EFFECT OF STUDY ABROAD ON INTERCULTURAL SENSITIVITY

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by

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The undersigned, appointed by the Dean of the Graduate School, have examined the dissertation entitled:

EFFECT OF STUDY ABROAD

ON INTERCULTURAL SENSITIVITY

Presented by Paula K. Patterson

A candidate for the degree of Doctor of Education

And hereby certify that in their opinion it is worthy of acceptance

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DEDICATION

I dedicate this dissertation to my dear husband Steve Fisk, who nagged me until I pursued this dream and spent a lot of time alone while I completed my degree, and to my parents who helped to support me financially and emotionally during this time. They always reminded me that any money they invested in my education and in my travel abroad was not wasted.

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ABSTRACT

One of the ways that students seek to prepare for the global job market is through studying abroad. Although little quantitative data has been collected to demonstrate the best way to develop intercultural sensitivity in students, the number of students participating in study abroad programs continues to increase. The purpose of this study was to determine the effect study abroad has on the development of intercultural learning and sensitivity with students at a mid-sized state-supported university in the Midwest.

The research compared this intercultural development in students participating in study abroad and in students participating in on-campus courses. Statistical functions used for data analysis included paired samples *t*-test and independent sample *t*-test. Qualitative data was collected from interviews with study abroad students and email questionnaires sent to on-campus students at the end of the semester.

The qualitative data revealed voices of change in both groups. The data gathering tool for the quantitative data was the *Intercultural Development Inventory* (*IDI*) (Hammer & Bennett, 2001). The results of the statistical analysis revealed that the groups progressed differently on several scales of the *Development Model of Intercultural Sensitivity* (*DMIS*) (Bennett, 1986, 1993). Neither group revealed significant changes. However, the study abroad group revealed noticeable changes and a small to moderate effect size.

CHAPTER ONE

INTRODUCTION TO THE STUDY

Background

In recent years, globalization and intercultural sensitivity have become increasingly important. Higher education's response has been to place increased emphasis on international education. Both the U.S. Department of Education and the U.S. Department of State have recognized International Education Week annually since the year 2000 (Banks & Erbland, 2002). As Berry (2002) stated, "No longer are there self-contained nations with self-contained cultures. There are very real implications in this for traditional study abroad, intercultural studies, and education in general" (p. 50).

Globalization

Competition in the job market increases for American students as U.S. companies hire a more culturally diverse workforce, open offices overseas, and expand existing operations outside of the U.S. These global expansions can even cause the closing of offices in the U.S. and downsizing of U.S. personnel. "Executive work is becoming more international in orientation and more and more employees have to be able to operate within foreign cultures" (Van der Zee & Brinkmann, 2004, p. 285). Because the Midwest university in this study is less diverse than universities in other parts of the United States, many American students at the university in this study are looking for ways to become more familiar with those from other countries and their cultures before entering the workforce.

If studying at an international university is indeed necessary preparation for students to succeed, some college graduates in the U.S. may not be prepared to compete

in this increasingly global marketplace. As Yates (2002) asserted, “Global citizenship makes an applicant stand out” (p. 6). In other words, “The international experience carries more weight on your resume than a similar job at home” (Hackbarth, 2002, p. 57).

Higher Education's Response

Many universities have created task force committees to plan for the future of their institutions. One of the areas often included in strategic planning is implementation of international education opportunities and establishing its importance for the complete education of university students and the community. According to Kipper (2002), “Broad understanding of international affairs, particularly political hot spots around the world, is crucial if an American is to thrive in a globalized world" (p. 2). For students and faculty who cannot afford to spend time away from their home institution, interacting with international students in the classroom can be a way for them to obtain the exposure to cultural diversity needed in the workplace.

According to Open Doors, “174,629 U.S. students studied abroad in 2002/03, an increase of 8.5% from the previous year” (Institute of International Education (IIE), 2004, p. 16). In a post-9/11 world, the number of students choosing to study abroad continues to increase. Futurists predict that the number of U.S. students studying abroad will increase to one million, or 50% of all students in higher education, by 2016-2017. The Lincoln Commission Study Abroad Fellowship Program, established by the late Senator Paul Simon (Commission on the Abraham Lincoln Study Abroad Fellowship Program, 2005) is slated to assist in the funding of study abroad by adding to the pool of available scholarship funding for U.S. students. The U.S. Senate recognized the importance of international study and declared 2006 as the *Year of Study Abroad*

(Loveland & Murphy, 2006). And, according to Open Doors 2005, the majority (56%) of U.S. students now choose study abroad programs of less than one semester in duration (Institute of International Education (IIE), 2005). Yet the measurable development of students on short-term study abroad programs is largely unexplored.

Need for Assessment

Institutions and employers are searching for the best ways to develop intercultural sensitivity in students and prepare them for the diverse workforce that students face after graduation. One of the ways that students seek this preparation is through studying abroad. Even though part of the long-range plans developed by many universities include increasing international programs and globalization, little quantitative data has been collected to demonstrate the best way to develop intercultural sensitivity in students. Whalen (1996) pointed out that there are few analyses of how the study abroad experience shapes student learning. A limited number of journals publish articles on internationalization, a field that has only recently experienced a growth in research.

As Ollikainen (1996) asserted, "...research on internationalization is...theoretically thin...nothing like a 'critical research tradition' has...emerged....The prevailing motives and means of universities and various organizations promoting internationalization of higher education have not been questioned" (p. 49). Assessment of home campus programs and degree requirements far exceeds study abroad program assessment (Burn, 2002). NAFSA is an association of international educators. "According to an electronic sampling conducted by NAFSA's Section on U.S. Students Abroad (SECUSSA) and the Institute of International Education (IIE), only 15 percent of the reporting institutions assess intercultural proficiency in study abroad" (Sideli, 2001, p. 30). Many of those who

work in the field of international education are practitioners instead of faculty members who do research.

Myles (1996) suggested that "our role as international educators is becoming essentially that of managers of information or even technical apprentices" (p. 57). According to Vande Berg (2001), "International educators have during the past decade become increasingly aware of the need to identify and measure the learning outcomes of students participating in study abroad programs" (p. 31). Additional costs incurred by the institution are shared by faculty and staff as working with study abroad students incrementally increases their workloads. In these times of financial crisis for public universities, it is important to justify the costs of providing study abroad programming as well as recruitment of international students to come to the United States.

Conceptual Underpinnings for the Study

For many years, students have been assessed of what they have learned in a classroom. However, as the number of students who study abroad increases, the instructional strategies associated with the field may become the norm rather than the exception. According to a study by Snyder (2000), the majority of high school students tested were described as global or tactile/kinesthetic learners who "learn best by actually doing things, not by just listening and watching. They need to be actively involved in constructing their own knowledge about the subject they are learning" (p. 16). This population of students is now in college. Therefore, perhaps the strategies used in high school should also be explored in higher education. The conceptual underpinnings for this study include two theoretical perspectives of the content and context of learning: *collaborative learning* (Bruffee, 1999) and learning by *direct experience* (Nonaka &

Takiuchi, 1995). Two additional themes in this study include the *learning organization* (Morgan, 1997), and *intercultural development* (Hammer, Bennett, & Wiseman, 2003).

Collaborative learning. Bruffee (1999) mentioned that new ideas are better accepted through conversation among the parties involved. He calls this "reacculturation through collaboration" (Bruffee, p. 10). Reacculturation accelerates learning, and this learning becomes more complex in a lifelong process. Through conversation, knowledge creation is not separated from society or personal relationships, and the resulting interaction in the constructive conversation is helpful, because it acknowledges differences in judgment and improves the decision-making process (Bruffee). Collaborative learning and cooperative learning were considered by Bruffee to be "educational activities in which human relationships are the key to welfare, achievement, and mastery" (p. 83).

Knowledge is created in a social setting (Bruffee, 1999). One way that Bruffee described collaborative learning was the "negotiation that occurs when we construct knowledge socially…at the boundaries between different communities of knowledgeable peers…[to] normalize options that one knowledge community seems to offer to another" (p. 70). An additional goal of cooperative learning is the concept of "learning collectively rather than competing with one another…It wants students to ask…who can help them and who else can they help" (Bruffee, p. 88).

Learning by direct experience. "The most powerful learning comes from direct experience....The creation of knowledge is as much about ideals as it is about ideas" (Nonaka & Takeuchi, p. 10). According to Huang (1997), "...students learn science most effectively through direct experience....It is widely held that such learning is more

durable, is more likely to increase the motivation of students, and helps students develop their own powers of reasoning...and analysis" (p. 10).

Steinberg (2002) asserted that "Learning is not isolated in a classroom, but involves a total experience. Learning takes place outside of the study abroad classroom in the student's living situation, associations with peers, and participation in extracurricular activities" (p. 211). Nonaka and Takeuchi (1995) also noted that knowledge is created in a social setting and asserted that a tacit, explicit exchange creates knowledge.

Learning organization. In describing a learning organization, Morgan (1997) advocated that organizations anticipate environmental changes by "developing an ability to question, challenge and change operating norms and assumptions" (Morgan, p. 90). Morgan found that genuine learning is based on action that "...arises from uncertainty and lack of control in a situation" (p. 94). "Organizations must develop cultures that support change and risk taking" (Morgan, p. 94).

Rhodes (1997) pointed out that study abroad can mean "gaining access to a new kind of intellectual community" (p. 1). Koskinen and Tossavainen (2003) stated, "...one can only learn intercultural sensitivity within human interaction and through personal development ... relationships may be the key element in learning in a foreign educational context" (p. 501). During study abroad, Koskinen and Tossavainen (2004) found that when Finnish nursing students worked in Britain, "the growing intercultural awareness and maturation caused by the stressful adjustment to differences might be the key components of becoming interculturally competent. The degree of difference might have a positive impact in such a learning process" (p. 112).

Intercultural development. According to Hammer, et al. (2003), "Today, the importance of intercultural competence in both global and domestic contexts is well recognized" (p. 421). And as the workforce becomes more diverse, cross-cultural training becomes more valuable (Homann, 1999; Minehan, 1997; Montwani, Harper, Subramanian, & Douglas, 1993; Mueller, 1996). This study will measure the degree of change in *intercultural development* that actually occurs in students after participation in a study abroad program.

Before entering into relationships with those from different cultures, a quality orientation program is important for both students and professionals (Bryant, 1995; Homann, 1999). According to Anderson (2003), "For short-term students especially, but also for anyone new to a cultural setting, an approach that helps make explicit one's reading of others' behavior and cultural materials can greatly increase a working understanding of local cultures" (p. 41). "The dimension of cultural sensitivity has long been recognized as playing a vital role in the success or failure of cross-cultural endeavors" (Greenholtz, 2000, p. 416). Relich and Kindler (1996) stated that when Canadians studied in Australia, "The gaining of awareness of cultural differences promoted intercultural sensitivity and understanding rather than prompting a further search for the common ground" (p. 42). Rhodes (1997) pointed out that even the development of modern science occurred "by challenging some of the prevailing everyday assumptions, implicit beliefs, and prevailing views....It is this cultural web, the set of questioned and unquestioned intellectual assumptions, in which discoveries take place" (p. 2).

Although study abroad espouses the development of intercultural sensitivity better than what can be done with traditional teaching strategies used in a domestic classroom in the U.S., there has been little quantitative assessment to measure this development.

Statement of the Problem

The number of students participating in study abroad programs continues to increase. According to data collected from U.S. institutions by the Institution of International Education (IIE) and published in Open Doors 2004, "study abroad has increased by 129% in about a decade, and by 53% in the past five years and reached an all-time high of almost 175,000 [174,629] students" (Institute of International Education (IIE), 2004, p. 17).

It is important to "know if the investment of staff, funds, and other resources to conduct study abroad and exchange programs are justified by their contributions to students' international education" (Carlson, Burn, Useem, & Yachimowicz, 1991, p. 47). As Vande Berg (2001) stated, "...students and their parents...hold colleges...accountable for the quality of the educational opportunities they provide--educational consumers want assurances that institutions will provide knowledge, skills, and awareness that will contribute directly to success after graduation" (p. 31).

According to Carlson et al. (1991), "....study abroad is one of the most rapidly expanding fields in American higher education, and yet there has hitherto been little systematic research on its outcomes for students" (p. 47). International educators "believe the field will benefit from new research studies that focus on student learning outcomes" (Rubin & Sutton, 2001, p. 30). And, according to Crossley (2000), "international research

in education is essential...the strategic bridging of cultures and traditions lies at the heart of this process" (p. 326).

Little empirical data exists on the effects these study abroad programs have on learning. There has not been a quantitative study focused on any changes in the development of intercultural sensitivity of the study abroad students at the state-supported midwest university in this research. Yet data collection is one of the most accurate and compelling ways to demonstrate to others (those within the institution and external constituents) the extent to which the university supports its mission and contributes to the educational experience of its students.

Purpose of the Study

College graduates are obtaining jobs with companies and offices outside of the United States. Increasing numbers of foreign born workers and their families are now members of companies, schools, and communities within our country. Therefore, the development of intercultural awareness, sensitivity, and competence is essential for a person to compete in today's workplace. Many students seek to develop these skills through studying abroad. The purpose of this study was to determine the effect study abroad has on the development of intercultural sensitivity.

Research Questions

The primary research questions are as follows:

1. How much do students develop on the *DMIS: Developmental Model of Intercultural Sensitivity* (Bennett, 1986, 1993) as a result of participation in study abroad according to scales and subscales measured by the *IDI* (*Intercultural Development Inventory*) (Hammer & Bennett, 2001)? The *DMIS* (Bennett) moves from *Ethnocentrism: denial, defense, minimization* to

Ethnorelativism: acceptance, adaptation, integration. Scales and subscales on the *IDI* (Hammer & Bennett) include:

a. Denial/Defense (Disinterest, Avoidance, Reversal)

b. Minimization (Similarity, Universalism)

c. Acceptance/Adaptation (Cognitive and Behavioral Frame Shifting)

d. Encapsulated Marginality

e. Developmental Sensitivities, Perceived Sensitivities, and the gap between Developmental and Perceived Sensitivities

2. How much do students develop on the *DMIS: Developmental Model of Intercultural Sensitivity* (Bennett, 1986, 1993) as a result of a semester in a traditional classroom experience in the U.S. according to scales and subscales measured by the *IDI* (*Intercultural Development Inventory*) (Hammer & Bennett, 2001)? The *DMIS* (Bennett) moves from *Ethnocentrism: denial, defense, minimization* to *Ethnorelativism: acceptance, adaptation, integration*. Scales and subscales on the *IDI* (Hammer & Bennett) include:

   a. Denial/Defense (Disinterest, Avoidance, Reversal)

   b. Minimization (Similarity, Universalism)

   c. Acceptance/Adaptation (Cognitive and Behavioral Frame Shifting)

   d. Encapsulated Marginality

   e. Developmental Sensitivities, Perceived Sensitivities, and the gap between Developmental and Perceived Sensitivities

3. Do students who study abroad demonstrate higher development of intercultural sensitivity than students who study in a traditional classroom?

4. Does post-test qualitative data from student interviews and emails reflect the same result as the *IDI* (Hammer & Bennett, 2001) quantitative measurement on the *DMIS* (Bennett, 1986, 1993)?

Research Hypotheses

Based on the literature and experiences of others, the following research hypotheses, which related to the stated research questions, were also explored in this study:

Question 1: How much do students develop on the *DMIS: Developmental Model of Intercultural Sensitivity* (Bennett, 1986, 1993) as a result of participation in study abroad according to scales and subscales measured by the *IDI* (*Intercultural Development Inventory*) (Hammer & Bennett, 2001)? The *DMIS* (Bennett) moves from *Ethnocentrism: denial*, *defense*, *minimization* to *Ethnorelativism: acceptance*, *adaptation*, *integration*. Scales and subscales on the *IDI* (Hammer & Bennett) include:

a. Denial/Defense (Disinterest, Avoidance, Reversal)

b. Minimization (Similarity, Universalism)

c. Acceptance/Adaptation (Cognitive and Behavioral Frame Shifting)

d. Encapsulated Marginality

e. Developmental Sensitivities, Perceived Sensitivities, and the gap between Developmental and Perceived Sensitivities

Hypothesis 1: Students who study abroad will show a small movement from minimization of *ethnocentrism* to acceptance of *ethnorelativism* on the *Developmental Model of Intercultural Sensitivity* (Bennett, 1986, 1993).

