personal, professional, and educational career. Te quiero Mama!

I also dedicate this dissertation to my loving wife, Janine Odreman. You have been patient and understanding with me and my studies throughout my doctoral work. Your support and encouragement show how much you love me and want me to succeed. I am lucky to have such a loving partner and best friend who gets me and accepts me. Te Amo Janine! I also dedicate this work to my two beautiful daughters, Natalia and Marisa. Their lovely smiles and hugs kept me going.

Finally, I would like to dedicate this dissertation to my "Canadian Dad and Mom," Gordon Gilmore and Susan Gilmore. You always showed a keen interest in my research by patiently listening and trying to understand what I wished to accomplish from my doctoral research. You have been great role models for me.

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Chapter 1: Introduction to the Study

In healthcare, possessing cultural competence is considered one of many important clinical skills (Axtell, Avery, & Westra, 2010; Back et al., 2007; Brathwaite & Majumdar, 2006; Chun, Young, Honda, Belcher, & Maskarinec, 2012; Delgado et al., 2013; Eshleman & Davidhizar, 2006; Jeffreys & Dogan, 2012; Kardong-Edgren et al., 2010; Mihalic, Morrow, Long, & Dobbie, 2010; Stone et al., 2013). With every patient encounter, healthcare professionals meet the physical healthcare needs of patients (Wehbe-Alamah, 2008). Illnesses such as heart attacks, diabetes, and high blood pressure are manifested in the same way in those affected by them regardless of cultural background (Brathwaite & Majumdar, 2006; Chun et al., 2012; Jeffreys & Dogan, 2012; Wehbe-Alamah, 2008; Westberg, Adams, Thiede, Stratton, & Bumgardner, 2006). For this reason, healthcare professionals are trained to provide consistent and standardized clinical approaches in interventions for patients suffering from such common diseases.

There is an increased need to find ways to develop transcultural self-efficacy in healthcare professionals so that they can become aware of the healthcare needs of patients from specific cultural backgrounds (Halter et al., 2014; Jeffreys & Dogan, 2012; Larsen & Reif, 2011). Consequently, transcultural self-efficacy for healthcare professionals and their approach to holistic healthcare is a goal for a better healthcare system (Brathwaite & Majumdar, 2006; Hawala-Druy & Hill, 2012; Leadbeater & Litosseliti, 2014). However, what is not always standard in the practice of healthcare is the development of learning approaches to train future healthcare professionals to

develop cultural awareness and confidently use culturally sensitive communication skills to meet that goal.

In order to achieve holistic care when treating all patients' illnesses, healthcare professionals must develop an understanding of how patients' cultural backgrounds can influence their receptiveness to healthcare (Okoro, Odedina, Reams, & Smith, 2012). Patients' cultural backgrounds can influence the way in which they receive information, which may in turn have an impact on the effectiveness of healthcare services (Purnell, 2013). Providers' lack of awareness and knowledge of other cultures, lack of transcultural self-efficacy, and lack of confidence in using effective communication techniques can increase anxiety and confusion for patients of different cultural backgrounds (Rider & Keefer, 2006).

While healthcare education has been able to facilitate and support professional development and clinical opportunities for the practice of competent healthcare (Axtell et al., 2010; Back et al., 2007; Brathwaite & Majumdar, 2006; Chun et al., 2012), specific and effective educational strategies are still needed in order to raise the transcultural self-efficacy of healthcare professionals (Jeffreys & Dogan, 2012; Rider & Keefer, 2006; Sasnett, Royal, & Ross, 2010; Stone et al., 2013; Thomas & Cohn, 2006). Encouragement of culturally sensitive behaviors can promote caring communication with patients from different cultural backgrounds (Back et al., 2007; Mihalic et al., 2010). Consequently, developing transcultural self-efficacy through culturally based communication techniques for patients from different cultural backgrounds can promote and effect positive social changes that are needed in the healthcare environment. For

example, when it is necessary to perform a physical examination of a female patient from a culture in which touch is carefully reserved for members of the same gender, a male healthcare professional can confidently identify the uniqueness of the patient's cultural situation and arrange for another healthcare professional of the same gender to perform the examination.

In this chapter, I provide background on the importance of education for transcultural self-efficacy and its place in healthcare, as well as the problem statement, purpose, and research question of this study that guided the method of investigation further detailed in Chapter 3. In addition, Chapter 1 includes the theoretical framework that informs an understanding of approaches to adult learning theory, specifically with regard to transformative and observational theories, as the basis for acquiring transcultural self-efficacy. Furthermore, assumptions, limitations, and delimitations provide justification for conducting this investigation into effective educational methods to increase transcultural self-efficacy in interprofessional beginning healthcare students.

Background

Transcultural self-efficacy is an important skill that healthcare professionals must have in order to address the healthcare needs of patients from different cultural backgrounds (Halter et al., 2014; Jeffreys & Dogan, 2010). While clinical skills that are required to meet the physical needs of all patients can be seen as the focus in every healthcare setting, it is also important to understand that patients are diverse and that their backgrounds, whether cultural or psychosocial in nature, must be equally considered in order to promote and maintain proper health (Leadbeater & Litosseliti, 2014; Wehbe-

Alamah, 2008). A review of literature from the fields of education, health care, and nursing revealed research studies on the use of several teaching strategies in an attempt to promote effective and meaningful ways of increasing transcultural self-efficacy. As part of this dissertation study, I was interested in researching existing educational methods, such as lecture-based workshops, through which beginning healthcare students can learn about the development of transcultural self-efficacy skills for the care of patients from different cultural backgrounds.

Furthermore, the dissertation study provided an opportunity to research the potential for new teaching strategies that are informed by adult learning theories such as transformative (Mezirow, 1991) and observational (Bandura, 1977) learning. For example, Carroll (2006) provided information on the development of an evaluation instrument that could be used by educators to promote reflective learning and facilitate debriefing feedback to marketing sales students after role-play activities. In addition, Eshleman and Davidhizar (2006) showed how the use of role-play video vignettes can help nursing students place themselves in the position of a person from a different culture and in this way experience a closer connection with individuals from different cultural backgrounds. Further, Schim, Doorenbos, and Borse (2006) provided information on how instructional workshops for providers of hospice care helped to expand their perception of cultural awareness, sensitivity, and competence.

Another study showed a relationship between the use of cultural instruction to enhance ways of learning English as a second language while at the same time helping to increase students' proficiency in language learning through activities of culture

appreciation and sensitivity (Tsou, 2005). Yet another study addressed the role that cultural competence plays for healthcare faculty and how it affects their ability to support the cultural needs of their students and their students' interactions with future patients from diverse cultural backgrounds (Wilson, Sanner, & McAllister, 2010). Finally, Jeffreys and Dogan (2010) developed a transcultural self-efficacy tool (TSET) in order to gain insight into the cultural competence development of culturally diverse nursing students. The TSET included a guide for future research and the development of educational initiatives that were intended to enhance the cultural competence curriculum at an institution using an integrated approach to cultural competence education.

While the studies already mentioned addressed the importance of helping students develop transcultural self-efficacy, the review of the literature did not clearly reveal the existence of a unique and effective educational methodology that helps learners raise their awareness of different cultures. In addition, there were no studies found that investigated the level of multidisciplinary healthcare students' confidence in their transcultural self-efficacy and their effective use of culturally sensitive communication skills. Therefore, in the research for this dissertation, I compared two methods of teaching cultural competence by investigating differences in transcultural self-efficacy that resulted from the two methods in a multidisciplinary healthcare learning environment.

Problem Statement

There is a high number of individuals from different cultures requiring health care (Mareno & Hart, 2014). In order to support the healthcare needs of this diverse population, healthcare educators need to provide theoretical and clinical instruction on

cultural care to future healthcare professionals (Axtell et al., 2010; Jeffreys & Dogan, 2012; Kardong-Edgren et al., 2010; Larsen & Reif, 2011; Mihalic et al., 2010; Purnell, 2013). The standard mode of instruction used to encourage interprofessional beginning healthcare students to develop transcultural self-efficacy is workshop or lecture style (Brathwaite & Majumdar, 2006; Chun et al., 2012; Eshleman & Davidhizar, 2006; Fleischmann, Robbins, & Wallace, 2011; Hawala-Druy & Hill, 2012; Mihalic et al., 2010; Rogers-Sirin & Sirin, 2009). Some educational institutions have made use of role-play, task-training mannequins, and computerized animation in an attempt to enhance and evaluate students' theoretical understanding and performance of clinical skills (Harder, 2010; Kesten, 2011; Khan, Pattison, & Sherwood, 2011; McCaughey & Traynor, 2010; Russell & Shepherd, 2010; Tokarczyk & Greenberg, 2011).

However, a review of the literature showed that while instructional methods based on transformative (Bowles, 2011; Clapp-Smith & Wernsing, 2014; Kozub, 2013; McDowell, Goessling, & Melendez, 2012; Taylor, 2007) and observational (De Grez, Van Steendam, & Raedts, 2014; Groenendij, Janssen, Rijlaarsdam, & Van Den Bergh, 2013; Kempster & Parry, 2014) theories are used effectively for various educational purposes, there appeared to be little use of these theories for the purpose of training interprofessional beginning healthcare students toward developing transcultural self-efficacy. As a result, there is a need to determine if the application of observational theory (i.e., by observing role models) and transformational theory (i.e., by challenging assumptions about culture) in training interprofessional beginning healthcare students increases transcultural self-efficacy.

Purpose of the Study

The purpose of this quasi-experimental quantitative study was to determine to what extent there was a relationship between mode of instruction (observing role models that challenge assumptions about culture in a videotaped role-play simulation) and increased transcultural self-efficacy in cultural competence instruction. The intent was to determine whether mode of instruction (lecture-based workshop or observation of a videotaped role-play simulation) was related to increased transcultural self-efficacy in an interprofessional education (IPE) course designed to teach beginning healthcare students about communication with patients from specific cultural backgrounds. The independent variable was the mode of cultural care instruction provided to interprofessional beginning healthcare students from disciplines such as nursing, paramedic, dental assisting, and occupational/physical therapy assisting. The dependent variable was the healthcare student's perceived change in transcultural self-efficacy as measured by the TSET (Jeffreys, 2010) after receiving the prescribed mode of cultural care instruction.

The standard mode of instruction was a lecture-based workshop (control group), whereas the alternative mode of instruction was observation of standardized patient actors in a videotaped role-play simulation that demonstrated the effective use of culturally sensitive touch and communication techniques when caring for a patient from a specific cultural background (experimental group). *Standardized patient actors* are trained individuals who portray the personal history, physical conditions, and emotional and cultural characteristics of an actual patient presented within a simulated environment.

Research Question and Hypotheses

Research question: To what extent is there a relationship between mode of instruction (lecture-based workshop or observation of a videotaped role-play simulation) and increased transcultural self-efficacy in cultural competence instruction?

Null hypothesis (H_0): There will be no significant difference in transcultural self-efficacy between interprofessional beginning healthcare students who observe a videotaped role-play simulation of standardized patient actors who demonstrate transcultural self-efficacy and randomly assigned interprofessional beginning healthcare students who receive lecture-based workshop instruction on transcultural self-efficacy.

Alternative hypothesis (H_A): There will be a significant difference in transcultural self-efficacy between interprofessional beginning healthcare students who observe a videotaped role-play simulation of standardized patient actors who demonstrate transcultural self-efficacy and randomly assigned interprofessional beginning healthcare students who receive lecture-based workshop instruction on transcultural self-efficacy.

Theoretical Framework

A combination of Bandura's (1977) observational learning theory and Mezirow's (1991) transformative learning theory provided the theoretical basis for this research. Both theories may be used to guide the development and use of videotaped role-play simulation (Nygaard, Courtney, & Leigh, 2012) and as with other studies in different fields (Jeffreys & Dogan, 2010) assisted in understanding whether interprofessional beginning healthcare students might learn about culturally sensitive care to a greater extent through observation and challenging their previous assumptions about culture.

Observational learning theory (Bandura, 1997) provided a basis for suggesting how interprofessional beginning healthcare students might learn through witnessing role models within specific cultural experiences of the practice of healthcare. Furthermore, transformative learning theory (1991) provided insight into how the choice of instructional mode had the potential to transform learners' perspectives and practice of transcultural care.

Nature of the Study

A quasi-experimental quantitative randomized design was used for this study with a convenience sample population of 240 beginning interprofessional health care students in their first year of postsecondary health care education. Paired-samples *t* test was used to compare the mean differences of transcultural self-efficacy between the experimental group and the control group. The sample population consisted of interprofessional beginning healthcare students in a one-session instructional unit on culturally sensitive communication techniques. Pretest and posttest using the Transcultural Self-Efficacy Tool (TSET) were administered to each group before and after the instructional unit with comparison of scores between groups. The control group received the standard mode of instruction (i.e., classroom lecture) on transcultural self-efficacy for the care of a Muslim patient. The experimental group observed a videotaped role-play simulation using standardized patient actors who demonstrated transcultural self-efficacy in their care of a Muslim patient.

Definitions

Cultural competence is expressed when healthcare professionals recognize the need for caring practices that are unique to patients' specific cultural needs (Jeffreys, 2010). In addition, cultural competence is the integration of three dimensions of cultural care—cognitive, practical, and affective—that are present in each and every patient encounter (Jeffreys, 2010). Culturally competent healthcare professionals possess awareness of their own attitudes, assumptions, and biases (Mareno & Hart, 2014). Having cultural awareness means acknowledging potential traces of racism and stereotyping before, during, and after interactions with patients from different cultural backgrounds (Mareno & Hart, 2014).

Transcultural self-efficacy is a healthcare professional's level of confidence when applying or learning transcultural nursing skills in each patient encounter (Jeffreys, 2010). Jeffreys (2012) explained that the performance of cultural competence is based on the degree of the healthcare professional's perceived confidence when performing specific transcultural care skills and in this way achieving culturally congruent care. This study used the TSET (Jeffreys, 2010) to measure transcultural self-efficacy in interprofessional beginning healthcare students asked about their future performance of transcultural skills when interviewing and gathering healthcare information from patients from different cultural backgrounds.

Videotaped role-play is defined as an educational strategy used to teach communication skills through observation (He, Mackey, O'Brien, Ng, & Arthur, 2011). In this dissertation study, a role-play using standardized patient actors portrayed both

good and bad interactions between a healthcare professional and a Muslim female patient. The role-play was in the form of a prerecorded video in two segments that was shown to the experimental group to allow observation of how a healthcare professional uses cultural knowledge to provide transculturally congruent care.

Lecture-based workshop classroom is defined as a traditional educational strategy in which a lecturer stands in front of a class to deliver educational content to learners. The classroom setting for this study was a lecture-hall classroom at the college facility that was arranged for students in the control group. A lecturer was present at the front of the classroom to deliver the content on transculturally congruent care.

Assumptions

Learners' cultural competence may be dependent on the level and amount of prior cultural care education and clinical experiences they have received. Therefore, it was assumed that learners in this study might have had some exposure, big or small, to people of different cultural backgrounds at one point or another in their healthcare education. A further assumption was that these experiences were more or less spread equally throughout a group of interprofessional beginning healthcare students. In addition, skills in transcultural care may be learned through demonstrations, return demonstrations, and reflection activities before students graduate from their respective educational programs. For this reason, another assumption was that learners were capable of learning complex and abstract thinking skills such as culturally sensitive communication techniques through observation and role modeling. Furthermore, it was assumed that learners, when exposed to situations that required an awareness of another person's culture, had a greater

appreciation for cultural competence based on their interest in pursuing an education in healthcare services (Back et al., 2007).

It was also assumed that interprofessional beginning healthcare students would respond honestly and completely to the TSET. The TSET contained questions about how confident students would feel if they were to interview a patient of a specific cultural background in order to learn about the patient's values and beliefs. In addition, the TSET asked students how aware, accepting, appreciating, recognizing, and advocating they thought they would be toward a patient of a specific cultural background. It was assumed that students might not have had exposure to many patients with specific or different cultural backgrounds or might not have been from a different cultural background themselves, and that such experiences might help students feel an increased level of confidence and self-awareness in serving patients of different cultures. However, a way of controlling for this was the inclusion of a question on the pretest and posttest whereby students could rate their degree of experience with individuals from three specific cultural backgrounds: Hispanic, Native Canadian, and Muslim. It was also assumed that the videotaped role-play would accurately convey the unique cultural differences between caregiver and patient.

Scope and Delimitations

This dissertation study involved a convenience sample population of 240 students from varied healthcare disciplines including nursing, personal support worker, dental hygiene, and retail pharmacy assisting. In addition, the population sample included students enrolled in the second term of the first year of their educational program. The

scope of this study was delimited to interprofessional beginning healthcare students in their first year of their appropriate postsecondary healthcare educational program. In addition, this study focused only on interprofessional beginning healthcare students within one community college enrolled in an IPE course that required clinical placement hours with patient encounters, some of whom may have been from different cultural backgrounds.

Limitations

Based on a convenience sampling, this study may have limited generalizability. Because generalizability was potentially limited, the threat to external validity was addressed through random assignment of participants from the convenience sample population to the control and experimental groups. Threats to internal validity were addressed by including in the study participants in both the control and experimental groups who were interprofessional beginning healthcare students enrolled in the same IPE course. In addition, threat to internal validity in the form of maturation was addressed by conducting the research over a period of 2 weeks, with the pretest administered in Week 1, the experimental intervention administered in Week 2, and the posttest administered during Week 2 after the experimental intervention.

The selection of an instrument that allowed for the operationalization of variables in predictable ways helped to address threats to construct validity. Finally, statistical conclusion validity was addressed through the use of a quasi-experimental design and the statistical tests that helped to analyze the data collected. Furthermore, an alpha level of .05 as the cutoff point in the social sciences helps in addressing the risk of making a Type

I error. Finally, reliability in the use of validated and tested instruments and their standardized implementation during the pretest and posttest helped to address statistical conclusion validity. Therefore, these measures chosen for this dissertation study helped to address the limitations and potential biases.

Significance of the Study

The significance of this research study rests in its potential to increase understanding as to whether a standard lecture-based workshop or an observational learning activity in the form of a videotaped role-play simulation is more helpful to students' development of transcultural self-efficacy when responding to the needs of patients from different cultural backgrounds. As a result of increased experience in role-playing activities, it was anticipated that interprofessional beginning healthcare students would demonstrate increased transcultural self-efficacy when caring for patients from different cultural backgrounds. In addition, faculty in healthcare programs who read this study may gain information about whether time and energy devoted to videotaped role-playing activities will empower interprofessional beginning healthcare students to assess and reflect on their exposure to different cultural backgrounds before, during, and after each patient care encounter. To this end, this study may also empower students, as adult learners, to share their cultural care knowledge and confidence with others in order to effect positive outcomes in healthcare.

Summary

Interprofessional beginning healthcare students need to gain the necessary cultural competency skills to be successful in their future professions in order to deal with the

increasing diversity among their patients. An increase in those competency skills is of interest to all healthcare educators, as students are expected to meet the individual healthcare needs of patients from different cultural backgrounds using culturally sensitive communication skills (Back et al., 2007; Mihalic et al., 2010; Thomas & Cohn, 2006). In this chapter, I have presented the background of the study and identified an increase in the number of culturally different individuals in need of healthcare that has led to an increased demand for culturally sensitive healthcare services (Mareno & Hart, 2014). Such demand creates a need to research ways to educate future healthcare professionals on how to develop the skills necessary to deliver care in culturally competent ways. Therefore, in this study, I researched the relationship between mode of instruction and level of transcultural self-efficacy in interprofessional beginning healthcare students. I concluded the chapter by indicating the importance of educating future healthcare professionals in the development of transcultural self-efficacy.

In Chapter 2, the problem and purpose of this research are stated as guides for the review of the literature. In addition, the theories of observational learning (Bandura, 1977) and transformative learning (Mezirow, 1991) provided the theoretical foundation for this research and guided the research methodology. Finally, the review of the literature covers key terms such as *transcultural care*, *cultural competence*, *interprofessional healthcare education*, *instruction*, and *role-play*, as well as key concepts found in the model for cultural competence (Purnell & Paulanka, 1998) relating to forms of culturally sensitive verbal and nonverbal communication between healthcare professionals and their patients.

Chapter 2: Literature Review

The practice of culturally sensitive care by interprofessional beginning healthcare students has been a focus in faculty and clinical settings as cultural diversity has increased within society (Purnell & Paulanka, 1998). Given that cultural diversity has increased among individuals requiring health care (Mareno & Hart, 2014), the need for theoretical and clinical instruction on culturally sensitive care for future healthcare professionals has also increased (Axtell et al., 2010; Jeffreys & Dogan, 2012; Kardong-Edgren et al., 2010; Larsen & Reif, 2011; Mihalic et al., 2010; Purnell, 2013). However, the standard mode of instruction for teaching transcultural self-efficacy in healthcare is lecture-based workshop (Eshleman & Davidhizar, 2006; Halter et al., 2014; Kardong-Edgren et al., 2010).

