THE IMPACT OF INTERNATIONAL SERVICE LEARNING ON HEALTH PROFESSION STUDENTS‟ CULTURAL COMPETENCE

THESIS

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THE IMPACT OF INTERNATIONAL SERVICE LEARNING ON HEALTH PROFESSION STUDENTS‟ CULTURAL COMPETENCE

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ABSTRACT

THE IMPACT OF INTERNATIONAL SERVICE LEARNING ON HEALTH PROFESSION STUDENTS‟ PERCEPTIONS OF CULTURAL COMPETENCE

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In this study, the Social Cognitive Theory was used as a framework to assess the impact of international service learning on health profession students‟ cultural competence. A purposive sample of 16 health profession students participated in a two-week international service learning trip to Central America in March of 2010. Participants worked in urban and rural areas of Costa Rica and Nicaragua, respectively, providing health care and health education to local community members. Mixed methodology was used, including pre & post-trip survey and follow-up telephone interview. The survey addressed students‟ frequency and familiarity in working with individuals from other cultures. Six interview questions were created to reflect common

themes found in the results of the quantitative data, and participant interviews were conducted over the telephone by the principal investigator. Results from the study indicated that international service learning positively impacted students‟ perceptions of cultural competence. Students who participated in the international service learning opportunity reported increased levels of confidence in working with individuals from different cultures; increased self-efficacy was a common theme resulting from the experience as well.

Key words: international service learning, health, cultural competence.

CHAPTER 1

INTRODUCTION

Introduction

As cultural diversity increases, the concept of cultural competency has caused the treatment of people from different cultural backgrounds to become a pivotal issue (Luquis & Perez, 2003; Luquis, Perez, Young, 2006). Individuals working within a cultural context with which they are not familiar can benefit from developing their cultural competence (Chang, 2007; Luquis & Perez, 2003). Immersing health promotion students into another country‟s culture can be an effective method of promoting and enhancing cultural competency (Goldberg & Coufal, 2009). Increasing cultural awareness in future health professionals may potentially increase effectiveness of health promotion programs; Yet, given the complex nature of culture itself, it is necessary that individuals working within different cultures develop cultural competence through a multi-dimensional approach to increase effectiveness and enhance learning (Chang, 2007; Jackson, 2008; Luquis & Perez, 2003; Luquis et al., 2006). Service learning provides individuals with the opportunity to connect formal learning with the realities of actual human-service settings (Diambra, McClam, Fuss, Burton, Fudge, 2009; Goldberg & Coufal, 2009).

The practice of service learning paired with an opportunity to engage in various cultures enhances overall learning, leading to a potentially transforming experience for the participant (Diambra et al., 2009; Goldberg & Coufal, 2009). Service learning on an international level may offer opportunities for enhancing academic achievement and professional development (Knutson-Miller & Gonzalez, 2009). Potential outcomes include improved critical thinking skills and a greater appreciation of cultural diversity, expanded notions of community, and awareness of global issues (Jackson, 2008; Knutson-Miller & Gonzalez, 2009). It is often argued that international service learning opportunities are potentially transformative in nature, by allowing individuals to expand their "comfort zone" while enhancing their abilities to view the world from multiple perspectives, and enhancing personal and professional flexibility (Goldberg & Coufal, 2009; Knutson-Miller & Gonzales, 2009).

This study was conducted to better understand the impact of international service learning on health professional students" perceptions of cultural competence. The Social Cognitive Theory (SCT) was used as the theoretical framework for this study. The SCT proposes that the majority of human learning occurs in a social environment, because dynamic social settings encourage interactions between environment, behaviors, and personal perceptions (Glanz, Rimer, Viswanath, 2008). A pre and post-trip survey instrument was used to guide the development of interview questions for individual interviews with participants, the primary focus of this thesis study.

The pre and post-trip survey sought to measure participants" knowledge, feelings and actions when working with various cultures in a professional health setting. Students

were sent invitations through university email to participate in the pre-survey, which was conducted prior to a two-week service learning trip to Central America (Costa Rica and Nicaragua), and the post-survey, which was administered within a three week period of returning to the United States from the service learning trip.

Data from the pre and post-trip survey were collected and consolidated using SurveyMonkey.com. Data from participant interviews were collected by the principle investigator and results, along with the SCT, guided the development of a six-question interview guide used to conduct individual telephone interviews with participants.

The participant interviews, which were the primary focus of this thesis study, were conducted to better understand student perceptions of personal cultural competence change in conjunction with their participation in an international service-learning program in Central America. The interview questions were intended to measure students‟ knowledge, feelings, and actions regarding their interactions within the international health promotion, health care, and service environments.

The sample for this study consisted of 16 students; three graduate students from Texas State University-San Marcos pursuing Master of Health Education degrees, and 13 undergraduate students from Valparaiso University enrolled in degree programs in the fields of nursing, pre-medical, pre-dental and pre-optometry. Participants were primarily recruited by electronic communication. The study was approved by Texas State‟s Institutional Review Board (IRB) on February 17, 2010 prior to the initiation of the study. Each participant completed a minimum of eight hours of cultural diversity training

prior to departure. Students met under the direction of the supervising faculty member that would be traveling with the students. The training took place in a classroom setting and used lecture and discussion as the main methods for instruction and preparing for the trip. All students who participated in the trip were invited to participate in telephone interviews that were conducted to better understand the impact of international service learning on health professional students‟ perceptions of cultural competence. The interviews took place in September, 2010 and each interview lasted approximately 20 minutes. The data from the telephone interviews were recorded, transcribed and entered into the qualitative data software NVivo. Data were coded and reports were run to determine the frequency of various constructs of the SCT within the participant interviews. The recurring themes and patterns found were noted and discussed.

Significance of Problem

Academic service learning is an experience that can be beneficial for most students. Participation in service-learning can unite experiential components, civic engagement, and classroom activities (Goldberg & Coufal, 2009). Ultimately, the goal of service learning is to enhance students‟ sense of civic responsibility while fulfilling the academic objectives (Goldberg & Coufal, 2009; Urraca, Ledoux, Harris, 2009). International and intercultural travel is now a common experience for post-secondary students across the U.S. with short-term service learning opportunities steadily gaining popularity (Urraca et al., 2009).

Although many definitions of service learning exist, the majority of service learning projects have three common objectives: (1) to meet a community need, (2) to

develop professionally through learning outcomes and (3) to offer students structured opportunities for reflection (Urraca et al., 2009). Further, Amerson (2010) suggests that service learning is a form of experiential education in which students engage in activities that address community and human needs together. Opportunities are then intentionally designed to promote student learning and development (Goldberg & Coufal, 2009).

As a whole, the practice of service learning is an increasingly accepted method for providing students with culturally relevant teaching and an opportunity to enhance experiential learning (Goldberg & Coufal, 2009). On a professional level, student participation in service learning provides innovative opportunities to use newly acquired skills and knowledge in real-life situations. Service learning may also enhance material taught in schools and allow students the opportunity to develop a sense of caring for others on a local, national, or global level (Amerson, 2010).

Improving cultural competence in an increasingly multicultural world has become an ethical necessity and professional expectation in the nursing field (Smith-Miller et al., 2010). Cultural competence draws on adult learning principles, emphasizing the direct applicability of knowledge and self-identification of learning needs and experience; together these suggest that immersion may be the best method to encourage students‟ development of cultural competence (Smith-Miller, Leak, Harlan, Dieckmann, Sherwood, 2010).

According to Smith-Miller et al., (2010) cultural competence is an ongoing developmental process requiring experiences and contexts in which cultural competence

constructs are integrated; unlike clinical skills that are learned, demonstrated, and then performed. That being said, increased cultural competence has the potential to expand health profession students‟ insights into multicultural care (Luquis & Perez, 2003). Participation in global health experiences is an effective strategy for changing health profession students‟ knowledge, attitudes and skills; it can contribute to enhanced culturally-competent practice in any setting (Smith-Miller et al., 2010).

Need for the Study

To prepare for community engagement, health professionals must understand the skills needed to work within diverse communities (Amerson, 2010; Goldberg & Coufal, 2009). The National Commission for Health Education Credentialing Incorporated (NCHEC) performed a job analysis to develop the *Responsibilities and Competencies of Health Education Specialists.* The established responsibilities for health education specialists act as a framework for creating and developing strategies to improve the delivery of health education. *Responsibilities and Competencies of Health Educators* is categorized into seven responsibilities and corresponding competencies and sub-competencies (National Commission for Health Education Credentialing, 2010). Listed below are the applicable sub-competencies that address the importance of this study (Table 1).

Table 1
Responsibility VII Communicate and Advocate for Health and Health Education

Competency A: Analyze and respond to current and future needs in health education.
Sub-competencies:
1.Analyze factors (e.g., social, cultural, demographic, political) that influence decision-makers
Competency B: Apply a variety of communication methods and techniques.
Sub-competencies:
1. Assess the appropriateness of language in health education messages.
2. Compare different methods of distributing educational materials.
3. Respond to public input regarding health education information.
4. Use culturally sensitive communication methods and techniques.
5. Use appropriate techniques for communicating health education information.
6. Use oral, electronic and written techniques for communicating health education information.

Research Question

In order to understand how international service learning influences health profession students, the following research question was asked: What is the impact of international service learning on health profession students‟ perceptions of cultural competence?

Basic Assumptions

For this study, it was assumed that participants have knowledge, feelings and actions associated with cultural competency issues that should be explored. Another assumption was that all participants answered the interview questions openly and honestly thus providing accurate and detailed responses.

Delimitations

The study was delimited to the health professional students who participated in the service learning trip to Central America in the spring 2010 semester and agreed to participate in the telephone interview. All students participating in the service learning trip to Central America were invited to participate in the telephone interview, and all subjects participated voluntarily. Demographics of the student participants were primarily Caucasian female students. Further, the interview relied on self-reported data from the participants potentially resulting in skewed and unverifiable data.

Theoretical Background

The Social Cognitive Theory (SCT) was used as the theoretical framework for this study (Table 2). Constructs from the SCT in this study examined the effect of practical experience on cultural perceptions. The SCT proposes that the majority of human learning occurs in a social environment, because dynamic social settings encourage interactions between environment, behaviors, and personal perceptions (Glanz, Rimer, Viswanath, 2008).

Table 2

Major Concepts in Social Cognitive Theory

Constructs	Definition
Environment	Factors physically external to the person
Situation	Persons perception of the environment
Expectations	Anticipatory outcomes of a behavior
Observational Learning	Behavioral acquisition that occurs by watching the actions and outcomes of others behavior
Reinforcement	Responses to a person‟s behavior that increase or decrease the likelihood of reoccurrence
Self-Efficacy	The persons confidence on performing a particular behavior
Reciprocal Determinism	The dynamic interaction of the person, the behavior, and the environment in which the behavior is performed.

Data Collection

Pre-survey data were collected within five days of departure for a two-week service learning trip to Central America. Students then left their respective campuses and departed for San Jose, Costa Rica between February 26 and 28 and the post-survey data were collected within three weeks of returning to the United States. This was designed to assess the students‟ perceptions after the experience, whether their perceptions had changed since the beginning of the experience. Data from the pre and post-assessments were collected using SurveyMonkey.com; the quantitative data were then analyzed and interview questions were created for the second portion of the study. Participant interviews were conducted in September 2010 to measure the student perceptions of personal change in conjunction with their participation in an international service learning program in Central America.

Six interview questions were derived from the study„s pre and post-survey. Additional prompt questions were directed towards the participants to enhance the interviews. The interview questions probed for information pertaining to the students‟ understanding of cultural competence and its relation to their professional background. Data from participant interviews were collected telephonically by the principle investigator and later transcribed.

Each person that participated in the Central America trip received an email invitation to participate in the interview. The researcher then scheduled a date and time to call the participants. The principle investigator provided an overview of the study a statement of confidentiality and informed the participants that their interview would be recorded for transcription purposes. The participants provided oral consent and the interview commenced. Each interview lasted approximately 20 minutes.

Data Analysis

Quantitative data from the pre and post surveys were consolidated in SurveyMonkey and analyzed by the principle investigator. When comparing the pre-trip survey with the post-trip survey, the data indicated that participants increased their overall cultural competency as a result of participating in the international service learning trip.

Specifically, the data showed an 18% increase in participants‟ competence in working with people who are from cultures different from their own. The data also showed a 20% increase in opinion that race is not the most important factor in determining a person‟s culture. This is not surprising because 92% of post-survey

participants disagreed that knowing a person‟s culture could eliminate the need to assess their personal preferences for health services, whereas only 80% of participants agreed in the pre-survey. Additionally, the data showed a 22% increase that participants would remove obstacles for people of different cultures when barriers to services have been identified.

Common themes from the data, along with specific constructs from SCT were then used to create interview questions for the qualitative assessment. The interview questions were created to gather feedback that would provide additional data to assess the effect of international service learning on student‟s cultural competence. This was done to enhance the data from the pre and post-trip surveys as a numerical scale survey may not capture the true depth of how the students were impacted by the experience. The interview questions are listed below (Table 3).