Question 2: How much do students develop on the *DMIS: Developmental Model of Intercultural Sensitivity* (Bennett, 1986, 1993) as a result of a semester in a traditional classroom experience in the U.S. according to scales and subscales measured by the *IDI* (*Intercultural Development Inventory*) (Hammer & Bennett, 2001)? The *DMIS* (Bennett) moves from *Ethnocentrism: denial, defense, minimization* to *Ethnorelativism: acceptance, adaptation, integration*. Scales and subscales on the *IDI* (Hammer & Bennett) include:

a. Denial/Defense (Disinterest, Avoidance, Reversal)
b. Minimization (Similarity, Universalism)
c. Acceptance/Adaptation (Cognitive and Behavioral Frame Shifting)
d. Encapsulated Marginality
e. Developmental Sensitivities, Perceived Sensitivities, and the gap between Developmental and Perceived Sensitivities

Hypothesis 2: Students in the classroom will begin farther into *ethnocentrism* and will not show as large a movement as those who study abroad.

Question 3: Do students who study abroad demonstrate higher development of intercultural sensitivity than students who study in a traditional classroom?

Hypothesis 3: Study abroad students will show more development than classroom students.

Limitations, Assumptions, and Design Controls

Limitations and Assumptions

The main limitation of this study was that it was based solely on student participants at one mid-sized state university in the Midwest. It should also be noted that

students who study abroad were self-selected and may have begun at a different level of cultural learning sensitivity than the student who did not choose to study abroad. Other factors such as finances and personal responsibilities (i.e., jobs and families) may also have influenced a student's decision to study abroad.

Furthermore, the sample size for this study was relatively small. The test population included only students who participated in faculty-led short term study abroad programs ranging from two to four weeks. The control group included students who enrolled in selected summer school courses on the home campus. These courses included Introduction to Intercultural Communication and selected foreign language courses.

Because of the cost of the Intercultural Development Inventory instrument and the limited funding available, a sample size of sixty students was used. According to Fraenkel and Wallen (2000), this number is sufficient for statistical significance in a *t*-test for correlated means. In order to enhance the richness of the data, qualitative data was also added.

Design Controls

The study was a quasi-experimental design utilizing a convenience sample. The participants were not randomly selected. In order to remove the normal effects of maturation throughout the time period a student was enrolled in class, this study used the same pre-test and post-test to reveal changes that may have normally occurred with students over the course of two to four weeks enrolled on campus as a control group. The on-campus classes chosen included Introduction to Intercultural Communication and selected foreign language courses at this university.

This quantitative data was compared to results of the same test instrument administered to students from the same university who studied abroad. Since alpha equals .05 for all, the planned analysis was ANCOVA, using the pre-test as the covariate, unless there were no significant difference on the pre-test scores.

Qualitative data was also be added. Students who studied abroad answered questions in an interview and those in the classrooms answered the same questions by email. The qualitative data from these interviews and email responses was coded and compared to the quantitative data from the Intercultural Development Inventory (IDI) to reveal differences between the development shown quantitatively on the IDI and the development revealed in the qualitative data results.

Definitions of Key Terms

Abraham Lincoln Study Abroad Fellowship Program. This program was established by the late Senator Paul Simon (D-Illinois) to provide federal money to send one million students to study abroad annually in a decade (Commission on the Abraham Lincoln Study Abroad Fellowship Program, 2005).

Acceptance. This is the fourth stage of the DMIS. People are curious about and respectful toward cultural difference (Bennett, 1986, 1993).

ANCOVA (Analysis of Covariance). This statistical comparison is used when groups are given a pre-test related in some way to the dependent variable. If mean scores on this pre-test are found to differ, it enables to researcher to adjust the post-test mean scores on the dependent variable for each group to compensate for the initial differences between the groups on the pre-test (Fraenkel & Wallen, 2000).

Adaptation. The fifth stage of the DMIS comes from experience yielding perception and behavior appropriate to that culture; behavior may intentionally change to communicate. (Bennett, 1986, 1993).

Classroom students. This refers to those enrolled on campus for the summer in a foreign language course or an intercultural communications course at this university.

Culture (Objective). This is behavior that has become routinized into a particular form, such as art, music, and so forth, or social, economic, political, and linguistic systems (Hammer & Bennett, 2001).

Culture (Subjective). This is the learned and shared patterns of beliefs, behaviors, and values of groups of interacting people...the psychological features that define a group of people (Bennett, 1986, 1993).

Defense. The second stage of the DMIS is described by statements such as "*We* are superior and *they* are inferior" People are threatened (Bennett, 1986, 1993).

Denial. In this first stage of the DMIS, other cultures are avoided. People are generally disinterested (Bennett, 1986, 1993).

DMIS (Developmental Model of Intercultural Sensitivity). This is a theory of intercultural communication based on a series of predictable cognitive stages of individuals experiencing cultural differences; used with great success to develop curriculum for intercultural education and training programs (Bennett, 1986, 1993).

Diversity. This refers to the existence of different cultures within the same group of people.

Ethnocentric stages. These are when one's own culture is experienced as central; first three stages of the DMIS (Bennett, 1986, 1993). This includes the conscious or

unconscious implicit belief in the innate superiority of one's own culture or system of belief.

Ethnorelative stages. These are when one's own culture is experienced in the context of other cultures; final three stages of the DMIS (Bennett, 1986, 1993).

Faculty-led. This term refers to a study abroad program, usually short-term, in which students are accompanied to the host country by a faculty member from their home university.

Foreign student. This refers to anyone enrolled for courses in the United States who is not a permanent resident, citizen, refugee or resident alien (green card holder) (Koh, 2001).

Heritage seeker. This refers to a U.S. citizen who studies abroad in the country or on the continent from which his ancestors immigrated to the United States (Asia, Africa, Europe).

Home country or university. This is the place from which the study abroad students come.

Host country or university. This is the country or university to which study abroad students go.

Intercultural. This refers to the culture of another country (Tovey, 1997). It can also refer to the cultures of different ethnic groups within the United States.

Intercultural competence/sensitivity. This is the capability to generate increasingly more complex perceptions and adapt behavior appropriately to cultural context (Hammer & Bennett, 2001).

Integration. The sixth stage of the DMIS is rare and found primarily among expatriates. (Bennett, 1986, 1993).

IDI (Intercultural Development Inventory). The theory-based instrument that measures the first five of the six stages on the DMIS (Hammer & Bennett, 2001) is used in this study.

Internationalization. This is a complex series of processes whose combined effect, whether planned or not, is to enhance the international dimension of the experience of higher education in universities and similar educational institutions (de Wit, 1995).

Lincoln Commission. This Commission was formed to recommend ways to greatly expand the opportunity for students at institutions of higher education in the U.S. to study abroad, with special emphasis on studying in developing countries using funds from the Abraham Lincoln Study Abroad Fellowship Program.

Minimalization. The third stage of the DMIS includes the belief that elements of one's own culture are universal (Bennett, 1986, 1993).

Multicultural. This refers to the culture of another country (Tovey, 1997); of, relating to, or including several cultures.

NAFSA. This is an association of international educators.

Non-traditional student. This is a student who is older than 25 years of age.

Paired Samples t-Test. (See *t*-Test for correlated means.)

Population. This is the group to which the researcher would like the results of a study to be generalizable, it includes *all* individuals with certain specified characterics (Fraenkel & Wallen, 2000).

Post-9/11. This is the period after the tragedy of September 11, 2001 occurred.

Qualitative data. This data is in the form of quotes or words describing observations instead of statistical numbers found in quantitative data. (Fraenkel & Wallen, 2000).

Qualitative research. This is research in which the investigator attempts to study naturally occurring phenomena in all their complexity (Fraenkel & Wallen, 2000).

Quantitative data. This is data that differs in amount or degree, along continuum from less to more (Fraenkel & Wallen, 2000).

Quantitative research. This is research in which the investigator attempts to clarify phenomena through carefully designed and controlled data collection and analysis (Fraenkel & Wallen, 2000).

Reversal. Part of the ethnocentric stage of the DMIS is the conscious or unconscious implicit belief in the innate superiority of another culture or system of belief over one's own culture (Bennett, 1986).

September 11, 2001. This is the date when the U.S. was attacked by terrorists leading to changes in immigration laws and the establishment of the Homeland Security Act. This is also referred to as 9/11.

Short-term study abroad programs. These are programs of six weeks or less (See study abroad.)

Study abroad. This refers to an educational program for undergraduate study, work, or research that is conducted outside the United States and that awards academic credit toward a college degree. Data for this study came from short-term study abroad programs of six weeks or less.

t-Test for Correlated Means. This parametric test of statistical significance is used to determine whether there is a statistically significant difference between the means of two matched, or nonindependent, samples. It is used for pre-post comparisons (Fraenkel & Wallen, 2000), and also called a *paired samples t-test* in SPSS.

Summary

In recent years, globalization and intercultural sensitivity have become increasingly important. Many American students are looking for ways to become more familiar with those from other countries and their cultures before entering the workforce. Universities are including implementation of international education opportunities into their strategic plans for the future.

However, even though the number of students participating in study abroad programs continues to increase, the intercultural development that occurs is not always assessed. Little quantitative data has been collected to determine whether or not study abroad develops intercultural sensitivity in students and if the development occurs more than in traditional classroom settings. The next chapter will provide a literature review based on selected works that have been written about international education, diversity, and teaching strategies.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

According to Van Hoof (2005), international education "...prepares students for a global context and for the ability to tolerate ambiguity and to consider issues from multiple perspectives..." (p. 32). Competition in the job market increases for American students as U.S. companies hire a more culturally diverse workforce, open offices overseas, and expand existing operations outside of the U.S. Higher Education's response has been to place increased emphasis on international education. Van Hoof (2005) continued, "...internationalization of higher education leads to better teaching and research because a narrow, parochial focus will not survive in an international climate" (p. 32). Study abroad is one strategy used to prepare students for internationalization.

Two notable concepts in education today are *collaborative learning* (Bruffee, 1999*)* and *learning from direct experience* (Nonaka & Takiuchi, 1995). Knowledge can be created in a social setting through both of these styles of learning. The development of intercultural awareness, sensitivity, and competence is important for a person to compete in today's workplace. Many students seek to obtain these skills through studying abroad.

Chapter one reviewed the importance of globalization and intercultural sensitivity. This chapter provides a literature review based on selected works that have been written about international education, diversity, and teaching strategies. It is principally directed toward research that provides insight into the history and importance of international education and diversity and the need for further research and assessment. In researching the literature on study abroad and intercultural sensitivity, these are the three themes that

emerged: the history of international education, the importance of international education, and perspectives of multicultural learning, including teaching strategies and assessment.

The history of international education, including globalization and study abroad in the United States, will begin this chapter. Two overarching types of internationalization and cultural diversity are discussed in the literature. First, there are international students, foreign born workers (global diversity), and non-white Americans (domestic diversity) in our workplaces and classrooms. A second type of internationalization effort taking place on U.S. campuses includes U.S. students studying abroad. Next, this chapter will review what the literature said about the importance of study abroad and intercultural sensitivity. Categories of study abroad include classroom, experiential learning, language acquisition, work abroad, interdisciplinary learning, and experiences of heritage seekers.

The last theme discussed will be strategies for teaching intercultural sensitivity, including various categories of study abroad programs and various perspectives of multicultural education and training. The chapter will conclude with a review of the literature describing the importance of assessment of learning from study abroad.

History of International Education

Globalization is not a new concept. In fact, according to Friedman (2005), "there have been three great eras of globalization" (p. 9). The first era began in "1492--when Columbus set sail, opening trade between the Old World and the New World" (Friedman, p. 9). "The second great era...lasted roughly from 1800 to 2000. This era shrank the world from a size medium to a size small...the key agent of change...was multinational companies" (p. 9). And "around the year 2000, we entered...Globalization 3.0" (Friedman, p. 10).

International education and study abroad are also not new phenomena in the U.S. Two hundred years after Friedman's (2005) concept of globalization began, many students left the United States in order to study in England, according to Dubois (1995). Ideas from American scholars returning home to the United States from visits to research universities in Germany, Spain, France, and Scotland were also later used in our own educational institutions in the United States. Then, during the nineteenth century, many students, especially those from wealthy families, began participating in European tours as part of their studies (Dubois).

Early twentieth century. During the early twentieth century, ideas about internationalization and diversity emerged leading to student movements such as civil rights in the United States and other countries and the development of and participation in the Peace Corps. The experiences of World Wars I and II also increased the desire of global citizens throughout the world to get to know human beings from other countries and understand other cultures in an effort toward world peace.

An early study abroad student was an African American student named W. E. B. Du Bois. In 1892, he left the United States to study abroad for two years in Berlin. There he learned that it was not an innate trait of whites to be prejudiced against blacks. And when he returned home to this country, he became an African American civil rights pioneer (Beck, 1996).

In 1919, the Institute for International Education (IIE) in Washington, D. C. was founded (de Wit, 1995). This institute now offers 250 grant programs, including the prestigious Fulbright Program, the Gilman Scholarship to fund students from low-income families to study abroad, the Freeman-Asia Grant to fund students who choose to study in

Asia, and the NSEP (National Security Education Program) to fund students who choose to study an underrepresented (non-European) language abroad. The IIE also publishes Open Doors, an annual publication which provides valuable statistical data of U.S. students studying abroad as well as information about international students studying in the U.S.

After World War II veterans returned from Europe, there was interest in studying abroad, and the Council for International Educational Exchange (CIEE) and the American Field Studies (AFS) began in 1947. These programs continue to offer exchange programs for U.S. high school and college students to study abroad and live with host families. They also offer opportunities for international students to come to the U.S. to study or work and stay with American families. In 1961, the federal government established the Peace Corp. Its mission is to send Americans abroad to work as volunteers in underdeveloped countries and communities.

1961-2001. Participation in international education continued to grow during the next forty years as the numbers of U.S. students studying abroad increased, especially throughout the 1990's. Friedman (2005) considers 11/9/89, when the Berlin wall fell, to be the first of "ten forces that flattened the world" (p. 48). Cluett (2002) pointed out that "The first ten years after the end of the Cold War witnessed a dramatic increase in international travel" (p. 18). During this time, study abroad went through profound changes.

Although participation in study abroad programs had once been considered an exclusive activity for those with tremendous intellectual and economic resources, as the numbers increased, study abroad progressed to an emerging student learning paradigm,

which was less elitist than the older paradigm. Interestingly, the gathered statistics illustrated that U.S. females participated in study abroad more than males did. As women began participating in study abroad programs outside of Western Europe, new demographics emerged. As study abroad participation increased in Latin America and the Middle East, an unexpected tension was reflected in the qualitative data gathered from U.S. women who studied in countries in these regions. These female participants were faced with a culture that was more male-dominated than their own (Twombly, 1995).

September 11, 2001. Crossley (2000) predicted, "...the geopolitical relations of the 21st century will require the forging of more equal partnerships between all systems and personnel engaged in international educational development" (p. 323). However, after the tragedy of September 11, 2001, the Homeland Security Act was passed, and many aspects of international education came under close scrutiny from the U.S. State Department, implying that the presence of foreign students in this country was a threat to national security. "Post-September 11 security-related changes in visa policy...generated perceptions abroad that the United States is closing its doors to international students and scholars" (Institute of International Education (IIE), 2004, p. 3).

In 2003/2004, the number of international students studying at U.S. campuses declined by 2.4% (Institute of International Education (IIE), 2004, p. 3). This was the first decline in 30 years and "only the second such decline since 1954/55, when the Institute of International Education began collecting data on international students systematically and reporting these findings in the *Open Doors Report on International Educational Exchange*" (Institute of International Education, p. 3).

However, Honigsblum (2002) emphasized the importance of international education during this time of "dramatic geopolitical shifts" (p. 111). Unless those from other countries have a chance to study, work, and live in the United States, their only knowledge of U.S. culture will come from the television and movie industry, the President and other politicians, U.S. study abroad students, and tourists who visit abroad. Johnson (2002) stated, “International education is part of the solution to terrorism, not part of the problem” (p. 4).