While role-play, task-training mannequins, and computerized animation have been used in healthcare education to enhance and evaluate students' theoretical understanding and performance of clinical skills (Harder, 2010; Kesten, 2011; Khan, Pattison, & Sherwood, 2011; McCaughey & Traynor, 2010; Russell & Shepherd, 2010; Tokarczyk & Greenberg, 2011), an effective mode of instruction that uses observational learning (Bandura, 1977) and transformative learning (Mezirow, 1991) in the form of videotaped role-play simulation (Nygaard, Courtney, & Leigh, 2012) appears not to have been considered as a method for enhancing interprofessional beginning healthcare students' transcultural self-efficacy (Jeffreys & Dogan, 2010).

The purpose of this quasi-experimental quantitative study was to determine to what extent there was a relationship between mode of instruction (observing role models

who challenge assumptions about culture in a videotaped role-play simulation) and increased transcultural self-efficacy in cultural competence instruction in an IPE course that about communication between beginning healthcare students and patients from specific cultural backgrounds..

The literature review conducted for this study supports the need for increasing awareness of the importance of cultural competence in healthcare professionals (Back et al., 2007; Delgado et al., 2013; Hawala-Druy & Hill, 2012; Leadbeater & Litosseliti, 2014; Mareno & Hart, 2014; Schim, Doorenbos, & Borse, 2006). In addition, the literature suggests how a lack of understanding of the specifics of certain cultural backgrounds can have a negative impact on the well-being of individuals (Chun et al., 2012; Larsen & Reif, 2011), community groups (Brathwaite & Majumdar, 2006; Larsen & Reif, 2011; McClimens, Brewster, & Lewis, 2014), and society (Delgado et al., 2013; Hawala-Druy & Hill, 2012). Therefore, various teaching strategies have been implemented in healthcare in order to raise awareness and development of cultural competence and in this way increase transcultural self-efficacy in the practice of present and future healthcare professionals. Teaching strategies such as lecture workshops (Lim, Wegelin, Hua, Kramer, & Servis, 2008; Steed, 2010), simulation (Baker et al., 2008; Smith & Silk, 2011; Spinner-Gelfars, 2013), role-play (Ertmer et al., 2010; Lee, Blythe, & Goforth, 2009; Liu, 2010), and multiculturally based field immersions (Larsen & Reif, 2011; McDowell et al., 2012) have been used individually or in combination in order to help learners develop an appreciation for others' cultural differences with varying success. Furthermore, an understanding of learner self-efficacy as a way of improving

learners' cultural competence has been a focus of studies in the literature (Back et al., 2007; Halter et al., 2014; Jeffreys & Dogan, 2010, 2012; Larsen & Reif, 2011). However, there appears to have been little research related to learning in the healthcare professions through observing role models demonstrating effective caring techniques when interacting with individuals from different cultural backgrounds. For these reasons, this research study investigated whether there was a relationship between mode of instruction (lecture-based workshop or observation of a videotaped role-play simulation) and increased transcultural self-efficacy in cultural competence instruction in healthcare.

In this chapter, key variables and terms used in the library search are listed in order to detail the literature search strategy implemented for this research study. In addition, a description of the theories of observational learning (Bandura, 1977) and transformative learning (Mezirow, 1991) demonstrates how these build upon the theoretical framework of Purnell's and Paulanka's (1998) model of cultural competence used for this research. Finally, a detailed review of previous and current research in the field is used to identify and analyze an existing gap in research related to cultural competence, including key concepts regarding Purnell's and Paulanka's (1998) model in communication; transcultural self-efficacy; and the use of role-play in the development of transcultural self-efficacy in interprofessional beginning healthcare students.

Literature Search Strategy

Library databases that were used in order to research the concepts of cultural competence, cultural sensitivity, and role-play methods included SAGE journals within the specialty of education. In addition, the ProQuest Nursing and Allied Health research

database were used to research the concepts of cultural sensitivity within healthcare. Furthermore, Google Scholar was helpful in identifying research in scholarly journals that had a focus on the use of role-play activities as a method for teaching cultural sensitivity. Key search terms and phrases were used in the initial process of the literature review. Terms entered in the library database search were *transcultural care, cultural competence, and transcultural self-efficacy*; *cultural care and instruction*; *instruction and cultural competency*; *cultural care and role-play*; and *culture care education and healthcare*.

The scope of the literature review encompassed peer-reviewed academic and professional journals in the fields of education, nursing, medicine, pharmacy, counseling, social work, psychology, and computer science. In addition, the year range of publications was between 2004 and 2014. Texts found during the literature search included those from authors in the fields of simulation and gaming, cultural competence, self-efficacy, adult education, and transformative or transformational learning.

Theoretical Foundation

Observational learning (Bandura, 1977) and transformative learning (Mezirow, 1991) were two theoretical foundations used to guide this research. In his work on observational learning, Bandura (1977) proposed the benefits that direct observation can have in the learning experiences of adults. In addition, through the observation of others' behaviors, learners can make sense of self-regulations that validate their personal, professional, or social roles. Furthermore, specific analysis, retention, enactment, and motivation from observation of a modeled behavior can suggest to learners strategies for

applying new learning to their future practice. For example, in this dissertation study, the observation of noneffective and effective culturally sensitive communication techniques may enhance the learning of students and help them recall communication strategies that can be adapted to future interactions with patients from different cultural backgrounds.

The theory of transformative learning (Mezirow, 1991) addresses how the creation of new meaning happens as learners accept the challenge to test previous assumptions. Receptiveness to perspectives that differ from previously adopted worldviews gives learners an opportunity to assess the need to transform existing ways of thinking into enhanced perspectives on themselves and others. For example, as interprofessional beginning healthcare students observe how role models communicate with a patient from a specific cultural background, they may have an opportunity to reflect on their previous assumptions about people from similar ethnic cultures. In addition, the observation of the effort that role models take in order to communicate in a culturally sensitive manner can challenge learners to think about their own interest in communicating with people of similar ethnic cultures and in this way recognize the value of being culturally sensitive in healthcare.

Bandura's Observational Learning

According to Bandura (1977), learners' behaviors and ways of thinking are influenced by environmental stimuli that affect their emotional and psychological perspectives on things they see and experience. To this end, Bandura argued that learning occurs when learners directly observe others' behaviors and actions. Therefore, one way of increasing one's knowledge and knowing how to perform a behavior in the future is

having an interest in observing others (Bandura, 1977). Bandura claimed that, though learning from trial and error may be seen as necessary, learning by observation can equally and effectively achieve the same goal. Bandura further explained that when learners observe the mistakes made by others during a specific behavior or performance, the experience provides learners with the ability to judge and implement future strategies that will help them avoid the same mistakes or errors that have been observed. Consequently, the notion of learning from others' mistakes becomes the basis for how observational theory can be an effective and less frustrating way of learning and achieving results.

Bandura (1977) contended that learners' ability to understand the importance of their social responsibility becomes inherent to them once they have an opportunity to witness others' social involvements through responsible behavior and wise decision making. Bandura defined such social involvement as the capability of individuals to be self-regulated. Through observation of others' actions, adult learners can confirm their own self-regulatory ways of thinking when approaching similar situations and realize the effectiveness that observational learning can have in their own personal and social development (Bandura, 1977). With this in mind, Bandura contended that to be self-regulated is to have a keen awareness of one's own actions informed by an understanding of social consequences that can steer individuals away from lack of self-control and inappropriate decision making. In more recent healthcare research related to caring for clients from different cultural backgrounds, the ability to observe and learn from others' positive interactions with people of different cultures was found to serve as a compass

pointing toward positive and acceptable social behaviors with clients of specific cultural backgrounds (Mareno & Hart, 2014).

Bandura (1977) asserted that human behavior is, for the most part, learned through the actions modeled by others. Bandura maintained that whenever individuals look for a specific behavior they are trying to learn more from, they identify the behavior that is best modeled, which becomes coded in their memory for future recall to inform appropriate behaviors in similar situations. Bandura termed this process in observational learning theory the *symbolic representation of observed modeled activities*. For instance, when encountering future activities that challenge the decision to behave in appropriate ways, learners can rely on previously observed coded symbolic representations to help inform present situational perspectives while at the same time adapting their values and beliefs in order to meet the needs of the situation they are in.

Bandura (1977) explained that attentional, retention, motor reproduction, and motivational processes are four driving principles that describe the overall process by which individuals can learn from observing behaviors modeled by others. For Bandura, the attentional process allows the experience of learning by observation to be most effective when learners pay specific attention to various characteristics, features, and nuances of the observed behavior and the role model's actions. In addition, Bandura contended that the attentional process is focused in the specific and repeated associations between the learner and the observed individual. Consequently, Bandura purported that the type of association and how valuable the association is for learning determine whether or not the learner will value the continuous observation and analysis of the

observed behavior. The rate and quality of the learner's attentional process are dependent on the difficulties and complexities demonstrated by the observed behavior (Bandura, 1977). For example, the learner takes from the observed behavior what it is necessary to learn according to the learner's understanding of the behavior, the learner's previous assumptions and life experiences, and the learner's own assessment of what is practically necessary to take from the observed behavior that indicates a potential change for self-development. To this end, it is important to understand that the different capabilities of learners to assimilate and retain information may determine how they view the benefit of observing and learning from specific modeled behaviors. Hence, Bandura (1977) suggested that the attentional process informs the retention process when the learner's needs identify the relevance of the observed behavior and influence the quality of what is perceived and interpreted in the situation before there is a commitment to store the information cognitively for future recall.

Bandura (1977) emphasized that in order for a change to occur, an observed behavior must be significant and important to the learner so that it can be remembered and retained for future use. Consequently, when an individual is engaged in the retention process, the individual's effectiveness in remembering information relies on how well imagery and verbal symbols represent the actions within each observed behavior. The retention process is effective when the behavior being observed and the words used during the behavior are both powerful and meaningful to the learner, engendering commitment to the use of the retained information and belief in the value of retaining the observed information for future use. For example, an individual's commitment to

remembering how to use appropriate speech when physically approaching a person from a specific cultural background will depend on how memorable the observation of a role model's behavior with the specific ethnic culture was. Furthermore, the importance of the learner knowing how to interact with the specific culture, the culture's relevance to the learner's personal and professional background, and the learner's previous knowledge about the specific culture will determine the quality and level of information retained (Bandura, 1977). Another important aspect of the retention process is mental rehearsal of an observed behavior (Bandura, 1977). For instance, it may not always be possible to replicate real-life situations for the learner to apply a specific learned behavior. By using mental rehearsal, learners can imagine themselves applying a behavior in a specific situation and in this way analyze and plan for the best possible outcome before enacting the behavior (Bandura, 1977).

While the cognitive analysis of an observed behavior can help learners practice in their minds how they would execute such behaviors, the purposeful reproduction of behaviors into actions is also important. Bandura (1977) maintained that possessing a level of maturity, enhanced by an understanding of how observed behaviors have different meanings for different situations, could allow learners to create new patterns from observed behaviors leading to action. However, within the theory of observational learning, Bandura emphasized that the creation of new patterns in the motor reproduction process can be faulty if learners do not possess the necessary skills to carry out the observed behavior. Bandura warned that in recognizing any lack of cognitive or motor skills prior to an attempt to execute observed behaviors, learners are encouraged to model

and practice the behavior of interest so that precise and complex performances may be achieved in the future. As a result, part of learning how to interact with an individual from a specific cultural background involves the learner observing others and identifying the best modeled behaviors to achieve this. In addition, the learner would recognize the importance of putting into practice the modeled behavior as it becomes important to his or her personal and professional life.

Learners' motivational intentions play an influential role in learning from observation and ultimately putting this learning into action (Bandura, 1977). Bandura (1977) explained that learned behaviors are acquired but not necessarily adopted. Bandura contended that learners' intrinsic motivation will help in the decision of whether to adopt or disregard a modeled behavior according to what long-lasting benefits are offered to the learner. In other words, learners have the opportunity to exercise their right to expressly identify which behaviors they find self-satisfying while rejecting those that go against their personal or professional value systems. To this end, healthcare educators can demonstrate, through the motivational process of observational learning theory, repeated model behaviors such as the appropriate use of nonverbal elements of communication during a physical examination of a patient who is from a cultural background in which touch is reserved for a specific gender (Purnell, 2013).

For example, a physical examination of a Muslim female patient should be done by a female healthcare professional. According to Bandura (1977), motivating modeled behaviors will show value and effectiveness in achieving a desired response, motivate the repetition of similar behaviors, and encourage others observing to replicate them.

Consequently, these serve to correct inaccuracies in repeated behaviors and provide a sense of reward when learners see how they have been able to successfully match their learned behavior to the modelled behavior.

Observational learning theory has been used in studies for the development of instructional videos (De Grez et al., 2014), performance of creative tasks (Groenendijk et al., 2013), and leadership training and development (Kempster & Parry, 2014). For example, De Grez, Van Steendam, and Raedts (2014) created instructional videos that would help in the development of presentation skills for business students. In that study, the cognitive and motivational aspects of developing instructional videos were facilitated by observational learning theory. De Grez et al. (2014) showed that when applying the principles by which learning through observation is done: attention, retention, motivation, and reproduction; instructional videos can provide knowledge that is both procedurally and cognitively meaningful. In addition, De Grez et al. described how a well-designed instructional video that carefully considers how learning is attained through observation can motivate learners to reproduce knowledge learned from the observed video-clips. De Grez et al. demonstrated that the construction and use of instructional videos, when considering observational learning, can effectively help learners to retain specific information and motivate them to personal and professional development though continuous learning.

Groenendijk, Janssen, Rijlaarsdam, and Van Den Bergh (2013) examined how learning by observation can have an influence in the visual and verbal creativity of learners. In their study, 61 students from a Grade 9 class participated in a pre- and

posttest and were randomly assigned to one of two experimental conditions: an observational learning condition and an instructional condition. From their work, Groenendijk et al. described the use of video clips presenting one model that portrayed the proper creation of an artistic collage and another model that did not. Groenendijk et al. found that through observation, an experimental group of art students was able to identify which model did better at the creative construction of a collage over the other model's construction. To this end, Groenendijk et al.'s study showed the influential benefits that observational learning provided to learners when learning to identify specific details from created art, useful for their future practice. Likewise, the students' poetry and writing were enhanced as a result of observing the learning videos (Groenendijk et al., 2013).

Kempster and Parry (2014) conducted a meta-analysis regarding the development of leadership skills of middle level managers when observing prominent leaders in managerial positions. Kempster and Parry contended that by observing significant role models, managers developed formative leadership skills when witnessing the lived managerial experiences of other individuals. Kempster and Parry contended that when individuals observe the leadership practice from significant models, specifically models that are in close working relationship with the learner's day to day activities, an implicit foundation of leadership knowledge is acquired and used by the learner for future leadership experiences. In addition, Kempster and Parry argued that learners have a better chance of developing immediate strong leadership skills when relating to familiar leaders than world renowned prominent leaders. For example, a meta-analysis of studies about

observational experiences of middle level managers, Kempster and Parry described that future undergraduate and graduate business students can quickly demonstrate leadership skills after observing a prominent and more experienced manager. This was due to the students' close proximity to the observed managers at work. Kempster and Parry found this to be different when comparing the influence of observing a publicly renowned leader, with whom there was no a close work relationship.

Therefore, Kempster and Parry (2014) confirmed the importance that observational learning has on the effective development of leadership skills of students when witnessing the practice of leaders that are in close proximity to the learner. In addition, when opportunities for observing role models in action are available to learners, self-reflection and transformative learning can be experienced. To this end, the meta-analysis from Kempster and Parry provides another reason why the observation of role models within this dissertation study can encourage the development of transcultural communication skills in interprofessional beginning healthcare students.

Mezirow's Transformative Learning

Transformative learning theory involves the analysis and reflection based on new experiences that test learners' previous assumptions and former ways of thinking (Mezirow, 1991). For example, any experience has the potential to transform learners' views on life as long as they intend to seek and discover new perspectives that can become beneficial to their personal growth. Mezirow (1991) claimed that transformative learning leads to the making of new meaning or knowledge as a result of learners' inherent commitment to welcome the potential for new perspectives. To this end,

Mezirow proposed that transformed meanings result from remembering, connecting, and interpreting previous experiences to new ones.

Mezirow (1991) suggested that when remembering experiences, learners have an opportunity to recreate in their minds meaning from previous experiences and compare them to a recent one. In addition, Mezirow explained that the comparison between previous and new experiences led to reasonable connections that help learners engage in the analysis and synthesis of information for later use and applicability to everyday life. Therefore, interpreting such information informs learners how to act on new behaviors, validate transformed perspectives, and empower reflective practice.

With transformative learning theory, new experiences can derive from innovative learning environments. For example, Mezirow (1991) maintained that when a new learning environment is created, a transformation in learners' views is experienced. Mezirow contented that through new experiences, learners have an opportunity to question previous assumptions, personal expectations, cognitive knowledge, and social norms as ways of reinterpreting existing or future goals. Therefore, it can be expected that when learners create new meaning, their cognitive autonomy that is responsible for their independence from traditional social views empowers learners to be critical thinkers and appraisers of their circumstances (Mezirow, 1991).

Likewise, a meta-analysis by Taylor (2007) supported the notion that new meaning was enabled through learners' use of critical reflection when arriving at new ways of knowing. Certainly, Taylor's meta-analysis showed that the purpose of transformative learning has increasingly become about the identification of factors that

help educators facilitate learning experiences for learners. Furthermore, transformative learning molds educational activities that transform and foster practical applications of knowledge in classroom settings. However, Taylor cautioned to first assess the degree of reflection exercised by learners from previous and present learning experiences. Only after can researchers assess the investment of learners when putting the effort toward critical reflection as a factor in facilitating transformative ways of knowing. As a result, educational strategies that encourage deeper levels of critical reflection will enhance the learner's experience of transformative learning through autonomy and self-confidence (Taylor, 2007).

The construction of new meaning according to Mezirow (1991) occurs when learners are exposed to knowledge and emotions differing from previous assumptions, ways of thinking, or feeling. New experiences help learners adjust to future social events that are constantly changing. In addition, it is suggested that while learning from a specific event, learners are receptive to viewing, thinking, and cognitively analyzing the degree of change they are willing to experience and accept. For example, learners' values, beliefs, and presumptions about a specific cultural background can be challenged during the observation of culturally competent healthcare practices. This can become a moment of transformation in the learners' thinking and personal assumptions about their degree of agreement with cultural competence based on the observed behavior. Therefore, when a transformative learning opportunity is presented, transformation occurs when the new experience triggers an analysis of previous assumptions in learners and an interest for self-reflection that lead to a new perspective of present and future

behaviors. For this reason, Mezirow, contended that exposure to new experiences is not sufficient to ensure transformative thinking. Instead, exposure and receptiveness of the new experience through analysis and reflection of presumptions can better facilitate opportunities for transformative learning through renewed and innovative ways of thinking and behaving.

Transformative learning theory has been used to understand its benefits in teacher instruction for cultural competence (Bowles, 2011; Kozub, 2013), management training of intercultural competencies (Clapp-Smith & Wernsing, 2014), helping nurses gain new perspectives regarding their patients' diversity (Kozub, 2013), and the expansion of family therapy and counselling students' worldviews throughout an international course (McDowell et al., 2012). For instance, Bowles (2011) found transformational changes in the practice of new teachers' approach to students of different cultural backgrounds. As a way of promoting cultural competence in a master of arts in teaching degree program, Bowles found that student teachers developed a keen awareness of self, of others' differences, and their sense of commitment to their students' experiences as a result of positive learning environments. However, Bowles' work did not show students' perception of self-efficacy after gaining an awareness of others' differences. Therefore, in this dissertation study it was important to know students' self-efficacy with cultural knowledge and competence and how these can be applied to their day-to-day practice.

Another use of transformative theory within multicultural education was found in the work of Clapp-Smith and Wernsing (2014). Clapp-Smith and Wernsing wanted to investigate how an international immersion experience can result in a transformational

trigger for students enrolled in an international study abroad program. They focused their study on management students where 82 students completed an online open-ended questionnaire and share their first time international immersion experience. The analysis of the questionnaire showed that learners went through four transformation triggers that encouraged a transforming, life changing, and empowering perception toward cultural sensitivity for others. To this end, Clapp-Smith and Wernsing showed how intercultural educational experiences are beneficial to management students so that cultural competencies can be attainable in the development of global leaders. Unlike Bowles (2011), Clapp-Smith and Wernsing (2014) demonstrated how a study abroad program can increase the confidence of students' multicultural education and knowledge.

Another use of transformative theory was found in an active learning tool that encouraged nurses to further explore their nursing perspectives when encountering clients from different cultural backgrounds (Kozub, 2013). Kozub (2013) described the use of event analysis as a useful active learning tool that can encourage nurses in any clinical setting explore their own perspectives during cultural encounters. Kozub contended that nurses who take the time to analyze their experiences from cultural encounters can arrive at a transformation of their own views on diversity through acceptance, tolerance, and consideration of patients' physical, mental, and cultural needs. In addition, Kozub explained that through an event analysis, the nurse can develop an awareness of his or her learning needs regarding patients' physical needs, their values, and their cultural background. Kozub stressed that engaging in event analysis provides nurses the opportunity to reflect on their present nursing practice, demonstrate cultural competence,

and identify useful applicability of event analysis for future nursing practice with patients from different cultural backgrounds. However, while the use of event analysis is helpful to practicing healthcare professionals, for the healthcare student with little or no clinical context there will unlikely be previous clinical experience to use as a point of reference for reflection, transformative learning, and self-efficacy. To this end, this dissertation study provided interprofessional beginning healthcare students with the observation experience of a videotaped simulation role-play of a clinical interaction between healthcare professionals and a patient from a different culture. Such observation was expected to provide students with clinical context to reflect on and help transform personal assumptions regarding transcultural self-efficacy and bias.