Table 3

Central America Service Learning Post Trip Participant Interview Guide

	Interview Item	Applicable Construct of Social Cognitive Theory
1.	Throughout your professional preparation what was the impact of international service learning on your health profession practice?	Environment, Situation, Observational Learning, Reinforcement, Self-Efficacy, Reciprocal Determinism
2.	After your international service learning opportunity how do you feel working with others from cultures different from your own?	Reinforcement, Self-Efficacy
3.	After your international service learning opportunity how confident do you feel in your skills in working with others from cultures different from your own?	Reinforcement, Self-Efficacy
4.	How did individuals in your personal and professional circles react to your participation in this international service learning opportunity?	Expectations
5.	Do you think students participating in international service learning would benefit from additional cultural diversity training prior to international service learning experiences?	Expectations, Self-Efficacy, Situation
6.	Are there any additional thoughts or comments you would like to add about your international service learning experience?	Expectations, Self-Efficacy, Situation

Upon the completion of each interview, recorded data were transcribed and entered into qualitative data analysis software NVivo. The principle investigator identified categories for classifying participant responses and the data were coded. Reports were run to determine the frequency of SCT constructs mentioned within

participants‟ interviews. Emerging themes and categories were identified upon further review.

CHAPTER 2

METHODOLOGY

This chapter is a description of the methodology used for the study exploring the impact of international service learning on health profession students‟ perception of cultural competence. The chapter has been organized into the following sections: statement of purpose, statement of the problem, design of the study, description of the participant population, study timeline, data collection procedures, and data analysis methods that were utilized in this study.

Statement of Purpose

This study was conducted to better understand the impact of international service learning on health professional students‟ perceptions of cultural competence. The Social Cognitive Theory (SCT) was used as the theoretical framework for this study (Table 4). Constructs from the SCT were used to examine the effect of practical experience on cultural perceptions. The SCT proposes that the majority of human learning occurs in a social environment, because dynamic social settings encourage interactions between environment, behaviors, and personal perceptions (Glanz et al., 2008).

Table 4
Major Concepts in Social Cognitive Theory

Constructs	Definition
Environment	Factors physically external to the person
Situation	Persons perception of the environment
Expectations	Anticipatory outcomes of a behavior
Observational Learning	Behavioral acquisition that occurs by watching the actions and outcomes of others behavior
Reinforcement	Responses to a person‟s behavior that increase or decrease the likelihood of reoccurrence
Self-Efficacy	The persons confidence on performing a particular behavior
Reciprocal Determinism	The dynamic interaction of the person, the behavior, and the environment in which the behavior is performed.

Research Question

What is the impact of international service learning on health profession students‟ perceptions of cultural competence?

Study Design

This study employed a mixed methodology design, utilizing both quantitative and qualitative data to enrich the findings and provide comprehensive results. Quantitative data provided measurable results to illustrate the significance of the students perceived changes in perception of cultural competence, while qualitative data allowed for understanding students perceptions of cultural competence.

Pre and Post-Trip Survey Instrument Design

The quantitative instrument used to elicit students‟ perceptions of cultural competence was created by Schim, Doorenbos, Miller, Benkert, (2003). The instrument

known as the Cultural Competence Assessment (CCA) was derived from the Schim and Miller Cultural Competence Model (SMCCM) which consists of four components: Cultural diversity, cultural awareness, cultural sensitivity, and cultural competence behaviors (Schim et al., 2003). The instrument was intended to assess hospice employees and volunteers‟ cultural competence, initially including 45 items that were developed and piloted by Schim et al., (2003). The initial survey included six items addressing the construct of cultural diversity experience, while providing demographic information. Two close-ended questions included identification of racial/ethnic/cultural groups encountered by participants in the past year, and personal racial/ethnic cultural group association. Four demographic items assessed diversity of age, educational level, years of practice, and professional affiliation. Three subscales of the CCA include cultural awareness, sensitivity, and competence behaviors. Eleven items addressed the construct of cultural awareness. Ten items were initially developed for the cultural sensitivity construct using the same format and response set as the cultural awareness subscale. Item stems were written to describe personal attitudes, beliefs, and feelings that reflect aspects of cultural sensitivity. Seventeen items were developed to assess the construct of cultural competence behaviors (p. 31, 33).

The instrument was reviewed by an expert panel to establish content and face validity. After the initial review the instrument underwent a field test (n=7) followed by a pilot test (n=113) among hospice workers (Schim et al., 2003). The internal consistency reliability measures of the CCA instrument in initial testing were (α=.92) (Schim et al., 2003). Concluding the pilot testing final revisions to the instrument were made. The

final CCA survey tool consisted of seven multiple choice items on diversity, eight rated agreement items regarding cultural awareness and sensitivity, one item rating overall comfort, one item indicating previous training, and one open-ended item for participants to describe their previous training (Schim et al., 2003).

The instrument used in the present study was modified from the final CCA tool, and was designed to assess whether health profession students‟ perceptions had changed as a result of their participation in the international service learning opportunity. Modified from the CCA instrument developed, reviewed and tested by Schim et al., (2003), survey items were intended to gather information about how participants personally think, feel, and act regarding cultural competence.

Telephone Interview Instrument Design

Qualitative interview data provided insight into the students‟ international service learning experiences through the participants‟ description of perceived impact of significant events. Interview questions were created by utilizing the results from the pre and post-trip survey. Quantitative data from pre and post-assessments were consolidated into a printed report, and results were analyzed to determine if responses had changed as a result of the international service learning trip. Common themes from the data, such as significant shift in response towards participants‟ cultural competence, and specific constructs from the SCT were used to create interview questions for qualitative interview guide. The following interview questions were utilized to elicit each participant‟s perceptions of how the international service learning experience impacted their views on cultural competence (Table 5). Questions also sought to examine students‟ understanding

of cultural competence and its relation to professional background without leading, or biasing the interviewees‟ thoughts. Additional prompts, explanation of terms to the questions were used, when necessary, to enhance the participants understanding of the question, with the intention of enhancing interview data or participant response.

Table 5

Central America Service Learning Post Trip Participant Interview Guide

	Interview Item	Applicable Construct of Social Cognitive Theory
1.	Throughout your professional preparation what was the impact of international service learning on your health profession practice?	Environment, Situation, Observational Learning, Reinforcement, Self-Efficacy, Reciprocal Determinism
2.	After your international service learning opportunity how do you feel working with others from cultures different from your own?	Reinforcement, Self-Efficacy
3.	After your international service learning opportunity how confident do you feel in your skills in working with others from cultures different from your own?	Reinforcement, Self-Efficacy
4.	How did individuals in your personal and professional circles react to your participation in this international service learning opportunity?	Expectations
5.	Do you think students participating in international service learning would benefit from additional cultural diversity training prior to international service learning experiences?	Expectations, Self-Efficacy, Situation
6.	Are there any additional thoughts or comments you would like to add about your international service learning experience?	Expectations, Self-Efficacy, Situation

The qualitative instrument used to elicit students‟ perceptions of cultural competence was reviewed for content validity by the thesis committee members. The thesis committee was comprised of four graduate faculty members within the Department of Health and Human Performance at Texas State University-San Marcos. Following the review of the interview guide by the thesis committee for content validity, recommendations for editorial changes were reviewed, accepted, and the changes were made to the interview guide. These changes were primarily editorial, altering wording of a question for improved clarity. Due to the small sample size a pilot study was not performed. During the late stages of the first interview, the principle investigator decided to add a sixth item to the interview guide to obtain any additional feedback that the student may have had regarding the international service learning experience that may not have been addressed in the preceding interview questions.

Participant interviews were conducted to understand the student perceptions of personal change. Additional prompts to the questions were used, when necessary, to enhance the interview data. Questions probed for information pertaining to students‟ understanding of cultural competence and its relationship to professional background.

Sample

Purposive selection was used to acquire participants for this study. All health professional students who were invited to participate in the study also participated in the international service learning trip to Central America in March of 2010. The sample for this study was a group comprised of 16 participants; 15 females and one male. A closer

inspection of the sample population demographics reveals that there were three graduate students and 13 undergraduate students who were predominantly Caucasian females, ages 19-27 years. Few of these students had any prior international travel experiences and they represented a variety of health profession majors, as well as varying degrees of Spanish language proficiency (Table 6).

Table 6

Participant Demographics

Demographic Variables	n	n	n
Gender	Male 1	Female 15	
Academic Classification	Graduate 3	Undergraduate 13	
Ethnicity/Race	Caucasian 9	Asian American 2	Missing 5
Proficiency in Spanish Language	Yes2	No 9	Missing 5
Prior International Service Learning Experience	Yes 2	No 9	Missing 5
Declared Major	Nursing 8	Health Education 3	Missing 5

The students participating in the service learning opportunity worked with a multidisciplinary team as part of a service learning trip to underserved urban and rural locations. Service opportunities included working directly with physicians to assist in minor treatments, dispersing medications in the pharmacy, teaching basic hygiene and dental care, administering vitamins and parasitic medications, providing health education, and conducting field research by interviewing local residents, as well as taking digital photographs and Global Positioning System (GPS) data points of the interview location.

Fluency in Spanish was not a prerequisite for the trip, and all students had the opportunity to work with locally contracted translators in order to communicate with residents of both communities.

Students also had the opportunity to make home visits that allowed them firsthand knowledge of the poverty, culture, and health care in these Central American countries. Over the course of the trip, students were exposed to a culture that was significantly different from their own, in which poverty was apparent and obviously different in kind and degree from the poverty that students were used to seeing at home.

The service learning project consisted of three to four days of health care administration and education in a clinic at a church in Pavas, an urban community located within the city of San Jose, Costa Rica (Figure 1). In addition, the trip also included seven days of health care administration, health education, and field research at a clinic in La Palma, a rural community located on Ometepe Island, in Nicaragua (Figure 2).

Figure 1. Map of Costa Rica.

Figure 2. Map of Nicaragua.

All participants completed a minimum of eight hours of orientation to their community experience prior to beginning their international service learning trip. Students met under the direction of a supervising faculty member that would be traveling

with the students. In general, students met in a classroom setting with lecture and discussion as the main methods for instruction and preparing for the trip. Infectious disease education and culturally relevant topics such as language, interpersonal communication, and local cuisine, hygiene, and safety considerations were also discussed.

Data Collection

Prior to data collection, the study received approval from the IRB at Texas State University-San Marcos on February 17, 2010. There were no risks to participation in this study. Participants were not under any coercion to participate in the research. Participants were free to stop their participation in the study at any time without penalty. None of the students interviewed nor the students who completed the pre and post-trip surveys had names included in the data. In addition, the participants contact information was secured in a locked cabinet in the principle investigators office, unavailable to anyone other than the principle investigator.

Pre and Post-Trip Survey Instrument Data Collection

The Global Health- Central America survey instrument was designed to assess the knowledge, feelings, and actions of students when they interact with others in the context of health care and health service environments and in academic settings. The 43 item survey contained Likert, and close-ended and demographic questions. The web-based survey tool SurveyMonkey was utilized in the facilitation of the pre and post-trip survey instruments. To assist in the data collection process for the pre and post-trip survey,

participants received an email inviting them to participate in the study. Specific directions to complete the survey were located on the questionnaire. Each of the pre and post-trip surveys took approximately 20-30 minutes to complete. The pre-trip survey was conducted within five days of departure for a two-week service learning trip to Central America from February 28- March 12, 2010. The post-survey was conducted upon completion of the trip within a three week period of returning to the United States, ending on April 2, 2010.

Telephone Interview Data Collection

In order to facilitate the data collection processes for the interview, participants received an email invitation from the principal investigator to participate in the telephone interview. As participants responded, the researcher communicated with the participants to schedule a specific date and time to conduct the interview. On the date of the scheduled interviews, the principle investigator contacted participants via text message 15 minutes prior to the scheduled interview to remind the participant of their interview time. This action served two purposes, first to remind the participants of their scheduled interview, and second, to make them aware of the phone number they would be contacted by. This prevented any participants from screening the incoming phone call from a number they may not have recognized. The principle investigator began each interview with a statement of confidentiality, as well as a description of the study. Participants were informed that their interview would be recorded for transcription purposes. Participants then provided oral consent to the principle investigator and the interview commenced. Each interview lasted approximately eight to 20 minutes.

Pre and Post-Trip Survey Data Analysis

On May 18, 2010 a response summary from the pre-trip (n=10) and post-trip (n=13) survey was printed and analyzed by the principle investigator. This was done to determine if a shift in student perception of cultural competence occurred. The principle investigator and thesis committee chair compared the response summaries from pre-trip survey to the post-trip survey and identified increases, decreases or no changes in participant response for each survey item on the copy of the post-survey printout. Results of the survey analysis were recorded and discussed by the principle investigator and thesis committee chair. Qualitative interview questions were then created by the principle investigator and verified by thesis committee to reflect the students‟ survey response.