Just as the experiences of U.S. soldiers who returned from World Wars I and II increased the desire of U.S. students to study abroad and of global citizens throughout the world to begin to get to know human beings from other countries and understand other cultures in an effort toward world peace, September 11 also highlighted a need for more internationalism, especially in the field of education. However, the events of September 11 were a wake up call to international advisors regarding the safety of students coming to the United States to study. Institutions abroad now realized that they too needed a travel emergency contingency plan for students in the United States.

American students also began to take another look at the safety of study abroad. Cluett (2002) acknowledged that since "September 11...American students...have had to reevaluate...their sense of personal security...[and] the depth and the sincerity of the 'welcome' they hope to experience while living and studying in poorer and politically volatile parts of the world" (p. 19).

One of the main factors that increased the numbers of students participating in short-term faculty-led study abroad programs is the ability to provide increased safety of students. *Open Doors* stated that in 2002/2003, "short-term programs...enrolled nearly

half, or about 48% of all U.S. students abroad" (Institute of International Education (IIE), 2004, p. 19). Students and their parents feel more secure spending two to six weeks abroad led by a faculty member from their home institution than studying abroad independently for a whole semester or year.

Current trend. According to *Open Doors*, "Since 1997/98, programs of short duration have seen the largest growth of all program types" (Institute of International Education (IIE), 2004, p. 19). During the last five years, the numbers of students participating in short-term faculty-led study abroad programs has increased. As mentioned above, one of the reasons is concern about student safety. Another reason for the increase in short-term programs is the increase in non-traditional students who have personal responsibilities such as jobs and families that prevent them from spending more than two to six weeks abroad. A third reason is the increasing requirements of degree programs and the need to still graduate with a bachelor degree in the traditional four years. A short-term program is often easier for students to fit into their degree programs without delaying graduation. Yet the measurable development of students on short-term study abroad programs is largely unexplored.

Study abroad and international education have been part of education in the United States since the early colonial period. And “U.S. participation in study abroad for academic credit has consistently increased since 1985/86, with particularly dramatic growth since the mid-1990s. U.S. study abroad increased by 129% in about a decade, and by 53% in the past five years alone” (Institute of International Education, 2004, p. 16). The literature discusses some reasons that study abroad continues to gain importance today.

Importance of Study Abroad

The importance of study abroad is highlighted in the literature in several different areas. First, U.S. funding for study abroad continues to increase. Second, study abroad may develop marketable skills such as leadership and intercultural sensitivity. And finally, study abroad is acknowledged by U.S. institutions as crucial for business, science and engineering, nursing, and education.

Funding. One of the ways an institution or government demonstrates what programs are significant is through distribution of funding. The United States federal government is planning to provide substantial funding to U.S. students from the Lincoln Commission Study Abroad Fellowship Program, established by the late Senator Paul Simon (Commission on the Abraham Lincoln Study Abroad Fellowship Program, 2005) Senator Simon's purpose in establishing this program was to increase the number of U.S. students studying abroad to one million, or 50% of students in higher education, by 2016-2017.

The Institute for International Education (IIE) in Washington, D. C. continues to offer 250 grant programs, including the prestigious Fulbright Program, the Gilman Scholarship to fund students from low-income families to study abroad, the Freeman-Asia Grant to fund students who choose to study in Asia, and the NSEP (National Security Education Program) to fund students who choose to study an underrepresented (non-European) language abroad.

At one time a college degree was considered unusual. But, just as a bachelors or even a graduate degree is common today, study abroad is becoming an expectation of many students, their parents, and employers. It has also become an expectation of

institutions as study abroad becomes a requirement for some degrees. Making study abroad a degree requirement indicates that university faculty members and administrators consider study abroad to be a central part of a student's education.

In addition to funding for study abroad, the U.S. Senate declared 2006 as the *Year of Study Abroad* (Loveland & Murphy, 2006) and both the U.S. Department of Education and the U.S. Department of State have recognized International Education Week annually since the year 2000 (Banks & Erbland, 2002). However, the literature on study abroad does not include empirical evidence that a student who has studied abroad does better academically or is more likely to get a job upon graduation than the one who stayed on campus without studying abroad. Nevertheless, it does suggest that skills gained with study abroad include some of the same skills for which many employers are looking.

Leadership. One of the skills that many employers look for in an employee is leadership. Study abroad forces students to learn what to do when they find themselves in new situations outside of their own comfort zones. “Although the outsider has an opportunity to better understand a different culture as well as find out more about him or herself, the experience isn’t always a comfortable one” (Hartung, 2002, p. 28). However, this discomfort of being an outsider can prepare students for required skills of leadership.

According to Yukl (2006), "In a turbulent environment in which organizations must continually adapt, innovate, and reinvent themselves, leaders must be flexible enough to learn from mistakes, change their assumptions and beliefs, and refine their mental models" (p. 198). When employers see study abroad on students' resumes or transcripts, they may recognize that these students have been forced to show the flexibility needed to adapt to new environments.

Earnest (2003) asserted that study abroad improves leadership skills. "Leaders will need to be prepared to lead in fast-changing environments that include a multiplicity of cultures and traditions....Study abroad gives students the experience of studying and living in another culture" (Earnest, p. 46). As these students learn to adjust to another culture abroad, it may improve the leadership skills also needed to adjust to the culture of an organization. Schein (1992) discussed the culture of an organization and defined culture as the shared values and assumptions within an organization as it functions from day to day.

In addition to adjusting to the culture of an organization, experience living outside the United States is a skill many look for in a leader. According to McCaig (2002), "At a time when...international cooperation is vital..., the leadership of persons whose...experience extends beyond borders is critically needed" (p. 11). Study abroad enables students to gain this needed experience of studying and living beyond their own borders. Yukl (2006) described a transformational leader as one who "…influences followers to view problems from a new perspective" (p. 262). And Williamson (2002) agreed that "there is a great need for future leaders to understand the world around them" (p. 11). Through study abroad, this understanding of the world may increase intercultural sensitivity.

Intercultural sensitivity. Bruffee (1999) stated, "Knowledge is a conversation in progress among people who understand one another--people who speak the same language. Change in knowledge--what we call learning--takes place at the boundaries among these language communities" (p. 118). International education forces students to cross these boundaries and experience learning.

In 1986, Dr. Milton Bennett published the *Developmental Model of Intercultural Sensitivity (DMIS)* "as a framework to explain the experience of people he observed...in intercultural workshops, classes, exchanges, and graduate programs" (Hammer & Bennett, 2001, p. 12). In the first stage, *denial*, "consideration of other cultures is avoided by maintaining...isolation from differences" (Hammer & Bennett, p. 12). Therefore, merely exposing one's self to another culture is a step forward on the *DMIS*. Promoting international education on campus, such as study abroad programs and having international students in U.S. classrooms, is a way that students can experience another culture and begin to develop intercultural sensitivity.

This is a skill that is important for employers. Relich and Kindler (1996) stated, "students felt that having to make adjustments for different ways of getting things done made them more tolerant and open to accepting intercultural variables...enhancing of their understanding and sensitivity toward individual differences" (p. 44). One area in which intercultural sensitivity is particularly crucial is in the field of business.

Business. Just as Bruffee (1999) describes learning as a collaboration, Friedman (2005) in *The World is Flat* also discusses the importance of collaboration today in business, particularly with global partners. Peppas (2005) stated, "Globalization is here to stay and companies across the world are realizing the importance of having employees with a global mindset" (p. 143). One way to prepare students to "function and excel in the new and challenging global business environment of the 21st century...is through short-term study abroad or business study abroad tours" (Peppas, p. 143).

"Geographic origin and identity for the individual contributes significantly to one's world view or more specifically to one's perceptions of the immediate external

environment, for example, the work place" (Miller, 1994, p. 17). "No one disputes that the business world is now a global work environment" (Odenwald, 1996, p. 54). Tovey (1997) pointed out that "...working in culturally diverse workplaces may have its own set of communication and management problems. Business is practiced within a cultural context, and understanding that context...is crucial to a successful business" (p. 26). For example, Exxon hired an experienced team facilitator to provide communications training to the work team that included an Asian woman whose culture dictated that she wait for silence before speaking (Gilbert, Stead, & Ivancevich, 1999). "Even firms that do not send employees abroad expect individuals to be involved in the company's global operations and to work in culturally diverse settings" (Peppas, 2005, p. 143).

Science and engineering. Another area where the literature emphasized the importance of globalization and intercultural sensitivity is in the fields of science, engineering, and industry. Rhodes (1997) contended, "Science is an international creation, a global undertaking, and its roots go back to ancient civilizations" (p. 2). According to Friedman (2005), "the lever that is enabling individuals and groups to go global so easily and so seamlessly is...software--all sorts of new applications--in conjunction with the creation of a global fiber-optic network" (p. 10).

The fact that many so-called experts in the science community failed to challenge each other's values has led to overpopulation and overconsumption (Connet, 1997; Pimentel, Huang, Cordova, & Pimentel, 1997). Because the earth's resources are limited, the quantity of natural resources per person causes a difference in what is considered a satisfactory lifestyle for those who live in the United States, China, and other countries. (Pimentel et al.).

American science and engineering students who study abroad could learn a lot about how other societies conserve natural resources and maintain a satisfactory lifestyle. However, according to *Open Doors* (Institute of International Education (IIE), 2005), U.S. science and engineering students are currently underrepresented in study abroad. Although many international students come to the United States to study in these fields, the number of U.S. students in these academic fields who study abroad is very low. This may be because some faculty members in the fields of science and engineering do not encourage U.S. students to participate in study abroad.

Science and engineering programs often have rigid degree requirements regarding what courses must be taken each semester and the sequence in which they must be taken. These faculty members also believe that international students come to the U.S. to receive a superior education in these subjects. Therefore, they feel that U.S. students cannot get an equivalent education if they spend a semester studying these fields at a university outside of the United States.

"It has been noted that with the increasing trend toward globalization in business activities and technology applications, more and more scientists, engineers, and technologists will find themselves working in unfamiliar cultural environments in different parts of the world" (Goh, 1997, p. 16). If American scientists and engineers have not had experience studying abroad, they may be less competitive with those in the field from other countries who have had the experience of living in another part of the world (the United States) during their years of study. "Global education is...urgent for meeting the needs of industry, as nearly every European ...firm...has a...need for globally

educated engineers and scientists...European industrialists are interested in hiring globally trained engineers (Humily, 1997, p. 18).

Nursing. In addition to business, science, and engineering, another area requiring intercultural sensitivity is nursing. Koskinen and Tossavainen (2003; 2004) emphasized the importance of intercultural competence in nursing. They discussed the challenges faced by nursing students from Finland who worked with nurses in a hospital in England. Although these students learned about cultural differences by living in another country, they also learned about differences in medical practices. Furthermore, they learned about the culture in their observations of the relationships nurses had with each other, between patients and nurses, and between nurses and themselves as students.

The need for nurses and those who work in all areas of healthcare in the United States will continue to increase as *baby-boomers* get older and people live longer. In addition, globalization has caused epidemics to become pandemics as they cross international boundaries. It has also become clear that disease, epidemics, and pandemics can often be closely tied to cultures and cultural practices.

It is not only imperative for those in healthcare to learn the latest trends in medicine. As the United States grows more diverse, it is also important for healthcare workers to learn how to work with patients and healthcare providers from many different cultures. Therefore, it is essential for American students majoring in the health sciences to have the opportunity to study abroad. Studying abroad may allow these students to witness the differences in medical practices as well as developing more confidence in working with patients, families, and employees who are from other cultures.

Education. It is also valuable for teachers and administrators to learn to work with the changing population of students in their classrooms. "Scholars in teacher education...have called attention to the widening gap between cultural and ethnic diversity of school children and their teachers" (Burden, Hodge, O'Bryant, & Harrison, 2004, p. 174).

Because of certification requirements, education students are often discouraged from studying abroad as they find it difficult to fit a study abroad program into their degree program. Courses taken abroad do not always meet teacher certification requirements. However, as educational administrators and teachers seek to relate to students and families from other cultures, some sort of academic experience in multiculturalism and diversity becomes more and more crucial. This study will compare the intercultural development of students who study abroad to students who spend time in a campus classroom with a multicultural course aspect.

As the number of people coming to the U.S. from other countries has increased, so has the need for teachers of English as a second or other language. Often these teachers have studied a foreign language themselves. However, they are more often graduates of the English Department than the Education Department. They also need to have the background to relate to the students and families from other cultures. Studying abroad may give educational administrators and teachers, both in traditional classrooms and in English as a Second Language programs an experience that will be helpful to them as they attempt to relate to students and families from other cultures.

The literature pointed out the importance of study abroad in several different areas. First, U.S. funding for study abroad continues to increase. Second, study abroad

develops skills such as leadership and intercultural sensitivity. And finally, study abroad is important for business, science and engineering, nursing, and education. This section included what the literature said about the importance of study abroad. The next section will discuss other perspectives of multicultural development in the literature.

Perspectives of Multicultural Development

Because of increasing diversity in our schools and in the workplace, among students and among employees, the literature included different perspectives of multicultural development. One of the challenges the United States faces in relationships with people from other cultures is the difference between an individualist and collectivist society. In order to work together with those from different backgrounds, students and employees must learn cross-cultural sensitivity. One way that students can attempt to learn this is through study abroad.

Exchange programs are economical ways for U.S. students to study abroad. It enables them to pay the same fees as they would to study in the U.S. at their home institution. These fees are collected to provide the opportunity for an international student to spend a semester or year at a U.S. institution. This gives U.S. students the opportunity to experience the presence of international students in their classes and residence halls here in the U.S. However, international students are now finding it more difficult to obtain visas to study in the United States.

Having international students on campus and studying abroad are espoused to be important to multicultural development. Nevertheless, there are few empirical studies and little quantitative data about how international education increases multicultural

development. It is important to seek evidence that study abroad will add value to a student's education.

Individualism vs. collectivist. The United States is a culture of individualism (Althen, 2002). Nonaka and Takeuchi (1995) describe the differences between a group-based Japanese organization and an individually-based western organization. The requisite variety that occurs through cross-functional teams in a Japanese companies will also occur in western companies through individual differences.

Stuller (1995) highlighted the challenge that international businesses face in examples of the collectivist ways that some non-western Chevron employees and customers see the world. Cox (1991) concluded, "organizations must be transformed to...a multicultural model...characterized by pluralism, full integration of minority-culture members both formally and informally, an absence of prejudice and discrimination, and low levels of intergroup conflict" (p. 47). Students who study abroad can experience cultural difference first-hand before entering the workforce.

Cross-cultural sensitivity and employees. Many believe that cross-cultural sensitivity is a skill that employers look for in new job applicants. Therefore, intercultural development becomes a significant skill for students to obtain. As Arenofsky (1998) pointed out, in business, "your fellow employees may have a different ethnic background from you. You'll need to understand ...their...customs so you can work...with them" (p. 24).

Changes are occurring as the number of foreign born workers increases in the U.S. (Arnofsky, 1998). As the workforce in the United States becomes more diverse, cross-cultural training becomes more valuable (Homann, 1999; Minehan, 1997;

Montwani, Harper, Subramanian, & Douglas, 1993; Mueller, 1996). Mueller (1996) predicted, "Immigration will have a greater impact on the U.S. population profile than in the 1980s, when immigration accounted for more than one-third of the U.S. population growth" (p. 57). When students spend time in another country, they may have the same experience as those in the U.S. who were foreign born. Therefore, they may better relate to this population.

"With the world integrated by economics, communications, transportation, and politics, Americans increasingly see that they live and work in a global marketplace of goods, services, and ideas" (Pickert, 1992). Cross-cultural sensitivity is significant in a wide variety of academic fields and workplaces, including the fields of politics, business, and service related industries. It is an especially vital skill to develop when dealing with issues of diversity. According to Larkey (1996), "Diversity in the U.S. workplace has become an increasingly important management issue during the last decade. In the management literature, assertions often are made concerning the impact of diversity on organizational outcomes of productivity and effectiveness" (p. 463).