Finally, McDowell, Goessling, and Melendez (2012), investigated the impact that international courses could have on the development of multicultural sensitivity of eight students enrolled in an international course of a master degree program. In addition, participants in the study took at least one specific graduate course in diversity but did not have prior lived experience through an international immersion course or program. To this end, the objective of the study was to explore and understand the effects students' multicultural experiences had on their formation and professional development as future family therapists and counselors. McDowell et al. (2012) used a qualitative design to interview the eight graduate level students 2 to 6 months after completing an international course. A total of five themes and 15 subthemes emerged from the semi-structure audiotaped interviews. McDowell et al. found that an improvement and transformed understanding of societal norms, global awareness, and their own emotions was evident

when learners engaged in a time of reflection and dialogue after returning from their international course. Learners in the study gained the confidence necessary to appreciate new ways of perceiving the world from a multicultural lens.

Rationale for Choice of Bandura's and Mezirow's Theories

The combination of Bandura's (1977) observational learning and Mezirow's (1991) transformative learning theories provided the basis for the research in this study. Both helped to understand how learners benefit from learning experiences that challenge their present cultural competence. More specifically, challenging present cultural competence was based on a mode of instruction involving a class of interprofessional beginning healthcare students observing videotaped role models as part of their educational experience. In addition, the witness of a specific cultural event suggested role modeling approaches that inform the practice of learners when considering future healthcare practice. Furthermore, the research for this dissertation may informed best practices for adult educators when facilitating learning activities that help learners develop cultural competence.

The chosen theories for this dissertation study helped to assess and identify differences between the used methods of instruction when considering the cultural competence of interprofessional beginning healthcare students without clinical experience. Similar to the research of Rogers-Sirin and Sirin (2009) in their use of video to present ethical violations of racial intolerance in school settings, this dissertation research provided opportunities for interprofessional beginning healthcare students to observe through videotaped role-play scenarios good and bad interactions between a

specific ethnic patient and a healthcare provider. This type of observational activity was expected to create opportunities for students to examine the nature and influence of this learning through observation (Bandura, 1977) that can lead to the kind of transformed perspectives suggested by Mezirow (1991). For example, a method of instruction that includes observational ways of learning can help to identify whether the degree of transcultural self-efficacy in interprofessional beginning healthcare students changes after they witness the behaviors and communication skills of role models (Mareno & Hart, 2014). Similarly, the degree of transformation of previous assumptions about caring and communicating with culturally diverse patients can inform how cultural competence is effectively supported when using the right mode of instruction for interprofessional beginning healthcare students (Clapp-Smith & Wernsing, 2014; Kozub, 2013).

The theories of transformative (Mezirow, 1991) and observational learning (Bandura, 1977) gave a basis for what this dissertation study helped to discover. Consequently, the research in this dissertation assessed the degree of transcultural self-efficacy in interprofessional beginning healthcare students. Moreover, witnessing best practices in culturally sensitive verbal and nonverbal communication skills was sure to provide interprofessional beginning healthcare students with the opportunity to experience self-reflection which helped to challenge and transform their previous assumptions about communicating with patients from a specific cultural background. To this end, a detailed review of the literature within previous and current research in the field of healthcare and education identified and analyzed an existing gap in research related to cultural competence, including a model for cultural competence and

communication; transcultural self-efficacy; and the use of role-play in developing transcultural self-efficacy in interprofessional beginning healthcare students.

Literature Review of Key Concepts

This section will review key concepts such as cultural competence, including Purnell's and Paulanka's (1998) model for cultural competence, and its domain of cultural competence and communication; the use of transcultural self-efficacy in healthcare; and the implementation of role-play as a teaching strategy to enhance learning. Cultural competence involves the acquisition and progression of behavioral skills that take into account the individuals' ability to become knowledgeable of self and others' values and beliefs, exhibit sensitivity when approaching specific differences in others, and exhibiting confidence when applying behaviors that are culturally congruent to the needs of people from different cultural backgrounds (Schim et al., 2006). To this end, in this study the discussion of literature related to the variables and key concepts included several descriptions of cultural competence and cultural competence within the Purnell and Paulanka domain of communication and related research.

In addition, the review of the literature presented demonstrates how transcultural self-efficacy can increase as a result of the impact that cultural competence has on the development and instruction of learners, their communication skills, and their perceived level of confidence when thinking about future clinical encounters for which cultural skills or techniques are needed. Moreover, the review of the literature covered recent studies that have implemented different educational strategies, such as role-play and instructional videos, in an attempt to increase the perceived confidence of cultural

competence in learners. Gaps in the literature are identified and are used to make an argument that supports the need to conduct further research in the area of teaching methods to develop transcultural self-efficacy in interprofessional beginning healthcare students.

Cultural Competence

Jeffreys (2010) defined cultural competence as the integration of a healthcare professional's self-confidence in the dimensions of cognitive, practical, and affective domains. This is so the care provided to patients will fit their specific cultural needs. In addition, cultural competence has been viewed as the process that healthcare professionals attempt to effect positive acts of caring bringing context to patients' culture experience within the healthcare system (Brathwaite & Majumdar, 2006).

For example, Mareno and Hart (2014) conducted a prospective cross-sectional descriptive survey study design where they compared the level of cultural awareness, knowledge, skills, and perceived confidence of 365 Registered Nurses, some with undergraduate education and others with graduate education, and that received a certain amount of cultural diversity training in the workplace. Mareno and Hart wanted to assess if the level of cultural awareness between the two groups of nurses was based on any cultural diversity training received in the workplace or the level of educational preparation when providing cultural care for patients. Descriptive statistics and a Clinical Cultural Competency Questionnaire were used to compare the amount of cultural diversity training obtained in the workplace and received as part of their educational preparation in the undergraduate and graduate degree programs.

Mareno and Hart (2014) found there was a statistical significant difference in the level of cultural knowledge between undergraduate and graduate degree nurses. Mareno and Hart explained that the difference was due to the fact that graduate nurses obtain a greater breadth of cultural diversity knowledge in their educational preparation when compared to the cultural diversity preparation for undergraduate degree nurses. However, a review of the literature showed Mareno and Hart that having higher levels of cultural knowledge does not necessarily translate into higher levels of cultural competence in the clinical setting. At the same time, they found that undergraduate degree nurses had statistically significant higher levels of cultural diversity training in the workplace over the graduate degree nurses.

Mareno and Hart (2014) pointed out that this was due to more undergraduate degree nurses working in direct patient care positions in hospital settings where cultural diversity training is readily available and accessible to nurses interested in receiving that training. They concluded that even though workplace cultural diversity training was accessible to nurses, it was still lacking in both groups of nurses. Mareno and Hart purported that a lack of cultural diversity education in undergraduate and graduate degree programs may influence an interest in seeking cultural diversity training in the workplace. They contended that cultural diversity training has a direct impact on the improvement of cultural knowledge in nurses and therefore their cultural competence in the clinical setting. Therefore, Mareno and Hart suggested that cultural competence must be central to the curricular aspects of healthcare education. Consequently, cultural competence must embody an educational experience that can guide healthcare

professionals to appreciate the distinct differences that exist in their present and future patients. However, the study of Mareno and Hart did not yield enough information on effective educational strategies for the instruction of cultural competence.

In order to inform healthcare professionals to provide cultural caring practices, a body of knowledge in cultural care must continue to be developed. McClimens, Brewster, and Lewis (2014), studied the experiences of nursing students after caring for patients from different cultural backgrounds. Using a qualitative research design, McClimens et al. (2014) conducted focus group discussions in order to assess participants' perceptions of how challenging or difficult it was to provide culturally competent care. They suggested that cultural competence, in the profession of nursing, can be defined as the field of study that investigates the holistic approaches to respect, caring, values, and patients' diverse cultural lifeways. Because of the ongoing rise of culturally diverse populations there is a need for professionally prepared health care providers that can show respect, dignity, and cultural sensitivity in the provision of nursing care for patients of different cultural backgrounds.

McClimens et al. (2014) found that nursing students found it challenging to know how best to provide culturally competent care, especially when considering patients' language barriers, dietary practices, and relationship boundaries between genders. McClimens et al. contended that nursing students need to receive more educational preparation in order to feel ready for the workforce and in this way meet the diverse cultural needs of patients. To this end, McClimens et al. maintained that the competent and compassionate practice of healthcare professionals must be motivated toward the

specific cultural needs of patients. Similarly, Schim, Doorenbos, and Borse (2006) conducted a quasi-experimental longitudinal crossover research design in order to test an educational intervention strategy with the purpose of expanding cultural awareness, sensitivity, and the practice of cultural competence within a team of multidisciplinary hospice workers. By implementing a face-to-face educational session for 130 hospice workers from 8 difference hospice agencies, Schim et al. (2006) assessed the hospice workers' changes in cultural competence before and after the educational intervention. Schim et al. used a Cultural Competence Assessment measurement tool and noticed that the hospice workers in the interventional group demonstrated significant changes in their cultural competence as compared to the control group. Consequently, Schim et al. concluded that cultural competence, as a knowledge phenomenon that is closely linked to education, is a body of knowledge that complements the learning environment within healthcare.

Healthcare professionals must develop skills that encourage their practice of cultural competence. For example, Brathwaite and Majumdar (2006) conducted a mixed methods study to evaluate the effectiveness of an educational programme on cultural competence in order to increase the cultural knowledge of public health nurses. In their study, 76 public health nurses participated in a 5 week long cultural competence educational programme and an additional booster session offered 1 month after completion of the programme. Demographic data were collected from the participants, who were also asked standardized questions about their cultural knowledge at four points in time using a Cultural Knowledge Scale (CKS). In addition, the CKS had four subscales

that measured participants' health seeking behaviors; perception or understanding of health and illness; and their response to health, illness, and treatment of illness conditions.

Brathwaite and Majumdar (2006) used descriptive statistics to compute the demographic data and variables in order to describe the sample and the distribution of scores. Furthermore, repeated measures analysis of variance was used to identify any differences within-groups in cultural knowledge mean scores. Qualitative open-ended questions helped to assess participants' perception regarding the cultural competence educational programme. While the level of cultural knowledge did not change prior to the educational program, Brathwaite and Majumdar noticed the mean scores from a cultural knowledge scale to represent an effective outcome of the educational program in helping participants gain cultural knowledge. The quantitative data analysis from repeated measures analysis of variance showed that cultural knowledge increased as a result of the educational programme and was sustained 3 months after completion of the programme.

Brathwaite and Majumdar (2006) use of the qualitative data from the open-ended questions revealed that participants were satisfied with the quality, organization, and delivery of the programme. In addition, participants expressed that the effectiveness of the programme in providing cultural knowledge was due to the content, interactive learning activities, and resources. As a result, Brathwaite and Majumdar argued that by facilitating opportunities to acquire cultural knowledge, healthcare professionals develop cultural competence that leads to an awareness of, knowledge in, skill, exposure to, and desire for learning and appreciating different cultures.

Similarly, in a quantitative study involving 98 results from 111 nurses that assessed the impact that a cultural competence training had on them, Delgado et al. (2013) found a benefit to the competence of culturally congruent skills in nursing staff when on-going and sustained cultural competence instruction is provided. Participants completed the Inventory for Assessing the Process of Cultural Competence Among Healthcare Professionals (IAPCC) self-assessment tool, prior to the educational training and at 3 months and then 6 months after the training. Descriptive statistics were used to report on the demographic characteristics of participants in relation to their nursing career, their gender, ethnicity, and any travel they may have had outside of the United States.

One-Way analysis of variance helped Delgado et al. (2013) to analyze the cultural competence scores from the IAPCC self-assessment tool across the three time points. They found that prior to the cultural competence training, all participants scored the same within the IAPCC culturally awareness category. However, a statistically significant increase in cultural awareness was noted after the cultural competence training. Having said this, Delgado et al. found that while participants had an increase in cultural awareness, scores for cultural competence did not progress. As a result, Delgado et al. explained that while participants self-assessed an increase in their cultural awareness, they assessed a lack in their capabilities in demonstrating cultural competence. Delgado et al. confirmed that cultural awareness must come first before evidence of cultural competence can be seen.

For these reasons, Delgado et al. (2013) claimed that the development of the right skills that will encourage cultural competence must first be identified by the learner through their own cultural awareness and reflection of previous cultural assumptions (Mezirow, 1991). Therefore, the right cultural training programme will empower healthcare professionals to recognize gaps within their own cultural awareness and will equip them toward maintaining a culturally congruent environment. Delgado et al. recommended the development of educational curricula that intentionally seeks to increase cultural knowledge, awareness, and result in the development of specific culturally competent skills in healthcare professionals.

If healthcare professionals are willing to learn how to recognize their patients' unique cultural needs; they must be exposed to effective and positive caring practices that can be experienced on a regular basis. Above all, healthcare professionals must acquire skills and behaviors that facilitate caring in an effective way and with a context on culture (Waite & Calamaro, 2010). Acquiring culturally competent clinical skills will facilitate the assessment, planning, implementation, and evaluation of a positive cultural congruent health care environment for patients (Jeffreys & Dogan, 2012). To this end, healthcare professionals should be able to demonstrate caring approaches that are compatible with the cultural needs of patients.

Cultural competence is also described as the demonstration of attitudes, behaviors, sensitivity, and beliefs that influence healthcare professionals' self-awareness during encounters with patients from different cultural backgrounds (Jeffreys & Dogan, 2012). For instance, Eshleman and Davidhizar (2006) provided a discussion on the

review of several teaching strategies such as activities involving storytelling, article reviews, learning from childhood experiences, analysis of different cultures, preparing cultural dinners, inviting guest speakers, and limericks. They found that out of the different teaching strategies used in one school of nursing at a state college, storytelling, role-play, guest speakers, and self-reflection exercises were the most helpful in teaching nursing students about culture and cultural awareness., Eshleman and Davidhizar found the use of storytelling, role-play vignettes, guest speakers from different ethnic backgrounds, and self-reflection exercises were innovative teaching strategies that helped nursing students understand the importance of developing verbal and non-verbal communication skills.

In addition, Eshleman and Davidhizar (2006) explained that when using specific techniques to teach and promote cultural competence, nursing students begin to utilize knowledge from conceptual and theoretical cultural models that help them provide culturally appropriate care. Therefore, cultural competence resembles an individual's sophisticated application of cognitive, psychomotor, affective attitudes, and personal beliefs. Likewise, Steed (2010) considered cultural competence as the care giver's development of personal and professional attitudes; behaviors; and knowledge about another person's cultural make-up. As a result, the delivery of healthcare treatments can be appropriate and be considerate of the patient's specific cultural identity.

Healthcare professionals' need for cultural competence is due to their general lack of self-awareness in their attitudes, bias, and sensitivity toward the complexities of patient (McDowell et al., 2012; Stone et al., 2013; Thomas & Cohn, 2006). As an

illustration, Schim et al. (2006) conducted a quasi-experimental, longitudinal, crossover research design where 130 hospice healthcare professionals received a cultural competence educational intervention. The focus of that study was to assess the effects of the educational strategy on the hospice healthcare professionals' level of cultural awareness, sensitivity, and competence. Schim et al. used pre- and posttest scores to measure the level of cultural awareness, sensitivity, and competence behaviors in the intervention and control groups. They showed how the one hour educational intervention that included specific information about ethnic populations, contributed to a rise in cultural competence behaviors and was applicable to a broad range of disciplines of hospice providers. As a result, Schim et al. emphasized that part of the practice of cultural competence was in the recognition of diversity that allows healthcare professionals to identify another person's specific healthcare needs. In like fashion, Mareno and Hart (2014) referred to cultural awareness as healthcare professionals that are aware of their own attitudes, assumptions, and bias; acknowledging potential traces of racism and stereotyping. Therefore, developing an appropriate level of cultural awareness and sensitivity will help healthcare professionals achieve culturally congruent care in their healthcare practice.

Cultural competence was also described as the inherent desire of healthcare professionals to obtain cultural awareness. According to Kardong-Edgren et al. (2010), the secret behind the achievement of cultural competency is having the desire to learn and interact with others' cultures. To this end, a desire to practice cultural care will help to

understand the basics of specific cultures and their impact on healthcare practices (Mareno & Hart, 2014).

Finally, another definition of cultural competence includes the potential for transcultural self-efficacy to influence the level of cultural competence in healthcare professionals. For example, Okoro, Odedina, Reams, and Smith (2012) surveyed doctoral pharmacy students by administering a Clinical Cultural Competency self-questionnaire in order to help measure the level of clinical cultural-based knowledge about health disparities, skills when dealing with sociocultural issues, and comfort when dealing with cross-cultural situations. In addition, the questionnaire assessed the pharmacy students' attitudes about factors that contributed to health disparities and the influence on students' self-awareness of racial-ethnic-cultural identity. Furthermore, Okoro et al., (2012) examined their perceived importance of cultural competency training in the doctoral pharmacy students. Consequently, Okoro et al. confirmed that culture influences patients' perceptions of disease; their reaction to and utilization of healthcare resources; and in turn influenced the practice of cultural competence in healthcare professionals. Schim et al. (2006) asserted Okoro et al.'s argument by adding that patients' cultural values, beliefs, and customs during the experience of a terminal disease greatly influences the cultural competence of healthcare professionals. Consequently; the professional's ability to provide culturally congruent care can be positive and can also increase the level of self-awareness, sensitivity, and unbiased behaviors.

For these reasons, cultural competence is defined as the healthcare professional's self-confidence in integrating the dimensions of cognitive, practical, and affective

domains within each and every patient encounter (Jeffreys, 2010). Given the definition of cultural competence, a receptive approach to transcultural self-efficacy and when recognizing the potential influences that an individual's culture can have on healthcare practices will further refine the healthcare professional's understanding of how much cultural competence can be achieved on a day-to-day basis.

Cultural competence is an important aspect in the provision of healthcare for populations of diverse cultural backgrounds (Chun et al., 2012; Hawala-Druy & Hill, 2012; Leadbeater & Litosseliti, 2014; Mareno & Hart, 2014; Smith & Silk, 2011). Consequently, both the community's and their patient's health are greatly benefited from an understanding and a diligent provision of cultural sensitive healthcare. For instance, culturally diverse populations are at risk for health disparities that can threaten the overall wellbeing of people (Axtell et al., 2010).

According to Axtell, Avery, and Westra (2010) health disparities can be better understood and effectively addressed when there are opportunities for healthcare professionals to engage with people from different cultural backgrounds in their unique communities. This was evident in their study where they facilitated community engagement and collaboration among community leaders, healthcare professionals, nursing faculty, and nursing students in order to suggest improvements to the curriculum from a nursing graduate degree program. As a result, the transformation of healthcare delivery to the cultural needs of patients was an intentional strategy in helping eliminate existing health disparities. Axtell et al. claimed that the process of community

engagement facilitated cultural acceptance and allowed for stronger relationships between healthcare and community partners based on respect and collaboration.

The health of a community is greatly impacted by the cultural competence of healthcare professionals (Like, 2011). For example, Waite and Calamaro (2010) conducted a systematic review of the literature to assess effective ways of teaching cultural competence in healthcare. Waite and Calamaro found that the use of standardized patient actors helped to evaluate the cultural competence of healthcare professionals and educators, especially when the standardized patient actor closely mimicked the characteristics of a patient from a different cultural background. They contended that such educational strategy could help learners engage in self-reflection, dialogue, and self-awareness around issues of culture in the clinical setting. To this end, Waite and Calamaro suggested that a healthcare workforce that was trained and comfortable providing culturally competent care will translate into positive outcomes and promote a healthcare system that is free of health disparities.

Similarly, Smith and Silk (2011) commented that health disparities considerably decrease whenever opportunities for cultural competence training to healthcare professionals are mandated and supported by accredited healthcare organization. To illustrate this, Smith and Silk provided to an experimental group of Osteopathic medical students, a 30- to 60-minute online interactive patient simulation activity showing an Arab American Muslim woman that was cared by a white male physician. Analysis from posttests scores showed that participants in the experimental group reported an increased gain in knowledge about the Arab American population. Unlike participants in the

control group, which did not receive an online educational intervention, posttests results revealed a perceived self-efficacy gain in the experimental group after observing the communication skills implemented in the online interactive patient simulation. Therefore, focusing on specific cultural patient populations and recognizing gaps in their accessibility to healthcare services will help healthcare professionals effectively address the health disparities that still exists within society.

Consequently, through training and understanding on the use of cultural competence, health benefits to patients and their communities can be experienced. Such benefits can be apparent in the form of educational programs, specific teaching strategies, and in the development of healthcare educators. For example, creating educational programs that encourage healthcare professionals to gain cultural knowledge may equip them to provide culturally competent services to culturally diverse patients and their communities (Brathwaite & Majumdar, 2006).