Telephone Interview Data Analysis

Upon completion of the telephone interviews (n=13), recorded interviews were uploaded onto an electronic file and then transcribed. Transcribed interviews were entered into the qualitative data analysis software NVivo. Individual nodes were created for the SCT constructs applicable to this study. Participant interviews were coded to identify the occurrence and frequency of SCT constructs in the participants‟ responses to the interview questions. Upon completion of the data coding, a free node summary report and coding summary report were run to determine the frequency of SCT construct references from the participants. Emerging themes and trends were identified and are discussed in Chapters 3 and 4.

CHAPTER 3- Manuscript for Publication

According to guidelines for authors: The Health Educator

The Impact of International Service Learning on Health Profession Students‟ Cultural Competence

Abstract:

This study used constructs from the Social Cognitive Theory to assess the impact of international service learning on health profession students‟ cultural competence. A purposive sample of 16 health profession students participated in a two-week international service learning trip to Central America in March 2010. Participants worked in urban and rural areas of Costa Rica and Nicaragua, providing health care and health education to local community members. This study utilized employed a pre & post-trip survey, to measure health profession students‟ frequency and familiarity in working with individuals from other cultures. Quantitative results from the study indicated that the international service learning opportunity had a positive impact on the students‟ perception of cultural competence. Students who participated in the international service learning opportunity reported increased levels of confidence in working with individuals from different cultures. Key words: international service learning, health, cultural competence.

Introduction

The drive for incorporating international experiences into health profession programs is based on population trends in the United States, which have accelerated demand for health professional organizations to provide culturally competent care (Luquis & Perez, 2003; Smith-Miller, Leak, Harlan, Dieckmann, Sherwood, 2010). As cultural diversity increases, the concept of cultural competency continues to receive increased attention; health professionals working with individuals from cultures different from their own experience a greater need for increased cultural competence (Chang, 2007).

Immersing health profession students into another country‟s culture can be an effective method of promoting and enhancing cultural competency (Luquis & Perez, 2003; Smith-Miller et al., 2010). Increasing cultural awareness in health profession students may potentially increase the effectiveness of health promotion programs (Jackson, 2008; Smith-Miller et al., 2010; Sullivan, 2009). For health professionals to be fully involved in the endeavor to become culturally competent professionals, they must first understand the significant impact culture can have on one‟s health (Luquis & Perez, 2003). Given the complex nature of culture itself, it is necessary that individuals working within different cultures develop cultural competence through a multidimensional approach to increase effectiveness and enhance learning (Chang, 2007; Luquis & Perez, 2003). Service-learning is an increasingly accepted tool that provides individuals with the opportunity to connect formal learning with the realities of actual human-service

settings (Diambra, McClam, Fuss, Burton, Fudge, 2009; Goldberg & Coufal, 2009 Smith-Miller et al., 2010).

The practice of service-learning paired with an opportunity to engage in various cultures enhances overall learning, leading to a potentially transformative experience for the participant (Diambra et al., 2009; Goldberg & Coufal, 2009). Service learning on an international level may offer opportunities for enhancing academic achievement and professional development, and has also been successful in exposing health professionals to diversity (Goldberg & Coufal, 2009; Knutson-Miller & Gonzalez, 2009). Potential outcomes include improved critical thinking skills, a greater appreciation of cultural diversity, expanded notions of community, and awareness of global issues (Goldberg & Coufal, 2009; Knutson-Miller & Gonzalez, 2009). It is argued that international service learning opportunities have the potential to be groundbreaking in nature, by allowing individuals to expand their "comfort zone" while enhancing their abilities to view the world from multiple perspectives, and enhancing personal and professional flexibility (Knutson-Miller & Gonzalez, 2009).

Academic service learning is an experience that can be practiced at all levels of education, but may prove to be particularly beneficial to today‟s university students frequently termed millennials (Goldberg & Coufal, 2009). This generation is characterized to be remarkably accepting of diversity, comfortable working in teams, while embracing learning approaches that parallel their knowledge and skills. Service learning may be an effective approach to build on students pre-existing cultural acceptance and willingness to engage with others (Goldberg & Coufal, 2009)

Ultimately, the goal of service learning is to enhance students‟ sense of civic responsibility while fulfilling academic objectives (Urraca, Ledoux, Harris, 2009). International travel is now a common experience for post-secondary students across the United States and short-term service learning opportunities are steadily gaining popularity (Urraca et al., 2009).

Although many definitions of service learning exist, the majority of service learning projects have three common objectives: (a) to meet a community need, (b) to develop professionally through learning outcomes and (c) to offer students structured opportunities for reflection (Urraca et al., 2009). Further, Amerson (2010) suggests that service learning is a form of experiential education which provides students the opportunity to engage in activities that address both community and human needs. Opportunities are then intentionally designed to promote student learning and development.

As a whole, the practice of service learning is an increasingly accepted method for providing students with culturally-relevant teaching and an opportunity to enhance experiential learning (Goldberg & Coufal, 2009). On a professional level, student participation in service learning provides innovative opportunities to use newly acquired skills and academic knowledge in real-life situations. Service learning may also allow students the opportunity to develop a sense of caring for others on a local, national, or global level (Amerson, 2010).

Cultural competence draws on adult learning principles, emphasizing the direct applicability of knowledge and self-identification of learning needs and experience, suggesting that immersion may be the best method to encourage students‟ development of cultural competence (Smith-Miller et al., 2010). According to Smith-Miller et al., (2010) cultural competence is an ongoing developmental process requiring experiences and contexts in which cultural competence constructs are integrated; unlike skills that are learned, demonstrated, and performed. Increased cultural competence has the potential to expand health profession students‟ insights into multicultural care. Participation in global health experiences is an effective strategy for changing health profession students‟ knowledge, attitudes and skills, contributing to enhanced culturally competent practice in any setting (Smith-Miller et al., 2010).

In order to prepare for community engagement, health professionals must understand the skills needed to work within diverse communities (Amerson, 2010). The National Commission for Health Education Credentialing Incorporated (NCHEC) used a job analysis to develop the *Responsibilities and Competencies of Health Education Specialists.* The established responsibilities for health education specialists act as a framework for creating and developing strategies to improve the delivery of health education. *Responsibilities and Competencies of Health Educators* is categorized into seven responsibilities and corresponding competencies and sub-competencies (National Commission for Health Education Credentialing, 2010), (Table 7).

Table 7
Responsibility VII Communicate and Advocate for Health and Health Education

Competency A: Analyze and respond to current and future needs in health education.
Sub-competencies:
1.Analyze factors (e.g., social, cultural, demographic, political) that influence decision-makers
Competency B: Apply a variety of communication methods and techniques.
Sub-competencies:
1. Assess the appropriateness of language in health education messages.
2. Compare different methods of distributing educational materials.
3. Respond to public input regarding health education information.
4. Use culturally sensitive communication methods and techniques.
5. Use appropriate techniques for communicating health education information.
6. Use oral, electronic and written techniques for communicating health education information.

The Social Cognitive Theory (SCT) was used as the theoretical framework for this study (Table 8). Constructs from the SCT in this study examined practical experience and its effect on cultural perceptions. The SCT proposes that the majority of human learning occurs in a social environment, because dynamic social settings encourage interactions between environment, behaviors, and personal perceptions (Glanz, Rimer, Viswanath, 2008).

Table 8
Social Cognitive Theory Constructs and Definition

SCT Construct	Definition
Environment	Factors physically external to the person.
Situation	Person‟s perception of the environment.
Expectations	Anticipatory outcomes of a behavior.
Observational Learning	Behavioral acquisition that occurs by watching the actions and outcomes of others behavior.
Reinforcement	Responses to a person‟s behavior that increase or decrease the likelihood of reoccurrence.
Self-Efficacy	The person‟s confidence on performing a particular behavior.
Reciprocal Determinism	The dynamic interaction of the person, the behavior, and the environment in which the behavior is performed.

(Glanz et al. 2008).

Study Design

This study was conducted in order to better understand the impact of international service learning on health profession students‟ perceptions of cultural competence. The study employed quantitative data to provided measurable results to illustrate the significance of the students‟ perceived changes in perception of cultural competence as a result of their participation in the international service learning opportunity. The quantitative instrument was developed by Schim, Doorenbos, Miller, Benkert, (2003). The instrument known as the Cultural Competence Assessment (CCA) was derived from the Schim and Miller Cultural Competence Model (SMCCM) which consists of four components: Cultural awareness, cultural diversity, cultural sensitivity, and cultural competence behaviors (Schim et al., 2003). The instrument was intended to assess nurses‟ cultural competence, initially including 45 items that were developed and piloted by Schim et al., (2003). The initial survey included six items addressing the construct of cultural diversity experience, while providing demographic information. Two close-

ended questions included identification of racial/ethnic/cultural groups encountered by participants in the past year, and personal racial/ethnic cultural group association. Four demographic items assessed diversity of age, educational level, years of practice, and professional affiliation. Three subscales of the CCA include cultural awareness, sensitivity, and competence behaviors. Eleven items addressed the construct of cultural awareness. Ten items were initially developed for the cultural sensitivity construct using the same format and response set as the cultural awareness subscale. Item stems were written to describe personal attitudes, beliefs, and feelings that reflect aspects of cultural sensitivity. Seventeen items were developed to assess the construct of cultural competence behaviors (p. 31, 33).

The instrument was reviewed by an expert panel to establish content and face validity. After the initial review the instrument underwent a field test (n=7) followed by a pilot test (n=113) among hospice workers (Schim et al., 2003). Cronbach alpha reliability estimates for both scales were strong. CAS: .90, and CCB: .91 (Schim et al., 2003). Concluding the pilot testing final revisions to the instrument were made. The final CCA survey tool consisted of seven multiple choice items on diversity, eight rated agreement items regarding cultural awareness and sensitivity, one item rating overall comfort, one item indicating previous training, and one open-ended item for participants to describe their previous training (Schim et al., 2003).

The instrument used in the present study was modified from the final CCA tool, and was designed to assess whether health profession students‟ perceptions had changed as a result of their participation in the international service learning opportunity.

Sample

Purposive selection was used to obtain participants for this study. All of the participants invited to complete the survey instrument participated in the international service learning trip to Central America in March of 2010. The sample for this study was a group comprised of 16 participants. There were 15 females and one male. A closer inspection of the sample population reveals that there were three graduate students and 13 undergraduate students who were predominantly middle-class Caucasians, with ages ranging from 19-27 years. Few of these students had any prior international travel experiences and represented a variety of health profession majors. The majority of participants did not report proficiency of the Spanish language (Table 9).

Table 9

Participant Demographics

Demographic Variables	n	n	n
Gender	Male 1	Female 15	
Academic Classification	Graduate 3	Undergraduate 13	
Ethnicity/Race	Caucasian 9	Asian American 2	Missing 5
Proficiency in Spanish Language	Yes2	No 9	Missing 5
Prior International Service Learning Experience	Yes 2	No 9	Missing 5
Declared Major	Nursing 8	Health Education 3	Missing 5

The students participating in the service learning opportunity in Central America worked with a multidisciplinary team as part of a service learning trip to underserved urban and rural locations in Costa Rica and Nicaragua, respectively. Fluency in Spanish was not a prerequisite for the trip, and all students had the opportunity to work with locally contracted translators in order to communicate with residents of both communities. The service opportunities that were available to students included working directly with physicians to assist in minor treatments, dispersing medications in the pharmacy, teaching basic hygiene and dental care, parasitic medications, providing health education, and conducting field research. Each day, students were assigned to different areas of work based on their academic background, personal preference, and availability.

Students also had the opportunity to make home visits that allowed them firsthand knowledge of the poverty, culture, and health care in these Central American countries.

Over the course of the trip, students were exposed to a culture that was significantly different from their own, in which poverty was apparent and obviously different in kind and degree from the poverty that students were used to seeing at home.

The service learning project consisted of three to four days of health care administration and education in a clinic at a church in Pavas, an urban community located within the city of San Jose, Costa Rica (Figure 1). The trip also included seven days of health care administration, health education, and field research at a clinic in La Palma, a rural community located on Ometepe Island, in Nicaragua (Figure 2).

Figure 1. Map of Costa Rica

Figure 2. Map of Nicaragua

All participants completed a minimum of eight hours of orientation to their community experience prior to beginning their international service learning trip.

Students met under the direction of a supervising faculty member that would be traveling with the students. In general, students met in a classroom setting with lecture and discussion as the main methods for instruction and preparing for the trip. The orientation consisted of infectious disease education and culturally relevant topics such as language, interpersonal communication, and local cuisine, hygiene, and safety considerations were also discussed.

Data Collection

Prior to data collection, the study received approval from the Institutional Review Board at Texas State University-San Marcos on February 17, 2010. To facilitate the data collection for pre and post-trip survey, participants received an email inviting them to participate in the online survey with the corresponding link to SurveyMonkey.com. Specific directions to complete the survey were located on the pre and post-trip instruments. Both the pre and post-trip survey took participants approximately 30 minutes to complete. The pre-trip survey was conducted within five days of departure for the two-week service learning trip to Central America from February 28- March 12, 2010. The post-survey was conducted upon completion of the trip within a three week period of returning to the United States, ending on April 2, 2010. Similar to the procedures for the pre-trip survey, participants received an email inviting them to participate in the online survey with the corresponding link to SurveyMonkey.com.