Glastra, Meerman, Schedler, and DeVries (2000) wrote, "In an era of international networking and mobility, the social and cultural composition of communities in which people live and work is becoming increasingly diverse" (pp. 698-699). Quimbita (1989) contended, "...the word *community* no longer applies only to neighbors citywide but to neighbors worldwide (p. 2). Cross-cultural sensitivity becomes essential for relationships.

Teaching strategies. Study abroad programs vary in category, length, and teaching strategies employed. For example, some of the categories the literature reviewed included classroom, experiential learning, language acquisition, work abroad,

interdisciplinary learning, and experiences of heritage seekers. Even classroom learning outside of the United States will be different than classroom learning in the United States. The literature also pointed out the importance of intercultural training through both study abroad and domestic diversity training in the workplace.

Intercultural issues apply to several different groups: Americans who go abroad to study, work, and live; foreigners who come to the United States to study, work, and live; and the relationships between Americans of different cultures, ethnicity, and race. The participants in this study were U.S. students who studied on short-term faculty led study abroad programs lasting only two to four weeks. The control group included U.S. students in classes with an aspect of culture and society on a campus in the United States.

When students study abroad, one of the cultural differences students may notice is in academic systems. For example, Elliott (1997) observed that "...degree courses in the United Kingdom tend themselves to start with a greater specialization....medicine...and veterinary science are undergraduate degrees..." (p. 27). Volet (1999) stated that students who study abroad as international students in another country not only discover another culture outside of the classroom, but they discover that classroom behavior and expectations in classrooms are also different. For example, "students identified the nature of teacher-student interactions to be an area of difference" (Relich & Kindler, 1996, p. 43). This difference is usually a more formal and reserved relationship versus a more relaxed relationship. Another difference is in computer facilities, library resources, and an intercultural difference of service and speed (Relich & Kindler, 1996).

Collaborative learning was considered by Bruffee (1999) to include “educational activities in which human relationships are the key to welfare, achievement, and mastery”

(p. 83). Knowledge is created in a social setting (Bruffee). One way that Bruffee described *collaborative learning* was the "negotiation that occurs when we construct knowledge socially…at the boundaries between different communities of knowledgeable peers…[to] normalize options that one knowledge community seems to offer to another" (p. 70).

An additional goal of *collaborative learning* is the concept of "learning collectively rather than competing with one another…It wants students to ask…who can help them and who else can they help" (Bruffee, 1999, p. 88). Bruffee mentioned that new ideas are better accepted through conversation among the parties involved. He called this "reacculturation through collaboration" (Bruffee, p. 10). Reacculturation accelerates learning, and this learning becomes more complex in a lifelong process. Through conversation, knowledge creation is not separated from society or personal relationships, and the resulting interaction in the constructive conversation is helpful, because it acknowledges differences in judgment and improves the decision-making process (Bruffee).

Steinberg (2002) asserted, "Learning is not isolated in a classroom, but involves a total experience. Learning takes place outside of the study abroad classroom in the student's living situation, associations with peers, and participation in extracurricular activities" (p. 211). According to Huang (1997), "...students learn science most effectively through direct experience....It is widely held that such learning is more durable, is more likely to increase the motivation of students, and helps students develop their own powers of reasoning...and analysis" (p. 10).

Nonaka and Takeuchi (1995) agreed, "The most powerful learning comes from direct experience....The creation of knowledge is as much about ideals as it is about ideas" (p. 10). And like Bruffee (1999), Nonaka and Takeuchi also posited that knowledge is created in a social setting and asserted that a tacit, explicit exchange and daily double-loop learning create knowledge.

Nonaka and Takeuchi (1995) developed their organizational knowledge-creation process in ethnically homogenous Japanese companies. As these companies become increasingly global, they pointed out "the critical importance of socialization and externalization in global knowledge creation" (p. 197-198).

An educational system both reflects and shapes a culture. One of the goals of a student's education should be improving the understanding of cultural differences (Mahoney & Schamber, 2004). Literature about the importance of this understanding for students entering the workforce has been discussed. Even though the number of students who study abroad continues to increase, the intercultural sensitivity in these students is rarely measured. Yet Ritchie (2003) pointed out, "The goal of study abroad is not merely to lead students through a foreign country, but to teach them to be competent to live, work, and travel in a very different setting" (p. 66).

Mahoney and Schamber (2004) found that "analysis and evaluation of cultural difference is more effective in improving students' levels of intercultural sensitivity than a curriculum employing comprehension of cultural difference" (p. 332). "Most educators and researchers realize the importance of educating students who live in an ethnically and culturally diverse society about difference" (Mahoney & Schamber, p. 331).

Jurasek, Lamson, and O'Maley (1996) stated, "ethnographic research...as a learning tool during study abroad leads to...the cultural learning process, meaningful interaction with members of other cultures...(p. 29). Lutterman-Agullar and Gingerich (2002) stated, "...if one of the goals of study abroad is to foment global citizenship, then it must broaden students' horizons by helping them to identify the problems and concerns of others within the global community" (p. 14).

According to Annette (2002), "Universities can play a key role in developing networks for a global civil society and global citizen action. This will enable students to develop both an understanding of community development across national and regional boundaries" (p. 91). It seems logical that students can learn more about another language and culture when they study it outside the United States. As Citron and Kline (2001) pointed out, "The opportunity to immediately use new information is the principal advantage that comes with teaching in the country where the lesson is most relevant" (p. 25).

Student diversity. As diversity on our college campuses increases, so does diversity of the students who choose to study abroad. Some students, *heritage seekers*, choose countries or continents of their ancestors as study abroad destinations. Qualitative data shows that these students learn not only about the culture of this country outside of the U.S. but they also realize for the first time the difference between the foreign culture of their ancestors and the American culture in which they live.

Whether their ancestors are European, Asian, or African, these students find that when they return to the home of their ancestors, their hosts view them, not as European, Asian, or African, but as Americans. For example, African-Americans who choose Africa

as a destination, find that they are much richer than their African hosts and are accepted more as Americans than Africans. This economic disparity can become a source of tension (Landau & Moore, 2001). As our global society becomes increasingly interconnected, people from all cultures, races and ethnicities have more contact with other parts of the world.

Van Der Meid (2003) stated,

> "To be an informed citizen in this society requires an understanding of other cultures and societies. International educational exchange is one avenue that allows students from all over the world to develop an international understanding by experiencing life in a new culture or country" (p. 71).

According to Spyrou (1997), "The self-sufficiency of the universities must not isolate them from their social surroundings, and universities must pursue a leading role in addressing the problems of the society" (p. 24). The concept of addressing the problems of the society directly relates to the state-wide public affairs mission of the midwest university in this study.

One way to prepare students for the diverse workforce they are entering is to increase the number of international students on our campuses here in the United States and to provide opportunities for U.S. students to study abroad. An economical way to increase international students on our campus and participation in study abroad by U.S. students is through exchange programs. In this case, students are able to use scholarships and other financial aid, pay fees to their home institutions, and study for a semester or year in a foreign country.

The escrowed U.S. student fees cover the costs of an international student who comes to the U.S. for a semester or year. A positive outcome of an international student studying in the U.S. as an exchange student is that many remain as fee-paying students or return to pay fees as graduate students. Therefore, in addition to the cultural values, these programs can become financially profitable for a university.

Difficulty getting a visa. One of the challenges of international student recruitment is that there is increased difficulty experienced by international students in obtaining a visa to study in the U.S. Therefore, many of international students are choosing to study in countries other than the U.S., where the visa process is easier. "The 2003/04 academic year marked, for the first time in over 30 years, a decline in the number of international students, and only the second such decline since 1954/55, when the Institute of International Education began collecting data on international students..." (Institute of International Education (IIE), 2004, p. 3).

Economics. International students who come to the U.S. to study have made a positive impact on our country's economy. According to Open Doors, "In 2003/04, international students contributed almost $13 billion to the U.S. economy" (Institute of International Education (IIE), 2004, p. 5). As Van Hoof (2005) stated, "International Education is big business, really big business" (p. 32).

According to Friedman (2005), economics can be tied to a culture. "To reduce a country's economic performance to culture alone is ridiculous, but to analyze a country's economic performance without reference to culture is equally ridiculous" (p. 324). "The more you have a culture that naturally globalizes--that is, the more your culture easily

absorbs foreign ideas and best practices and melds those with its own traditions--the greater advantage you will have" (Friedman, p. 325).

Friedman (2005) believes that the countries with cultures that are the most open to change are the ones who are the most successful economically. For example, the Hindu religion of India is one of acceptance. This is the fourth consecutive year that India has sent more students to study in the U.S. than any other country (Institute of International Education, 2005). And China is second in the number of students coming to the United States to study (Institution of International Education). Friedman describes India and China the two fastest growing economic powers in the world today. "The gap between cultures that have the will, the way, and the focus to quickly adopt these new tools and apply them and those that do not will matter more" (Friedman, p. 324).

Regarding education in the United States, Kerr (2002) stated, "Education is perhaps our greatest export, just as the students who flock to this country each year are among our most valuable imports" (p. 6). With international students on our U.S. campuses and classrooms, those U.S. students who cannot afford to study abroad also have the opportunity to get to know students other countries.

Assessment. Those who work with study abroad programs meet some challenges when it comes to assessment. First of all, collecting data has a price-tag. Few assessment instruments are available, and they are expensive to use. Second, there are many different types of study abroad programs today. And a fair degree of confusion exists of such terms as *field of study, home-stay, sponsorship, affiliation, ethnic background,* and *short-term*. Thirdly, current laws and regulations concerning privacy of student information are sometimes a barrier to collecting certain student data.

Nevertheless, there is a growing importance of the assessment movement in higher education. Although it has been widely assumed that students somehow benefit from exposure to another culture, there has been little quantitative data to prove this. Rapid and continuing growth in study abroad enrollments is shifting study abroad from the academic margins to the center of many institutions. Faculty members, administrators, and parents are becoming more interested in what students are actually learning abroad. They are seeking evidence that study abroad will add value to their students' education.

Conclusion

According to Van Hoof and Verbeeten (2005), students say that studying abroad "brought them a greater understanding of other cultures, that it had helped them appreciate their own culture more, that it enabled them to learn more about themselves, and that it had enriched them personally" (p. 56). Simply spending time in another culture, while studying abroad, does not necessarily guarantee understanding and acceptance of another culture. As Althen (2002) pointed out, "Some...of the September 11 hijackers had come to the United States and lived for a time .... they did not learn to appreciate American values and the American way of life" (p. 36). Furthermore, Coffman and Brennan (2003) asserted,

> …study abroad programs should not be facilitators of cultural voyeurism; they should be sincere efforts to learn -- and, where necessary, to learn how to learn - by acquiring the sorts of skills that enable one to be sensitive, responsive, connective, and reflective. (p. 143)

This study will measure a student's development of intercultural sensitivity, which is an important skill for successful leaders in today's global society.

Van Der Meid (2003) stated,

> Once thought of as a privilege for only the predominately white upper class, students of all ethnic backgrounds and socio-economic classes are increasingly choosing to study abroad. However, research into the study abroad options for these new groups of students has not kept pace with the emphasis on multiculturalism and diversity in higher education institutions today. (p. 71).

According to Bennett's (1986, 1993) *Developmental Model of Intercultural Sensitivity* (*DMIS*), there are three ethnocentric stages (*Denial, Defense, Minimization*) and three ethnorelative stages (*Acceptance, Adaptation, Integration*). During the last twenty years since this model was first developed, cultural diversity and international education has continued to increase. And yet there was a need for a valid instrument that would measure a person’s orientation toward cultural differences on the *DMIS*. In response to this need, the *Intercultural Development Inventory* (*IDI*) was developed. This instrument measures five orientations: DD (denial and defense), R (reversal), M (minimalization), AA (acceptance and adaptation), and EM (encapsulated marginality) (Hammer & Bennett, 2001).

First, qualitative data was collected from a population that was not limited to the university community and included a variety of cultural backgrounds. This qualitative data was examined for the six stages on the DMIS (Hammer & Bennett, 2001). The comments confirmed "that people from a variety of different cultural backgrounds construe their experiential world consistent with the primary orientations toward

differences identified by the *DMIS*" (Hammer & Bennett, p. 50). Greenholtz (2000) stated, "The Intercultural Development Inventory provides a psychometrically valid and reliable empirical tool which administrators of transnational educational programs can use to... maximize the quality of student experiences" (p. 416). Paige, Jacobs-Cassuto, Yershova, and DeJaeghere (2003) agreed: "Our research suggests that Hammer and Bennett's Intercultural Development Inventory is a sound instrument, a satisfactory way of measuring intercultural sensitivity as defined by Bennett (1993) in his development model" (p. 485).

The quality of experiences abroad has gained importance to international educators and administrators. Sheer numbers of student participants is no longer their only focus (Engle & Engle, 2003). "International education administrators want evidence that study abroad is beneficial" (Isabelli-Garcia, 2003, p. 151). Yet little feedback from actual participants in international programs has been elicited for research on the benefits of study abroad (Van Hoof, 2005). Further steps must be taken to determine the impact on students' lives and the outcome of the different types of learning that results from studying abroad (Farrell & Suvedi, 2003). Some of the changes in the behaviors, values, and beliefs of study abroad students may not occur until after the student returns home. International educators are seeking tools to analyze these changes that reflect affective learning (Farrell & Suvedi).

Corporations and schools, as well as the government and individual students and their parents, are investing large sums of money into training programs that they believe will increase intercultural sensitivity. A limited amount of literature and empirical data, especially quantitative data exists, showing how effective study abroad programs are in

increasing intercultural sensitivity. "This trend implies an increasing need for instruments aimed at measuring skills, traits and abilities that are related to success in an international context" (Van der Zee & Brinkmann, 2004, p. 285). This study will use the Intercultural Development Inventory (Hammer & Bennett, 2001) to measure the degree of change in intercultural development that actually occurs in students after participation in a study abroad program.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

The number of students participating in study abroad programs continues to increase. However, little empirical research exists on the effects these study abroad programs have on learning. There has not been a quantitative study focused on any changes in the development of intercultural sensitivity of the study abroad students at the state-supported midwest university in this research.

More data needs to be collected to show the effect study abroad has on students. According to Sideli (2000), "...our profession has never fully come to terms with the record-keeping process" (p. 38). Perhaps international education ventures have grown too quickly for formal evaluation to keep pace. "Institutional strategies for internationalization must nurture productive alliances between the international office and an institution's faculty" (Rodenberg & Beynon, 2002, p. 24).

This chapter will be divided into four subsections. First, the characteristics of the participants will be described. Second, the instrument and its validity will be described. The Intercultural Development Inventory (*IDI*) (Hammer & Bennett, 2001) will be used to measure students' progress on the Developmental Model of Cultural Sensitivity (*DMIS*) (Bennett, 1986,1993). Third, procedures will be described about how data was collected. Finally, analysis of the data will be discussed.

Research Questions

The primary research questions are as follows:

1. How much do students develop on the *DMIS: Developmental Model of Intercultural Sensitivity* (Bennett, 1986, 1993) as a result of participation in

study abroad according to scales and subscales measured by the *IDI* (*Intercultural Development Inventory*) (Hammer & Bennett, 2001)? The *DMIS* (Bennett) moves from *Ethnocentrism: denial, defense, minimization* to *Ethnorelativism: acceptance, adaptation, integration*. Scales and subscales on the *IDI* (Hammer & Bennett) include:

a. Denial/Defense (Disinterest, Avoidance, Reversal)

b. Minimization (Similarity, Universalism)

c. Acceptance/Adaptation (Cognitive and Behavioral Frame Shifting)

d. Encapsulated Marginality

e. Developmental Sensitivities, Perceived Sensitivities, and the gap between Developmental and Perceived Sensitivities

2. How much do students develop on the *DMIS: Developmental Model of Intercultural Sensitivity* (Bennett, 1986, 1993) as a result of a semester in a traditional classroom experience in the U.S. according to scales and subscales measured by the *IDI* (*Intercultural Development Inventory*) (Hammer & Bennett, 2001)? The *DMIS* (Bennett) moves from *Ethnocentrism: denial, defense, minimization* to *Ethnorelativism: acceptance, adaptation, integration*. Scales and subscales on the *IDI* (Hammer & Bennett) include:

    a. Denial/Defense (Disinterest, Avoidance, Reversal)

    b. Minimization (Similarity, Universalism)

    c. Acceptance/Adaptation (Cognitive and Behavioral Frame Shifting)

    d. Encapsulated Marginality

e. Developmental Sensitivities, Perceived Sensitivities, and the gap between Developmental and Perceived Sensitivities

3. Do students who study abroad demonstrate higher development of intercultural sensitivity than students who study in a traditional classroom?
4. Does post-test qualitative data collected from student interviews and emails reflect the same result as the *IDI* (Hammer & Bennett, 2001) quantitative measurement on the *DMIS* (Bennett, 1986, 1993)?