Chun, Young, Honda, Belcher, and Maskarinec (2012) created a formal educational intervention where 24 surgical residents received training on cross-cultural care issues in the surgical setting. In other words, the creation of a standardized patient actor examination assessed the level of interpersonal and communication skills of surgical residents when encountering patients from different cultural backgrounds. To this end, after receiving a workshop prior to the intervention, surgical residents completed a Cross-Cultural Care survey prior to their standardized patient actor encounter. The Cross-Cultural Care survey helped encourage learners to assess their self-awareness of how their cultural beliefs can influence future cultural encounters.

However, a posttest administered 5 months later with the administration of the Cross-Cultural Care survey did not show statistical significance of improvement in the surgical residents' attitudes, knowledge, and skills toward cultural training. Consequently, this study lacked information about the effectiveness in the use of standardized patient actors helping learners to increase self-awareness of cultural sensitivity and competence when implementing communication skills during encounters with patients of different cultural backgrounds. The research for this dissertation attempted to address such a gap by using standardized patient actors to role-play effective and non-effective culturally sensitive communication techniques when encountering a patient from a specific cultural background. In spite of the lack of statistical significance, Chun et al. (2012) use of standardized patients to test the cultural knowledge and responses of healthcare professionals provided information on how to enhance cross-cultural health training and promote positive outcomes for patients of different cultural backgrounds.

Kardong-Edgren et al. (2010) used a descriptive study with a posttest design to measure a multicurricular approach to teaching cultural competence in 515 nursing students and comparing six Bachelor of Science in nursing degree programs in the United States. While no specific curricular approach was beneficial over the other when teaching cultural content, Kardong-Edgren et al. found that students scored higher in the area of cultural awareness regardless of the curricular strategy used by the individual programs of nursing. Kardong-Edgren et al. claimed that the attainment of cultural competence begins with the learner's cultural awareness. For these reasons, there is a need for the

creation of appropriate and reliable methods or tools to evaluate cultural knowledge and encourage transcultural self-efficacy in healthcare professionals so a healthcare system can provide cultural specific care to patients (Kardong-Edgren et al., 2010). Yet, Mareno and Hart (2014) considered most importantly the development of faculty or clinical educators to become effective teachers in cultural competence when supporting and role modeling cultural care to their students. As a result, students will learn to be more confident in their cultural competence when encountering patients from different cultural backgrounds.

Finally, the interest to provide culturally competent care results from opportunities where encounters with patients of different cultural backgrounds encourage healthcare professionals to develop an ongoing understanding of the need, reason, and justification for cultural care practices. Particularly, Delgado et al. (2013) claimed that to understand cultural differences healthcare professionals must pay attention to the culture and cultural needs of patients; and be willing to educate themselves on the best practices for appropriate cultural care techniques. For these reasons, there is interest in preparing present and future healthcare professionals to acquire an understanding and awareness of different cultures through an understanding of what cultural competence is (Eshleman & Davidhizar, 2006).

In order to understand and have an appreciation for other cultures, healthcare professionals must first learn about cultural competence. For example, service learning activities are educational strategies that help healthcare students apply what they have learned about cultural competence. In the case of Amerson (2010), a study design to

identify the benefits of a service-learning project, six students participated in a 1 week international immersive experience to become aware of the healthcare issues faced by people from a different culture. In addition, students gained opportunities to provide culturally appropriate care. The Transcultural Self Efficacy Tool (Jeffreys, 2010) was administered to students before and after the service learning experience to measure their level of confidence when providing cultural care.

Amerson (2010) found that students perceived a significant gain in their cognitive learning of cultures and an increased ability to understand the cultural need of the patients. Amerson maintained that learning cultural competence through service learning activities helped learners to appreciate the unique healthcare issues encountered by peoples of different cultural backgrounds. Amerson emphasized that service learning activities encourage learners' abilities to think, feel, and put into practice culturally competent skills while they work along with communities. He argued that engaging students in such educational activities provided opportunities for cultural competence and encouraged learners to find solutions to healthcare issues.

Participating in educational activities that provide learners with practical approaches to exercise cultural competence is important to the future practice of healthcare learners. Equally important is the ability for healthcare learners to gain self-awareness when exercising cultural competence. For example, Amerson (2010) proposed that engaging in educational experiences that promote an understanding of the cultural values and beliefs of specific cultural populations, learners must begin to understand the impact that culture can have on patients' decision making regarding healthcare practices.

This supports the notion that learners acquire cultural self-awareness as they begin to recognize ethical dilemmas and health issues from the perspective of the patients' cultural context.

To illustrate, Rogers-Sirin and Sirin (2009) conducted a workshop on multicultural education with the aim to help 95 preservice teachers increase their ability to recognize discrimination and racism in their schools. Rogers-Sirin and Sirin administered a pretest survey involving demographic questions, the Teacher Multicultural Competence Scale (TMAS), and a version of the Quick Racial and Ethical Sensitivity Test (Quick-REST). Moreover, they administered a posttest survey that involved completing the TMAS, a different version of the Quick-REST, and the completion of the workshop evaluation form. In addition to the surveys, Rogers-Sirin and Sirin used mini lectures and role-play activities to encourage participants to reflect on the ethical implications surrounding issues of racial intolerance. Results from the Quick-REST showed that there was a significant increase in participants' sensitivity to ethical dilemmas in racial intolerance when comparing pretest and posttest scores. Results from the TMAS showed that participants found the workshop to be effective in helping them self-report multicultural awareness and sensitivity. Therefore, Rogers-Sirin and Sirin claimed that a workshop dedicated to instruct school teachers on how to recognize racial intolerance in schools, helped to increase their ethical sensitivity, become multiculturally competent, and express a keen awareness of potential and existing issues of intolerance.

Cultural competence derives from the individual's acquisition of cultural self-awareness (Axtell et al., 2010; Brathwaite & Majumdar, 2006; Delgado et al., 2013;

Hawala-Druy & Hill, 2012; Leadbeater & Litosseliti, 2014; Mihalic et al., 2010). In fact, Delgado et al. (2013) purported that evidence of cultural self-awareness was seen when educational activities encourage learners to engage in dialogue regarding culture. Especially when there is an acceptance that different cultures in society will have a unique effect on the practice of healthcare professionals. For example, Delgado et al. (2013) noted during a cultural workshop session involving 98 staff including nurses, care assistants, and secretaries from a Medical Center nursing unit, that discussions surrounding culture allowed learners to appreciate learning gaps within healthcare services intended to provide cultural care that was sensitive, unique to the patient's needs, and of quality.

Similarly, Hawala-Druy and Hill (2012) carried out a mixed methods research where they designed an interdisciplinary educational activity for 106 health professions students including students from nursing, pharmacy, physical therapy, occupational therapy, and physical assistants at a private academic institution. The educational activity was designed to provide students with culturally congruent teaching. Hawala-Druy and Hill administered the Inventory for Assessing the Process of Cultural Competence Student Version (IAPCC-SV) before and after the educational intervention in order to measure the level of cultural competence and culture desire. Univariate statistics using means, medians, standard deviations, and ranges were used to analyze the IAPCC-SV scores before and after the educational intervention. Further analysis of the IAPCC-SV was done using one-way ANOVA test. Students were asked to complete a total of eight reflection journals over the course of the semester and quantitative results from the

IAPCC-SV showed that there were significant improvements in the participants' cultural competence. Qualitative results from the reflection journals showed that participants self-reported an increased perception in cultural sensitivity and competence. Consequently, Hawala-Druy and Hill claimed that when providing learners with opportunities to discuss and appreciate different perspectives on culture, learners can be encouraged to appreciate how others approach cultural care. Therefore, stimulated educational activities, such as the one planned for this dissertation study, can lead learners to gain sensitivity towards the need for cultural care of patients.

Gaining cultural self-awareness that leads to appropriate culturally competent practices is an evolving process for personal and professional growth in learners (Rogers-Sirin & Sirin, 2009). In order to experience the gradual development of cultural competence, learners must be involved in educational activities that expose them to specific cultural situations (Wilson, Sanner, & McAllister, 2010). Wilson, Sanner, and McAllister (2010) recommended that educational institutions support the ongoing development and efforts to enhance healthcare curricula with a variety of theories and experiential learning activities that support learners' cultural knowledge, cultural awareness, and cultural sensitivity.

When learners develop cultural knowledge, self-awareness, and sensitivity for others, they also demonstrate confidence in their own cultural competence (Jeffreys & Dogan, 2012). For example, by incorporating cultural competence in formal education, future healthcare professionals can gain the confidence needed to identify the needs of patients and advocate appropriate services for people of different cultural backgrounds

(Jeffreys & Dogan, 2012). Another example is Okoro et al.'s (2012) study involving 304 doctor of pharmacy students. Okoro et al. administered a modified pre-training Clinical Cultural Competency Questionnaire (CCCQ) in order to measure learners' cultural competence based on knowledge of health disparities, skills when dealing with sociocultural issues, and their confidence and attitudes toward factors that influence their self-awareness and bias of cultural training.

In addition, the questionnaire assessed the need for cultural specific instruction in the doctor of pharmacy program. The CCCQ showed that mature students felt comfortable with cross-cultural encounters than younger students. Students from minority ethnic backgrounds felt it was important to receive cultural competence training from healthcare professionals. Furthermore, mean scores on knowledge about health disparities were low for all participants. Results from the questionnaire showed that the students from minority ethnic backgrounds felt the importance of having cultural competence training as part of the formal educational curriculum. This was not necessarily the case for the remaining non-minority students. Okoro et al. (2012) concluded that knowledge about health disparities and skills needed to deal with sociocultural and cross-cultural encounters was lacking. The need to expose students to cultural competence instruction was evident in order for learners to express a higher level of confidence when applying cultural care.

Findings by Okoro et al. (2012) support the need to advocate for the infusion of cultural-based caring concepts that are relevant to the clinical practice of interprofessional beginning healthcare students. Therefore, making cultural education

relevant to learners will help improve their development of culturally competent skills and enhance their cultural knowledge so that health disparities in culturally diverse populations can be addressed (Okoro et al., 2012). Moreover, the purposeful integration of cultural care concepts will produce observable behaviors (Bandura, 1977) that educators can role-model. Educators can then demonstrate ways in which cultural competence can effect positive and transformative (Mezirow, 1991) healthcare changes in the future practice of interprofessional beginning healthcare students.

To this end, it's no wonder that some have found that the deliberate long term exposure to cultural competence education in specific healthcare professions, such as nursing, can increase the level and degree of transcultural self-efficacy, and effect positive changes in healthcare (Jeffreys & Dogan, 2012; Kardong-Edgren et al., 2010; Okoro et al., 2012; & Stone et al., 2013). Yet others have found that regardless of the dose amount of education in cultural competence, positive differences of self-awareness and sensitivity for others can still be achieved (Jeffreys & Dogan, 2012; Schim et al., 2006). For example, Jeffreys and Dogan (2012) found that in a two year nursing program, significant changes in nursing students' thinking and acquisition of self-awareness were achieved when cultural competence education was integrated throughout the curriculum.

Similarly, Schim et al. (2006) conducted a quasi-experimental longitudinal crossover design study with a 130 hospice workers from a total of eight hospice agencies and examine any changes in cultural competence after receiving a 1 hour educational cultural context workshop. Participants from the first four agencies were placed in an interventional group and the remaining four agencies were placed in the controlled group.

The interventional group received a 1 hour educational workshop about the patient population served by the eight hospice agencies. The session also included educational content on end of life care with a cultural care context. The control group received a 1 hour educational workshop on end of life care with an emphasis on ethical and legal issues regarding end of life care and without the cultural care context. Schim et al. administered pretests and posttests that included a demographic survey and a cultural competence assessment tool (Schim et al., 2006). Analysis of the data revealed the mean scores on cultural competence were higher for the intervention than for the control group.

Additionally, Schim et al. (2006) showed that even with a limited amount of cultural competence exposure, long term gains in cultural competence skills can continue to be developed in the thinking and practice of healthcare students. However, a lack of random assignment of study participants challenged the potential for generalizability. Furthermore, the cultural competence assessment tool, as a self-reporting tool, was too subjective from the participants' perspective, which also challenged the objective assessment of the impact that educational intervention had on participants' cultural knowledge and competence. In spite of these results, the argument exists regarding whether or not cultural competence, as opposed to developing transcultural self-efficacy, should be the focus for the practice of cultural care in present and future healthcare practitioners (Halter et al., 2014; Jeffreys & Dogan, 2010; Larsen & Reif, 2011).

Nonetheless, developing transcultural self-efficacy will help learners develop an understanding of the sensitive and intentional cultural healthcare practice that is called cultural competence. For example Kardong-Edgren et al. (2010) proposed that helping

learners arrive at a point where they can begin to recognize their ability to become aware of others' unique cultural backgrounds would be a sufficient and acceptable before graduating from nursing education. The same concept can be generalized to other interprofessional beginning healthcare students who do not need to be cultural competent experts but rather be able, at minimum, to promptly recognize cultural differences in others and how such differences will trigger needed changes in clinical practice. Therefore, cultural training that is geared to empower learners to recognize their contributions to the care of culturally diverse patients will affirm their professional roles within their own healthcare disciplines.

For example, Stone et al. (2013) conducted a research study with the goal of developing two training educational modules that would help learners understand and become sensitive to a wide range of patients' cultural needs. Stone et al.'s mixed methods research design used pre- and post-training questionnaires and telephone interviews to collect data. Data analysis showed that the two training modules taught the specific care of a defined ethnic population, was a low cost approach, and was an effective teaching modality helping learners improve their confidence in transcultural care, knowledge, and self-awareness of specific ethnic cultures.

In addition Stone et al. (2013) found that learners became self-aware of the impact that their own cultural beliefs had on the cultural population under study. Learners were also able to recognize how important their role as healthcare professionals were in the delivery of care. For example, their application of cultural competence was evident when recognizing the need to use appropriate body language in order to obtain and share

healthcare information with the patient population. After review of the literature, Stone et al. found that importance should be made in helping learners develop cultural competence and cultural care skills. Moreover, the potential influence that cultural care instruction can have on learners will help them gain experience and confidence as they become self-aware of their transcultural self-efficacy necessary for the education, understanding, and application of cultural care actions.

Purnell and Paulanka's model for cultural competence. The Purnell and Paulanka (1998) model for cultural competence is an organizing framework that helps healthcare professionals understand the type of impact that culturally specific domains, such as communication, can have on the professional relationships of healthcare professionals with their patients. In addition, Purnell's and Paulanka's model of cultural competence supports the argument that there is a need for an educational strategy that can help interprofessional beginning healthcare students in developing transcultural self-efficacy. Consequently, the model for cultural competence will be used in this dissertation study as a key concept. Purnell and Paulanka's model will help to identify the level of perceived transcultural self-efficacy and cultural sensitivity. In addition, this model will help to understand how interprofessional beginning healthcare students may need to consider their use of nonverbal communication, such as physical touch and facial gestures, and verbal communication techniques after they observe standardized patient actors role-playing the care of Muslim patients, within the city of Welland in the Niagara region in Ontario, Canada.

The model for cultural competence has been described as a comprehensive model that, in a systematic and concise way, allows learners from different walks of personal and professional life to appreciate a meaningful understanding of culture (Purnell & Paulanka, 1998). Purnell and Paulanka (1998) asserted that healthcare professionals, educators, researchers, managers, and administrators can use this model as a way to acquire a restorative perspective of what and how cultural competence can be like in healthcare education and practice settings. To this end, this model (Purnell & Paulanka, 1998) provides ways for healthcare professionals to understand how unique forms of communication with patients of different cultural backgrounds can enhance care and raise transcultural self-efficacy.

Purnell and Paulanka (1998) argued that when using the model for cultural competence, healthcare professionals can experience a renewed understanding of the concepts and characteristics of culture. In addition, healthcare professionals will gain an appreciation for others' unique worldviews, especially for those from different cultural backgrounds. Furthermore, the model serves as a practical tool that helps healthcare professionals realize how their interaction with different cultures can build meaningful relationships with each and every patient encounter. Finally, Purnell and Paulanka contended that the model promotes congruence between conscious social sensitivity and competence in healthcare through a cultural lens. Consequently, the use of the model for cultural competence provides a few theoretical assumptions that supported the research in this dissertation study and helped investigate effective ways of instruction for culturally

competent communication between healthcare professionals and individuals from different cultures.

Purnell and Paulanka's model (1998) suggested that all healthcare professionals should have comprehensive resources that provide information about cultural diversity. In addition, they contended that health compliance and improved healthcare outcomes are accomplished whenever healthcare professionals encourage opportunities for patients to participate in decisions regarding their own care; especially when decisions incorporate the patient's cultural values and beliefs. Furthermore, they purported that culture is a powerful human characteristic that influences the patient's interpretations and response to healthcare delivery. For these reasons, healthcare professionals must be equipped with culturally competent skills in order to address and respond to the basic culturally-based healthcare needs of patients. Certainly, an over encompassing assumption in the model is that developing a sensitivity for cultures can enhance healthcare professionals' self-reflection while recognizing that encounters with patients are diverse cultural experiences (Purnell & Paulanka, 1998).

Purnell and Paulanka (1998) believed that individuals must recognize whenever their awareness and practice of cultural competence is driven by their conscious or unconscious interactions from patient encounters. Their view is based on comparing conscious and unconscious awareness of others' cultures as being culturally competent or incompetent. For example, unconscious culturally incompetent healthcare professionals do not recognize that a lack in knowledge exists about others' cultures. However, consciously culturally incompetent healthcare professionals recognize and have an

awareness of their knowledge gap regarding culture. On the other hand, unconsciously culturally competent health care professionals are drawn to provide culturally specific care without realizing and may be influenced by previous patient encounters. Yet, and ideally, consciously culturally competent healthcare professionals intentionally provide culturally congruent care and possess a desire to develop cultural competence.

The organization of the model for cultural competence was structured into 12 conceptual domains that are applicable in all cultures: overview, inhabited localities, and topography; communication; family roles and organization; workforce issues; biocultural ecology; high-risk behaviors; nutrition; pregnancy and childbearing practices; death rituals; spirituality; health-care practices; and health-care providers (Purnell & Paulanka, 1998). Purnell and Paulanka (1998) contended that by considering each of the 12 domains, healthcare practitioners can apply inductive or deductive reasoning throughout their assessment and implementation of patient care. They maintained that when carefully considering a domain of culture, healthcare professionals are encouraged to raise their awareness of culture, enhance the healthcare experiences of patients, and advocate, adopt, modify, or reject the individual plan of care for patients of different cultures.

The use of the model for cultural competence (Purnell & Paulanka, 1998) as a guiding framework has been seen in different research studies (Hayward & Charrette, 2012; Leadbeater & Litosseliti, 2014; Sasnett et al., 2010). Hayward and Charrette (2012) used this model as a framework for 28 Doctor of Physical Therapy (DPT) students in their fifth-year of their program. Learners engaged in a meaningful international service learning experience in the country of Ecuador with the goal of developing cultural

knowledge. The service learning experience, provided over two consecutive academic years, allowed one group of 14 students to participate during the first year and the remaining 14 during the second year. Prior to the departure to Ecuador, Hayward and Charrette promoted the development of cultural awareness by having students engage in reflective thinking exercises that were based on culturally related questions regarding professionalism, cultural concerns, and personal goals.

The Professionalism in Physical Therapy: Core Values (PPTCV) survey was used to allow students to self-assess their own professional skills, before and after the international service learning experience. In addition, the Cross Cultural Adaptability Inventory (CCAI) was administered to all students before and after their trip to Ecuador. Scores from the PPTCV showed a significant increase in students' professional skills awareness post international service learning experience. All 14 students in the second group completed the CCAI and results showed statistically significant scores in the area of emotional resilience.

Hayward and Charrette (2012) contended that emotional resilience can help learners identify how they respond to culture shock when dealing with frustrations, interacting in new environments, and having self-confidence. To this end, Hayward and Charrette established that students gained a desire for cultural knowledge, a new appreciation for different cultures, and an interest in developing cultural skills that can facilitate better healthcare practices for future patient encounters. Therefore, the use of the model for cultural competence in Hayward and Charrette's work helped them understand how a desire to learn another culture can encourage a life-long practice of

cultural competence in healthcare professionals. The use of Purnell and Paulanka's (1998) model illustrated how students' development of cultural knowledge is one way to prepare them for the real world of healthcare.

Sasnett, Royal, and Ross (2010) described the design of an educational experience that helped promote cultural sensitivity among an interdisciplinary group of healthcare students. Using Purnell and Paulanka's (1998) model for cultural competence as a framework, students engaged in a series of educational activities where teams of students interacted with patients in the community during home visits. As part of the home visits, students were challenged to gather information about their exploration of patients' family healing traditions, the stereotyping of individuals, the use of intercultural communication, and the delivery of culturally competent health care. Students were also asked to complete a case write-up and a care plan which was later evaluated against Purnell and Paulanka's model. Sasnett et al. (2010) assessed the level of students' cultural awareness and sensitivity by the number of cultural domains identified during the cultural awareness home visits and the case write-ups. They found that students' experiences in these activities led them to an emphasis on patients' need to discuss family and spiritual issues. In addition, students expressed a greater need for a more holistic approach in improving the health of patients. Consequently, Sasnett et al. findings showed that when healthcare practitioners recognize similar characteristics among cultures, they can identify and potentially predict how individuals may respond to the delivery of healthcare.