Analysis of Pre and Post-Trip Survey Data

On May 18, 2010 a response summary from the pre-trip (n=10) and post-trip (n=13) survey results were printed and manually analyzed by the principle investigator. . This was done to determine if a shift in student perception of cultural competence occurred. The principle investigator compared the response summaries from pre-trip survey to the post-trip survey and manually indicated an increase, decrease or no change in participant response for each survey item on the hard copy of the post-survey printout. Results of the survey analysis were recorded and discussed by the principle investigator and thesis committee chair. The post-trip survey student participation increased by 30%. The variable averages were compared and the additional three participants in the post-survey were not outliers; therefore, their inclusion did not skew the post-survey data.

Findings

The analysis of results from the pre and post-trip surveys indicated the majority of students were positively impacted by the international service learning experience. Overall, trends reflecting an increase towards greater cultural competence in the data were clear throughout the post-trip survey. In total, three survey items and five sub-items were identified as having significantly higher scores on the post-trip survey than on the pre-trip survey (Tables 10-15).

Table 10

Race is the most important factor in determining a person"s culture

	Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree	No Opinion
Pre n=10	0	1	4	1	0	3	1	0
Post n=13	0	1	2	1	2	3	1	0

Table 11

I ask people to tell me about their expectations for health services

	Always	Very Often	Somewhat Often	Often	Sometimes	Few Times	Never	Not Sure
Pre n=10	0	0	0	3	4	2	0	0
Post n=13	1	4	3	3	0	1	0	1

Table 12

I find ways to adapt my services to individual and group cultural preferences

	Always	Very Often	Somewhat Often	Often	Sometimes	Few Times	Never	Not Sure
Pre n=10	0	2	2	1	1	0	1	3
Post n=13	1	5	6	1	0	0	0	0

Table 13

If I know about a person‟s culture, I don‟t need to assess their personal preferences for health services

	Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree	No Opinion
Pre n=10	0	0	0	0	1	0	8	1
Post n=13	0	0	0	0	0	4	8	1

Table 14

Throughout your professional profession, which of the following special population groups have you encountered within the health care environment or workplace?

	Pre-Survey n=10	Post Survey n=13
Mentally or emotionally ill	60.0%	76.9%
Physically challenged/disabled	80.0%	92.3%
Homeless/housing insecure	30.0%	53.8%
Substance abusers/alcoholics	50.0%	84.6%
Gay, lesbian, bisexual or transgender	60.0%	76.9%
Different religious/spiritual backgrounds	90.0%	100.0%
Other	10.0%	15.4%

Table 15
Throughout your professional preparation, which of the following special population groups have you encountered among your clients and their families or within the health care environment or workplace?

	Pre-Survey n=10	Post-Survey n=13
Hispanic/Latino (including Mexican, Mexican American)	90.0%	100.0%
White/Caucasian/European American	100.0%	100.0%
Black/African American/Negro	100.0%	100.0%
American Indian/Alaska Native	10.0%	23.1%
Asian (Asian Indian, Chinese, Filipino, Japanese)	70.0%	84.6%
Native Hawaiian/Pacific Islander	20.0%	30.8%
Arab American/Middle Eastern	50.0%	61.5%
Other	0.0%	15.4%

Conclusions

Cultural competency is a lifelong learning process and cannot simply be achieved by participating in one isolated experience (Hoban & Ward, 2003). Furthermore, it does not have uniform and concrete criteria by which individuals can declare they have reached a standardized level of success. In this study, participants were asked to reflect on the impact the international service learning opportunity had on their health profession practice (Chang, 2007). This international service learning trip created an eye-opening experience that afforded the participants of this study to work with individuals from a culture that was dramatically different from their own (Goldberg & Coufal, 2009).

The majority of the students who participated in this study embarked on the international service learning trip without any prior travel experience to Central America.

The preparatory cultural training exposed students to aspects of the Central American culture such as language, living environment, interpersonal communication, relevant health concerns and communicable diseases. The training also provided students the opportunity to develop cultural empathy and awareness, allowing them to mentally prepare for the service learning experience. The international service learning opportunity immersed the health profession students into the Central American culture and was an effective means of increasing participant‟s cultural competency.

Limitations

A noteworthy limitation in this study was the short time frame for students to complete the pre-trip survey, resulting in a smaller number of participants not having time to complete the CCA survey prior to their departure for Central America. This time frame, along with a lack of awareness of the pre-trip survey, may have influenced the amount of data collected. There also seemed to be a lack of understanding of what the term cultural competence meant. Cultural competence was not given an official definition in the pre and post-trip survey instrument. This lack of understanding was particularly evident among the undergraduate student participants and could have resulted in limited responses. Lastly, the international service learning experience took place over a two-week period of time. A longer time frame for the service learning opportunity may have yielded different results. However, the international service learning trip was bound by actual time allotted for students to be away from their respective campuses and academic courses during the regular spring semester.

Recommendations for Further Research

Suggestions for further research on the impact of international service learning on health profession students include qualitative assessment in the form of student interviews or conducting a focus group session upon returning from the trip. In order to obtain timely record of minor daily events during the international service learning experience, requiring participants to keep daily journals could enhance the quality of information recalled by the students for a greater length of time subsequent to the trip.

Third, while the students indicated that the cultural training they received prior to the international service learning trip was useful, they also stated that further and more comprehensive training preceding the experience would have been beneficial. Many students reported difficulty in working with a translator, indicating that the task of facilitating health care with the assistance of a translator was more complicated than they had initially perceived. Providing students with access to instruction in medical terminology from the native language and also practical preparation in working with translators prior to the international service learning trip are specifically recommended.

Additionally, to provide students with a comprehensive service learning experience, it is recommended that participants take part in a domestic service learning opportunity prior to or following the international service learning trip. While similar in the context of service learning, the experience could provide students with additional professional preparation to enhance their practice.

A long term follow-up with former international service learning students assessing the opportunity to apply knowledge gained from the experience to their health profession careers. Long term follow-up could also assess the impact that the students‟ service learning experience had on their subsequent professional development and career opportunities pursued.

Implications for the Field

As global interaction and cultural diversity increase, cultural competence has begun to receive more attention and health professionals are finding themselves at the center of a cultural crossroads (Chang, 2007). The diversification of the U.S. population continues to grow, and it is inevitable that health professionals will be confronted with the reality of working with individuals from cultures different from their own at some point in their careers (Luquis, Perez, Young, 2006). It is imperative that health profession students gain practical experience working with individuals from other cultures in order to increase their level of success in their practice. While cultural content may be present in health profession students‟ curriculum, students may not have the opportunity to gain hands-on experience working with individuals from cultures different from their own. This may be due to a lack of exposure to diverse cultural groups including faculty, patients, etc (Upvall & Bost, 2007).

Regarding the implications of student development, many students responded that this international service learning trip positively impacted their views of cultural competence, stating that the experience has made them more confident in their health

profession practice. Although none of the students indicated that this isolated international service learning experience made them exponentially more confident, the majority of participants did report a 30.8% increase in self-efficacy in working with individuals from cultures different from their own. The majority of students participating in this study have become advocates for international service learning opportunities in all health professions. Furthermore, they feel that cultural competence is a valuable skill gained from a transformative experience that can be utilized no matter which avenue of health one may choose to pursue.

Service learning experiences can serve as a foundation for the development of health profession students‟ cultural competence (Upvall & Bost, 2007). The process of service learning and its influence on the development of health profession students‟ cultural competence was apparent in this study. The international service learning opportunity provided students with a unique opportunity to connect classroom learning with the realities of an actual human-service setting (Diambria et al., 2009). Increasing health profession students‟ cultural competence, could potentially lead to an overall improvement in the manner in which health care is facilitated (Amerson, 2010). Whether the students‟ perception of the international service learning opportunity was positive or negative, exposure to contrasting cultures can create a deeper recognition of how a lack of cultural competence can contribute to disproportionate levels of care in various health professions.

In summary, service learning can be an influential teaching and learning strategy (Diambria et al., 2009). Participation in international service learning is an effective

method for increasing health profession students‟ understanding and empathy towards cultures different from their own. This can be achieved by increased advocacy for international service learning by health profession faculty and veteran service learning participants. When the number of students pursuing international service learning opportunities begins to grow, the result of their increased cultural competency could very well be a positive shift that transforms the health profession.

CHAPTER 4- Manuscript for Publication

According to guidelines for authors: American Journal of Health Studies

International Service Learning and Health Profession Students‟ Cultural Competence

Abstract:

This study assessed the impact of international service learning on health profession students‟ cultural competence by utilizing mixed methodology- employing a pre & post-trip survey, and follow-up telephone interview. The survey addressed the students‟ frequency and familiarity in working with individuals from cultures different from their own. Six interview questions were created to reflect themes found in the results of the quantitative data, and participant interviews were conducted over the telephone by the principal investigator. Students who participated in the international service learning opportunity reported increased levels of self-efficacy and confidence in working with individuals from Central America.

Key words: international service learning, health, cultural competence.

Introduction

As cultural diversity increases, the concept of cultural competency has begun to receive increased attention, causing the way in which people from different cultural backgrounds are treated to become a pivotal issue (Chang, 2007). Individuals working within a cultural context in which they are not familiar experience a greater need for increased cultural competence (Chang, 2007). Immersing health profession students into another country‟s culture can be an effective method of promoting and enhancing cultural competency. Increasing cultural awareness in health profession students may potentially increase effectiveness of health promotion programs (Jackson, 2008). Yet, given the complex nature of culture itself, it is necessary that individuals working within different cultures develop cultural competence by a multidimensional approach to increase effectiveness and enhance learning (Chang, 2007). Service-learning provides individuals with the opportunity to connect formal learning with the realities of actual human-service settings (Diambra, McClam, Fuss, Burton, Fudge, 2009).

The practice of service-learning paired with an opportunity to engage in various cultures enhances overall learning, leading to a potentially transformative experience for the participant (Diambra et al., 2009). Service learning on an international level may offer opportunities for enhancing academic achievement and professional development (Knutson-Miller & Gonzalez, 2009). Potential outcomes include improved critical thinking skills and a greater appreciation of cultural diversity, expanded notions of community, and awareness of global issues (Knutson-Miller & Gonzalez, 2009). It is often argued that international service learning opportunities have the potential to be

groundbreaking in nature, by allowing individuals to expand their "comfort zone" while enhancing their abilities to view the world from multiple perspectives, and enhancing personal and professional flexibility (Knutson-Miller & Gonzalez 2009).

This study was conducted to better understand the impact of international service learning on health profession students" perceptions of cultural competence.

Significance of Problem

Academic service learning is an experience that can be practiced at all levels of education. Ultimately, the goal of service learning is to enhance students" sense of civic responsibility while fulfilling academic objectives (Urraca, Ledoux, Harris, 2009). International travel is now a common experience for post-secondary students across the United States with short-term service learning opportunities steadily gaining popularity (Urraca et al., 2009).

Although many definitions of service learning exist, the majority of service learning projects have three common objectives: to meet a community need, to develop professionally through learning outcomes and to offer students structured opportunities for reflection (Urraca et al., 2009). Further, Amerson (2010) suggests that service learning is a form of experiential education in which students engage in activities that address community and human needs together. Opportunities are then intentionally designed to promote student learning and development.

As a whole, the practice of service learning is an increasingly accepted method for providing students with culturally-relevant teaching and an opportunity to enhance

experiential learning (Goldberg & Coufal, 2009). On a professional level, student participation in service learning provides innovative opportunities to use newly acquired skills and academic knowledge in real-life situations. Service learning may also allow students the opportunity to develop a sense of caring for others on a local, national, or global level (Amerson, 2010). Cultural competence draws on adult learning principles, emphasizing the direct applicability of knowledge and self-identification of learning needs and experience; together these suggest that immersion may be the best method to encourage students‟ development of cultural competence (Smith-Miller, Leak, Harlan, Dieckman, Sherwood, 2010).

According to Smith-Miller et al. (2010) cultural competence is an ongoing developmental process requiring experiences and contexts in which cultural competence constructs are integrated; unlike skills that are learned, demonstrated, and then performed. That being said, increased cultural competence has the potential to expand health profession students‟ insights into multicultural care. Participation in global health experiences is an effective strategy for changing health profession students‟ knowledge, attitudes and skills, contributing to enhanced culturally competent practice in any setting (Smith-Miller et al., 2010).

Need for the Study

In order to prepare for community engagement, health professionals must understand the skills needed to work within diverse communities (Amerson, 2010; Goldberg & Coufal, 2009). The National Commission for Health Education Credentialing Incorporated (NCHEC) used a job analysis to develop the *Responsibilities*

and Competencies of Health Education Specialists. The established responsibilities for health education specialists act as a framework for creating and developing strategies to improve the delivery of health education. *Responsibilities and Competencies of Health Educators* is categorized into seven responsibilities and corresponding competencies and sub-competencies (National Commission for Health Education Credentialing, 2010), (Table 16).