Research Hypotheses

Based on the literature and experiences of others, the following research hypotheses, which related to the stated research questions, were also explored in this study:

Question 1: How much do students develop on the *DMIS: Developmental Model of Intercultural Sensitivity* (Bennett, 1986, 1993) as a result of participation in study abroad according to scales and subscales measured by the *IDI* (*Intercultural Development Inventory*) (Hammer & Bennett, 2001)? The *DMIS* (Bennett) moves from *Ethnocentrism: denial*, *defense*, *minimization* to *Ethnorelativism: acceptance*, *adaptation*, *integration*. Scales and subscales on the *IDI* (Hammer & Bennett) include:

a. Denial/Defense (Disinterest, Avoidance, Reversal)

b. Minimization (Similarity, Universalism)

c. Acceptance/Adaptation (Cognitive and Behavioral Frame Shifting)

d. Encapsulated Marginality

e. Developmental Sensitivities, Perceived Sensitivities, and the gap between Developmental and Perceived Sensitivities

Hypothesis 1: Students who study abroad will show a small movement from minimization of *ethnocentrism* to acceptance of *ethnorelativism* on the *Developmental Model of Intercultural Sensitivity* (Bennett, 1986, 1993).

Question 2: How much do students develop on the *DMIS: Developmental Model of Intercultural Sensitivity* (Bennett, 1986, 1993) as a result of a semester in a traditional classroom experience in the U.S. according to scales and subscales measured by the *IDI* (*Intercultural Development Inventory*) (Hammer & Bennett, 2001)? The *DMIS* (Bennett) moves from *Ethnocentrism: denial, defense, minimization* to *Ethnorelativism: acceptance, adaptation, integration*. Scales and subscales on the *IDI* (Hammer & Bennett) include:

a. Denial/Defense (Disinterest, Avoidance, Reversal)

b. Minimization (Similarity, Universalism)

c. Acceptance/Adaptation (Cognitive and Behavioral Frame Shifting)

d. Encapsulated Marginality

e. Developmental Sensitivities, Perceived Sensitivities, and the gap between Developmental and Perceived Sensitivities

Hypothesis 2: Students in the classroom will begin farther into *ethnocentrism* and will not show as large a movement as those who study abroad.

Question 3: Do students who study abroad demonstrate higher development of intercultural sensitivity than students who study in a traditional classroom?

Hypothesis 3: Study abroad students will show more development than classroom students.

Population and Sample

Participants included approximately sixty students drawn from the student body at a state university of about 20,000 students located in the Midwest. The university was the second largest in the state. There were less than 1000 international students on campus. The student population at this university was also primarily from the Midwest and included many first-generation students from small rural communities. It included mainly non-residential, commuter undergraduate students with some master level graduate students. This study included students, primarily undergraduates, who self-selected to participate in study abroad programs, as a comparison group, and students who had not, as a control group.

The results of the pre-test/post-test on study abroad students should show the effectiveness of study abroad on the development of intercultural sensitivity. These results were compared to pre-tests/post-tests of the on-campus control group. The study abroad students participated in a political science program to China and a Spanish language program to Ecuador. On-campus classes were selected from Intercultural Communication, and foreign language classes. Participation in the test was voluntary. It included males and females of varied major fields of study.

Data Collection and Instrumentation

There were several high-quality, reliable and valid cultural inventory tests available. The one used for this study was the Intercultural Development Inventory, an instrument that assessed the experience of cultural difference in terms of the

Developmental Model of Intercultural Sensitivity (DMIS) (Bennett, 1986, 1993). According to Bennett's (1986, 1993) *Developmental Model of Intercultural Sensitivity (DMIS),* there are three *ethnocentric* stages (*Denial, Defense, Minimization*) and three *ethnorelative* stages (*Acceptance, Adaptation, Integration*).

The *Intercultural Development Inventory* (*IDI*) (Hammer & Bennett, 2001) is a standardized test used for measuring intercultural development. It requires an administrator who has completed a three-day training program with Drs. Hammer and Bennett. After completion of the training, the administrator can purchase individual copies of the instrument from the Intercultural Communication Institute in Portland, Oregon.

Greenholtz (2000) stated, "The Intercultural Development Inventory provides a psychometrically valid and reliable empirical tool which administrators of transnational educational programs can use to... maximize the quality of student experiences" (p. 416). Paige et al. (2003) agreed, "Our research suggests that Hammer and Bennett's Intercultural Development Inventory is a sound instrument, a satisfactory way of measuring intercultural sensitivity as defined by Bennett (1993) in his development model" (p. 485).

Participants completed a 50-item assessment. The assessment took no more than twenty minutes. Those who participated in study abroad programs took the test before the study abroad experience and after the study abroad experience. These responses were compared to students enrolled in pre-selected on campus classes.

Students who had not studied abroad also completed a pre-test/post-test at the beginning and end of the summer term to allow for normal changes that occur in students

during two to four weeks of study. These students were from the on-campus courses of Introduction to Intercultural Communication, and selected foreign languages. This was to identify the difference that study abroad has on two different samples of students. Additional qualitative data was collected from students who were willing to participate. This data came from interviews with students who studied abroad and answers to email questions to students who studied on campus.

Data Analysis

The experimental group was the study abroad students. The control group was the students who did not study abroad, but took selected classes on campus during a comparable period of time. The independent variable was study abroad programs, and the dependent variable was the development of intercultural sensitivity. A paired samples *t*-test of significance was done using SPSS 14.0 to determine if there was a significant change between the scores of students before a study abroad experience and after. A paired samples *t*-test was also used to determine if there was a significant change between the scores of students in selected on-campus courses at the beginning and end of the semester. Since alpha equals .05 for all, the planned analysis was ANCOVA, using the pre-test as the covariate, unless there were no significant difference on the pre-test scores.

After the study abroad students returned, their interviews provided qualitative data to compare with the collected quantitative data. The qualitative data was coded to reveal iterative themes (Merriam, 1998). The themes from this data were analyzed to provide examples of indications of intercultural development perceived by the students that occurred during their study abroad experience.

Students in the on-campus classes were asked to respond to post-semester questions to reveal additional qualitative data that could be compared to the quantitative data analyzed from comparing the pre-test and post-test. Adding the qualitative data contributed to the richness of the study. Using the research design and methodology that was discussed in Chapter 3, the next chapter will reveal the data analysis and results of this study.

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

The specific purpose of this study was to assess the effect study abroad has on the development of intercultural sensitivity. The research design and methodology utilized to answer the research questions was presented previously in Chapter Three. This chapter will present an analysis of data collected from the *Intercultural Development Inventory (IDI)* (Hammer & Bennett, 2001) and from answers to questionnaires and interviews obtained from students at a state-supported Midwest university used in this research. The sample included students who studied abroad and a control group of students who studied in traditional classrooms on campus. The sample of students who studied abroad will be referred to as *study abroad* and the control group will be referred to as *on-campus*.

The study was a quasi-experimental design utilizing a convenience sample. The participants were not randomly selected. Quantitative data was collected using the *IDI* (Hammer & Bennett, 2001), which measured the dimensions of the *Developmental Model of Intercultural Sensitivity (DMIS)* (Bennett, 1986, 1993) as measured by the scales and subscales of the *IDI* (Hammer & Bennett). The analysis of the data will be used to answer the research questions and evaluate the hypotheses established in the previous chapters. Qualitative data was collected from interviews with returning study abroad students and email questionnaires sent to on-campus students after the end of the course.

After presenting demographic data of the population, this chapter will explain the changes in each dimension of the *Developmental Model of Intercultural Sensitivity (DMIS)* (Bennett, 1986, 1993) on the scales and subscales of the *IDI* (Hammer &

Bennett, 2001) which occurred in a group of students who studied abroad (*study abroad* group) as measured by paired-samples *t*-tests. The effect size statistics for the paired-samples *t*-tests will also be presented, as a way of comparing scores, using the *d* statistic which "evaluates the degree that the mean of the difference scores deviates from 0 in standard deviation units" (Green & Salkind, 2003, p. 147). According to Green and Salkind, "The *d* may be computed using the following equation: *d*=Mean/SD" (p. 147). These effect size statistics will not only look at the differences between the pre-test and post-test scores, but also show the amounts of difference between the scores.

Next, this chapter will explain the changes in each scale and subscale of the *IDI* (Hammer & Bennett, 2001) which occurred in a group of students from the same university who studied in a traditional classroom in the United States (*on-campus* group) as measured by paired-samples *t*-tests. Following an explanation of the results of independent samples *t*-tests that were used to compare the changes in each scale and subscale of the *IDI* (Hammer & Bennett) between the students who studied abroad and students who studied in a traditional classroom in the United States, the chapter will conclude by presenting and analyzing qualitative data from interviews and email questionnaires. These results will be compared to the quantitative measurements found using the *IDI* (Hammer & Bennett).

It should be noted that independent samples *t*-tests were performed on the change in scores for research question three instead of ANCOVA for two reasons. The primary reason is that were no significant differences between the groups on the pre-test thus making pre-test scores an inappropriate covariate. Secondly, there was a large number of

different scores produced by the *Intercultural Development Inventory* (*IDI*) (Hammer & Bennett, 2001), which was the instrument used to gather data for the research.

Profiles of the Participants

Group Profiles. The study abroad students participated in a political science program to China and two Spanish language programs to Ecuador. The China program was two weeks in length, and the Spanish language programs were two or four weeks in length, depending on the group of students.

In order to remove the normal effects of maturation throughout the time period a student was enrolled in class, this study used the same pre-test and post-test to reveal changes that may normally occur with students over the course of four to five weeks enrolled on-campus as a control group. Beginning Spanish language, beginning French language, and Introduction to Intercultural Communication were the classes in which the students in the control group were enrolled. Both language classes were four weeks in length and the communication class was five weeks in length.

A total of 43 study abroad pre-tests were collected and 41 on-campus pre-tests. The study abroad pre-tests were divided as follows: 11 for China, 13 for the 2-week Ecuador program, and 15 for the 4-week Ecuador program. In order to ensure that there would be enough data, three study abroad pre-tests were also collected for a 4-week French language program in Canada and one for a 4-week program in Ireland. Post-tests included 9 for the 2-week program in China, 8 for the 2-week program in Ecuador, 12 for the 4-week program in Ecuador, and 1 for the 4-week program in Canada. The on-campus tests were divided as follows: 15 for the Spanish class, 13 for the French class,

and 13 for the communications class. Post-tests included 13 for Spanish, 10 for French, and 14 for Communications.

The post-test response rate for study abroad students was 70% compared to a 90% return rate on post-test for on-campus students. Since the post-tests for on-campus students were given during class time before the final exam, there was a much better return rate than for the study abroad students, whose surveys were mailed to their home addresses during the summer. Some of these post-test surveys were lost in the mail or thrown away.

Participants' pre and post-tests were matched and grouped according to the on-campus course or study abroad program in which they participated. A total of 19 pre-tests were unmatched. For on-campus students, this was a result of students being absent or late on the day the questionnaire was administered or as a result of students withdrawing from the course. For study abroad students, the unmatched surveys were the result of surveys being lost in the mail or not returned. A total of 64 questionnaires were matched pairs with a pre and post-test. The group totals for matched pairs included 36 from on-campus classes and 28 from study abroad students.

In order to answer research question 4, email questionnaires were sent to on-campus students and study abroad students were interviewed. The same four questions were asked of each group. Four of the on-campus students responded by email. Four study abroad students were interviewed. The demographic profile of those from whom qualitative data was collected will be discussed in the next section.

Demographic Profile. The demographics of the two groups were similar (gender, age, experience in another culture, and education). The majority of the population of

students who participated in the quantitative research were female (62% of study abroad students and 67% of on-campus students), high school graduates (100% of study abroad students and 99% of on-campus students), 18-30 years of age (84 % of study abroad students and 88% of on-campus students) with no previous experience living in another culture (62% of study abroad and 66% of on-campus students). Each group had one student who had lived during the formative years to age 18 outside of North America. And in each group this one student lived in the Asia Pacific during these years.

Demographics of the students from which qualitative data was gathered follows. All of the on-campus students were female and all of the study abroad students were male. Three of the on-campus students were from the Spanish class and one was from the Communications class. The study abroad students' experiences were varied. The students who were interviewed included one student from the two-week China program, two from the four-week Ecuador program (one of whom had also already completed a semester study abroad program in Australia), and one student who had spent three semesters studying abroad in two countries in Europe.

Research Questions

The purpose of this research was to determine the effect of study abroad on intercultural sensitivity. This was done by comparing data collected from students before and after participating in short-term faculty-led study abroad programs. Data was also collected from students enrolled in on-campus classes (Beginning Spanish language, beginning French language, and Introduction to Intercultural Communication) on the first and last day of class.

Changes in Development of Intercultural Sensitivity

Research question 1: How much do students develop on the *DMIS: Developmental Model of Intercultural Sensitivity* (Bennett, 1986, 1993) as a result of participation in study abroad according to scales and subscales measured by the IDI (*Intercultural Development Inventory*) (Hammer & Bennett, 2001)? The *DMIS* (Bennett) moves from Ethnocentrism: denial, defense, minimization to Ethnorelativism: acceptance, adaptation, integration. Scales and subscales on the *IDI* (Hammer & Bennett) include:

a. Denial/Defense (Disinterest, Avoidance, Reversal)
b. Minimization (Similarity, Universalism)
c. Acceptance/Adaptation (Cognitive and Behavioral Frame Shifting)
d. Encapsulated Marginality
e. Developmental Sensitivities, Perceived Sensitivities, and the gap between Developmental and Perceived Sensitivities

To answer this question, paired samples *t*-tests were used to compare the scores of study abroad students before and after the study abroad experience. The *t*-test results are presented in Table 1 for each dimension of the *DMIS* (Bennett, 1986, 1993) as measured by the scales and subscales of the *IDI* (Hammer & Bennett, 2001), including the average change (mean difference).

As a test of the validity of the paired samples *t*-tests, the correlations ranged from .110 on the Acceptance Cluster subscale of Ethnorelativism to .776 on the Denial/Defense scale of Ethnocentrism with most of the correlations above .500. These paired-samples correlations show that the people who scored low on the pre-test tended

Table 1

Paired Samples t-Test Comparisons for Study Abroad

Scale	Mean (sd) Pre-test	Mean (sd) Post-test	*t* (*df*=27)	*p*	Mean difference
Denial/Defense Scale	4.187 (.513)	4.297 (.538)	-1.647	.111	-.110†
Minimization Scale	2.667 (.714)	2.512 (.724)	1.466	.154	.155
Accept/Adapt Scale	3.273 (.585)	3.495 (.688)	-1.628	.115	-.222†
Denial Cluster	4.260 (.492)	4.439 (.517)	-.312	.758	-.179†
Denial (Disinterest)	4.188 (.560)	4.420 (.578)	-2.555	.017	-.232†
Denial (Avoidance)	4.357 (.580)	4.464 (.604)	-1.396	.174	-.107†
Defense Cluster	4.101 (.703)	4.131 (.690)	-.312	.758	-.030†
Reversal Scale	3.361 (.762)	3.627 (.752)	-1.964	.060	-.266†
Minimization-Similar	2.564 (.960)	2.357 (.828)	1.565	.129	.207
Minimization-Universe	2.795 (.885)	2.705 (.910)	.516	.610	.089
Acceptance	3.307 (.765)	3.529 (.854)	-1.083	.289	-.221†
Adapt/Cognitive	3.205 (.656)	3.518 (.802)	-1.872	.072	-.313†
Adapt/Behavioral	3.293 (.731)	3.443 (.866)	-1.043	.306	-.150†
Encapsulated Margin	3.929 (.651)	3.971 (.730)	-.265	.793	-.043†
Develop Sensitivity	88.215(16.269)	92.670 (15.730)	-1.644	.112	-4.456†
Perceived Sensitivity	119.232 (7.160)	121.131 (6.301)	-1.572	.127	-1.898†
PSDS Gap	31.018 (9.423)	28.460 (10.042)	1.605	.120	2.558†

Note. N=28; Accept/Adapt=Acceptance/Adaptation Scale; Similar=Similarity Cluster; Universe=Universalism Cluster; Adapt/Cognitive=Adaptation (Cognitive frame-shifting); Adapt/Behavioral=Adaptation (Behavioral code-shifting); Encapsulated Margin=Encapsulated Marginality; Develop Sensitivity=Developmental Sensitivity; PSDS Gap=the gap between the Perceived Sensitivity and the Developmental Sensitivity

†Direction of difference suggests growth in intercultural sensitivity.

to be the same people as those who scored low on the post-test, and the people who scored high on the pre-test scored higher on the post-test.