Similarly, Leadbeater and Litosseliti (2014) conducted a qualitative research design in order to assess the knowledge, views, and feelings on the topic of cultural

competence in 20 speech and language therapists (SLT) caring for children and families of different cultural and linguistic backgrounds. Participants were given a questionnaire and participated in focus groups. Qualitative results yielded numerous themes: it is important to work in partnership with families, cultural sensitivity can be challenging to demonstrate when using interpreters, being able to arrive at a differential diagnosis demonstrates cultural competence, individualizing the choice of therapy is a way of showing cultural competence, additional time must be allocated when working with clients with different linguistic backgrounds, and the healthcare professional must be willing to make changes to communication techniques. Additional themes showed that there was a need to work with other healthcare professionals in order to better understand families' needs. Also, there was a need for SLTs to gain more knowledge about other cultures and to continue to improve families' perception of the role and profession of SLTs.

Leadbeater and Litosseliti (2014) used the model for cultural competence to help speech language therapists identify the differences in belief and practice that exists in the children and families for whom they provided care. They focused on three of Purnell and Paulanka's (1998) cultural domains: healthcare practitioners, healthcare practices, and communication; during the qualitative questionnaires and focus group. Leadbeater and Litosseliti confirmed that while the speech language therapists felt adequate with their belief in cultural competence, they recognized a lack cultural knowledge regarding the different children and families they served. Furthermore, therapists' responses showed an interest in learning more specifically the cultural beliefs and practices of children and

families that they encountered more frequently. While their study did not address threats to external validity since it did not generalizable to other SLTs, their use of the model for cultural competence (Purnell & Paulanka, 1998) did help the speech language therapists to learn about main cultures so that their future healthcare practices and communication could facilitate transcultural healthcare (Leadbeater & Litosseliti, 2014).

From a cultural lens, Purnell and Paulanka (1998) described communication as a phenomenon that was interconnected with the other 11 domains of the model for cultural competence. Purnell and Paulanka explained that communication encompasses high degree of complex contextual information in the form of language variations. To this end, any culture communication can be characterized by its use of verbal language, dialects, and dominant forms of communication. Furthermore, in the model for cultural competence communication is described in ways of voice volume, tone, and intonations when these are used to express emotional and physical behaviors. Nevertheless, Purnell and Paulanka contended that cultural characteristics and applications of communication styles, can affect the communication between individuals from different cultural backgrounds and insiders (i.e., family and close friends) and outsiders (i.e., strangers and unknown healthcare professionals). For example, Purnell and Paulanka emphasized that key communication characteristics involve the use of eye contact, facial expressions, touch, expressive body language, maintaining space and distance from others, and the use of socially acceptable forms of greetings.

According to Purnell and Paulanka (1998), these communication characteristics are important aspects of the experience of communication within and across cultures.

Therefore, in order to gain an understanding on ways to facilitate and develop the cultural competence of healthcare professionals, a review of the literature was conducted. Only the domain of communication, as detailed in the model for cultural competence, was used as a key concept to be taught in both the modes of instruction in this dissertation study (i.e., videotaped role-play simulation and classroom lecture-based workshop). Consequently, the use of Purnell and Paulanka's model helped to further understand how transcultural congruent care through verbal and non-verbal communication influenced the cultural competence of future interprofessional beginning health care students. To this end, a description and analysis of cultural competence, an overview of its application within the different healthcare and educational fields of study, and an analysis that will bring to light existing gaps in the literature helped to inform the research in this study.

Cultural competence and communication. Possessing good communication skills can help learners develop and enhance their cultural competence. For example, Back et al. (2007) showed through the development of an educational oncology workshop for physicians, that new and enhanced communication skills could be acquired and immediately applied to new situations. Such results demonstrated that learners can acquire effective communication skills when exposed to focused educational experiences where communication was seen as an integral aspect of healthcare. Effective communication skills encouraged learners to develop a keen interest in understanding their patient's perspectives on healthcare practices. This suggested that the use of effective communication skills gave evidence to leaners' cultural sensitivity and application of cultural competence.

Learning about transcultural care involves the practical application of communication skills that incorporate both verbal and non-verbal means of exchanging information with patients of different cultural backgrounds (Jeffreys, 2010; Larsen & Reif, 2011). Jeffreys (2010) explained that in the education of transcultural care, verbal and non-verbal communication skills are important to develop in order to further understand the values and beliefs of patients from different cultural backgrounds. Jeffreys asserted that acquiring effective communication skills will help learners assess the unique cultural needs of patients and become knowledgeable about the impact that cultural backgrounds can have on patients' decisions about their own healthcare. Ultimately, culturally-based communication skills will help learners strengthen their self-awareness, sensitivity, and knowledge about cultures. For these reasons, opportunities to practice communication skills from a cultural perspective have been identified as important in order to develop competent practitioners (Larsen & Reif, 2011). This was seen in the case of cultural immersion experiences which provide a structure interaction between learners and people from a different culture (Halter et al., 2014; Larsen & Reif, 2011; McDowell et al., 2012).

For example, Halter et al. (2014) made cultural immersion experiences available to participants in the Navajo reservation of Nicaragua and in South Africa. As a result of the participants' involvement in one of these cultural immersion experiences, there were profound affective responses that were considered life changing. Another example was the study of Larsen and Reif (2011) where 14 nursing students participated in one of two cultural immersion experiences: Port Elizabeth, South Africa and Juarez, Mexico; in

order to allow students to experience a foreign culture and witness health issues and concerns as experienced by the people of each country. Yet another example was McDowell et al.'s (2012) study where eight graduate students from a counseling psychology program attended one of two cultural immersion experiences: a country in the Middle East and a country in Asia. McDowell et al. anticipated that the cultural immersion experience would have an impact on the participants' development of multicultural sensitivity.

Educating learners to appreciate different ways of communicating with patients of different cultural backgrounds is another way of practicing cultural competence (Leadbeater & Litosseliti, 2014). For example, Leadbeater and Litosseliti (2014) studied the work of speech and language therapists in the United Kingdom and assessed the way they provided healthcare taking into consideration the cultural differences of patients. Leadbeater and Litosseliti used a pilot questionnaire to test and then develop a main study questionnaire that was administered to 20 speech and language therapists. Results from the main study questionnaire showed that the therapists implemented a variety of culturally competent communication skills with every patient encounter (Leadbeater & Litosseliti, 2014). Leadbeater and Litosseliti claimed that when effective communication skills are acquired, the learner's communication style can be modified and applied so that communication between the practitioner and another person can be specific. The interest and ability to modify communication style was synonymous to acquiring and desiring cultural sensitivity (Leadbeater & Litosseliti, 2014). Therefore, it can be argued that

educational experiences that role model multiple strategies of communication techniques can help learners meet the unique healthcare and cultural needs of patients.

In order to understand the importance of possessing effective communication skills, learners must recognize that speech is just put a small component of communication. This was the case in Mihalic, Morrow, Long, and Dobbie's (2010) research designed to implement and validate a multimodality cultural competence curriculum for pediatric physicians. As part of the curriculum, Mihalic et al. (2010) conducted two interactive workshops, provided multimedia web activities, and facilitated a cultural linguistic competence pocket guide. Mihalic et al. evaluated the overall curriculum using a student satisfaction survey, a nominal technique focus group, and a knowledge test. Mihalic et al. showed that students were satisfied with the curriculum and found it meaningful. In addition, pediatric physicians gained an increased understanding about the role of culture in medicine, gained knowledge about cultures and potential ethnic disparities, and learned ways to improve cross-cultural communication when working with interpreters. Furthermore, cultural knowledge test scores, taken pre- and post-showed that pediatric physicians gained significant cultural knowledge after taking the multimodality cultural competence curriculum. To this end, Mihalic et al.'s study showed how a specific cultural competence curricular approach improved cross-cultural communication even in situations when nonverbal communication is needed.

Similarly, Root and Ngampornchai (2012) performed an analysis of 18 reflection papers from university students who participated in an abroad cultural international experience. More specifically, Root and Ngampornchai looked at the students' process of

self-reflection and evaluation of their international experience and how influential such experience had on the level of interaction between the students and the people of different cultures they encountered. As a result, Root and Ngampornchai were able to show that when learners were placed in a language minority situation they were encouraged to realize how important it was to acquire and develop effective verbal and nonverbal communication skills. Consequently, they found that nonverbal ways of communicating with clients is an important skill to develop and master. Especially when it involved clients for which English was not their first language. They also contended that nonverbal communication can help the healthcare learner to be conscientious and apply sensitive methods of communication techniques when addressing the unique cultural healthcare needs of patients.

Given the right educational experience, Root and Ngampornchai (2012) suggested that learners can be encouraged to appreciate new forms of communication with the goal of helping them to discover new ways of interacting with their patients. For example, learners can appreciate the complexities of the healthcare system from the perspective of a patient from a different cultural background when language or communication barriers exist. Recognizing language as part of a patient's culture helps learners to identify effective ways of interacting with patients whether verbal or nonverbal methods of communication are needed. As a result, learner self-awareness and cultural sensitivity can be achieved through this process.

A practical approach to cultural competence can be experienced whenever learners are challenged to identify and later apply culturally sensitive communication

skills (Mihalic et al., 2010; Thomas & Cohn, 2006). With these skills, learners can also take considerate actions regarding people's culture and help address the healthcare needs of patients from different cultural backgrounds. Therefore, it is important that as interprofessional healthcare learners begin to understand the level of responsibility they have when delivering competent healthcare, they must also understand how to meet the transcultural healthcare needs of patients. The next section addresses the concepts and implications of developing transcultural self-efficacy for the delivery of transcultural congruent care.

Transcultural Self-Efficacy

According to Bandura (1995), self-efficacy is defined as personal experiences that individuals will use to inform future behaviors or actions. Successful performances from previous experiences determines the level of confidence an individual will have and use to predict success in future similar performances. However, Bandura confirmed that even in the absence of personal performance experiences, individuals can gain personal self-efficacy by observing the success of others. Bandura defined this type of observed learning as vicarious experiences. During these types of experiences, learners see themselves in the similar position as others when performing the same or potentially similar actions or behaviors. Bandura explained that when learners see others like themselves succeed in a particular activity they gain confidence in believing that they also can succeed. Therefore, developing personal self-efficacy from active performance experiences or through vicarious experiences would be expected to help healthcare

learners to take advantage of cultural care education and develop transcultural self-efficacy that leads to cultural competence.

According to Jeffreys (2010), transcultural self-efficacy is the perceived level of confidence that a healthcare practitioner has when practicing or learning transcultural nursing skills. Cultural competence is greatly influenced by the level of confidence that a healthcare provider has (Jeffreys, 2010). Furthermore, Jeffreys asserted that transcultural self-efficacy, or confidence when providing cultural care, allows for the integration of cognitive, practical, and affective dimensions of cultural care into the practice of healthcare professionals. Therefore, dynamic and evolving cultural education strategies, as well as cultural clinical experiences, can facilitate transcultural self-efficacy in healthcare learners. For example, in their study Halter et al. (2014) used the TSET to measure the transcultural self-efficacy of 260 nursing students. By administering the TSET at the beginning and at the end of the academic year, between the Fall and Spring semesters, Halter et al. exposed the nursing students to a variety of cultural educational interventions such as an on-campus conference with a guest expert in transcultural nursing, a global awareness symposia, a nursing coursework with cultural care outcomes, clinical simulations and case studies with an emphasis on caring for patients of minority groups, and clinical setting experiences where students completed cultural assessments as part of their patient assignments. Halter et al. found that after an academic year of formal cultural care education, the nursing students' perceived confidence in transcultural care increased.

In a similar study, Jeffreys and Dogan, (2012) used the TSET to evaluate the influence that cultural competence education had on the perceived transcultural care confidence of nursing students. Jeffreys and Dogan showed that with a validated and reliable tool such as the TSET, existing and future modalities of cultural care education can be assessed and evaluated for their effectiveness in encouraging the development of cultural competence in existing and future healthcare professionals. The use of Jeffreys and Dogan's TSET was used in this dissertation study as a pretest and posttest measuring any changes in students' transcultural self-efficacy after receiving an instructional unit on culturally sensitive communication techniques, for the controlled group, and after observing role models role-play culturally sensitive communication techniques, for the experimental group, when caring for a patient of a specific and different cultural background.

It is important to note that the theoretical construct of Bandura's (1977) observational learning, self-efficacy through vicarious experiences, and Mezirow's (1991) theory of transformative learning support the learner's understanding and acquisition of culturally competent skills through observational activities. Therefore, a case can be made that transcultural self-efficacy can be developed through innovative educational activities that equips healthcare professionals with cultural competence. The next section addresses the specific use of role-playing through activities and videos to raise awareness of and sensitivity for the needs of people from different cultural backgrounds.

Role-Play as Teaching Strategy

Research studies have used educational activities, such as role-play simulation and video clip vignettes, in an attempt to find ways of helping learners acquire effective communication skills and in turn promote active learning (Axtell et al., 2010; Brathwaite & Majumdar, 2006; Jeffreys, 2010; Mihalic et al., 2010; Rogers-Sirin & Sirin, 2009; Spinner-Gelfars, 2013; Thomas & Cohn, 2006). For example, Nygaard, Courtney, and Leigh (2010) described role-playing as playful activities or exercises where learners assume a role that represent personal, professional, or social characteristics from another individual. Furthermore, role-play activities usually take place in a supportive educational environment where the primary goal is to encourage learners to build a first-person experience. As a result, true learning is dependent on how structured and developed the role-play activity is and how committed the participants are to the role-play activity when they are expected to "explore and articulate viewpoints that may not be their own" (Nygaard et al., 2012, p. 4).

Role-play activities have been known in the literature as useful educational exercises that enhance students' learning and active thinking (Axtell et al., 2010; Brathwaite & Majumdar, 2006; Carroll, 2006; Cross, Matthieu, Cerel, & Knox, 2007; Lee et al., 2009; Nygaard et al., 2012; Spinner-Gelfars, 2013; Westberg, Adams, Thiede, Stratton, & Bumgardner, 2006). For example, Carroll (2006) designed and implemented a marketing-sales-based curriculum that incorporated role-play activities as a teaching modality. Carroll's use of role-play was intended as feedback evaluation for the learners encouraging them to engage in reflective learning. Therefore, Carroll argued that the

development of role-play activities and role-play as an evaluation measure were instrumental in the training of sales professionals.

Cross, Matthieu, Cerel, and Knox (2007) conducted a pilot study involving a one hour workshop on suicide prevention skills for non-clinical employees at a university hospital setting. Concern with the attitudes and degree of self-efficacy of the non-clinical staff when encountered with a potential patient with suicidal ideation, Cross et al. (2007) made use of role-play activities as an instructional strategy to support the learning of the participants. Upon completion of the workshop, participants rated the role-play activities as positive learning experiences that allowed them the opportunity to practice and master suicidal prevention skills in a safe simulated environment. Cross et al. argued that role-play activities helped to facilitate the rehearsal of specific behaviors that are needed in the training of specific skills.

Furthermore, He, Mackey, O'Brien, Ng, and Arthur (2011) carried a study on the evaluation of a self-developed video that used role-play as a way of facilitating the teaching and learning of effective therapeutic communication skills. He et al. (2011) created videos that presented the important aspects of communication skills such as listening, understanding, exploring, and comforting. The videos were shown to 74 first year nursing students over a period of 4 weeks. Results from a descriptive exploratory questionnaire, originally designed to assess students' opinions on the effectiveness in teaching communication skills through video role-play, showed that the use of video role-play activities were a useful educational tool to enhance students' communication skills.

Role-plays are motivational activities that help learners appreciate the importance of specific skills or tasks. For example, Liu (2010) found the use of role-play activities were received positively by learners for which English was not their first language. In addition, Liu noted that learners that engaged in role-play activities were more motivated to speak English than the learners who received standard classroom English instruction.

Rickles, Tieu, Myers, Galal, and Chung (2009) conducted a mixed methods research design to assess the value of a lecture-laboratory course using standardized patients to teach students communication skills. Using a blinded retrospective analysis 127 students participated in the study. As part of the qualitative approach, students completed a Communication Skills Assessment Form (CSAF) to evaluate the role-play videos at the beginning, during, and toward the end of students viewing the videos. Descriptive statistics and repeated measures analysis of variance was used to compare the role-play videos. Quantitative results showed that there were significant and incremental improvements from students watching the role-paly videos at baseline, midpoint, and final. Qualitative results showed that students favored the use of standardized patients as a way of helping them improve their communication skills. To this end, Rickles et al. (2009) suggested that simulation role-play activities that use standardized patient actors can help learners be motivated to commit to the learning experience and therefore develop, practice, and perfect specific skills such as communication techniques.

Role-play activities can help educators address sensitive or personal issues with leaners in a manner that is safe and appropriate while still facilitating and maintaining a supportive learning environment (Thomas & Cohn, 2006). For example, Cross et al.

(2007) conducted a one hour community gatekeeper training in-service where 76 nonclinical support staff received training that was focused on assessing the knowledge, attitudes, and skills of the nonclinical staff when identifying individuals at risk for suicide. Cross et al. administered pre- and post-surveys in order to assess the knowledge about suicide and the efficacy about suicide prevention skills in nonclinical staff. Two types of knowledge - declarative, or factual knowledge gained from the training; and perceived, or the individual's self-assessment of the learned content - helped to measure the participants' knowledge about suicide. Furthermore, the training workshops included role-paly activities that used standardized patient actors to help learners implement the skills learned during the training workshop. Consequently, participants demonstrated a satisfactory level of Gatekeeper skills since they had an opportunity to apply new knowledge into a practical activity such as role-play. Therefore, Cross et al. (2007) claimed that role-play activities were an effective educational approach to the development and practice of learners' suicidal prevention skills. Cross et al. contended that as learners engaged in frequent role-play activities, their competence in suicidal prevention skills increased.

Similarly, Herbert and Lohrmann (2011) performed a content analysis of health education curricula in 10 educational institutions to determine their inclusion of instruction strategies for the acquisition of health skills. Herbert and Lohrmann found that role-play activities were one of the five active learning strategies that encouraged students to acquire health skills in an ethical manner. They found that using role-play activities with professional actors that are video recorded and that role-played ethical

dilemmas on how school aged adolescents can avoid using drugs in schools, was beneficial and a viable and safe venue for educating secondary school students.

Finally, role-play activities are educational strategies that, within a cultural context, can provide a setting for learners to become self-aware of their values and beliefs, consider a deeper understanding of their future roles as culturally competent healthcare professionals, and continue to develop a keen awareness for cultural sensitivity (Ertmer et al., 2010). The use of role-play activities to enhance learners' understanding and appreciation for others' cultures have been an educational strategy in post-secondary education (Nygaard et al., 2012). For example, Fleischmann, Robbins, and Wallace (2011) used experiential activities, in the form of role-play, so that learners could gain a deeper understanding of the important concepts surrounding problem solving of ethical dilemmas and how decision making can have positive or negative results. Fleischmann et al. (2011) found that through the role-play of case studies featuring ethical dilemmas in information systems technology, learners developed competent decision making skills that helped them deal with emerging global and multicultural ethical challenges in the world of information systems.

Spinner-Gelfars (2013) used high-fidelity simulation equipment or simulated patient actors with students role-playing real life characters. Spinner-Gelfars identified this as an educational experience that provides the learners with an opportunity to transform previous biases regarding their approach to patient situations. For example, high fidelity patient simulator mannequins and simulated patient actors were used to engage nursing students in mental health communication activities as the students role-

played the role of a mental health nurse. Spinner-Gelfars' purpose was to assess the best educational approach that would help nursing students from different cultural backgrounds develop appropriate linguistic and communication skills for nursing practice. Spinner-Gelfars found that students expressed favor for the role-play activities as these gave students an opportunity to practice and assess their communication proficiency and linguistic abilities. Furthermore, students were able to reflect on their application of therapeutic communication techniques and apply new learning from the feedback they received from faculty members.

Video recordings as form of instruction or demonstrations have been used in teaching and learning within health care programs (Axtell et al., 2010; Back et al., 2007; Chun et al., 2012; Halter et al., 2014; Hawala-Druy & Hill, 2012; He, Mackey, O'Brien, Ng, & Arthur, 2011; Herbert & Lohrmann, 2011; Rider & Keefer, 2006; Scallan, Ball, Lyon-Maris, Burrows, & Gorrod, 2011; Thomas & Cohn, 2006). For example, Hawala-Druy and Hill (2012) designed and implemented interdisciplinary educational activities as culturally congruent teaching strategies to encourage healthcare students to interact with each other. In addition, video recordings of guest speakers were used to provide opportunities for healthcare students to engage in discussion about the different roles that each member of the healthcare team has in providing care for patients. Furthermore, they found that the healthcare students' levels of cultural competency had improved after participating in the educational activities and group discussions that were facilitated by the video recordings of guest speakers.