Table 16
Responsibility VII Communicate and Advocate for Health and Health Education

Competency A: Analyze and respond to current and future needs in health education.
Sub-competencies:
1.Analyze factors (e.g., social, cultural, demographic, political) that influence decision-makers
Competency B: Apply a variety of communication methods and techniques.
Sub-competencies:
1. Assess the appropriateness of language in health education messages.
2. Compare different methods of distributing educational materials.
3. Respond to public input regarding health education information.
4. Use culturally sensitive communication methods and techniques.
5. Use appropriate techniques for communicating health education information.
6. Use oral, electronic and written techniques for communicating health education information.

Basic Assumptions

For this study, it was assumed that participants have knowledge, feelings and actions associated with cultural competency issues that should be explored. The second assumption was that all participants answered the interview questions openly and honestly, thus providing accurate and detailed responses.

Delimitations and Limitations

The study was delimited to the health profession students who participated in the international service learning trip to Central America in the Spring 2010 semester and agreed to participate in the pre and post-trip survey, as well as the telephone interview.

The brief time frame for students to complete the pre-trip survey is a noteworthy limitation of this study, resulting in a small portion of the participants not completing the survey prior to their departure for Central America. This time frame, along with a lack of awareness of the pre-trip survey, may have influenced the amount of data collected. When compared with the post-trip survey, participants were informed of the post-trip survey during and after the international service learning experience. Additionally, the time frame for post-trip survey completion was three times longer than that of the pre-trip survey. There was also what seemed to be a lack of understanding of what the term cultural competence actually meant. This seemed particularly evident among the undergraduate student participants, and could have resulted in less comprehensive responses. Lastly, the international service learning experience took place over a relatively short two-week period of time. A longer time frame for the service learning opportunity may have yielded different results. However, the international service learning trip was bound by actual time allotted for students to be away from their respective campuses and academic courses during the regular spring semester.

Theoretical Background

The Social Cognitive Theory (SCT) was used as the theoretical framework for this study (Table 17). Constructs from the SCT in this study examined practical experience and its effect on cultural perceptions. The SCT proposes that the majority of human learning occurs in a social environment, because dynamic social settings encourage interactions between environment, behaviors, and personal perceptions (Glanz, Rimer, Viswanath, 2008).

Table 17
Social Cognitive Theory Constructs and Definition

SCT Construct	Definition
Environment	Factors physically external to the person.
Situation	Person‟s perception of the environment.
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Self-Efficacy	The person‟s confidence on performing a particular behavior.
Reciprocal Determinism	The dynamic interaction of the person, the behavior, and the environment in which the behavior is performed.

(Glanz et al. 2008).

Study Design

This study employed mixed-methodology design, utilizing both quantitative and qualitative methods. This was done to enrich the findings, and provide comprehensive results. Quantitative data, obtained from a pre and post-trip survey, allowed for understanding students‟ perceptions of cultural competence. The quantitative data provided measurable results to illustrate the significance of the students‟ perceived changes in perception of cultural competence. In order to better understand the students increased confidence and greater understanding of cultural competence, quantitative data were used to help develop questions for a telephone interview. The open-ended interview items were used to further assess students‟ reflections towards their international service learning experience. Data from close-ended and numerical scale survey questions are beneficial, but may not fully illustrate the essence of how the students perceive the experience and its effects on their health profession practice.

Pre and Post-Trip Survey Design

The quantitative portion of the study was designed to assess whether students‟ knowledge, attitudes, and actions had changed as a result of their participation in the international service learning opportunity. The quantitative instrument used to elicit students‟ perceptions of cultural competence was created by Schim, Doorenbos, Miller, Benkert, (2003). The instrument known as the Cultural Competence Assessment (CCA) was derived from the Schim and Miller Cultural Competence Model (SMCCM) which consists of four components: Cultural diversity, cultural awareness, cultural sensitivity, and cultural competence behaviors (Schim et al., 2003). The instrument was intended to assess hospice employees and volunteers‟ cultural competence, initially including 45 items that were developed and piloted by Schim et al., (2003). The initial survey included:

> Six items addressing the construct of cultural diversity experience, while providing demographic information. Two close-ended questions included identification of racial/ethnic/cultural groups encountered by participants in the past year, and personal racial/ethnic cultural group association. Four demographic items assessed diversity of age, educational level, years of practice, and professional affiliation. Three subscales of the CCA include cultural awareness, sensitivity, and competence behaviors. Eleven items addressed the construct of cultural awareness. Ten items were initially developed for the cultural sensitivity construct using the same format and response set as the cultural awareness subscale. Item stems were written to describe personal attitudes, beliefs, and feelings that reflect aspects of cultural sensitivity. Seventeen items were developed to assess the construct of cultural competence behaviors (p. 31, 33).

The instrument was reviewed by an expert panel to establish content and face validity. After the initial review the instrument underwent a field test (n=7) followed by a pilot test (n=113) among hospice workers (Schim et al. 2003). The internal consistency

reliability measures of the CCA instrument in initial testing were (α=.92) (Schim et al., 2003). Concluding the pilot testing final revisions to the instrument were made. The final CCA survey tool consisted of seven multiple choice items on diversity, eight rated agreement items regarding cultural awareness and sensitivity, one item rating overall comfort, one item indicating previous training, and one open-ended item for participants to describe their previous training (Schim et al., 2003).

The instrument used in the present study was modified from the final CCA tool, and was designed to assess whether health profession students‟ perceptions had changed as a result of their participation in the international service learning opportunity. Modified from the CCA instrument developed, reviewed and tested by Schim et al., (2003), survey items were intended to gather information about how participants personally think, feel, and act regarding cultural competence.

Telephone Interview Design

Qualitative interview data provided insight into the students‟ international service learning experiences through the participants‟ description of perceived impact of significant events. Interview questions were created by utilizing the results from the pre and post-trip survey. Quantitative data from pre and post-assessments were consolidated into a printed report, and results were analyzed to determine if responses had changed as a result of the international service learning trip. Common themes from the data, such as significant shift in response towards participants‟ cultural competence, and specific constructs from the SCT were used to create interview questions for qualitative interview guide. Interview questions were utilized to elicit each participant‟s perceptions of how

the international service learning experience impacted their views on cultural competence (see Table 18). Questions also sought to examine students‟ understanding of cultural competence and its relation to professional background without leading, or biasing the interviewees‟ thoughts. Additional prompts, explanation of terms to the questions were used, when necessary, to enhance the participants understanding of the question, with the intention of enhancing/augmenting interview data or participant response.

Interview questions were utilized to elicit each participant‟s perceptions of how their views on cultural competence were impacted by the international service learning experience.

Table 18
Telephone Interview Guide

Interview Item	Applicable Social Cognitive Theory Construct(s)
Throughout your professional preparation, what was the impact of international service learning on your health profession practice?	Environment, Situation, Observational Learning, Reinforcement, Self-Efficacy, Reciprocal Determinism
After your international service learning opportunity, how do you feel working with others from cultures different from your own?	Reinforcement, Self-Efficacy
After your international service learning opportunity, how confident do you feel in your skills in working with others from cultures different from your own?	Reinforcement, Self-Efficacy
How did individuals in your personal and professional circles react to your participation in this international service learning opportunity?	Expectations
Do you think students participating in international service learning would benefit from additional cultural diversity training prior to international service learning experiences?	Expectations, Self-Efficacy, Situation
Do you have any other thoughts, or comments that you would like to share about your international service learning opportunity?	Expectations, Self-Efficacy, Situation

Sample

Purposive selection was used to obtain participants for this study. All students invited to participate in the study participated in the international service learning trip to Central America in March of 2010. The sample for this study was a group comprised of 16 participants. There were 15 females, one male. A closer inspection of the sample population reveals that there were three graduate students and 13 undergraduate students

who were predominantly middle-class Caucasians. The specific cultural background of these students was Caucasian (n= 16), Filipino (n=1), with ages ranging from 19-27 years. Few of these students had any prior international travel experiences. They represented a variety of health profession majors, as well as varying degrees of Spanish language proficiency (Table 19).

Table 19

Participant Demographics

Demographic Variables	n	n	n
Gender	Male 1	Female 15	
Academic Classification	Graduate 3	Undergraduate 13	
Ethnicity/Race	Caucasian 9	Asian American 2	Missing 5
Proficiency in Spanish Language	Yes2	No 9	Missing 5
Prior International Service Learning Experience	Yes 2	No 9	Missing 5
Declared Major	Nursing 8	Health Education 3	Missing 5

The students participating in the service learning opportunity in Central America worked with a multidisciplinary team as part of a service learning trip to underserved urban and rural locations. Service opportunities included working directly with physicians to assist in minor treatments, dispersing medications in the pharmacy, teaching basic hygiene and dental care, administering vitamins and parasitic medications, providing health education, and conducting field research.

The field research consisted of interviewing local residents, as well as taking digital photographs and global positioning system (GPS) data points of the interview

location. Fluency in Spanish was not a prerequisite for the trip, and all students had the opportunity to work with locally contracted translators in order to communicate with residents of both communities. Students also had the opportunity to make home visits that allowed them firsthand knowledge of the poverty, culture, and health care in these Central American countries. Over the course of the trip, students were exposed to a culture that was significantly different from their own, in which poverty was apparent and obviously different in kind and degree from the poverty that students were used to seeing at home.

The service learning project consisted of three to four days of health care administration and education in a clinic at a church in Pavas, an urban community located within the city of San Jose, Costa Rica. In addition, the trip also included seven days of health care administration, health education, and field research at a clinic in La Palma, a rural community located on Ometepe Island, in Nicaragua.

All participants completed a minimum of eight hours of cultural training prior to beginning their international service learning trip. The orientation consisted of infectious disease education, and culturally relevant topics such as language, interpersonal communication, local cuisine, hygiene, and safety considerations.

Data Collection

Prior to data collection, the study received approval from the IRB at Texas State University-San Marcos on February 17, 2010. There were no risks to participation in this study. Participants were not under any coercion to participate in the research.

Participants were free to stop their participation in the study at any time without penalty. None of the health profession students interviewed nor the students who completed the pre and post-trip surveys had their names included in the data. In addition, the participants contact information was secured in a locked cabinet in the principle investigators office, unavailable to anyone other than the principle investigator.

Pre and Post-Survey Data Collection

The Global Health- Central America survey instrument was designed to assess the knowledge, feelings, and actions of students when they interact with others in the context of health care and health service environments and in academic settings. The 7 item, 43 sub-item survey, contained Likert, and close-ended and demographic questions. To facilitate the data collection processes for the pre-trip survey, participants received an email inviting them to participate in the online survey tool with the corresponding link to SurveyMonkey.com. Specific directions were located on the questionnaire. Both the pre and post-trip survey took approximately 30 minutes to complete. The pre-trip survey was conducted within five days of departure for the two-week service learning trip to Central America from February 28- March 12, 2010. The post-survey was conducted upon completion of the trip within a three week period of returning to the United States. Post-trip survey data collection protocol was identical to the pre-trip survey process. Participants received an email inviting them to participate in the online survey with the corresponding link to SurveyMonkey.com. Survey data collection ended on April 2, 2010.

Telephone Interview Data Collection

The data collection processes began with participants receiving an email invitation from the principle investigator to participate in the telephone interview. The researcher communicated with the participants to schedule a date and time to conduct the interview. On the date of the scheduled interviews, the principle investigator initially contacted participants via text message 15 minutes prior to the scheduled interview to remind them about the interview. This action served two purposes: first to remind the participants of their scheduled interview, and second, to make them aware of the phone number they would be contacted by. This step prevented participants from screening the incoming phone call from a number they may not have recognized. The principle investigator began each interview with a statement of confidentiality, as well as a description of the study. Participants were informed that their interview would be recorded for transcription purposes. Participants then provided oral consent to the principle investigator and the interview commenced. Each interview took no longer than 20 minutes.

Pre and Post-Trip Survey Analysis

On May 18, 2010 a response summary from the pre-trip (n=10) and post-trip (n=13) survey results were printed and manually analyzed by the principle investigator and thesis committee chair. This was done to determine if a shift in student perception of cultural competence occurred. The principle investigator and thesis committee chair compared the response summaries from pre-trip survey to the post-trip survey and

manually indicated an increase, decrease or no change in participant response for each survey item on the copy of the post-survey printout.

Telephone Interview Analysis

Upon completion of the telephone interviews (n=13), recorded interview data were uploaded into an electronic file and then transcribed in a word document. Transcribed interviews were then entered into the qualitative data analysis software NVivo. Individual nodes were created for the SCT constructs applicable to this study. Participant interviews were coded to identify the occurrence and frequency of SCT constructs in the participants‟ responses to the interview questions. Upon completion of the data coding, a free node summary report and coding summary report were conducted to determine the frequency of SCT construct references from the participants. Recurrent themes were identified and discussed.

Pre and Post-Trip Survey Findings

On May 18, 2010 a response summary from the pre-trip (n=10) and post-trip (n=13) survey was generated and analyzed by the principle investigator. The data were analyzed to determine if student perception of cultural competence occurred as a result of the international service learning opportunity. The principle investigator and thesis committee chair compared the response summaries from pre and post-trip surveys to identify if an increase, decrease, or no change in participant response occurred for each item. Results of the survey analysis were recorded and discussed by the principle investigator and thesis committee chair. The post-trip survey student participation

increased by 30%. The variable averages were compared and the additional three participants in the post-survey were not outliers; therefore, their inclusion did not skew the post-survey data.