For the paired samples *t*-tests, all of the probabilities were greater than .05 except the Disinterest subscale of the Denial Cluster; therefore, this was the only result that was statistically significant. This may be due, in part, to small sample size, as the *t*-test is very sensitive to sample size (Green & Salkind, 2003). However, the study abroad group did show a small amount of change. Although most of the changes were not statistically significant, nearly all were in the direction that was anticipated in terms of the nature of the changes. Specifically, the study abroad group showed small improvements on various subscales to be discussed in the following paragraphs.

Because the sample size was small and the results were not statistically significant, and yet there was a noticeable change, the effect size will also be discussed to look at the amount of difference between scores. The effect size statistics for the paired-samples *t*-tests compare scores, using the *d* statistic which "evaluates the degree that the mean of the difference scores deviates from 0 in standard deviation units" (Green & Salkind, 2003, p. 147). According to Green and Salkind, "The *d* may be computed using the following equation: *d*=Mean/SD" (p. 147). This study will interpret *d* value ranges from .2 to .3 as a small effect size, .4 to .6 as a moderate effect size, and .7 to .8 as a large effect size (Green & Salkind).

Denial/Defense. This is the first development level of ethnocentrism on the *DMIS* (Bennett, 1986, 1993). On the Denial/Defense Scale ($t(27)=-1.647$, $p=.111$) the mean of the study abroad group increased (.110) and the effect size was .3, showing a small effect.

The *IDI* (Hammer & Bennett, 2001) also measures four subscales of Denial/Defense, which are *Disinterest, Avoidance*, a combination (*Denial Cluster*), and *Reversal Scale*.

Four subscales. *Disinterest* indicates that one "…may simply not notice much cultural difference around you" (Hammer & Bennett, 2001, p. 4). The study abroad group showed a significant change on this subscale ($t(27)=-2.555$, $p=.017$) the pre-test mean was 4.188, and the post-test mean was 4.420; for an average change of .232 and a moderate effect size of .5. This means that before studying abroad, the students viewed the world through their own culture. This change indicates more interest in cultural differences.

Avoidance indicates that one "…may maintain separation from others who are different" (Hammer & Bennett, 2001, p. 4). On this subscale, ($t(27)=-1.396$, $p=.174$) the pre-test mean was 4.357, and the post-test mean was 4.464; for an average change of .107 and a small effect size of .3. The *Denial Cluster* measures a combination of issues of disinterest and avoidance. On this subscale ($t(27)=-.312$, $p=.758$) the pre-test mean was 4.260 and the post-test mean was 4.439; for an average change of .179 and a moderate effect size of .5.

The fourth subscale is *Defense*. Hammer and Bennett (2001) stated, "Issues in Defense indicate that you have a strong commitment to your own worldview and some distrust of cultural behavior of ideas that differ from your own" (p. 5). On this subscale, $t(27)=-.312$, $p=.758$, the pre-test mean was 4.101, and the post-test mean was 4.131; for an average change of .030, for no measurable effect.

Reversal. Another scale that is measured by the *IDI* (Hammer & Bennett, 2001) and considered to be part of *Defense* is the *Reversal* scale. However, the issues are the

reverse of *Defense* in that "…you have a largely positive view of…other cultures…and a somewhat negative opinion of your own" (Hammer & Bennett, p.6). The largest change for the study abroad students was on this *Reversal* scale, $t(27)=-1.964$, $p=.060$. Students began in transition with a pre-test mean of 3.361 and ended almost resolved with a post-test mean of 3.627; for an average change of .266 and a moderate effect size of .4.

Minimization. This scale is the second development level between *ethnocentrism* and *ethnorelativism* on the *DMIS* (Bennett, 1986, 1993). The *IDI* (Hammer & Bennett, 2001) also measures two subscales of Minimization. The first subscale is *Similarity*, which indicates a belief that "…people are deep down fairly similar" (Hammer & Bennett, p. 7). Students on this subscale ($t(27)=1.466$, $p=.154$) began with a pre-test mean of 2.564 and ended with a post-test score of 2.357 for an average change of .207 and a small effect of .3. As noted earlier, the scores for this group increased in the subscale of disinterest, indicating more attention to cultural differences. The change in minimization scores on this group showed a decrease, indicating that they became less likely to notice differences between their own culture and others.

The second subscale of *Minimization* is *Universalism*, or a belief in universal values (Hammer & Bennett, 2001). Students on this subscale ($t(27)=.516$, $p=.610$) began with a pre-test mean of 2.795 and ended with a post-test score of 2.705 for an average change of .089 and no measurable effect.

On the *Minimization Scal*e ($t(27)=1.466$, $p=.154$) the study abroad students began in transition with a pre-test mean of 2.667. This was the lowest of the scale's pre-test scores. On the post-test, the study abroad students actually went farther back into transition on the *Minimization Scales* with a post-test mean of 2.512. This could mean

that students became more likely to project their own culture onto the culture of others (Hammer & Bennett, 2001). Nevertheless, the change was very small and not statistically significant. The effect size was also considered small at .3.

Acceptance/Adaptation. This scale is the third development level which leads into *ethnorelativism* on the *DMIS* (Bennett, 1986, 1993). Study abroad students showed the most noticeable change with a mean difference of .222 on this scale with a small effect of .3. Although, this change was not statistically significant ($t(27)=-1.628$, $p=.115$). The group is not resolved in this scale, the change is consistent with other scores. As the students became more interested in cultural differences and less interested in cultural commonality and universal issues, they may begin to comprehend and accommodate complex cultural differences. The *IDI* (Hammer & Bennett, 2001) measured three subscales of *Acceptance/Adaptation*. The first subscale is *Acceptance*. According to Hammer and Bennett, "Resolved issues in *Acceptance* indicate that you both acknowledge and respect cultural difference" (p. 8). Students on this subscale ($t(27)=-1.083$, $p=.289$) began with a pre-test mean of 3.307 and ended with a post-test mean of 3.529 for an average change of .221 with an effect between small and moderate at .35. Although the students are not resolved in this subscale, they are moving toward respect and acceptance of those who are from different cultures.

Adaptation. This subscale is divided into *cognitive frame shifting*, indicating taking "the perspective of another culture" (Hammer & Bennett, 2001, p. 9) and *behavioral code shifting*, indicating "…that you are able to intentionally change your culturally based behavior" (Hammer & Bennett, p. 10). For the *cognitive frame shifting* subscale ($t(27)=-1.872$, $p=.072$) students began with a pre-test mean of 3.205 and ended

with a post-test mean of 3.518 for an average change of .313 and an effect size between small and moderate at .35. For the *behavioral code shifting* subscale ($t(27)=-1.043$, $p=.306$) students began with a pre-test mean of 3.293 and ended with a post-test mean of 3.443 for an average change of .150 and a small effect size of .2. This greater change in *cognitive frame shifting* than *behavioral code shifting* indicates that the study abroad group changed more in their perspective of another culture than in their actual behavior toward another culture.

Encapsulated Marginality. The fifth scale measured by the *IDI* (Hammer & Bennett, 2001) is *Encapsulated Marginality*. This indicates "…that you are struggling with how to integrate your intercultural abilities with your identity" (Hammer & Bennett, p. 11). The mean difference was .043 and the effect size was zero. This scale, ($t(27)=-.265$, $p=-.043$) showed no change from pre to post testing. The group of students in this study participated in short-term programs lasting only two to four weeks, and the pre and post tests both showed that the study abroad students were resolved in this issue.

Developmental and Perceived Sensitivities. Finally, the *IDI* (Hammer & Bennett, 2001) measured *Developmental Sensitivities*, or where the *IDI* (Hammer & Bennett) rated individuals on the *DMIS* (Bennett, 1986, 1993), *Perceived Sensitivities* which is where individuals rate themselves on the *DMIS* (Bennett), and the gap between the two.

The study abroad students showed more change in *Developmental Sensitivities*, ($t(27)=-1.644$, $p=.112$) with a mean difference of 4.456, than in *Perceived Sensitivities* ($t(27)=-1.572$, $p=.127$), with a mean difference of 1.898. The effect size of the change in both *Perceived Sensitivities* and *Developmental Sensitivities* was small at .3. The gap between developmental sensitivities and perceived sensitivities decreased, showing a

mean difference of 2.558 and a small effect of .3. This shows that students' self-rating actually came closer to the *IDI* (Hammer & Bennett, 2001) rating after they studied abroad. This indicates positive growth. The goal is for students to become more realistic about their development of intercultural sensitivity, so that they will seek out ways to develop this skill more fully.

Research question 2: How much do students develop on the *DMIS: Developmental Model of Intercultural Sensitivity* (Bennett, 1986, 1993) as a result of a semester in a traditional classroom experience in the U.S. according to scales and subscales measured by the *IDI* (*Intercultural Development Inventory*) (Hammer & Bennett, 2001)? The DMIS (Bennett) moves from *Ethnocentrism: denial, defense, minimization* to *Ethnorelativism*: *acceptance, adaptation, integration*. Scales and subscales on the *IDI* (Hammer & Bennett) include:

a. Denial/Defense (Disinterest, Avoidance, Reversal)

a. Minimization (Similarity, Universalism)

b. Acceptance/Adaptation (Cognitive and Behavioral Frame Shifting)

c. Encapsulated Marginality

d. Developmental Sensitivities and Perceived Sensitivities and the gap between the Developmental and Perceived Sensitivity

To answer this question, paired samples *t*-tests were used to compare the scores of pre and post-tests given to students on campus the first day of class and the last day of class. The *t*-test results are presented in Table 2 for each dimension of the *DMIS* (Bennett, 1986, 1993) as measured by the scales and subscales of the *IDI* (Hammer & Bennett, 2001), including the average change (mean difference).

Table 2

Paired Samples t-Test Comparisons for On-Campus

Scale	Mean (sd) Pre-test	Mean (sd) Post-test	*t* (*df*=35)	*p*	Mean difference
Denial/Defense Scale	4.248 (.609)	4.224 (.591)	.172	.864	.024
Minimization Scale	3.494 (.756)	3.512 (.891)	.164	.871	.025
Accept/Adapt Scale	3.253 (.714)	3.220 (.762)	.198	.844	.033
Denial Cluster	4.281 (.599)	4.262 (.658)	.137	.892	.020
Denial (Disinterest)	4.118 (.698)	4.153 (.761)	-.197	.845	.035
Denial (Avoidance)	4.500 (.588)	4.407 (.677)	.682	.500	.093
Defense Cluster	4.208 (.750)	4.181 (.665)	.167	.868	.028
Reversal Scale	3.494 (.756)	3.512 (.892)	-.100	.921	-.019
Minimization-Similar	2.478 (.817)	2.489 (.866)	-.064	.949	-.011
Minimization-Universe	2.799 (.830)	2.729 (.837)	.406	.688	.069
Acceptance	3.378 (.810)	3.283 (.891)	.510	.613	.094
Adapt/Cognitive	3.243 (.796)	3.222 (.912)	.116	.908	.021
Adapt/Behavioral	3.103 (.879)	3.109 (.796)	-.030	.976	-.006
Encapsulated Margin	4.039 (7.326)	4.000 (.901)	.217	.830	.039
Develop Sensitivity	90.145(14.545)	88.959(16.540)	.328	.745	1.185
Perceived Sensitivity	119.810 (5.574)	119.199 (6.449)	.458	.650	.611
PSDS Gap	29.665 (9.613)	30.240(10.631)	-.239	.813	-.575

Note. N=36; Accept/Adapt=Acceptance/Adaptation Scale; Similar=Similarity Cluster; Universe=Universalism Cluster; Adapt/Cognitive=Adaptation (Cognitive frame-shifting); Adapt/Behavioral=Adaptation (Behavioral code-shifting); Encapsulated Margin=Encapsulated Marginality; Develop Sensitivity=Developmental Sensitivity; PSDS Gap=the gap between the Perceived Sensitivity and the Developmental Sensitivity

[†]Direction of difference suggests growth in intercultural sensitivity.

As a test of the validity of the paired samples *t*-tests, the correlations ranged from .016 to .240. These paired-samples correlations show whether or not the people who scored low on the pre-test were the same people who scored low on the post-test. These low correlations indicate that the scores from pre to post testing for the on-campus group were somewhat inconsistent.

For the paired-samples *t*-tests, all of the probabilities were greater than .05; therefore, none of the results were statistically significant. This may be due, in part, to a small sample size, as the *t*-tests are very sensitive to sample size (Green & Salkind, 2003). Nevertheless, there were no significant changes and no noticeable changes to the on-campus group, as will be discussed in the following paragraphs. In addition, there were no effect sizes above .1.

Denial/Defense. This is the first development level of ethnocentrism on the *DMIS* (Bennett, 1986, 1993). On the *Denial/Defense Scale*, there was no significant change with a mean difference of .024. The *IDI* (Hammer & Bennett, 2001) also measured four subscales of *Denial/Defense*, which are *Disinterest*, *Avoidance*, a combination (*Denial Cluster*), and *Reversal Scale*. *Disinterest* indicates that one "…may simply not notice much cultural difference around you" (Hammer & Bennett, p. 4). There was no significant change with a mean difference of .035. *Avoidance* indicates that one "may maintain separation from others who are different" (Hammer & Bennett, p. 4). There was no significant change with a mean difference of .093. The Denial Cluster measures a combination of issues of disinterest and avoidance. There was no significant change in the *Denial Cluster* with a mean difference of .020. Hammer and Bennett stated, "Issues in Defense indicate that you have a strong commitment to your own worldview and some

distrust of cultural behavior of ideas that differ from your own" (p. 5). There was no significant change with a mean difference of .028. The *Reversal Scale,* which measures issues that ore the reverse of *Defense,* showed no significant change with a mean difference of -.019. None of the scores on the *Denial/Defense* scales and subscales were statistically significant in the on-campus group.

Minimization. This is the second development level between ethnocentrism and ethnorelativism on the *DMIS* (Bennett, 1986, 1993). The *IDI* (Hammer & Bennett, 2001) also measures two subscales of *Minimization*. The first subscale is *Similarity*, which indicates a belief that "…people are deep down fairly similar" (Hammer & Bennett, p. 7). The second subscale of *Minimization* is *Universalism,* or a belief in universal values (Hammer & Bennett). On the *Minimization Scale* the on-campus showed no change with a pre-test mean of 3.494 and a post-test mean of 3.512. The mean difference of .025 was not statistically significant. And the mean difference of -.011 on the *Similarity* subscale and .069 on the *Universalism* subscale were not statistically significant.

Acceptance/Adaptation. This scale is the third development level which leads into *ethnorelativism* on the *DMIS* (Bennett, 1986, 1993). The mean difference of .033 indicated that the change in the on-campus group on this scale was not significant. The *IDI* (Hammer & Bennett, 2001) measures three subscales of *Acceptance/Adaptation*. The first subscale is *Acceptance*. According to Hammer and Bennett, "Resolved issues in *Acceptance* indicate that you both acknowledge and respect cultural difference" (p. 8). The mean difference in this subscale was .094, which is not a statistically significant change. *Adaptation* is divided into cognitive frame shifting, indicating that you "take the perspective of another culture" (Hammer & Bennett, p. 9), in which the mean difference

was .021, and behavioral code shifting, indicating "…that you are able to intentionally change your culturally based behavior" (Hammer & Bennett, p. 10), in which the mean difference was -.006. The on-campus group did not show any statistically significant or noticeable changes on either of these subscales.