De Grez et al. (2014) explained that the use of well-designed instructional videos have the potential to enhance the metacognition of learners' knowledge when viewing the demonstration of a specific skill. To this end, as learners witness role models demonstrate both appropriate and inappropriate ways of performing a skill, learners are encouraged to reflect on their own skill set, challenge and transform previous assumptions they may have regarding their ability to perform the skill, and become self-aware of their own responsibility for what they have to do in order to develop personal self-efficacy. Consequently, the research for this dissertation study investigated a viable educational intervention to encourage the transcultural self-efficacy of interprofessional beginning healthcare students by combining two valuable educational strategies into one innovative modality: videotaped role-play.

As defined in Chapter 1, videotaped role-play is as an educational strategy that allowed students to learn communication skills through observation (He, Mackey, O'Brien, Ng, & Arthur, 2011). In addition, the observation of a role-play that uses standardized patient actors presented examples of transcultural congruent care in the interaction between a healthcare professional and a Muslim female patient. Therefore, the role-play was presented to interprofessional beginning healthcare students, in the experimental group, as a pre-recorded video.

Summary and Conclusions

Purnell and Paulanka's (1998) model for cultural competence guided the research of the dependent and independent variables in this dissertation study. Cultural competence and transcultural self-efficacy was explored through self-awareness as

informed by the participants' observational learning (Bandura, 1977), and by challenging their own assumptions about different cultures through transformative learning (Mezirow, 1991). Previous research regarding healthcare education in cultural competence raised awareness of the importance of acquiring enough cultural knowledge in order to provide culturally congruent care. The review of the literature in this chapter provided an opportunity to discover existing research concerning the definition of cultural competence and its importance within healthcare and education (Brathwaite & Majumdar, 2006; Delgado et al., 2013; Eshleman & Davidhizar, 2006; Jeffreys & Dogan, 2012; Kardong-Edgren et al., 2010; Mareno & Hart, 2014; McClimens et al., 2014; Okoro et al., 2012; Schim et al., 2006; Steed, 2010; Waite & Calamaro, 2010). In addition, a review of the different methodologies of teaching in fields of study such as education, business, healthcare, and psychology allowed for an appreciation of the different teaching modalities that exist to help develop transcultural self-efficacy in learners. However, none of the studies reviewed asserted to a standardized and effective way of teaching cultural competence that specifically addressed observational or transformative learning within healthcare education.

Another major theme evident in the review of the literature was the challenge of finding effective ways for learners to acquire and maintain transcultural self-efficacy through the use of educational strategies in communication techniques between learners and people of different cultural backgrounds (Back et al., 2007; Leadbeater & Litosseliti, 2014; Mihalic et al., 2010; Root & Ngampornchai, 2012; Thomas & Cohn, 2006). Yet,

these studies lacked measurement of the degree of transcultural self-efficacy in healthcare learners' use of transcultural congruent care through communication skills.

Finally, studies reviewed in the literature addressed the implementation of role-play activities (Axtell et al., 2010; Brathwaite & Majumdar, 2006; Eshleman & Davidhizar, 2006; Fleischmann, Robbins, & Wallace, 2011; Lee et al., 2009; McClimens et al., 2014; Mihalic et al., 2010; Rogers-Sirin & Sirin, 2009; Spinner-Gelfars, 2013; Stone et al., 2013; Thomas & Cohn, 2006) and videos (Axtell et al., 2010; Halter et al., 2014; Hawala-Druy & Hill, 2012; Rogers-Sirin & Sirin, 2009; Stone et al., 2013; Thomas & Cohn, 2006) as teaching modalities that enhance and support the learning and understanding cultural competence development.

It was evident that a gap appeared to exist after the review of the literature in knowing whether simulated videotaped role-play involving standardized patient actors or lecture method as a workshop would help increase transcultural self-efficacy of interprofessional beginning healthcare students when learning how to approach individuals from specific and different cultural background. As a result, this dissertation research study measured the level of transcultural self-efficacy in interprofessional beginning healthcare students after viewing a simulated roll-play video as an educational modality for teaching transcultural congruent care. This was compared to interprofessional beginning healthcare students who were taught transcultural congruent care in a traditional classroom lecture-based workshop. Considering Purnell and Paulanka's (1998) model for cultural competence and Jeffreys and Dogan's (2010) development of the TSET, I sought to investigate the relationship between mode of

instruction and interprofessional beginning healthcare students' transcultural self-efficacy.

Chapter 3: Research Method

The purpose of this quasi-experimental quantitative study was to determine to what extent there was a relationship between mode of instruction (observing role models who challenge assumptions about culture in a videotaped role-play simulation) and increased transcultural self-efficacy in cultural competence instruction in an IPE course about communication between beginning healthcare students and patients from specific cultural backgrounds. In Chapter 3, I discuss the research design and methodology that were used to examine the differences between students' perceived level of transcultural self-efficacy and experienced mode of instruction. In addition, this chapter provides a detailed description of the sampling procedures and the measurement instrument used as part of the data collection. Furthermore, I present threats to validity and ethical procedures. Finally, in a summary, I present the analytical strategies applied to the data collected.

Research Design and Rationale

The research design for this dissertation study relied on the use of a quantitative approach in order to investigate the relationship between the independent and dependent variables (Creswell, 2014; Frankfort-Nachmias & Nachmias, 2008) using the selected instrument to measure them and implement statistical measures to analyze the produced data. Qualitative and mixed methods research approaches were not selected, as they did not align with the research question for this study. Creswell (2014) explained that nonquantitative research approaches are used to explore and understand phenomena from subjects' lived experiences. Creswell described the use of inductive data analysis and the

interpretation of meaning from the collected data through specific protocols for observation, interviewing, and the identification of any emerging themes or patterns. Because the meaning and understanding of students' transcultural self-efficacy were not studied in this dissertation research, qualitative and mixed methods approaches were not applicable.

According to Frankfort-Nachmias and Nachmias (2008), experimental designs would be ideal in quantitative research because it would allow for greater control over extrinsic and intrinsic variables. However, Frankfort-Nachmias and Nachmias contended that external validity in experimental designs can be weak and that volunteering or self-selection of participants can make it difficult to study the population of interest and can limit generalizability. On the other hand, a quasi-experimental research design facilitates the study of subjects in their natural and real-life settings. In addition, while internal validity may be limited, quasi-experimental designs still enable researchers to assign participants to a control or experimental group (Frankfort-Nachmias & Nachmias, 2008). Therefore, a nonequivalent quasi-experimental design was selected to examine the relationship (if any) between perceived level of transcultural self-efficacy in interprofessional beginning healthcare students, the dependent variable, and the method of instruction about cultural competence in serving a patient with a specific cultural background, the independent variable.

Consequently, for this dissertation study I chose a quasi-experimental design with a nonequivalent control group design that used pretest-posttest ($\frac{RO\ X\ O}{RO\quad O}$) on transcultural self-efficacy for both the experimental and control groups. According to Campbell and Stanley (1963), the nonequivalent control group design is widely used in educational research. In addition, Campbell and Stanley explained that this type of experimental design lends itself to use in social research studies involving sample groups that are conveniently assembled, such as classrooms. However, Campbell and Stanley contended that this quasi-experimental design, unlike true experimental designs, does not have pre-experimental sampling equivalence for both the control and experimental groups. Campbell and Stanley stated, "the more similar the experimental and the control groups are in their recruitment, and the more this similarity is confirmed by the scores on the pretest" (Campbell & Stanley, 1963, p. 48), the more effective the research design will be. With this in mind, the goal for the use of a quasi-experimental nonequivalent control group design in this study was to randomly assign to either the control or experimental group from the nonequivalent population, a cohort of interprofessional beginning healthcare students within an IPE course.

Methodology

This section contains descriptions of the population of interest, the sampling procedures, the methods for recruitment, and the collection of data in order to analyze and study the transcultural self-efficacy of beginning interprofessional healthcare students in an IPE course. In addition, a description of the chosen instrument and its

operationalization for this study is provided. Furthermore, the experimental procedures and the statistical analysis plan are explained.

Population

The target population for this dissertation study was a convenience sample group of 240 students from various healthcare disciplines including nursing, personal support worker, dental hygiene, and retail pharmacy assisting who were enrolled in an IPE course. The IPE course was offered every semester within the community college and was part of the program of study for all first year healthcare students. The experimental group was located in a lecture-hall classroom with audiovisual equipment and chairs that facilitated a teaching environment and the viewing of the educational intervention. The control group was located in a separate lecture-hall classroom where traditional lecture-based workshop teaching was conducted.

Sampling and Sampling Procedures

The design for this dissertation study required two different classroom locations, and these had already been assigned as part of the course curriculum before the students were asked to participate in the study. The students were randomly assigned to Section 1 or Section 2 of the IPE course. A computerized system in the registration office of the college randomly assigned students at the time of course enrollment. Consequently, the experimental group was designated as Section 1 of the IPE course, and the control group was designated as Section 2 of the IPE course. Therefore, it was expected that an equal distribution of the class was in Section 1 (the experimental group) and Section 2 (the control group).

Other studies (Amerson, 2010; Halter et al., 2014; Jeffreys & Dogan, 2012; Larsen & Reif, 2011) similar to this dissertation study were conservative in effect size, with small samples. A preliminary sample size estimate was determined using G* Power 3.1.9 (Faul, 2014) with central and noncentral distributions. Using G* Power 3.1.9, the test family was set at *t tests* with the statistical test set at *Means*: *Difference between two dependent means (matched pairs)*. The type of power analysis was set at *A priori: Compute required sample size - given α, power, and effect size*. Additional settings were *effect size d 0.2, α err prob 0.05, and the Power (1-β err prob) 0.80*. The total sample size calculated with G* Power 3.1.9 was 198, with 99 students randomly assigned to each group. The available and actual population for this study was 240 interprofessional beginning healthcare students enrolled in an IPE course. I expected an 80% response rate, which meant that with 120 students randomly assigned to the control group and 120 to the experimental group, about 96 in each group would have completed and used the data. However, the actual response rate was 82%. In addition, 98 participants in the control group and 98 participants in the intervention group completed and used the data. Attrition did not occur during the week between the pretest administration and the following week when the posttest was administered. Therefore, the actual sample size for this dissertation study was 196 beginning interprofessional healthcare students.

Procedures for Recruitment, Participation, and Data Collection

The associate dean of the allied health programs was contacted and provided with detailed information about the study. A request was made to the associate dean to use the IPE course faculty and an additional faculty member to facilitate the classroom time at

the end of the class for the administration of the pretest during Week 1 and both the mode of instruction and the administration of the posttest during Week 2. Permission and a letter of support and cooperation from the associate dean of the allied health programs were obtained to use the IPE course for the purposes of this study. In addition, permission and a letter of cooperation from the standardized patient program facilitator were obtained for the use of prerecorded videos of interviews with a standardized patient actor playing the role of a Muslim patient. Permission and letters of cooperation were obtained as part of the application process for the college's Research Ethics Board (REB) as well as Walden University's Institutional Review Board (IRB) where the IRB approval # 05-26-15-0120791 was issued.

A date and time for the collection of data were established with the two faculty members identified by the associate dean of the allied health programs as responsible for the IPE course in the spring semester of 2015. A research assistant not associated with the course assisted only with making sure students put their pretest and posttest data in the appropriate collection box. The professor assigned to the section with the control group had taught the cultural competence in communication lecture module already prepared and approved for the course. The professor assigned to the section with the experimental group facilitated the time for observation of a prerecorded video role-play with two separate video segments. A video segment presented the SP actors role-playing the use of ineffective verbal and nonverbal communication skills, and a second video segment showed the SP actors role-playing the use of effective verbal and nonverbal communication skills in the care of a Muslim woman. Finally, a time of group reflection

and discussion was part of the educational intervention, which was facilitated prior to the administration of the posttest.

One week prior to the pretest data collection, at the end of the class, I asked permission to communicate some brief information about the study to students enrolled in the IPE course via the announcement section of the course's learning system (i.e., Blackboard Learn). To support the students' understanding of this study and make myself accessible for any questions students might have during the study, I provided the IPE faculty with information about the study and my personal contact information to post as an announcement in the course's learning system.

In Week 1 of the study and before the cultural communications unit of the course, both Section 1 and Section 2 of the IPE course were scheduled to be in one lecture-hall classroom for the beginning of the curriculum on cultural care. At the end of the class session, I entered the classroom, addressed the students, and provided information about the study, which required a pre- and posttest, consent to participate, and what was to be done with the data after analysis. Students were informed that completion of the instrument was to take an approximate time of 15-20 minutes and was not in any way related to the work that they submitted for the course. They were also informed that they would be free to withdraw from the study at any time during the pre- or posttest, without consequences. These same instructions were clearly detailed in the informed consent.

Next, and with the help of the research assistant, we distributed to each student a closed legal-size envelope containing the consent form, instructions for creating a nonidentifying 8-digit code, the Transcultural Self-Efficacy Tool-Multidisciplinary

Healthcare Provider (TSET-MHP; the instrument; adapted with permission from the author and the publishing company; Appendix A), and a pencil. The same research assistant helped to distribute the posttests in Week 2 of the study. Students were asked to read the informed consent with information about the study and to create and enter on a designated area of the pretest instrument their nonidentifying 8-digit code using the instructions provided. This was done in order to maintain the anonymity of each student's responses and ensure that the pre- and posttests for the same participating student could be matched at the time of data analysis. Students kept the consent form for their own records. Students' nonidentifying 8-digit codes had no meaning outside of the college system, and as a noninstructor of the course, I did not have access to the system that would equate the students' nonidentifying 8-digit codes with their names. I collected the sealed envelopes with the instrument, remained in the classroom for the entire time of the pretest, and maintained possession of all of the returned envelopes with instruments.

Any student who decided to withdraw from the study during the pretest was instructed to return the instrument to the envelope, leave it on his or her desk unsealed, and leave the classroom when ready to do so. After collection of the pretests, I took all of the submitted instruments in their sealed envelopes and brought them to my office on campus, where the collected instruments were secured and safely placed in a lock-and-key cabinet. I personally reviewed all of the completed and sealed envelopes containing the adapted-with-permission Transcultural Self-Efficacy Tool-Multidisciplinary Healthcare Provider (TSET-MHP; pretests) bearing the nonidentifying 8-digit codes students had created.

In Week 2 of the study, each section of the IPE course had been scheduled to attend a different lecture-hall classroom at the regular class time, as indicated on the course syllabus. All students in the course attended a session in one of two separate lecture-hall classrooms to continue the curriculum on cultural care. Students in Section 1 received the curriculum on cultural care using a videotaped interview with a standardized patient actor playing the role of a Muslim patient. Students in Section 2 received the curriculum on cultural care in lecture style with just the instructor of the course. Because I could not be in two places at the same time, as with the previous class session, my research assistant and I each arrived at one of the classroom locations and administered the posttest. The research assistant was assigned to the classroom of the control group (Section 2), and I was assigned to the classroom of the experimental group (Section 1). In our respective rooms, the research assistant or I addressed the students and read the same announcement with information about the study that I had read before for Week 1 of the pretest. Students were informed that completion of the instrument would take approximately 15-20 minutes each time and was not in any way related to the work that they submitted for the course. In addition, they were reminded that they would be free to withdraw from the study at any time during the posttest, without consequences.

As during Week 1 of the study, with the help of the research assistant, we distributed to each student a closed legal-size envelope containing the consent form, instructions for creating a nonidentifying 8-digit code, the Transcultural Self-Efficacy Tool-Multidisciplinary Healthcare Provider (TSET-MHP; the instrument; adapted with permission from the author and the publishing company), and a pencil. Students were

asked to read the informed consent with information about the study and to create and enter on a designated area of the posttest instrument their nonidentifying 8-digit codes using the instructions provided. Again, this was done in order to maintain the anonymity of each student's responses and to ensure that the pre- and posttests for the same participating student could be matched at the time of data analysis. Students kept the consent form for their own records. The research assistant and I remained in our designated classrooms for the entire time of the posttest. After completion of the posttest, students in the control group were instructed to drop their sealed envelopes with the instrument into a box/bin located at the exit door of the classroom. I collected the sealed envelopes from the students in the intervention group. The research assistant did not touch or handle the submitted envelopes from the students in the control group and was instructed by me to remain in the classroom for the entire time of the posttest until I arrived to pick up the box/bin containing the control group's completed instruments.

Once collected, the completed instruments from students in the intervention and control groups were transported by me to my office on campus, where the collected instruments were placed in a secure lock-and-key cabinet. I personally reviewed all of the completed and sealed envelopes containing the adapted-with-permission Transcultural Self-Efficacy Tool-Multidisciplinary Healthcare Provider (TSET-MHP; posttests) bearing the students' nonidentifying 8-digit code they had created.

Instrumentation and Operationalization of Constructs

The independent variable in this dissertation study was the mode of instruction which is a categorical variable. The dependent variable was the healthcare student's

perceived change in transcultural self-efficacy as measured by the TSET-MHP (Jeffreys, 2010) after receiving the prescribed mode of cultural care instruction. According to Bandura (1995), self-efficacy is defined as personal experiences that individuals will use to inform future behaviors or actions. Successful performances from previous experiences may determine the level of confidence an individual will have and use to predict success in future similar performances. According to Jeffreys (2010), transcultural self-efficacy is the perceived level of confidence that a healthcare practitioner has when practicing or learning transcultural nursing skills. Therefore, transcultural self-efficacy was measured in this dissertation study using a standardized instrument: the TSET-MHP (Jeffreys, 2010).

The TSET-MHP is an 83-item questionnaire, and it has been adapted with permission from the author and the publishing company that authored and own the original TSET tool, to measure and evaluate the level of confidence that learners identify when performing general transcultural care skills. In addition, the TSET-MHP allows for the measurement of *self-efficacy strength* (SEST) in order to assess learners' average strength of self-efficacy perception within three of the tool's dimension, or subscale, of the construct. The three subscales in the tool are: cognitive (containing 25 items), practical (containing 28 items), and affective (containing 30 items). However, the focus in this dissertations study was to use the practical subscale within the TSET-MHP as it helped to assess the students' perceived SETS after their observation of verbal and non-verbal communication skills demonstrated in the videotaped simulation role-plays. The TSET-MHP tool was used to focus on the self-efficacy assessment of healthcare

professionals instead of nursing. As a result, the TSET-MHP tool was an appropriate tool to use for this dissertation study as it has been designed to assess the transcultural self-efficacy of multidisciplinary groups of healthcare professionals.

Jeffreys (2010) contended that subscales within the TSET tool allow for a comprehensive assessment of coordinated learning in the cognitive, practical, and affective domains in a learner's experience. In addition, Jeffreys claimed that dimensions within a domain of inquiry benefits from the use of separate subscales that help in the accurate assessment and evaluation of learners' self-efficacy. Therefore, Jeffreys explained that the cognitive subscale asks learners to rate their knowledge about cultural factors that influence their care; the practical subscale assesses the learners confidence when interviewing patients from different cultural backgrounds; and the affective subscale addresses the learners attitudes, values, and beliefs when caring for patients from different cultural backgrounds. The answer format for this tool was a 10-point Likert scale as it was more discriminating than the 6-point rating scale (Jeffreys, 2010). Likert-type responses are categorized as 1 (Not Confident) up to 10 (Totally Confident). The item responses are summed and divided by the number of subscale items in order to assess each learner's transcultural self-efficacy.

The TSET has been used in several studies as a way of measuring the perceived level of transcultural self-efficacy in healthcare professionals (Amerson, 2010; Halter et al., 2014; Jeffreys & Dogan, 2012). For example, Amerson (2010) studied the benefits of a service-learning project, where six students participated in a one-week international immersive experience with exposure to healthcare issues faced by people from a different

culture. In addition, the international immersive experience provided students with opportunities to apply culturally appropriate care. Amerson administered the Transcultural Self Efficacy Tool to students before and after the immersive experience in order to measure their level of confidence when providing cultural care.

Amerson (2010) found a significant gain in students' cognitive learning about cultures. Furthermore, students demonstrated an increased understanding of patients' cultural needs. Similarly, Halter et al. (2014) used the TSET to measure the transcultural self-efficacy of 260 nursing students before and after exposure to a variety of cultural educational interventions. Halter et al. found that after an academic year of formal cultural care education, nursing students' perceived confidence in transcultural care increased.

Jeffreys and Dogan (2012) used the TSET to determine and evaluate how cultural competence education could influence the transcultural self-efficacy perceptions of undergraduate nursing students. After the cultural competence educational intervention, the TSET was administered to 147 nursing students, in their first and fourth year of the nursing program. Results showed that transcultural self-efficacy was influenced by formalized education and other learning experiences. Statistical analysis showed that, compared with novice students, advanced students' scores were higher for all subscales (Cognitive, Practical, and Affective). Analysis of variance and covariance showed that exposure to the educational interventions throughout the four semesters influenced transcultural self-efficacy changes and all students benefited from the formalized education in cultural competence.

Videotaped Simulation Role-Play

Videotaped simulation role-play in two segments were used to provide instruction to the experimental group (Section 1) on transcultural self-efficacy through the use of appropriate and inappropriate verbal and nonverbal communication techniques in the care of a Muslim woman. The plot of the role-play scenario took place in a doctor's office presenting the initial encounter between a healthcare professional and a Muslim female patient. The demonstration of communication skills through simulated role-play were observed by the experimental group (Section 1) as an intended method of teaching content on cultural competence. The same content was taught in the control group (Section 2) using a lecture-based workshop method.