The analysis from the pre and post-trip surveys indicated the majority of students were positively impacted by the international service learning experience. Overall, trends reflecting an increase towards greater cultural competence in the data were clear throughout the post-trip survey. In total, three survey items and five sub-items were identified as having significantly higher scores on the post-trip survey than on the pre-trip survey (Tables 20-27).

Table 20

I understand that people from different cultures may define the concept of "health care" in different ways.

	Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree	No Opinion
Pre n=10	5	4	0	0	0	0	0	0
Post n=13	9	4	0	0	0	0	0	0

Table 21

Race is the most important factor in determining a person"s culture

	Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree	No Opinion
Pre n=10	0	1	4	1	0	3	1	0
Post n=13	0	1	2	1	2	3	1	0

Table 22

I find ways to adapt my services to individual and group cultural preferences

	Always	Very Often	Somewhat Often	Often	Sometimes	Few Times	Never	Not Sure
Pre n=10	0	2	2	1	1	0	1	3
Post n=13	1	5	6	1	0	0	0	0

Table 23

If I know a person"s culture, I don"t need to assess their personal preferences for health services

	Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree	No Opinion
Pre n=10	0	0	0	0	1	0	8	1
Post n=13	0	0	0	0	0	4	8	1

Table 24

I ask people to tell me about their expectations for health services

	Always	Very Often	Somewhat Often	Often	Sometimes	Few Times	Never	Not Sure
Pre n=10	0	0	0	3	4	2	0	0
Post n=13	1	4	3	3	0	1	0	1

Table 25
Overall how competent do you feel working with people from cultures different from your own?

	Pre n=10	Post n=13
Very Competent	10.0%	38.5%
Somewhat Competent	80.0%	53.8%
Neither competent nor incompetent	10.0%	7.7%
Somewhat competent	0.0%	0.0%
Very competent	0.0%	0.0%

Table 26
Throughout your professional preparation, which of the following special population groups have you encountered within the health care environment or workplace?

	Pre-Survey n=10	Post Survey n=13
Mentally or emotionally ill	60.0%	76.9%
Physically challenged/disabled	80.0%	92.3%
Homeless/housing insecure	30.0%	53.8%
Substance abusers/alcoholics	50.0%	84.6%
Gay, lesbian, bisexual or transgender	60.0%	76.9%
Different religious/spiritual backgrounds	90.0%	100.0%
Other	10.0%	15.4%

Table 27
Throughout your professional preparation, which of the following special population groups have you encountered among your clients and their families or within the health care environment or workplace?

	Pre-Survey n=10	Post-Survey n=13
Hispanic/Latino (including Mexican, Mexican American)	90.0%	100.0%
White/Caucasian/European American	100.0%	100.0%
Black/African American/Negro	100.0%	100.0%
American Indian/Alaska Native	10.0%	23.1%
Asian (Asian Indian, Chinese, Filipino, Japanese)	70.0%	84.6%
Native Hawaiian/Pacific Islander	20.0%	30.8%
Arab American/Middle Eastern	50.0%	61.5%
Other	0.0%	15.4%

Telephone Interview Findings

Qualitative data analysis software NVivo was used to analyze the data. The software allowed for an analysis of relationships between participants, concepts, and experiences. The NVivo software analyzed qualitative data collected from transcribed interviews that were conducted over the telephone by the principle investigator. This process ensured that the interviews were reviewed for descriptive terms used by the participants to depict their experiences on the international service learning trip. Participant responses were coded by content to indicate which construct(s) of the SCT their response best embodied. Results from the qualitative data analysis are provided in a coding summary report (Table 28).

Table 28
Coding Summary report of SCT constructs

Constructs	Sources	References
Environment	13	33
Situation	13	29
Reciprocal Determinism	11	24
Self-Efficacy	13	54
Observational Learning	7	11
Expectations	11	17
Reinforcement	10	20

Further content analysis of participant responses resulted in identification of the following recurrent themes and their corresponding SCT constructs (Table 29).

Table 29
Recurrent Themes and Applicable Social Cognitive Theory Constructs

Theme	Applicable Social Cognitive Theory Construct(s)
Feeling more confident working with individuals from cultures different from their own.	Self efficacy, Situation, Environment, Reciprocal Determinism, Observational Learning
Pre-trip training is beneficial and helpful to students prior to the international service learning experience.	Expectations, Environment, Situation
Individuals in the students‟ personal and professional circles were supportive of their experience.	Expectations
The international service learning trip was a positive and beneficial experience as a whole.	Self-Efficacy
Development of new knowledge	Environment, Situation, Observational Learning
Understanding the importance of cultural competence	Environment, Situation, Observational Learning

The SCT seeks to provide a comprehensive understanding to both why and how people change behaviors and the environments that influence them (Glanz et al. 2008).

The recurrent themes generated from participant interviews mirror various constructs of the SCT. These themes delve further into the participants‟ perceptions of their international service learning experience and illustrate the profound impact that it had on their health profession practice.

The first theme: Feeling more confident working with individuals from cultures different from their own, correlates to several of the SCT constructs, specifically self-efficacy, situation, environment, reciprocal determinism, and observational learning. While reflecting on their international service learning opportunity several students were able to recognize the impact that the experience had on their professional development. An overall increase in self-efficacy can be attributed to the students having to function in an environment different from what they are familiar with. The unfamiliar setting could have posed a barrier to the students, had they not been able to rely on their peers and supervising professors for support. One method for increasing self-efficacy is social modeling (Glanz et al., 2008). In this study social modeling shows students that others like themselves are capable of performing the necessary tasks to be successful in the service learning opportunity (Glanz et al. 2008). By observing their peers in various situations, students were able to function and achieve success in an environment that they were not familiar with, leading to an increase in self-efficacy. Excerpts from participant interviews supporting this notion can be found below:

“I wouldn‟t say I‟m at 100%, but I think that it increased my knowledge greatly and I would feel I um, I feel very much at ease going back into a situation like I was in

Central America and feel like I would know at least how to get the ball rolling, and how to start things" (Student A, personal communication, September 14, 2010).

"I liked it; it changed my view of doing that a lot. So before the project I was kind of hesitant about it and more unsure and then while we were there I started to really like it and interacting with people of a different culture and learning about their culture and so now I'm more open and more open to working with other cultures" (Student C, personal communication, September 17, 2010).

"I feel very comfortable, um, I'd say I was pretty comfortable before but now I feel more confident using my Spanish and, like definitely more comfortable with the Hispanic population because we had so much immersion in their culture and it became a lot easier to understand, like, their traditions and values" (Student H, personal communication, September 15, 2010).

The second recurrent theme found among participant interviews was that the students felt that pre-trip training would be beneficial to students prior to the international service learning experience. This theme is associated with the SCT constructs of expectations, environment, and situation. While participants were quick to mention that only by being immersed in the new environment can one truly grasp the international service learning experience, students were grateful for the pertinent cultural information given to them prior to departing for Central America. The pre-trip training prepared students for the cultural differences they should expect for the duration of their trip. This training also provided students with an opportunity to establish expectations regarding the situations they would be placed in, ultimately contributing to their cultural

competence. Below is one student‟s description of the importance of acquiring knowledge of the surroundings prior to the international service learning experience

“Oh definitely, because once you get off the plane it‟s, if you‟re not prepared or you think it‟s just a simple trip, it, the culture kind of hits you abruptly in the face when you get off the plane because it‟s a totally different place than America. Whether it comes from the smell of a certain area or the looks of you know, the shanty towns we‟re walking in you know, you know a lot of children, a lot of students, a lot of professionals that are not prepared for this might have a certain look on their face, or they might not adapt too well to the surroundings. So it‟s a good thing to have them prepared, and be prepared to interact with different cultures and different people” (Student G, personal communication, September 14, 2010).

Each student interviewed who participated in the international service learning experience remarked that individuals in their personal and professional circles were supportive of their experience. Methods of support that were mentioned by students were mostly emotional, and on occasion financial. These methods of support tie into the SCT construct of outcome expectations. Increasing students‟ positive beliefs that the service learning experience will be of benefit illustrates the concept that one‟s actions are not based solely on objective reality but on their perceptions of it (Glanz et al., 2008). Specific examples of this are listed below:

“Everyone was overwhelmingly supportive personally and financially. Um, they were really excited for me they thought it would be a wonderful experience. They were

supportive throughout my trip whether it was traveling or my family and friends back home; nothing but positive support and feedback" (Student I, personal communication, September 18, 2010).

"Overall I think that reaction was very positive, I was supported by many of my family, many of my friends, um, and reactions from other students in the program who are not able to go it was more kind of, "Oh I wish I could go do that too." So I think overall, that there's an understanding that this kind of opportunity was valuable and it's very much so a good opportunity and a good experience" (Student L, personal communication, September 19, 2010).

An increase in participants' self-efficacy was the most noted reflection among students who participated in the international service learning experience. Each student interviewed felt that the international service learning trip was a positive and beneficial experience as a whole. During the telephone interview, each student had a personal explanation for why they felt the service learning experience contributed to their professional development; however an underlying tone of increased self-efficacy was present throughout their collective responses. This increase in self-efficacy was fostered mostly by the opportunity for students to interact with people from cultures different from their own in an environment that was foreign to them. Through observational learning students were able to witness their peers successfully engaging with others, prompting students to do the same and ultimately achieve the same level of success (Glanz et al., 2008).

"I just think it was a great experience, definitely opened my eyes to a different culture. We always talk about cultural competency and being aware of different people‟s cultures, you really don‟t get it until you‟re in that situation, until you‟re in a different culture so I just think it was a great experience. I really enjoyed myself" (Student B, personal communication, September 17, 2010).

"I would just say that I think every student should do something like that. That was an experience that all nursing students, every single student should have this experience of working with people from different cultures because you know, it just gives you a better background and just better communication skills in general" (Student D, personal communication, September 17, 2010).

"I just think it‟s a really positive experience and that if anyone in the healthcare has the opportunity to participate in a trip like this I think they definitely should. It would certainly inform the practice and teach it" (Student I, personal communication, September 18, 2010).

"I feel like it ought to be, in my opinion essential experience especially for healthcare providers in the U.S. and certainly around the world but um we have so many people and so many different cultures in the U.S. and I think that some kind of international experience, um, should be mandatory for healthcare providers just so they could understand their patients a bit better and really relate to them more and I know that‟s kind of an impossible thing to actually happen, but I feel like it could be a valuable

experience, um, to healthcare professions if more people were exposed to different cultures in their life" (Student J, personal communication, September 17, 2010).

Another theme associated with the international service learning experience was the students‟ opportunity to develop new knowledge. This theme was evident among all participants, with the term knowledge being used broadly; and taking many forms throughout the telephone interviews. The SCT constructs of environment, situation, and observational learning contributed to the participants‟ development of new knowledge by students learning to perform new behaviors by being exposed to peer modeling (Glanz et al., 2008).

"I feel more confident than I was before the trip, and I became more comfortable with the translator too and doing that and working back and forth and I think my skills improved while I was working with them" (Student C, personal communication, September 17, 2010).

As a whole, the group of students reflecting on their international service learning experience was able to understand the importance of cultural competence and its impact on the health profession. Participants understood the correlation between their increased awareness of cultural competence and their personal service learning experience. This theme relies on the environment, situation, and observational learning constructs of the SCT. This experience allowed participants to encounter people and events that would not be present in a classroom setting, providing students with experiential learning opportunities.

"I think um, it uh, opened my eyes to, um, other places doing healthcare, other than here in the United States and, um, let"s see, cultural competency, I guess I just never experienced or really experienced another culture in a healthcare aspect so um I think it definitely made me more culturally confident, uh, and more open to other ways of um teaching things and learning things" (Student F, personal communication, September 17, 2010).

"I think the biggest impact would be just to tell me how much more I have to learn or taught about the need for cultural competency and awareness. They teach us the basics but it"s very difficult to remember the details of each culture until you really worked with it, so it definitely…I have so much to learn" (Student I, personal communication, September 18, 2010).

"I want to be as accepting as possible, essentially, of other people"s beliefs, I mean that"s an important thing to me, to other people"s ideas, and especially if it"s healthcare, which is such a personal thing, I mean, your own health is a very, very important thing and your healthcare should correlate with your cultural beliefs, I think" (Student J, personal communication, September 17, 2010).

Conclusions

Cultural competency is a lifelong learning process and cannot simply be achieved by participating in one isolated experience (Hoban & Ward, 2003). Furthermore, it does not have uniform and concrete criteria by which individuals can declare they have reached a standardized level of success. In this study, participants were asked to reflect on the impact the international service learning opportunity had on their health profession

practice (Chang, 2007). This international service learning trip created an eye-opening experience that afforded the participants of this study to work with individuals from a culture that was dramatically different from their own (Goldberg & Coufal, 2009).