Encapsulated Marginality. The fifth scale measured by the *IDI* (Hammer & Bennett, 2001) is *Encapsulated Marginality*. This indicates "…that you are struggling with how to integrate your intercultural abilities with your identity" (Hammer & Bennett, p. 11). This scale showed the mean difference of .039, which is not statistically significant.

Developmental and Perceived Sensitivities. Finally, the *IDI* measured *Developmental and Perceived Sensitivities* and the gap between the two. The on-campus control group showed more change in *Developmental Sensitivities* with a mean difference of 1.185, than in *Perceived Sensitivities* with a mean difference of .611. The gap between developmental sensitivities and perceived sensitivities decreased, showing a mean difference of -.575. None of these differences were significant and all showed a zero effect of change.

Research question 3: Do students who study abroad demonstrate higher development of intercultural sensitivity than students who study in a traditional classroom?

The standard deviation demonstrates there was a wider range of scores in the on-campus students in the beginning. The study abroad group's beginning scores were more similar. Independent *t*-tests were used on the changes which occurred within each group and, when appropriate, the modified *t* for non-equal variances was utilized. The

researcher calculated the change that occurred with each group on each scale of the *DMIS* (Bennett, 1986, 1993) as measured by the *IDI* (Hammer & Bennett, 2001) and then conducted independent-samples *t*-tests on those variables to examine the hypothesis that students who study abroad (*study abroad students*) develop farther on the *DMIS* (Bennett), than those who study in a traditional classroom (*on campus students*).

Table 3 shows how much the on-campus group changed compared to how much the study abroad group changed. For each scale and subscale of the *DMIS* (Bennett, 1986, 1993) measured by the *IDI* (Hammer & Bennett, 2001), the average change or mean for the on-campus group and the study abroad group is displayed. All of the probabilities are greater than .05; therefore, none of the results are statistically significant, though all are in the direction of study abroad students changing more than on campus students.

Since the Levine's Test for Equality of Variances was significant on the *Denial Cluster Scale* and the *Denial/Defense Scale*, the adjusted *t* value is reported based on equal variances not assumed. For the *Denial Cluster* change, $t(51.329)=.994$; $p=.325$. For the *Denial/Defense* scale change, $t(50.029)=.878$; $p=.384$. The mean of the study abroad group increased (.110) while the mean of the on-campus group decreased (-0.24). The difference is not significant.

For the *Defense Cluster* change, the difference was not significant ($t(54.232)=.300$, $p=.765$). For the *Reversal* scale change, the difference was not significant ($t(60.081)=1.076$, $p=.286$). For the *Minimization* change, the difference was not significant ($t(62)=.667$, $p=.507$). However, the mean of the on-campus group decreased (-.025) while the mean of the study abroad group decreased even more (-.155).

Table 3

Independent t-Test for Comparison of Change for On-Campus and Study Abroad

Scale	On-Campus Mean (sd)	Study Abroad Mean (sd)	*t* (*df*)	*p*	Mean diff
Denial/Defense Scale	-.024 (.819)	.110 (.353)	.878 (50.030)	.384	.133
Minimization Scale	-.025 (.906)	-.155 (.559)	-.667 (62)	.507	-.130
Accept/Adapt Scale	-.033 (.974)	.222 (.721)	1.153 (61)	.254	.255
Denial Cluster	-.020 (.869)	.179 (.358)	1.242 (48.91)	.220	.198
Denial (Disinterest)	-.035 (1.059)	.232 (.481)	.994 (51.33)	.325	.197
Denial (Avoidance)	-.093 (.814)	.107 (.406)	1.280 (53.82)	.206	.200
Defense Cluster	-.028 (.998)	.030 (.505)	.300 (54.23)	.765	.058
Reversal Scale	.019 (1.115)	.266 (.716)	1.076 (60.08)	.286	.247
Minimization-Similar	.011 (1.042)	-.207 (.700)	-.954 (62)	.344	-.218
Minimization-Universal	-.069 (1.028)	-.089 (.916)	-.080 (62)	.936	-.020
Acceptance	-.094 (1.111)	.221 (1.082)	1.141 (62)	.258	.316
Adaptation/Cognitive	-.021 (1.076)	.312 (.884)	1.327 (62)	.189	.333
Adaptation /Behavioral	.006 (1.110)	.150 (.761)	.586 (61)	.560	.144
Encapsulated Margin	-.039 (1.077)	.042 (.854)	.329 (62)	.743	.082
Development Sensitivity	-1.186(21.040)	4.455(14.343)	1.195 (61)	.237	5.641
Perceived Sensitivity	-.611 (7.892)	1.898 (6.388)	1.362 (61)	.178	2.509
PSDS Gap	.575(14.222)	-2.558 (8.434)	-1.086 (56.67)	.282	-3.132

Note. N=36 (on campus); N=28 (study abroad); Accept/Adapt=Acceptance/Adaptation Scale; Similar=Similarity Cluster; Universe=Universalism Cluster; Adapt/Cognitive=Adaptation (Cognitive frame-shifting); Adapt/Behavioral=Adaptation (Behavioral code-shifting); Encapsulated Margin=Encapsulated Marginality; Develop Sensitivity=Developmental Sensitivity; PSDS Gap=the gap between the Perceived Sensitivity and the Developmental Sensitivity

†Direction of difference suggests growth in intercultural sensitivity.

Mean Diff=Mean Difference

For the *Acceptance/Adaptation Scale*, the difference was not significant ($t(61)=1.153$, $p=.255$). The mean of the study abroad group increased (.222) while the mean of the on-campus group did not (-.033). For the *Acceptance Cluster Change*, the difference was not significant ($t(61)=.586(61)$, $p=.144$). For the *Encapsulated Marginality Scale Change*, the difference was not significant ($t(62)=.329$, $p=.082$). For the overall *developmental* sensitivity (*DS*) the difference was not significant ($t(61)=1.195$, $p=5.641$). For the overall *perceived* intercultural sensitivity (*PS*) the difference was not significant ($t(61)=1.362$, $p=.2.509$). For the gap between the overall *developmental* sensitivity (*DS*) and the overall *perceived* intercultural sensitivity (*PS*) the difference was not significant ($t(56.673)=1.086$, $p=3.132$).

Research question 4: Does post-test qualitative data from interviews and emails reflect the same result as the quantitative measurement on the DMIS?

At the end of the on-campus class, questions were sent by email to the on-campus group. Four of the students from the on-campus group replied. When the study abroad students returned, the same questions were asked of four selected students in taped interviews. The next section will describe the questions that were asked of the students and summarize their answers into categories with quotes that give an example of recurring themes that were found in the qualitative data collected.

The first question was, “Describe the reason(s) that you chose to take this course or participate in this study abroad program.” A recurring theme in all of the interviews with study abroad students and answers to email questionnaires from the on-campus students was that the main reason students chose to study abroad or take a class on-campus with an intercultural aspect was in order to fulfill degree requirements for a major

or minor. No one mentioned a desire to increase intercultural sensitivity as a reason to study abroad or choose the on-campus class, although one social work student added that "speaking Spanish is an important asset to my career."

The second question was, "Describe experiences (if any) you have had with other cultures BEFORE you began this course." Again the responses from both groups were similar. All of the students who responded said that they had experiences from living in culturally diverse neighborhoods, attending culturally diverse schools, and/or traveling with family, choir tours, and mission trips.

The third question was, "Describe the most important thing(s) that you learned about another culture(s) as a result of completing this course." All of the study abroad respondents wanted to continue traveling to other countries, and they provided responses that indicated a more positive attitude toward other cultures. Words that were used in describing what the students had learned included "hospitality," "very friendly," "families are more important."

The on-campus group also had a positive impression of other cultures and expressed a desire to travel. One student who took a language course on-campus said, "The contributions that each culture brings to society adds to its beauty…when you learn about the diverse people that speak the language and where they come from the language becomes alive with expression and excitement." Although this could be what motivated the student to take the course, the fact remains that this was not the answer when the student was asked why she enrolled in the course; only when asked what she learned.

The final question was "Describe how you feel that you have changed, since beginning this course, in your sensitivity to those of other cultures. If possible, give

specific examples of any change in your behavior or relationships with those of cultures that are different than your own?" Both the on campus students and the study abroad students felt like they had changed. Their comments fit into three main categories: their worldview, their ideas about learning a foreign language, and their desire to travel abroad.

First, a study abroad student expressed that that he was "more readily able to understand their worldview." Another stated a change in "…looking at the worldview…from a more diverse background." Being "…more readily able to understand their view point [and being] more able to put yourself in other people's shoes," was how one study abroad student described how he had changed. And one study abroad student described "viewing the culture" as "trying to receive information without judging why that information exists" or "figuring out that okay this is why certain people are doing certain activities."

Second, the on-campus language students said that the course was "eye opening how difficult it is to learn a language" and regarding non-native speakers the course had "made me more aware that it may not be instant that they pick up on the English language." Other students looked forward to "dealing with students who might speak Spanish" and "trying to understand people" and "watching Spanish Television and listening to Spanish music."

And third, on-campus students expressed that "This course has made me want to travel more…." As a study abroad student said, "I want to travel to as many countries as I can." And another student said "I want to keep studying abroad, working abroad, living abroad!" Another similarity of both groups was that the study abroad group expressed a

desire to improve their language skills and the group of on-campus students who studied a foreign language on-campus expressed a desire to travel abroad.

The quantitative data revealed no statistically significant changes in the study abroad group. However, it did reveal noticeable changes. Furthermore, the qualitative data revealed a change in the development of intercultural sensitivity in the study abroad group. Although this change was not statistically significant in the quantitative data, one could hear voices of change in the interviews with the study abroad group.

In the on-campus group, the quantitative data not only revealed no significant changes, but revealed no noticeable changes. The qualitative data implied movement from *disinterest* into *minimization*. This was still on the *ethnocentrism* end of the *DMIS* (Bennett, 1986, 1982). Although the qualitative data revealed intercultural sensitivity, it was less clear that this was attributed to the class. For example, the on-campus group expressed a love of a foreign language, and there was no indication that this was a change as a result of the class. However, those who studied a foreign language on campus did indicate an increased desire to travel to locations where they could hear and speak the language that they had learned.

Summary

The research investigated, through statistical analysis, the effect of study abroad on intercultural sensitivity as compared to the effect of a control group of on-campus foreign language or intercultural communication students at the same state-supported university in the Midwest. Demographic variables were analyzed to determine the similarities of the two groups.

The results of the statistical analysis were presented in order to answer the research questions for this study. The analysis revealed that the groups progressed differently on several scales of the Developmental Model of Intercultural Sensitivity (*DMIS*) (Bennett, 1986, 1993).

The on-campus group was virtually the same at the end as they were in the beginning. However, the study abroad group showed a small amount of change. This change was in the direction that was anticipated in terms of the nature of the changes. In almost every case, the on-campus group did not change in any noticeable way, and the study abroad group did change in a noticeable way (although the numbers are only statistically significant on one subscale). Only three of the seventeen scales measured showed zero effect of change in the study abroad group. Three scales showed a moderate effect, two scales showed a small to moderate and the other nine scales showed a small effect of change in the study abroad group.

The only subscale that showed a statistically significant change on the study abroad group was *Disinterest,* which indicates that one "…may simply not notice much cultural difference around you" (Hammer & Bennett, 2001, p. 4). The study abroad group showed a significant change on this subscale with a probability of .017, a pre-test mean of 4.188, and a post-test mean of 4.420; for an average change of .232. The effect was .5 indicating a moderate effect. This means that before studying abroad, the students viewed the world through their own culture. This change indicates more interest in cultural differences. Although no other subscales showed a statistically significant change, the *Denial* cluster and *Reversal* scale showed moderate effect sizes. The effect of the change in *Denial* indicates growth toward resolution in issues of disinterest and avoidance. The

effect change in *Reversal* indicates growth toward resolution in having "a largely positive view of other cultures and a somewhat negative opinion of your own" (Hammer & Bennett, p. 6).

The results of the qualitative data were more difficult to measure and yet revealed growth in intercultural development. The qualitative data gathered from the study abroad group and the on-campus group showed development in the students' worldview, their desire to learn a foreign language, and their desire to travel abroad. The next chapter will summarize the implications of the results of the data analysis that was presented in this chapter.

CHAPTER FIVE

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

Those who work in higher education continue to search for the best ways to help students develop the intercultural sensitivity and globalization skills needed for the diverse workforce. Both the U.S. Department of State and the U.S. Department of Education have recognized International Education Week annually since the year 2000 (Banks & Erbland, 2002). And the U.S. Senate declared 2006 as the *Year of Study Abroad* (Loveland & Murphy, 2006). The Lincoln Commission Study Abroad Fellowship Program, established by the late Senator Paul Simon (Commission on the Abraham Lincoln Study Abroad Fellowship Program, 2005) is slated to add to the pool of scholarships for U.S. study abroad students.

As the workforce becomes more diverse, cross-cultural training becomes more valuable (Homann, 1999; Minehan, 1997; Montwani, Harper, Subramanian, & Douglas, 1993; Mueller, 1996). Study abroad is one of the ways to provide this cross-cultural training. Therefore, international education has become an area that is included in the strategic plans of many universities.

In fact, some have predicted that U.S. students studying abroad will increase to one million, or 50% of all students in higher education, by 2016-2017. Yet assessment of home campus programs and degree requirements far exceeds study abroad program assessment (Burn, 2002). “According to an electronic sampling conducted by NAFSA’s Section on U.S. Students Abroad (SECUSSA) and the Institute of International Education (IIE), only 15 percent of the reporting institutions assess intercultural proficiency in study abroad” (Sideli, 2001, p. 30).

Many students expect that study abroad will be a part of their college education. However, as tuition and other costs increase, universities are being held accountable for the quality and measurable results of study abroad programs. “International educators have during the past decade become increasingly aware of the need to identify and measure the learning outcomes of students participating in study abroad programs” (Vande Berg, 2001, p. 31). Most students are now choosing short-term study abroad programs. According to *Open Doors* 2005, the majority of U.S. students now choose study abroad programs of less than one semester in duration (Institutional of International Education (IIE), 2005). These short-term study abroad programs and their effect on the development of intercultural sensitivity was the focus of this study.

This chapter will begin with a summary of findings that presents the results of the three hypotheses of the study and compares them to the literature that was discussed in Chapter 2 on globalization, funding, and the current trend. Limitations and implications for future research and implications for practice will be discussed next, followed by a conclusion.

Summary of Findings

The purpose of this study was to determine the effect of study abroad on intercultural sensitivity. The study was based on responses from student participants in faculty-led short term study abroad programs and students who enrolled in selected summer school courses at a state university in the Midwest. The main findings of this study included (a) the effect of study abroad on intercultural sensitivity, (b) the effect of a traditional classroom experience in the U.S. on intercultural sensitivity, (c) the difference in the two groups, and (d) the comparison of quantitative data and qualitative data.

Hypothesis 1 stated that students who studied abroad would show a small movement from the *Minimization Scale* of *Ethnocentrism* to the *Acceptance Scale* of *Ethnorelativism* on the *Developmental Model of Intercultural Sensitivity (DMIS)* (Bennett, 1986, 1993). Hypothesis 2 stated that students in the classroom would begin farther into *ethnocentrism* and would not show as large a movement as those who studied abroad. And hypothesis 3 stated that study abroad students would show more development than on-campus students.

Hypothesis 1

The results did show a small movement, which was proposed in the first hypothesis. However, the quantitative data showed the most significant change in the *Disinterest subscale* of the *Denial Cluster*, not from *Minimization* to *Acceptance*, as stated in the original hypothesis. And the group of study abroad students began farther back into *Ethnocentrism* than was originally anticipated. In *Denial*, the first stage of the *DMIS* (Bennett, 1986, 1993), "consideration of other cultures is avoided by maintaining…isolation from differences" (Hammer & Bennett, 2001, p. 12). Although there was significant change in one area, the group remained on the *ethnocentrism* end of the *DMIS* (Bennett) and did not move into *ethnorelativism*.