In order to plan and organize the videotaped role-play of standardized patient actors, I sought the assistance and support of the associate dean of the Allied Health programs and the standardized patient program facilitator. Both agreed to provide support and advice on how I could use two segments of the videotaped role-play provided by the college's standardized patient program with the experimental group (Section 1). Because the lecture-based workshop class required students to read an article that introduced cultural competence before coming to class, all students in both sections were asked to read the same article before completing the posttest. During the Week 2 of instruction on cultural competence, students in the intervention group observed the first video segment presenting the standardized patient actors role-playing the use of ineffective verbal and nonverbal communication skills. After viewing the video, students grouped into small groups and were asked to recall and reflect on the key characteristics demonstrated in the

video segment that represented ineffective verbal and nonverbal forms of communication role-played by the standardized patient actors.

Next, the second video segment presented the standardized patient actors role-playing the use of effective verbal and nonverbal communication skills. Once again, students grouped into small groups and were asked to recall and reflect on the key characteristics demonstrated in the video segment that represented effective verbal and nonverbal forms of communication role-played by the standardized patient actors. To finish the time of instruction, while in their small groups, students were asked to reflect and share with one another how the observation of the videotaped simulation role-play would help inform their practice as future healthcare professionals if faced with the same scenario. At the end of the class students in both sections were asked to complete the posttest instrument.

Statistical Analysis Plan

In this study, SPSS was used as the software of choice for the analysis of the collected data. Before analysis, data editing and data cleaning ensured that there was proper coding during and after the processing of all data (Frankfort-Nachmias & Nachmias, 2008). As a result, any inconsistencies in responses from participants when using the selected instrument were checked for any errors or omissions prior to analysis (Frankfort-Nachmias & Nachmias, 2008). The independent variable was the mode of cultural competence instruction that was provided to interprofessional beginning healthcare students enrolled in an IPE course. The dependent variable was the interprofessional beginning healthcare students' perceived change in transcultural self-

efficacy when measured by the TSET-MHP (Jeffreys, 2010) after receiving the prescribed mode of instruction. The research question and hypotheses being tested were as follows:

Research question: To what extent is there a relationship between mode of instruction (lecture-based workshop or observation of a videotaped role-play simulation) and increased transcultural self-efficacy in cultural competence instruction?

Null hypothesis (H_0): There will be no significant difference in transcultural self-efficacy between interprofessional beginning healthcare students who observe a videotaped role-play simulation of standardized patient actors who demonstrate transcultural self-efficacy and randomly assigned interprofessional beginning healthcare students who receive lecture-based workshop instruction on transcultural self-efficacy.

Alternative hypothesis (H_A): There will be a significant difference in transcultural self-efficacy between interprofessional beginning healthcare students who observe a videotaped role-play simulation of standardized patient actors who demonstrate transcultural self-efficacy and randomly assigned interprofessional beginning healthcare students who receive lecture-based workshop instruction on transcultural self-efficacy.

As part of the analysis plan, this study employed descriptive statistics in order to summarize and organize the collected data during the process of statistical analysis. Then, inferential statistics allowed for the interpretation of data patterns and in this way, I was able to infer if the theory and hypotheses used have been observed in the experimental environment (Frankfort-Nachmias & Nachmias, 2008). According to Frankfort-Nachmias and Nachmias (2008), the use of descriptive and inferential statistics can help to come up

with explanations regarding the relationship between variables prior to their analysis, representations, and interpretations of such variables.

In addition, a frequency distribution was generated in order to help examine any patterns from participants' responses to the independent and dependent variable. Furthermore, conducting a frequency distribution helped to check any wild codes to the data sets that could cause problems to outliers (Frankfort-Nachmias & Nachmias, 2008). To understand and interpret the mean differences between the experimental and control groups, paired-samples *t* test analysis was conducted. According to Field (2013), a *t* test analysis helps to test the differences between the means of two groups. More specifically, paired-samples *t* test is testing for any mean differences that may be statistically significant between two groups and were paired participants have been assigned to one condition or the other (Field, 2013). This was done by obtaining the mean (M), degrees of freedom (df), standard deviation (SD_1), and number of scores (n_1) from both the experimental and control groups. To this end, using paired-samples *t* test would help determine any statistical significance in the mean differences between the two groups to the independent and dependent variables. In other words, paired-samples *t* test would help identify any statistical significance in the mean differences between the perceived transcultural self-efficacy between a group that receives the standard mode of cultural competence instruction and the other group that receives cultural competence instruction through the observation of a series of videotaped role-play simulation video segments.

Threats to Validity

The purpose of this study was to determine the relationship between mode of instruction and perceived transcultural self-efficacy in interprofessional beginning health care students. The intent was to determine whether mode of instruction (lecture-based workshop or observation of a videotaped role-play simulation) was related to an increase in transcultural self-efficacy in interprofessional beginning health care students enrolled in an IPE course teaching communication techniques with patients from a specific cultural background. As part of the research design I used a quasi-experimental quantitative approach to test the relationship between perceived level of transcultural self-efficacy in interprofessional beginning healthcare students and the method of instruction in cultural competence.

Bias on my part was not present as I was not teaching any of the students enrolled in the IPE course at the time of the study. However, threats to validity that needed to be considered and addressed as part of the research methodology were identified. First, I addressed the threat to external validity by the random assignment of participants to the control and experimental groups based on the course pre-assignment of students to sections. There was no reason to suspect differences based solely on their placement in Section 1 or Section 2; however, this would not completely resolve the external validity.

Second, the threats to internal validity were addressed by including in the study participants in both the control and experimental groups who were interprofessional beginning healthcare students enrolled in the same IPE course. In addition, the threat to internal validity in the form of maturation was addressed by conducting the research over

a period of two consecutive weeks where the pretest was administered in Week 1, the experimental intervention administered in Week 2, and the posttest administered during Week 2 right after the experimental intervention.

The threats to construct validity were addressed by the selection of an instrument that allowed for the operationalization of variables in predictable ways. The instrument selected has demonstrated psychometric data that support the reliability and validity of the scores they produce. In addition, statistical conclusion validity was addressed by the use of reliable, validated, and tested instrument and its standardized implementation during the pretest and posttest. Furthermore, the instrument selected for this dissertation study has been used in similar types of research studies. Finally, statistical conclusion validity was also addressed by using a quasi-experimental design, and the statistical tests that helped to analyze the collected data. Furthermore, choosing an alpha level of 0.05 as the cutoff point was a good compromise between the likelihood of making Type I and Type II errors. According to Frankfort-Nachmias and Nachmias (2008) Type I and Type II errors are related in that decreasing the alpha level to reduce the chances of making a Type I error will inadvertently increase the chances of making a Type II error. Therefore, a compromise in alpha level of 0.05 was adequate for this dissertation study.

Ethical Procedures

Walden University's IRB oversaw the research conducted in this dissertation study. The Walden University IRB approval # 05-26-15-0120791 was issued with an expiration date delineating the time frame for data collection. Then, I applied to the hosting educational institution ethics review board (REB) in order to obtain permission to

conduct this research study and collect data from the interprofessional beginning healthcare students enrolled in the IPE course. To this end, any and all required protocols by the IRB from Walden University and the REB of the hosting educational institution were strictly followed. The research, collection of data, or communication with potential participants did not occur until IRB and REB approvals, first from Walden University and second from the hosting educational institution, were obtained.

The identified research assistant and I handled the distribution of instruments. However, only I collected the informed consent and the instrument (pretest and posttests) from participants. In addition, a strict confidentiality practice from the research assistant was maintained. The research assistant signed a letter of confidentiality agreement as part of her involvement in this dissertation study. Following the collection of data, these were locked in a storage filing lock-and-key cabinet in my personal office and password protected on my personal computer which was only accessible to me. After five years, any records or the data collected will be destroyed and erased from my personal computer.

In order to not disturb the educational process during the weeks of data collection, the pretest was administered at the end of class during Week 1, and the posttest was administered at the end of the class during Week 2. After completion of the study, the results from the data that were collected and analyzed were made available to the associate dean of the Allied Health programs and the faculty teaching within the IPE course.

Summary

In summary, a quasi-experimental nonequivalent quantitative research design was used to measure the differences between mode of instruction and increased transcultural self-efficacy in cultural competence instruction. More specifically, this research design was intended to determine whether mode of instruction (lecture-based workshop or observation of a videotaped role-play simulation) was related to increase transcultural self-efficacy in an IPE course that teaches the application of culturally competent communication to beginning healthcare students when caring for patients of specific cultural backgrounds. Randomization of students in an interprofessional healthcare education course to the experimental group (Section 1) and the control group (Section 2) were done at the time of course enrollment by the college's registration office. Data were collected anonymously by myself through the paper and pencil administration of the TSET-MHP (Jeffreys, 2010) instrument contained within a letter size envelope. Paired-samples *t* test was used to analyze the data.

The methodology described in Chapter 3 gave evidence and support to this research framework. Chapter 4 of this dissertation study provides detailed information on the data collected and the results from its statistical analysis. The data results and statistical analysis implemented are represented by the evaluation of statistical assumptions, tables, and graphs where appropriate. Chapter 4 ends with a statistical analysis response to the research question.

Chapter 4: Results

There is an increased need to find ways to develop transcultural self-efficacy in healthcare professionals so that they can become aware of the healthcare needs of patients from specific cultural backgrounds (Halter et al., 2014; Jeffreys & Dogan, 2012; Larsen & Reif, 2011). Consequently, transcultural self-efficacy of healthcare professionals in their approach to holistic healthcare is a goal for a better healthcare system (Brathwaite & Majumdar, 2006; Hawala-Druy & Hill, 2012; Leadbeater & Litosseliti, 2014). Therefore, the purpose of this quasi-experimental quantitative study was to determine to what extent there was a relationship between mode of instruction (observing role models that challenge assumptions about culture in a videotaped role-play simulation) and increased transcultural self-efficacy in cultural competence instruction in an IPE course about communication between beginning healthcare students and patients from specific cultural backgrounds. In Chapter 4, I discuss the time frames, recruitment procedures, and response rates obtained in the data collection process. In addition, this chapter provides an overview of the baseline descriptive demographic characteristics and treatment or intervention fidelity conducted as part of this dissertation study. A detailed description of the results from the data analysis used to answer the research question is presented. Finally, in a summary, I provide answers to the research questions.

Research Question

Research question: To what extent is there a relationship between mode of instruction (lecture-based workshop or observation of a videotaped role-play simulation)

and increased transcultural self-efficacy in cultural competence instruction? This question informed the inquiry into the following hypotheses.

Hypotheses

Null hypothesis (H_0): There will be no significant difference in transcultural self-efficacy between interprofessional beginning healthcare students who observe a videotaped role-play simulation of standardized patient actors who demonstrate transcultural self-efficacy and a control group of randomly assigned interprofessional beginning healthcare students who receive a lecture-based workshop mode of instruction on transcultural self-efficacy.

Alternative hypothesis (H_A): There will be a significant difference in transcultural self-efficacy between interprofessional beginning healthcare students who observe a videotaped role-play simulation of standardized patient actors who demonstrate transcultural self-efficacy and a control group of randomly assigned interprofessional beginning healthcare students who receive the standard classroom lecture-based workshop mode of instruction on transcultural self-efficacy.

Data Collection

This section provides a description of the time frames and recruitment procedures for the dissertation study. In addition, a description of the calculated sample size and the attained response rate is provided. Furthermore, I address the population of interest, the sampling procedures, the methods of recruitment, and the collection of data in order to analyze and study the transcultural self-efficacy of beginning interprofessional healthcare students in an IPE course. A description of the chosen instrument and its

operationalization for this study is provided. Finally, this section provides a description of the demographic characteristics of the sample, which enables the interpretation of results from the analyzed data.

Time Frames and Recruitment

The data collection were planned for the June-August 2015 semester at the college in question. More specifically, two dates for data collection were identified: June 4, 2015, and June 11, 2015. The pretest data collection were conducted for both the control group and the intervention group on June 4, Week 1 of the study. The experimental treatment was administered to the intervention group as planned and described in Chapter 3. In addition, on June 11, which was in Week 2 of the study, the posttest was conducted for members of the control group after they received the standard mode of instruction and for the members of the intervention group after they received the experimental treatment. Recruitment of students was not necessary for this research, as I used the existing students already enrolled in the IPE course. However, during the two identified dates for data collection, all eligible students enrolled in the course who were present had an opportunity to choose whether or not to participate in the study.

Response Rate

For this dissertation study, the following was computed: A priori: compute required sample size - given α err prob 0.05, power (1-β err prob) 0.80, and effect size *d* 0.2, calculated with G* Power 3.1.9 was 198. The available sample population size of students enrolled in the IPE course was 240. Out of a possible 240 total participants, a total of 196 matched responses (pretest and posttest matched for the same participant)

yielded a response rate of 82%. The expected response rate was 80%. The reasons that some students decided not to participate in this research study are unknown.

Baseline Descriptive and Demographic Characteristics of the Sample

Envelopes containing paper-and-pencil instruments were obtained from a total of 240 beginning interprofessional healthcare students enrolled in the IPE course. However, after data screening, only 196 matched responses were used in the analysis. Baseline descriptive and demographic characteristics of the 196 respondents revealed the mean participant age to be 25.26. In addition, responses from the matched instruments showed that the majority of students did not have prior exposure to specific or different cultural backgrounds (Figure 1).

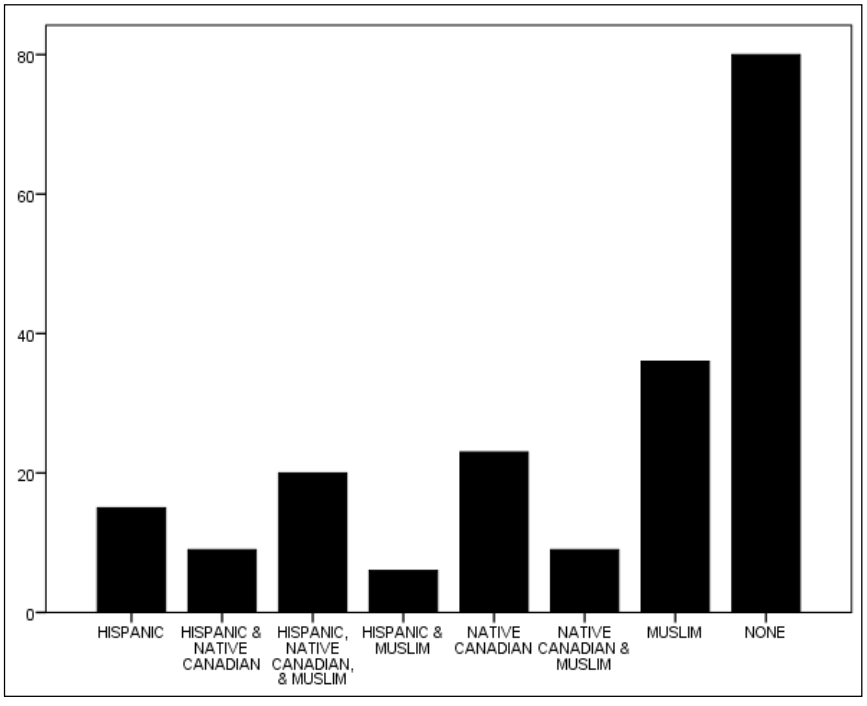

Figure 1. Bar chart showing frequency of prior exposure to cultural backgrounds from beginning interprofessional healthcare students in the IPE course.

Results

Descriptive Statistics

As shown in Table 1, the pretest for the intervention group (N = 98) was associated with transcultural self-efficacy scores M = 172.77 (SD = 42.14). In comparison, the pretest for the control group (N = 98) had numerically similar scores for transcultural self-efficacy M = 182.05 (SD = 45.57). On the other hand, the posttest for the intervention group (N = 98) was associated with numerically higher scores for transcultural self-efficacy scores M = 225.19 (SD = 37.84) when compared to the control group posttest (N = 98) for transcultural self-efficacy, M = 191.51 (SD = 40.12). A paired-samples t test was conducted to compare transcultural self-efficacy between interprofessional beginning healthcare students who observed a videotaped role-play simulation of standardized patient actors who demonstrated transcultural self-efficacy and interprofessional beginning healthcare students who received the standard classroom lecture-based workshop mode of instruction on transcultural self-efficacy.

Table 1

Descriptive Statistics Associated With Learners' Transcultural Self-Efficacy

		Pretest scores		Posttest scores	
	N	*M*	*SD*	*M*	*SD*
Control group	98	182.05	45.57	191.51	40.12
Intervention group	98	172.77	42.12	225.19	37.84

Note. N = number of participants in each group, M = mean, SD = standard deviation.

The population for the intervention and control groups' distributions were sufficiently normal for the purposes of conducting the *t* test. The assumption of normality, in order to test whether or not the scores were normally distributed, was satisfied through Shapiro-Wilk's test of normality. The differences in pretest scores for perceived transcultural self-efficacy for the control and intervention groups were normally distributed, as assessed by Shapiro-Wilk's test (p = .872). Likewise, the differences in posttest scores in perceived transcultural self-efficacy for the control and intervention groups were normally distributed, as assessed by Shapiro-Wilk's test (p = .299). Furthermore, a visual assessment of Q-Q plot graphs of difference between groups' pretest and posttest scores showed that the scores were normally distributed (Figure 2 & Figure 3).

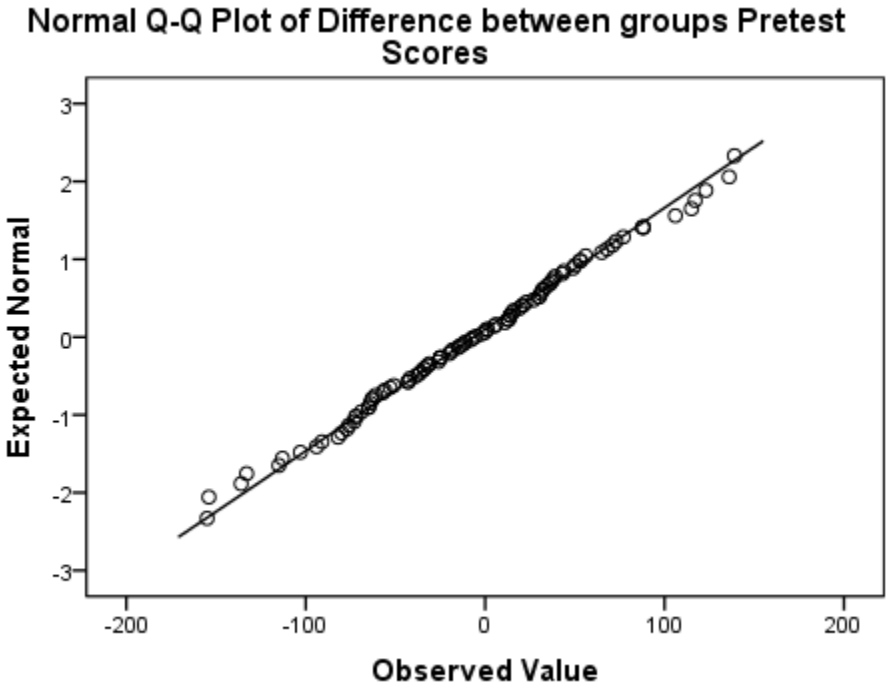

Figure 2. Normal Q-Q plot showing differences between groups' pretest scores normally distributed from beginning interprofessional healthcare students in the IPE course.

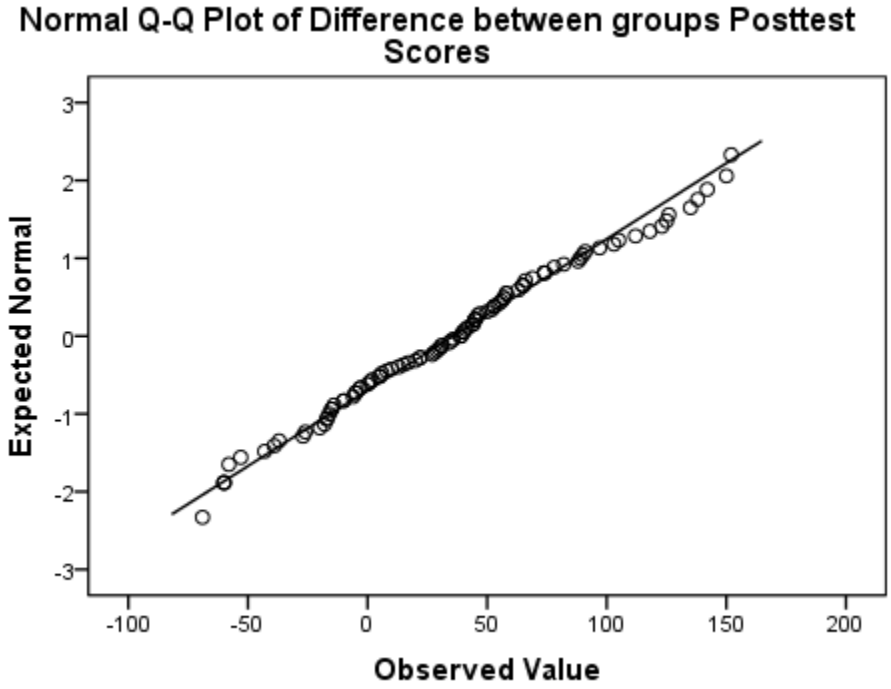

Figure 3. Normal Q-Q plot showing differences between groups' posttest scores normally distributed from beginning interprofessional healthcare students in the IPE course.