The majority of the students embarked on the international service learning trip without any prior travel experience to Central America. The preparatory cultural training exposed students to aspects of Central American culture such as language, living environment, interpersonal communication, common/relevant/geographically relevant health concerns and communicable diseases. The training provided students the opportunity to develop cultural empathy and awareness, and allowed them to mentally prepare for the service learning experience, creating a smoother transition from domestic to international health profession practice.

By participating in the international service learning trip, students were able to witness the daily hardships the Central American families experience on a daily basis. The majority of the families the students worked with lived in poor conditions that many students had not experienced firsthand prior to the international service learning trip. Despite these hardships, the Central American people appeared optimistic and happy, particularly in the rural community of La Palma in Nicaragua. The students became cognizant of the privileges they have both personally and professionally in the United States.

The international service learning opportunity immersed the health profession students into the Central American culture and was an effective means of increasing

cultural competency. If the students choose to continue on their projected career path and remain in the health profession field they will be able to utilize this international service learning experience to enhance their professional effectiveness.

Recommendations for Further Research

Suggestions for further research on the impact of international service learning on health profession students include qualitative assessment in the form of student journals. Timely record of minor daily events during the international service learning experience could enhance the quality of information recalled by the students for a greater length of time subsequent to the trip.

Second, while the students indicated that the cultural training they received prior to the international service learning trip was useful, they also stated that further and more comprehensive training preceding the experience would have been beneficial. Many students reported difficulty in working with a translator, indicating that the task of facilitating health care with the assistance of a translator was more difficult than they had initially perceived. Providing students with access to instruction in medical terminology from the native language and also practical preparation in working with translators prior to the international service learning trip are specifically recommended.

Additionally, to provide students with a comprehensive service learning experience, it is recommended that participants take part in a domestic service learning opportunity prior to or following the international service learning trip. While similar in

the context of service learning, these shared, yet differing experiences could provide students with additional professional preparation to enhance their practice.

A long term follow-up with former international service learning students assessing the opportunity to apply knowledge gained from the experience to their health profession careers. Long term follow-up could also assess the impact that their service learning experience had on their subsequent professional development and career opportunities pursued.

Implications for the Field

As the diversity of the world‟s population increases, health professionals are finding themselves at the center of a cultural crossroads (Chang, 2007). At some point in their careers, health professionals will be confronted with the reality of working with individuals from cultures different from their own. It is imperative that health profession students gain practical experience working with individuals from other cultures in order to increase their level of success in their practice.

In terms of implications of student development, many students responded that this international service learning trip positively impacted their views of cultural competence, stating that the experience has made them more confident in their health profession practice. Although none of the students indicated that this isolated international service learning experience made them exponentially more confident, the majority of participants did report an increase in self-efficacy in working with individuals from cultures different from their own. The majority of students participating in this

study have become advocates for international service learning opportunities in all health professions. Furthermore, they feel that cultural competence is a valuable skill gained from a transformative experience that can be utilized no matter which avenue of health one may choose to pursue.

By increasing health profession students‟ cultural competence, a wave can be set into motion that could potentially lead to an overall improvement in the manner in which health care is facilitated (Amerson, 2010). Whether the students‟ perception of the international service learning opportunity was positive or negative, exposure to contrasting cultures can create a deeper recognition of how a lack of cultural competence can contribute to disproportionate levels of care in various health professions.

Participation in international service learning is an effective strategy for increasing health profession students‟ understanding and empathy towards cultures different from their own. This can be achieved by increased advocacy for international service learning by health profession faculty and veteran service learning participants. When the number of students pursuing international service learning opportunities begins to grow, the result of their dedication to the field could very well be a positive shift that transforms the health profession.

CHAPTER 5

DISCUSSION

This chapter contains a discussion of implications of the influence of international service learning on health profession students‟ perception of cultural competence. The mixed method data were combined into two separate sections: pre and post-trip survey and telephone interviews. This structure enabled themes to emerge based on the students‟ perceptions of cultural competence after receiving information from a classroom setting, and then their perceptions after the entire experience. The experience included time in the countries of Costa Rica and Nicaragua. This chapter provides an overview of the study findings, conclusions, limitations, recommendations for further research, and implications for the field of health education.

Findings

A brief summary of the study‟s finding is provided below.

Pre and Post-Trip Survey Findings

On May 18, 2010 a response summary from the pre-trip (n=10) and post-trip (n=13) survey was generated and analyzed by the principle investigator. The data were analyzed to determine if student perception of cultural competence occurred as a result of

the international service learning opportunity. The principle investigator and thesis committee chair compared the response summaries from pre and post-trip surveys to identify if an increase, decrease, or no change in participant response occurred for each item. Results of the survey analysis were recorded and assessed. The post-trip survey student participation increased by 30%. The variable averages were compared and the additional three participants in the post-survey were not outliers; therefore, their inclusion did not skew the post-survey data.

The analysis of results from the pre and post-trip surveys indicated the majority of students were positively impacted by the international service learning experience. Overall, data trends reflected an increase towards greater cultural competence throughout the post-trip survey. In total, three survey items and five sub-items were identified as having significantly higher scores on the post-trip survey than on the pre-trip survey (Tables 30-37).

In the post-trip survey 100% of participants reported finding ways to adapt services to individual and group cultural preferences, an increase of 50%. 38.5% percent of participants reported feeling very competent working with people who are from cultures different from their own upon returning from the international service learning trip, an increase of 28.5%. A 20.8% increase of students reported strongly disagreeing with the notion that race is the most important factor in determining a person‟s culture. Participants also reported increased exposure to individuals from special population groups including various racial groups +75.4, mentally or emotionally ill +16.9%, physically challenged +12.3%, homeless +23.8%, and substance abusers +34.6%.

Table 30

Race is the most important factor in determining a person‟s culture

	Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree	No Opinion
Pre n=10	0	1	4	1	0	3	1	0
Post n=13	0	1	2	1	2	3	1	0

Table 31

I find ways to adapt my services to individual and group cultural preferences

	Always	Very Often	Somewhat Often	Often	Sometimes	Few Times	Never	Not Sure
Pre n=10	0	2	2	1	1	0	1	3
Post n=13	1	5	6	1	0	0	0	0

Table 32

If I know a person‟s culture, I don‟t need to assess their personal preferences for health services

	Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree	No Opinion
Pre n=10	0	0	0	0	1	0	8	1
Post n=13	0	0	0	0	0	4	8	1

Table 33

I understand that people from different cultures may define the concept of "health care" in different ways.

	Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree	No Opinion
Pre n=10	5	4	0	0	0	0	0	0
Post n=13	9	4	0	0	0	0	0	0

Table 34

I ask people to tell me about their expectations for health services.

	Always	Very Often	Somewhat Often	Often	Sometimes	Few Times	Never	Not Sure
Pre n=10	0	0	0	3	4	2	0	0
Post n=13	1	4	3	3	0	1	0	1

Table 35
Overall how competent do you feel working with people from cultures different from your own?

	Pre n=10	Post n=13
Very Competent	10.0%	38.5%
Somewhat Competent	80.0%	53.8%
Neither competent nor incompetent	10.0%	7.7%
Somewhat competent	0.0%	0.0%
Very competent	0.0%	0.0%

Table 36
Throughout your professional preparation, which of the following special population groups have you encountered among your clients and their families or within the health care environment or workplace?

	Pre-Survey n=10	Post Survey n=13
Mentally or emotionally ill	60.0%	76.9%
Physically challenged/disabled	80.0%	92.3%
Homeless/housing insecure	30.0%	53.8%
Substance abusers/alcoholics	50.0%	84.6%
Gay, lesbian, bisexual or transgender	60.0%	76.9%
Different religious/spiritual backgrounds	90.0%	100.0%
Other	10.0%	15.4%

Table 37
Throughout your professional preparation, which of the following special population groups have you encountered among your clients and their families or within the health care environment or workplace?

	Pre-Survey n=10	Post-Survey n=13
Hispanic/Latino (including Mexican, Mexican American)	90.0%	100.0%
White/Caucasian/European American	100.0%	100.0%
Black/African American/Negro	100.0%	100.0%
American Indian/Alaska Native	10.0%	23.1%
Asian (Asian Indian, Chinese, Filipino, Japanese)	70.0%	84.6%
Native Hawaiian/Pacific Islander	20.0%	30.8%
Arab American/Middle Eastern	50.0%	61.5%
Other	0.0%	15.4%

Telephone Interview Findings

Six open-ended telephone interview items were developed based on the results of the pre and post-trip survey. They also incorporated a portion of the constructs of the SCT. These interview questions allowed participants to articulate how they perceived the service learning experience and its impact on their health profession practice.

Table 38 lists the SCT constructs, their frequencies within the students" responses, and the number of participants identified as having responses tied to each of the constructs. Construct frequencies ranged from 11-54. Self-efficacy had the highest reference with 54 followed by environment totaling 33. Observational learning was recorded as the construct with the lowest frequency of 11.

Table 38
Coding Summary Report

Social Cognitive Theory Constructs	References	Sources
Environment	33	13
Situation	29	13
Reciprocal Determinism	24	11
Self-Efficacy	54	13
Observational Learning	11	7
Expectations	17	11
Reinforcement	20	10

Further content analysis of participant responses resulted in identification of the following recurrent themes and their corresponding SCT constructs (Table 39). These themes were created to illustrate the parallels between individual students‟ responses to the interview questions to that of the group as a whole.

Table 39

Recurrent Themes and Applicable Social Cognitive Theory Constructs

Theme	Applicable Social Cognitive Theory Construct(s)
Feeling more confident working with individuals from cultures different from their own.	Self-Efficacy, Situation, Environment, Reciprocal Determinism, Observational Learning
Pre-trip training is beneficial and helpful to students prior to the international service learning experience.	Expectations, Environment, Situation
Individuals in the students‟ personal and professional circles were supportive of their experience.	Expectations
The international service learning trip was a positive and beneficial experience as a whole.	Self-Efficacy
Development of new knowledge	Environment, Situation, Observational Learning
Understanding the importance of cultural competence	Environment, Situation, Observational Learning

The SCT seeks to provide a comprehensive understanding of why and how people change behaviors and an understanding of the environments that influence them (Glanz et al., 2008). The recurrent themes generated from participant interviews mirror various constructs of the SCT. These themes delve further into the participants" perceptions of their international service learning experience and illustrate the profound impact that it had on their health profession practice.

The first theme, feeling more confident working with individuals from cultures different from their own, correlates to several of the SCT constructs, specifically self-efficacy, situation, environment, reciprocal determinism, and observational learning. While reflecting on their international service learning opportunity several students were able to recognize the impact that the experience had on their professional development. An overall increase in self efficacy can be attributed to the students having to function in an environment different from what they are familiar with. The unfamiliar setting could have posed a barrier to the students, had they not been able to rely on their peers and supervising professors for support. One method for increasing self-efficacy is social modeling (Glanz et al., 2008). In this study social modeling shows students that others like themselves are capable of performing the necessary tasks to be successful in the service learning opportunity (Glanz et al., 2008). By observing their peers in various situations, students were able to function and achieve success in an environment that they were not familiar with, leading to an increase in self-efficacy. Excerpts from participant interviews supporting this notion are as follows.

"I wouldn‟t say I‟m at 100%, but I think that it increased my knowledge greatly and I would feel I um, I feel very much at ease going back into a situation like I was in Central America and feel like I would know at least how to get the ball rolling, and how to start things" (Student A, personal communication, September 14, 2010).

"I liked it; it changed my view of doing that a lot. So before the project I was kind of hesitant about it and more unsure and then while we were there I started to really like it and interacting with people of a different culture and learning about their culture and so now I‟m more open and more open to working with other cultures" (Student C, personal communication, September 17, 2010).

"I feel very comfortable, um, I‟d say I was pretty comfortable before but now I feel more confident using my Spanish and, like definitely more comfortable with the Hispanic population because we had so much immersion in their culture and it became a lot easier to understand, like, their traditions and values" (Student H, personal communication, September 15, 2010).

The second recurrent theme found among participant interviews included student feelings that pre-trip training would be beneficial to students prior to the international service learning experience. This theme is associated with the SCT constructs of expectations, environment, and situation. While participants were quick to mention that only through immersion in the new environment can one truly grasp the international service learning experience, students were grateful for the pertinent cultural information given to them prior to departing for Central America. The pre-trip training, which happened in an academic setting, prepared students for some of the cultural differences

they expected for the duration of their time in the communities. This training also provided students with an opportunity to establish expectations regarding the situations they would be placed in, ultimately contributing to their cultural competence. Below is one student‟s description of the importance of acquiring knowledge of the surroundings prior to the international service learning experience.

“Oh definitely, because once you get off the plane it‟s, if you‟re not prepared or you think it‟s just a simple trip, it, the culture kind of hits you abruptly in the face when you get off the plane because it‟s a totally different place than America. Whether it comes from the smell of a certain area or the looks of you know, the shanty towns we‟re walking in you know, you know a lot of children, a lot of students, a lot of professionals that are not prepared for this might have a certain look on their face, or they might not adapt too well to the surroundings. So it‟s a good thing to have them prepared, and be prepared to interact with different cultures and different people” (Student G, personal communication, September 14, 2010).

Each student remarked that individuals in their personal and professional circles were supportive of their experience. Most methods of support mentioned by the participants were emotional; however, occasionally students articulated financial support. These methods of support tie into the SCT construct of outcome expectations. Increasing students‟ positive beliefs that the service learning experience will be beneficial illustrates the concept that one‟s actions are not based solely on objective reality but on their perceptions of it (Glanz et al., 2008). Specific examples of this are listed below:

"Everyone was overwhelmingly supportive personally and financially. Um, they were really excited for me they thought it would be a wonderful experience. They were supportive throughout my trip whether it was traveling or my family and friends back home; nothing but positive support and feedback" (Student I, personal communication, September 18, 2010).

"Overall I think that reaction was very positive, I was supported by many of my family, many of my friends, um, and reactions from other students in the program who are not able to go it was more kind of, "Oh I wish I could go do that too." So I think overall, that there"s an understanding that this kind of opportunity was valuable and it"s very much so a good opportunity and a good experience" (Student L, personal communication, September 19, 2010).

An increase in participants" self-efficacy was the most noted reflection among students who participated in the international service learning experience. Each student interviewed felt that the international service learning trip was a positive and beneficial experience as a whole. During the telephone interview, each student had a personal explanation for why they felt the service learning experience contributed to their professional development; however, an underlying tone of increased self-efficacy was present throughout the collective responses. This increase in self-efficacy was fostered mostly by the opportunity for students to interact with people from cultures different from their own in an environment that was foreign to them. Through observational learning, students were able to witness peers successfully engaging with others,

prompting students to do the same and ultimately achieving the same level of success (Glanz et al., 2008).

"I just think it was a great experience, definitely opened my eyes to a different culture. We always talk about cultural competency and being aware of different people"s cultures, you really don"t get it until you"re in that situation, until you"re in a different culture so I just think it was a great experience. I really enjoyed myself" (Student B, personal communication, September 17, 2010).

"I would just say that I think every student should do something like that. That was an experience that all nursing students, every single student should have this experience of working with people from different cultures because you know, it just gives you a better background and just better communication skills in general" (Student D, personal communication, September 17, 2010).

"I just think it"s a really positive experience and that if anyone in the healthcare has the opportunity to participate in a trip like this I think they definitely should. It would certainly inform the practice and teach it" (Student I, personal communication, September 18, 2010).

"I feel like it ought to be, in my opinion essential experience especially for healthcare providers in the U.S. and certainly around the world but um we have so many people and so many different cultures in the U.S. and I think that some kind of international experience, um, should be mandatory for healthcare providers just so they could understand their patients a bit better and really relate to them more and I know

that‟s kind of an impossible thing to actually happen, but I feel like it could be a valuable experience, um, to healthcare professions if more people were exposed to different cultures in their life" (Student J, personal communication, September 17, 2010).

Another theme associated with the international service learning experience was the students‟ opportunity to develop new knowledge. This theme was evident among all participants, with the term knowledge being used broadly; and taking many forms throughout the telephone interviews. The SCT constructs of environment, situation, and observational learning contributed to the participants‟ development of new knowledge by engaging students in performing new behaviors by being exposed to peer modeling (Glanz et al., 2008).

"I feel more confident than I was before the trip, and I became more comfortable with the translator too and doing that and working back and forth and I think my skills improved while I was working with them" (Student C, personal communication, September 17, 2010).

As a whole, the students who reflected on their international service learning experience were able to understand the importance of cultural competence and its impact on the health profession. Participants understood the correlation between increased awareness of cultural competence and personal service learning experiences. The theme of importance of cultural competence relies on the environment, situation, and observational learning constructs of the SCT. Experiences allowed participants to

encounter people and events that would not be present in a classroom setting, providing students with experiential learning opportunities:

"I think um, it uh, opened my eyes to, um, other places doing healthcare, other than here in the United States and, um, let's see, cultural competency, I guess I just never experienced or really experienced another culture in a healthcare aspect so um I think it definitely made me more culturally confident, uh, and more open to other ways of um teaching things and learning things" (Student F, personal communication, September 17, 2010).

"I think the biggest impact would be just to tell me how much more I have to learn or taught about the need for cultural competency and awareness. They teach us the basics but it's very difficult to remember the details of each culture until you really worked with it, so it definitely…I have so much to learn" (Student I, personal communication, September 18, 2010).

"I want to be as accepting as possible, essentially, of other people's beliefs, I mean that's an important thing to me, to other people's ideas, and especially if it's healthcare, which is such a personal thing, I mean, your own health is a very, very important thing and your healthcare should correlate with your cultural beliefs, I think" (Student J, personal communication, September 17, 2010).

Conclusions

Cultural competency is a lifelong learning process and cannot simply be achieved by participating in one isolated experience (Hoban & Ward, 2003). Furthermore, it does

not have uniform and concrete criteria by which individuals are able to declare they have reached a standardized level of success. In this study, participants were asked to reflect on the impact a specific international service learning opportunity had on their health profession practice (Chang, 2007). The international service learning trip created an eye-opening experience that afforded the participants of this study to work with individuals from a culture that was dramatically different from their own (Goldberg & Coufal, 2009).

The majority of the students embarked on the international service learning trip without any prior travel experience to Central America. The preparatory, classroom-based cultural training exposed students to aspects of Central American culture such as language, living environment, interpersonal communication, relevant health concerns and communicable diseases. This training provided students the opportunity to develop cultural empathy and awareness, and allowed them to mentally prepare for the service learning experience, easing the transition from domestic to international health profession practice.

By participating in the international service learning trip, students were able to witness the daily hardships the Central American families experience on a daily basis. The majority of the families the students worked with lived in poor conditions that many students had not experienced firsthand prior to the international service learning trip. Despite these hardships, the Central American people appeared optimistic and happy, particularly in the rural community of La Palma in Nicaragua. The students became cognizant of the privileges they have, both personally and professionally, in the United States.

The international service learning opportunity immersed the health profession students into the Central American culture and was an effective means of increasing cultural competency. Various constructs of the SCT were utilized in illustrating the effect of service learning on health profession students‟ cultural competence. This was achieved by immersing students into environments and situations where they were challenged both mentally and physically to provide culturally sensitive care to individuals from cultures different from their own.

The health profession students were able to achieve success on this service learning trip by engaging in observational learning. All students who participated in the follow up telephone interview reported increased feelings of self-efficacy as a result of the service learning trip. If the students choose to continue their projected career path and remain in the health profession field, they will be able to utilize this international service learning experience to enhance their professional effectiveness by increasing their cultural competence. Cultural competence requires an individual to increase their level of experience by working with diverse populations to contribute towards ones knowledge and skills (Amerson, 2010). With approximately one in three residents within the United States members of minority groups there is a need for health professionals to provide culturally relevant care (Amerson, 2010).

Given the importance of culture in the health status of individuals, it has been argued that understanding cultural concepts is vital to health professionals‟ successful delivery of programs (Luquis et al., 2006). Service learning has been effective in exposing students to individuals from cultures different from their own (Goldberg &

Coufal, 2009). International service learning offers opportunities for training, and unique possibilities for enhancing student‟s academic achievement, positively influencing professional development (Knutson-Miller & Gonzalez, 2009). International service learning opportunities also allow students to foster greater appreciation of cultural diversity, develop a greater awareness of global issues, and increase their cultural competency in general (Knutson-Miller & Gonzalez, 2009). A student who is culturally competent within the health profession is not only critical to the health profession but to the individuals in which it serves (Luquis et al., 2006).

Limitations

The brief time frame for students to complete the pre-trip survey is a limitation of this study, resulting in a small portion of the participants not completing the survey prior to their departure for Central America. This limited time frame, along with a lack of awareness of the pre-trip survey, may have influenced the amount of data collected, unlike the post-trip survey, where participants were informed of the survey during and after the international service learning experience. Additionally, the opportunity for students to complete the post-survey was three times as long. Another limitation to the study was what seemed to be a lack of understanding of what the term cultural competence actually meant. This seemed particularly evident among the undergraduate student participants, and could have resulted in less comprehensive responses throughout the study.

Lastly the service learning experience took place over a relatively short two-week period of time. A longer duration of the service learning trip may have yielded different results. However, the international service learning trip was bound by actual time allotted for students to be away from their respective campuses and academic courses during the regular spring semester.

Recommendations for Further Research

Suggestions for further research on the impact of international service learning on health profession students include qualitative assessment in the form of student journals. Timely record of minor daily events during the international service learning experience could enhance the quality of information recalled by the students for a greater length of time subsequent to the trip (Goldberg & Coufal, 2009; Upvall & Bost, 2007).

Second, while the students indicated that the cultural training they received prior to the international service learning trip was useful, they also stated that further and more comprehensive training preceding the experience would have been beneficial. Many students reported difficulty in working with a translator, indicating that the task of facilitating health care with the assistance of a translator was more difficult than they had initially perceived. Providing students with access to instruction in medical terminology from the native language and also practical preparation in working with translators prior to the international service learning trip are specifically recommended.

Additionally, to provide students with a comprehensive service learning experience, it is suggested that participants take part in a domestic service learning

opportunity prior to, or following the international service learning trip. While similar in the context of service learning, these shared, yet differing experiences could provide students with additional professional preparation to enhance their practice.

A long term follow-up with former international service learning students is suggested to assess how the opportunity to apply knowledge gained from the experience affected their health profession careers. Long term follow-up could also assess the impact that the service learning experience had on their subsequent professional development and career opportunities pursued.

Implications for the Field

As the diversity of the world"s population increases, health professionals are finding themselves at the center of a cultural crossroads (Chang, 2007). At some point in their careers, health professionals will be confronted with the reality of working with individuals from cultures different from their own (Luquis et al., 2006). It is imperative that health profession students gain practical experience working with individuals from other cultures in order to increase their level of success in their practice (Smith-Miller et al., 2010; Amerson, 2010; Diambria et al., 2009; Hoban & Ward, 2003).

Regarding implications for student development, many students responded that this international service learning trip positively impacted their views of cultural competence, stating that the experience has made them more confident in their health profession practice. Although none of the students indicated that this isolated international service learning experience made them exponentially more confident, the

majority of participants did report an increase in self-efficacy in working with individuals from cultures different from their own. In fact, self-efficacy was the SCT construct most frequently coded among health profession students during the telephone interviews. This reflects Amersons (2010) conclusion that health profession students benefit from hands-on application of knowledge. Learning occurs in dynamic social settings because of interactions between and among environment, personal factors and behaviors (Silverman & Ennis, 2003). Student success in service learning revolves around the SCT constructs environment, observational learning, situation, self efficacy, and reciprocal determinism. By providing health professional students practical experience, service learning is able to provide real-life exposure to common issues that novice professionals may have been blindsided by otherwise (Silverman & Ennis, 2003).

A study examining the effectiveness of service learning on teacher cultural competency (Meaney, Bohler, Kopf, Hernandez, Scott, 2008) found that hands-on teaching could help aspiring teachers increase their confidence in the classroom. Although the participants of this study are not officially categorized as teachers, there are many parallels that can be drawn between the two professions including interpersonal communication, having to provide instruction, and interacting with individuals from cultures different from their own. Keeping in mind the close correlation between the two professions, the findings of the study conducted by Meaney et al., (2008) can also be attributed to health professionals.

It is also possible that service learning may reduce the number of negative situations that many professionals experience in their first years of practice. Health care

settings may have a high population of minority patients from low socioeconomic backgrounds and can pose a challenge to new health professionals, particularly if they themselves aren"t accustomed to an environment that does not mirror their personal school experiences growing up. The triadic reciprocal causation model from the Social Cognitive theory explains that health professionals" actions can be influenced by the environment, behaviors and personal factors (Meaney et al., 2008). By engaging in service learning and working in environments with individuals from different cultures, novice health professionals will gain valuable practice. This experience will enable them to become more confident by increasing their cultural competency while simultaneously decreasing the „reality shock" feeling in the first year of practice.

If health profession students are able to engage in service learning they will be provided a professional advantage that ensures a smooth transition from the university classroom to practice. Not only does service learning have the potential to make health educators more effective, but it will improve their professional experience as a whole.

The majority of students participating in this study have become advocates for international service learning opportunities in all health professions. Furthermore, they feel that cultural competence is a valuable skill gained from a transformative experience that can be utilized no matter which avenue of health one may choose to pursue.

By increasing health profession students" cultural competence, a movement can be set into motion that could potentially lead to an overall improvement in the manner in which health care is facilitated (Amerson, 2010). Whether the students" perception of the international service learning opportunity was positive or negative, exposure to

contrasting cultures can create a deeper recognition of how a lack of cultural competence can contribute to disproportionate levels of care in various health professions.

Participation in international service learning is an effective strategy for increasing health profession students‟ understanding and empathy towards cultures different from their own (Amerson, 2010; Hoban & Ward 2003). This can be achieved by increased advocacy for international service learning by health profession faculty and experienced service learning participants. When the number of students pursuing international service learning opportunities begins to grow, the result of their dedication to the field could very well be a positive change bringing with it the ability to transform the health profession.

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VITA

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