There was a significant difference in the posttest scores for the interprofessional beginning healthcare students who observed a videotaped role-play simulation of standardized patient actors who demonstrated transcultural self-efficacy (M = 225.19, SD = 37.84) and the interprofessional beginning healthcare students who received the standard classroom lecture-based workshop mode of instruction on transcultural self-efficacy (M = 191.51, SD = 40.16) conditions; t (97) = 6.73, p = .000 (Table 2). I calculated Cohen's d to be 0.68 by dividing the mean difference by the standard deviation. According to Cohen's (1992) guidelines, this is considered a medium effect. A power of 80% or 0.8 indicates that if the study were conducted 10 times, similar results would be obtained eight times (i.e., statistically significant).

These data suggest that beginning interprofessional healthcare students in the intervention group perceived a statistically significant increase in transcultural self-efficacy in cultural competence instruction, $M = 33.68$, 95% CI (23.75, 43.61) t (97) = 6.73, $p < .001$, $d = 0.68$ relative to beginning interprofessional healthcare students in the control group. More specifically, the results of this study suggest that when interprofessional beginning healthcare students observe role models demonstrating culturally competent skills, they will perceive an increase in transcultural self-efficacy when caring and communicating with patients from different cultural backgrounds. Consequently, I can reject the null hypothesis and accept the alternative hypothesis.

Table 2

Paired-Samples t Test Associated With Learners' Transcultural Self-Efficacy

	t	*df*	Sig. (2-tailed)	Mean difference	Std. deviation	Std. error difference
Pretest scores	1.50	97	.136	9.286	61.215	6.184
Posttest scores	6.73	97	.000**	33.68	49.536	5.004

**$p < .05$.

Data Screening and Reliability of Analysis

A preliminary review of 237 pretest questionnaires and 221 posttest questionnaires that were collected revealed three incomplete questionnaires in the pretest and four incomplete questionnaires in the posttest. A total of 196 matched questionnaires

were used in the final analysis, with 98 matched questionnaires from the intervention group and 98 matched questionnaires from the control group. All seven incomplete questionnaires and unmatched pairs were eliminated prior to the main analysis and were not included in the results of this dissertation study. Screening of the remaining 196 matched questionnaires was completed prior to generating the total scores. No problems were observed.

Summary

This quasi-experimental research design, with a nonequivalent control group design, was used to determine to what extent there was a relationship between mode of instruction (lecture-based workshop or observation of a videotaped role-play simulation) and increased transcultural self-efficacy in cultural competence instruction within an IPE course that teaches about communication between beginning healthcare students and patients from specific cultural backgrounds. The data analysis from the paired-samples *t* test showed that beginning interprofessional healthcare students in the intervention group had statistically significant higher ($p < .05$) posttest scores in perceived transcultural self-efficacy than the beginning interprofessional healthcare students in the control group. Therefore, the results from this dissertation study suggest that beginning interprofessional healthcare students perceive an increase in transcultural self-efficacy in cultural competence instruction after observation of standardized patient actors in a videotaped role-play simulation. Furthermore, the results of this study indicate that observational learning (Bandura, 1977) from role models such as standardized patient actors can

transform (Mezirow, 1991) learners' perceptions of confidence in culturally sensitive care.

In the next chapter, summary and discussion of the key findings from this study are provided. In addition, in Chapter 5 of this dissertation study, I discuss the limitations found in this study and propose recommendations for further research. Finally, Chapter 5 concludes with statements on how this study contributes to the body of knowledge in adult education and the implications of this study for positive social change in healthcare education.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this quasi-experimental quantitative study was to determine to what extent there was a relationship between mode of instruction (observing role models who challenge assumptions about culture in a videotaped role-play simulation) and increased transcultural self-efficacy in cultural competence instruction in an IPE course about communication between beginning healthcare students and patients from specific cultural backgrounds. Conducting this study helped in understanding how different modes of instruction can encourage students to develop transcultural self-efficacy when responding to the needs of patients from different cultural backgrounds. In the case of this research study, the findings showed a significant difference between a standard lecture-based workshop and an observational learning activity in the form of a videotaped role-play simulation in helping students develop confidence in perceived transcultural self-efficacy.

Interprofessional beginning healthcare students responded favorably to the observational learning activity as a method of instruction that contributed to their resulting increase in transcultural self-efficacy when observing care of a female Muslim patient. As a result, healthcare educators can consider observational learning activities effective teaching methods in developing transcultural self-efficacy. Interprofessional beginning healthcare students who engaged in observational methods of learning were found to reflect on clinical experiences involving patients from different cultural backgrounds. To that end, similar observational methods may serve to encourage students' transcultural self-efficacy when dealing with other specific cultural

backgrounds and in this way promote positive social changes within the healthcare system.

In Chapter 5, I provide interpretations of the study findings and examine the limitations. In addition, I propose recommendations for future research that can address the limitations of the study. Finally, I discuss the implications that can demonstrate potential impact for positive social changes in the field of healthcare education.

Interpretations of the Findings

According to Mareno and Hart (2014), there is a close relationship between the number of individuals from different cultural backgrounds requiring health care and the need for theoretical and clinical instruction on cultural care that supports the practice of future healthcare professionals (Axtell et al., 2010; Jeffreys & Dogan, 2012; Kardong-Edgren et al., 2010; Larsen & Reif, 2011; Mihalic et al., 2010; Purnell, 2013). As a result, healthcare educators have used workshops or lecture-style teaching as the standard mode of instruction to encourage interprofessional beginning healthcare students to develop transcultural self-efficacy (Brathwaite & Majumdar, 2006; Chun et al., 2012; Eshleman & Davidhizar, 2006; Fleischmann et al., 2011; Hawala-Druy & Hill, 2012; Mihalic et al., 2010; Rogers-Sirin & Sirin, 2009). Additionally, role-play, task-training mannequins, and computerized animation are used by educational institutions to enhance and evaluate students' theoretical understanding and performance of culturally competent skills (Harder, 2010; Kesten, 2011; Khan et al., 2011; McCaughey & Traynor, 2010; Russell & Shepherd, 2010; Tokarczyk & Greenberg, 2011).

Transformative (Bowles, 2011; Clapp-Smith & Wernsing, 2014; Kozub, 2013; McDowell et al., 2012; Taylor, 2007) and observational (De Grez et al., 2014; Groenendij et al., 2013; Kempster & Parry, 2014) methods of teaching have been known to be effective. However, these had apparently not been intentionally applied to teaching and training for the development of transcultural self-efficacy before this study. This research involved cultural competence instruction via observation of a videotaped role-play simulation with an experimental group and cultural competence instruction via the traditional lecture-based workshop with a control group from a population of 240 interprofessional beginning healthcare students.

Paired-samples pre- and posttest analysis showed that beginning interprofessional healthcare students perceived a statistically significant increase in transcultural self-efficacy in cultural competence when observing role models engaging in appropriate and inappropriate communication with patients with a specific (in this case, Muslim) cultural background. The statistically significant increase was compared to the group of students who received cultural instruction via only the traditional lecture-based workshop. The favorable outcome results from the experiment can be explained by Bandura's (1977) claim that observation of good and bad behaviors is an effective way of learning such behaviors. Observation of certain behaviors can inform learners' future strategies and may explain the results from the experimental group in this study.

The observation from the role models' behaviors in the videotaped role-play simulation made a significant impact on the learners' self-perception of their transcultural self-efficacy in this study. This can explain the posttest scores being significantly

different from the posttest scores from the control group. Therefore, a prediction can be made that interprofessional beginning healthcare students may become more comfortable implementing appropriate communication techniques when caring for a patient from a specific cultural background after receiving cultural care instruction through observational learning methods. It may be inferred from the data analysis in this study that impact on posttest scores were a result of the attention paid to the specific characteristics, features, and nuances of behavior in the role model's actions observed by the intervention group participants (Bandura, 1977). Consequently, the implementation of specific characteristics, features, and nuances of behavior that resemble real-life interactions contribute to transformed pre-assumptions that influence learner's future practices.

Mezirow (1991) claimed that transformative learning led to the making of new meaning or knowledge as a result of learners' inherent commitment to welcome the potential for new perspectives. Similarly, interpretation of the observed information from the videotaped role-play simulation showed that students in the intervention group validated new and transformed perspectives on care and communication techniques for the female Muslim patient. This was evident in the significant differences between the pre- and posttest scores.

Transformational methods of teaching and learning were observed, in previous studies (Bowles, 2011; Kozub, 2013; Taylor, 2007), to contribute to an increase in deeper levels of critical reflection, confidence, and acceptance of others' differences. Similarly, the interventional method implemented in this study with its result seen in the posttest

scores supported that interpretation. Equally important is that the results in this study demonstrate that learners in the intervention group experienced an increase in cultural competence based on the method of learning that was observed in the videotaped role-play simulation and the results from the posttest scores. Given that cultural competence is the integration of a healthcare professional's self-confidence in cognitive, practical, and affective domains (Jeffreys, 2010), the observation of role models in the videotaped role-play that demonstrated these domains influenced the learners' transcultural self-efficacy.

Jeffreys (2010) contended that the learner's level of confidence in cultural care is acquired when the learner's own perception of confidence is influenced by a predetermined situational event. In this dissertation study, the observational event provided to learners in the experimental group explained the significant increase in transcultural self-efficacy in posttest scores when compared to learners in the control group who received the traditional method of instruction. Because cultural competence is greatly influenced by the level of confidence that a healthcare provider has (Jeffreys, 2010), it is important to develop innovative educational activities, such as observational methods of learning, that transform learners' presumptions regarding cultural care and help to increase transcultural self-efficacy toward effective, culturally competent care.

Limitations of the Study

This dissertation study involved a convenience sample within one community college that implied threats to external validity and the potential for limited generalizability. However, the convenience sample and the results obtained from this research study offer inferences that support a level of generalizability that can represent

beginning healthcare students' transcultural self-efficacy when taking an IPE course with instruction in cultural competence. However, threats to external validity can be better addressed in future students by the randomization of participants to the control and experimental groups of a wider population of interprofessional beginning healthcare students from multiple educational institutions. Maturation was not expected to be an issue in this study.

The instrument selected for this study allowed for the operationalization of variables in predictable ways to help address threats to construct validity. In addition, designing this study as a quasi-experimental design allowed for the use of statistical tests and analysis in order to interpret the collected data. Finally, validated and tested instruments that helped to standardize the reliability and implementation of pretests and posttests addressed statistical conclusion validity. These were measures implemented in order to address the limitations and biases encountered in this dissertation study.

Recommendations

Interprofessional beginning healthcare students need to learn effective ways of providing culturally competent care. Consequently, these learners need to acquire the necessary transcultural self-efficacy that will help them effect positive and effective caring outcomes that meet the individual needs of every patient they encounter. Observational methods of learning that promote a transformative experience for future interprofessional beginning healthcare students will empower such learners to achieve this goal (Clapp-Smith & Wernsing, 2014; Kozub, 2013; Mareno & Hart, 2014; Rogers-Sirin & Sirin, 2009; Schim et al., 2006). For this dissertation, I examined the differences

that existed between two teaching methods and found that the method involving observation of a videotaped role-play simulation that demonstrated effective culturally sensitive touch and communication techniques when caring for a patient from a specific cultural background appeared to produce a positive increase in transcultural self-efficacy in interprofessional beginning healthcare students. Therefore, several recommendations emerged as a result of this study.

First, this study looked at group differences between the dependent variable of transcultural self-efficacy and teaching methodology that influences transcultural self-efficacy. However, examining the correlations between the variables and the learners' application of transcultural self-efficacy into role-played simulated experiences may be beneficial for a future study. This would lend itself to the exploration of relationships between methods of instruction that equip learners to not only perceive but also effectively implement transcultural self-efficacy into culturally competent behaviors within a caring environment.

Second, future studies could address how transcultural self-efficacy is related between different age groups and genders of interprofessional beginning healthcare students. There may be specific differences between individuals' perceptions of self-efficacy that relate to their personal views on social norms regarding age and gender and the impact these have on effective culturally competent care within healthcare. This may further inform the practice of healthcare educators on how student learning, age, and gender differences can influence receptiveness toward the adoption of cultural competence skills.

Third, subsequent studies should consider implementing research designs such as repeated measures analysis of variance in order to identify differences in mean scores for transcultural self-efficacy within groups. The use of a qualitative research design using open-ended questions may provide insight on students' perceptions of the effectiveness of the observational method of instruction in promoting cultural competence.

Finally, future research is needed to study the impact that participants' previous life experiences and exposures to multicultural events have on their cultural competence within clinical placement. This will help inform the practice of healthcare educators when considering ways of teaching and learning that encourage student centeredness and culturally sensitive care.

Implications

This research study has positive change implications for the field of healthcare education and may have an indirect impact on the healthcare of patients from different cultural backgrounds. To that end, this research study offers evidence that an observational learning activity in the form of a videotaped role-play simulation can be significantly helpful in students' development of transcultural self-efficacy when responding to the needs of potential patients from different cultural backgrounds. Similarly, the results from this study have impacts on multiple levels.

Without this study, healthcare educators and learners could attempt to make sense of what strategies can be incorporated in order to find ways of meeting the unique cultural healthcare needs of patients. However, this research study demonstrated consideration for specific learning activities that focus on the uniqueness of cultural

behaviors and communication between healthcare professionals and patients. Therefore, the observational learning activity used in this dissertation study can help to produce positive changes in the practice of healthcare educators when developing culturally sensitive curriculum. Furthermore, knowing teaching methods that help educators facilitate an increase in the level of confidence of learners will in turn inform the future practice of interprofessional beginning healthcare students with every cultural care encounter.

Learners who engage in educational activities that help them increase their transcultural self-efficacy may help them to assert their confidence within a learning or clinical environment. As a result, their level of confidence could enhance their delivery of healthcare so that it is competent and safe. Addressing the need to equip and prepare interprofessional beginning healthcare students for the development of transcultural self-efficacy will ensure that upon graduation, healthcare students will be ready to become effective members of the healthcare system. Consequently, this study promotes the implementation of an observational educational method that engages both educator and learner to promote a healthy society regardless of social class, belief, and culture.

Conclusion

The development of transcultural self-efficacy is important in order to meet the healthcare needs of patients from different cultural backgrounds (Halter et al., 2014; Jeffreys & Dogan, 2010). There has been a growing need to research educational theories that can inform the teaching of interprofessional beginning healthcare students on how to gain confidence in the use of culturally competent skills before caring for patients from

different cultural backgrounds. Therefore, this dissertation study provided an opportunity to research the potential for a new teaching strategy using adult learning theories such as transformative (Mezirow, 1991) and observational (Bandura, 1977) learning.

A quasi-experimental quantitative study was used to determine to what extent there was a relationship between mode of instruction (observing role models that challenge assumptions about culture in a videotaped role-play simulation) and increased transcultural self-efficacy in cultural competence instruction in an IPE course that teaches about communication between beginning healthcare students and patients from specific cultural backgrounds.. In other words, was the perceived transcultural self-efficacy of interprofessional beginning healthcare students within an interprofessional education (IPE) course the same or different between an observational approach to learning (observation of a videotaped role-play simulation) and a traditional lecture-based workshop on cultural competence? Using the TSET (Jeffreys, 2010) to measure learner transcultural self-efficacy before and after administration of the traditional and experimental methods of instruction, this study sought to answer the following research question: To what extent was there a relationship between mode of instruction (lecture-based workshop or observation of a videotaped role-play simulation) and increased transcultural self-efficacy in cultural competence instruction?

Data were collected in the pre- and posttest and analyzed for an actual sample size of 198 matched pairs of interprofessional beginning healthcare students. Paired-samples *t* test analysis showed that the observation of videotaped role-play simulation was statistically significant in increasing transcultural self-efficacy perception in the cultural

competence instruction of learners. Healthcare students do not need to wait until after they graduate from their program of study in order to begin to understand how to effectively meet the needs of patients from different cultural backgrounds.

The results from this research study can be used to advance the existing educational curricula with a mandate to provide instruction on competent clinical practices for future interprofessional healthcare professionals. I am confident that this dissertation study provides a solid foundation for future educational research in the area of cultural competence through transcultural self-efficacy. In addition, this research demonstrates that videotaped role-play simulation based on educational theories like observational and transformative learning improves transcultural self-efficacy in interprofessional beginning healthcare students. Based on the results of this study the implications for positive social change are that videotaped role-play simulation may be used in the curricula of educational healthcare systems to promote positive changes in the transcultural self-efficacy of learners.

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Appendix A: Transcultural Self-Efficacy Tool—Multidisciplinary Healthcare Provider (TSET-MHP)

For the purposes of this study, to maintain your privacy and confidentiality, the researcher is asking you to create your own 8 digit Code number. The 8 digit code has no meaning other than to match pre- and post-test instruments for the same participating student at the time of data analysis. To create your 8 digit code number, please write the information into the following fields:

1. Your year of Birth. For example if you were born on 1995, you would write "1995"
    a. Write your year of Birth here: _____
2. Your last 4 digits of your personal phone number. For example, if your personal phone number is 905-112-2233, you would write "2233"
    a. Write your last 4 digits of your personal phone number here: _____
3. Your new 8 digit code. For example, based on the examples above, the new 8 digit code would be "19952233"
    a. Now write your own 8 digit code based on your Birth year and last 4 digits of your personal phone number: _____

Before starting the questionnaire, please answer the following. Which of the following cultural backgrounds have you had prior exposure within a clinical setting. Circle your option (you may select more than one):

A) Hispanic

B) Native Canadian

C) Muslim

Transcultural Self-Efficacy Tool – Multidisciplinary Healthcare Professional (TSET-MHP)

Throughout your education and career as health care providers, faculty, or students, you will be caring for clients of many different cultural backgrounds. These clients will represent various racial, ethnic, gender, socioeconomic, and religious groups.

Cultural difference exists in health care needs, caring, and curing practices. Knowing and understanding cultural factors related to client care helps establish a theoretical foundation for providing culture-specific health care.

The most effective way to identify specific cultural factors that influence client behavior is to conduct a cultural assessment of each client. This is best done by interview.

Right NOW, how confident are **YOU** about **interviewing clients of different cultural backgrounds** to learn about their values and beliefs?

Rate your degree of confidence or certainty for each of the following **interview topics**. Please use the scale below and circle the number that represents your level of confidence.

How comfortable are you right now interviewing clients of different cultural backgrounds about:	Not Confident 1	2	3	4	5	6	7	8	9	Totally Confident 10
(1) language preference	1	2	3	4	5	6	7	8	9	10
(2) level of English comprehension	1	2	3	4	5	6	7	8	9	10
(3) meaning of verbal communication patterns	1	2	3	4	5	6	7	8	9	10
(4) meaning of nonverbal behaviors	1	2	3	4	5	6	7	8	9	10
(5) meanings of space and touch	1	2	3	4	5	6	7	8	9	10
(6) time perception & orientation	1	2	3	4	5	6	7	8	9	10
(7) racial background & identity	1	2	3	4	5	6	7	8	9	10
(8) ethnic background & identity	1	2	3	4	5	6	7	8	9	10
(9) socioeconomic background	1	2	3	4	5	6	7	8	9	10
(10) religious background & identity	1	2	3	4	5	6	7	8	9	10
(11) educational background & interests	1	2	3	4	5	6	7	8	9	10
(12) religious practices & beliefs	1	2	3	4	5	6	7	8	9	10
(13) acculturation	1	2	3	4	5	6	7	8	9	10
(14) world view (philosophy of life)	1	2	3	4	5	6	7	8	9	10
(15) attitudes about healthcare technology	1	2	3	4	5	6	7	8	9	10
(16) ethnic food preferences	1	2	3	4	5	6	7	8	9	10
(17) role of elders	1	2	3	4	5	6	7	8	9	10
(18) role of children	1	2	3	4	5	6	7	8	9	10
(19) financial concerns	1	2	3	4	5	6	7	8	9	10
(20) traditional health & illness beliefs	1	2	3	4	5	6	7	8	9	10
(21) folk medicine tradition & use	1	2	3	4	5	6	7	8	9	10
(22) gender role & responsibility	1	2	3	4	5	6	7	8	9	10
(23) acceptable sick role behaviors	1	2	3	4	5	6	7	8	9	10
(24) role of family during illness	1	2	3	4	5	6	7	8	9	10
(25) discrimination & bias experiences	1	2	3	4	5	6	7	8	9	10
(26) home environment	1	2	3	4	5	6	7	8	9	10
(27) kinship ties	1	2	3	4	5	6	7	8	9	10
(28) Aging	1	2	3	4	5	6	7	8	9	10