Hypothesis 2

Hypothesis 2 stated that students in the classroom would begin farther into *ethnocentrism* and would not show as large a movement as those who studied abroad. The quantitative results were consistent with the second half of hypothesis 2. The on-campus group did not show as large a movement as the results for those who studied abroad. The first half of hypothesis 2 was not supported. The quantitative results showed

that the students in the classroom began in a similar place on the *DMIS* (Bennett, 1986, 1993) as those students who chose to participate in a study abroad program.

Hypothesis 3

Hypothesis 3 stated that study abroad students would show more development than on-campus students. This hypothesis was supported. Although the results did not reveal a significant change for the study abroad group, there was more of a noticeable change than there was in the results for the on-campus students. The sample size was small and the change was not a significant.

Qualitative Findings

The expectation was that there would be more difference between the on-campus and study abroad group. The qualitative data did not support this expectation. Because this Midwest university is less diverse than universities in other parts of the United States, another expectation was that many American students at the university in this study were looking for ways to become more familiar with those from other countries and their cultures. In fact, the qualitative data did indeed imply movement from *disinterest* into *minimization*. This was still on the *ethnocentrism* end of the *DMIS* (Bennett, 1986, 1993).

However, the qualitative data from both groups yielded similar results, and the recurring themes in both the study abroad and on-campus data from the qualitative findings did not support this hypothesis. For example, one theme was that the main reason students chose to study abroad or take a class on-campus with an intercultural aspect was in order to fulfill degree requirements for a major or minor. No one mentioned a desire to increase intercultural sensitivity as a reason to study abroad or choose the on-

campus class. This could have been the result of the wording of the open-ended question that did not specifically ask if intercultural sensitivity was a reason to study abroad or choose an on-campus class.

A second theme found in the qualitative data that disputed the expectation was that students from both groups responded that they had experiences with other cultures from living in culturally diverse neighborhoods, attending culturally diverse schools, and/or traveling with family, choir tours, and mission trips. The third theme was that both groups wanted to continue traveling or travel more. And the fourth theme was that both groups also indicated a more positive attitude toward another culture.

The qualitative research revealed that the students perceived a change in themselves after they had studied abroad or taken a foreign language class on campus. However, the quantitative data showed no significant change in either group. The qualitative results were inconclusive because the difference in the development between the study abroad students and the on-campus control group of students was difficult to measure.

Summary

The study abroad group showed more development than the on-campus group. The study abroad group demonstrated a small movement with a significant change in the *Disinterest* subscale of the *Denial Cluster*. The *Denial* cluster and *Reversal* scale showed moderate effect sizes. The effect of the change in *Denial* indicates growth toward resolution in issues of disinterest and avoidance. The effect of the change in *Reversal* indicates growth toward resolution in having “a largely positive view of other cultures and a somewhat negative opinion of your own” (Hammer & Bennett, p. 6). The on-

campus group showed no significant change in the qualitative data. However, the qualitative data from both the study abroad group and the on-campus group yielded similar results and recurring themes that supported intercultural development.

Discussion of Results

The next section highlights literature that was discussed in Chapter 2. This includes selected works that have been written study abroad. The importance of globalization will be discussed as well as the funding that has been developed to encourage study abroad, and the current trend toward short-term study abroad programs. The section will conclude with the results of this study.

Globalization. Berry (2002) stated "No longer are there self-contained nations with self-contained cultures. There are very real implications for traditional study abroad, intercultural studies, and education in general" (p. 50). Classrooms and workplaces in America continue to include international students and foreign born workers as well as a growing number of non-white Americans from various religions and cultures. This global and domestic diversity requires intercultural sensitivity.

Study abroad has been considered by funding agencies such as the Institute of International Education (IIE) as a way to develop skills needed for globalization such as intercultural sensitivity. Although the literature is clear about the importance of globalization, it is less clear about the effect study abroad has in preparing students for a global work environment. The results of this study showed noticeable but not statistically significant growth by the study abroad group in intercultural sensitivity.

Funding. One of the ways that study abroad is encouraged is through the distribution of funding. IIE in Washington, D.C. continues to offer 250 grant programs,

including the prestigious Fulbright Program, the Gilman Scholarship to fund students from low-income families to study abroad, the Freeman-Asia Grant to fund students who choose to study in Asia, and the NSEP (National Security Education Program) to fund students who choose to study an underrepresented (non-European) language abroad.

However, according to *Open Doors 2005*, the majority of U.S. students now choose study abroad programs of less than one semester in duration (IIE, 2005). The results of this study call for a need for more assessment of these short term programs. Clearer learning goals should be established for short-term programs. When these goals are established, programs and orientations can be designed in ways that will best meet these goals.

Current trend. Although study abroad programs were once considered an exclusive activity for those with tremendous economic and intellectual resources, it has progressed to an emerging student learning paradigm. The most recent trend is toward short-term faculty led programs. These programs were the focus of this study. The results of this study showed that students who participated on a short-term program for two to four weeks showed a more noticeable increase in the development of intercultural sensitivity than students who studied a foreign language or culture class on campus for four to five weeks. However, the increase was not statistically significant.

And there is no empirical evidence that participation in a short-term program is any more likely to lead to participation in a semester program than studying a language or culture class on campus. And yet qualitative data in this study indicated that students who returned from the short-term program may have more interest in studying a foreign

language and students who studied a foreign language may be more interested in traveling abroad. These results may have implications for higher education.

Summary

The literature states that globalization is an important part of educating students entering the workforce. Significant funding has been designated by the U.S. government to encourage students to study abroad in order to obtain globalization skills. There is an increase in the number of students studying abroad and the number of study abroad programs offered. Study abroad program designs are changing. The most recent trend is toward faculty-led short-term programs. These programs were the focus of this study.

Limitations

There are some limitations to this study that need to be taken into consideration. This study was a quasi-experimental design because the participants were not randomly selected. The group of students who studied abroad and the control group both included self-selected students. And the students were all from the same mid-sized state university in the Midwest.

The time-frame between the pre and post-test for the short-term programs and summer school classes was limited. The test population included only students who participated in faculty-led short term study abroad programs ranging from two to four weeks. The control group included only students who enrolled in foreign language courses and intercultural communication for four to five weeks during summer school.

Furthermore, the sample size was also small due to the cost of the Intercultural Development Inventory instrument and limited funding available. It should be noted that the *t* is sensitive to sample size (Green & Salkind, 2003). Because this test was based on a

small sample, it was harder to find something that was statistically significant. If the same pattern was found in a sample of twice as many students, it probably would be statistically significant. Therefore, effect size was also measured for the study abroad group. Statistical conclusions should, therefore, be considered more tentative than similar findings from a larger sample.

Implications for Future Research

There are several implications for further research. First of all, there is a need for research with more subjects (at least 60) and a longer study abroad experience (a semester or year, or more than 2-4 weeks). Another need for further research would be to include a longitudinal study to measure the long-term impact on the students after they return and time has passed.

Students who participate in study abroad programs could also participate in research on theoretical perspectives of learning such as *collaborative learning* (Bruffee, 1999) and learning by *direct experience* (Nonaka & Takeuchi, 1995). These learning theories were explored in chapter one of this study. And since program designs include traditional classroom learning, experiential learning, and ethnographic learning, future research could also involve collecting data from groups of students who experience each of these program designs in order to assess the differences in intercultural development between these groups of students. In addition, after the design of a program is changed or an orientation is expanded, students could be tested to assess their learning.

Another study could involve comparing the data collected at a medium sized state school and comparing this to the same data collected from a small private liberal arts

college. Results at a Midwest school could also be compared to results in other parts of the U.S.

Data could also be analyzed according to the country or continent where the American student studied, the language of the country and current world events that occur during the semester. And finally other instruments could be used to determine skills besides intercultural sensitivity (such as leadership, self-actualization, etc.) that may be developed as a result of study abroad and international experience.

Implications for Practice

In the past, students who participated in study abroad programs received assessment for the work they did in classrooms abroad. However, the learning that took place outside of the classroom was not always as clearly defined. This study assessed development of intercultural sensitivity, a skill that study abroad programs claim to improve. One way that might improve the development of this skill would be to design orientations and programs based on the scale on the *DMIS* from which students begin. For example, if students are at the position of *minimization*, the orientation and program might be designed to facilitate more development on the scales of *acceptance* and *adaptability*. Students could be assessed of their intercultural development after any changes or expansion in orientation and program design.

The first hypothesis predicted that the study abroad students would start in *minimization* scale. Therefore, an orientation and program might be designed to learn about how other cultures are different than U.S. culture. However, unlike the first hypothesis predicted, the study abroad group in this study started in *denial*. Therefore, the orientation and program design would need to promote growth toward *minimization.*

The fact that the group ended in *minimization* indicates a positive assessment if it is compared to the *denial* scale from which the study abroad in this group began. Using these results in different settings and program designs could determine conditions that are necessary to ensure that culture-contact will lead to mutual understanding and appreciation and to determine what can be done on campuses in communities to attain these conditions.

As Snyder (2000) stated, some students "need to be actively constructing their own knowledge about the subject they are learning" (p. 16). There is a need for practitioners to gather more quantitative and qualitative data on college students who participate in activities abroad without earning academic credit, such as work abroad, volunteer service, internship, service learning, and other experiential programs for which they do not earn academic credit. This will be helpful in determining what these students learn and how it compares with what students, in an academic experience abroad, learn.

Conclusion

According to Van Hoof and Verbeeten (2005), students say that studying abroad "brought them a greater understanding of other cultures, that it had helped them appreciate their own culture more, that it enabled them to learn more about themselves and that it had enriched them personally" (p. 56). However, based on the preceding discussion of the results of this study as well as a review of the literature, it appears that simply spending time in another culture, while studying abroad, does not necessarily guarantee understanding, acceptance of another culture, and a statistically significant development of intercultural sensitivity. As Althen (2002) pointed out, "Some…of the

September 11 hijackers had come to the United States and lived for a time…they did not learn to appreciate American values and the American way of life" (p. 36).

"Institutional strategies for internationalization must nurture productive alliances between the international office and an institution's faculty" (Rodenberg & Beynon, 2002, p. 24). One way to do this is by continued data collection, research, and review. The quality of experiences abroad has gained importance to educators and administrators in higher education. Sheer numbers of student participants is no longer their only focus (Engle & Engle, 2003).

The data presented in the previous chapter provided some evidence of the benefits of a faculty led short-term program. Although the change in the students was not statistically significant, the effect size was small to moderate on most of the scales and subscales of the *DMIS* (Bennett, 1986, 1993). However, there were many limitations to this study, and there is much additional research that needs to be done. Further steps must be taken to determine the impact on students' lives and the outcome of the different types of learning that results from studying abroad (Farrell & Suvedi, 2003). There is "…an increasing need for instruments aimed at measuring skills, traits and abilities that are related to success in an international context" (Van der Zee & Brinkmann, 2004, p. 285).

As Sideli (2000) stated, "…our profession has never fully come to terms with the record-keeping process (p. 38). Perhaps international education ventures have grown too quickly for formal evaluation to keep pace. "International education administrators want evidence that study abroad is beneficial" (Isabelli-Garcia, 2003, p. 151). More data needs to be collected. Corrections in program design need to be made to ensure that time and money invested in study abroad programs shows significant results. These may include

more thorough orientation programs, programs of different lengths, and more immersion with host cultures. Hopefully this study will only be the beginning of more evaluations of study abroad programs to discover the best program designs to promote intercultural sensitivity in students.

Appendix A

Request to Enter Classroom

Course name_____Section_____Time_____

Instructor name _____

Thank you for considering participation of your class in the study about intergroup relations. This study is being conducted to complete my doctoral degree in educational leadership at the University of Missouri.

This project has been reviewed and approved by the Missouri State University Human Subjects Review Committee. The committee believes that the research procedures adequately safeguard the subject's privacy, welfare, civil liberties, and rights. The project is being supervised by Dr. Cindy MacGregor, Assistant Professor, Educational Administration, Missouri State University (417-836-6046).

The purpose of this study is to better understand how study abroad programs and on-campus classes develop intercultural sensitivity in participating college students. This information will be useful for educational research and further development of the cultural aspects of study abroad programs.

Informed Consent Procedures

The following information will be communicated to the students before data collection as part of the informed consent procedure:

Before you make a final decision about participation, please read the following about how your input will be used and how your rights as a participant will be protected:

- Participation in the study is completely voluntary. You may stop participating at any point without penalty.
- You need not answer all of the questions.
- Your answers will be kept confidential. Results will be presented to others in summary form only, without names or other identifying information.
- Your participation will take approximately 20 minutes and 20 minutes again at the end of the semester. During each time you will answer questions about your intercultural sensitivity.

Students not participating in the research will be allowed to continue studying their coursework.

I give permission for Paula Patterson to enter my classroom for data collection for the intercultural sensitivity research project. I understand this will take 20-30 minutes of classroom time during the first week of class and 20-30 minutes of classroom time during the last week of the semester.

Thank you very much for your time and consideration.
Paula Patterson
Missouri State University, 836-6368

Appendix B
Informed Consent Form

Dear research participant:

Thank you for considering participation in the study "Effect of Study Abroad on Intercultural Sensitivity." This study is being conducted to complete my doctoral degree in educational leadership at the University of Missouri.

The purpose of this study is to better understand how study abroad programs and on-campus classes develop intercultural sensitivity in participating college students. This information will be useful for educational research and further development of the cultural aspects of study abroad programs.

Before you make a final decision about participation, please read the following about how your input will be used and how your rights as a participant will be protected

- Participation in the study is completely voluntary. You may stop participating at any point without penalty.
- You need not answer all of the questions.
- Your answers will be kept confidential. Results will be presented to others in summary form only, without names and other identifying information.
- Your participation will take approximately 20 minutes. During this time you will answer questions about intercultural sensitivity.

This project has been reviewed and approved by the Missouri State Human Subjects Review Committee. The committee believes that the research procedures adequately safeguard the subject's privacy, welfare, civil liberties, and rights. The project is being supervised by Dr. Cindy MacGregor, Assistant Professor, Education Administration, Missouri State University (417-836-6046).

If at this point you are still interested in participation and assisting with this important research project please fill out the consent form below. Keep the top of this letter for future reference. You can contact me at 836-6368 if you have questions or concerns about your participation. Thank you very much for your time and consideration.

Sincerely,

Paula Patterson
University of Missouri

I,_____agree to participate in the study of intercultural sensitivity conducted by Paula Patterson. I understand that:

- My answers will be used for educational research
- My participation is voluntary.
- I may stop participation at any time without penalty.
- I need not answer all of the questions.
- My answers and identity will be kept confidential.

I have read the information above and any questions I asked have been answered to my satisfaction. I agree to participate in this activity, realizing that I may withdraw without prejudice at any time.

Signed:_____Date:_____

Appendix C

Questions for email questionnaire:

1. Describe the reason(s) that you choose to take this course?
2. Describe experiences (if any) you have had with other cultures BEFORE you began this course (i.e. study, work, or living abroad, travel, international students). If you have not had experiences with other cultures, explain why not.
3. Describe the most important thing(s) that you learned about another culture(s) as a result of completing this course.
4. Describe how you feel that you have changed, since beginning this course, in your sensitivity to those of other cultures. If possible, give specific examples of any change in your behavior or relationships with those of cultures that are different than your own.

Questions for interviews with study abroad students at the end of the program:

1. Describe the reason(s) that you choose to participate in this study abroad program?
2. Describe experiences (if any) you have had with other cultures BEFORE you began this study abroad program (i.e. study, work, or living abroad, travel, international students). If you have not had experiences with other cultures, explain why not.
3. Describe the most important thing(s) that you learned about another culture(s) as a result of participating in this study abroad program.
4. Describe how you feel that you have changed, since beginning before this study abroad program, in your sensitivity to those of other cultures. If possible, give specific examples of any change in your behavior or relationships with those of cultures that are different than your own.

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VITA

Paula Kay Patterson was born July 15, 1955 in Dallas, Texas. After two years at Baylor University, she completed a Bachelors degree in Music Education from Missouri State University, Springfield, Missouri (1977), a Master of Music degree in Vocal Performance from the University of Texas at Austin (1981), and an Ed.D. in Educational Leadership and Policy Analysis from the University of Missouri-Columbia (2006).

After receiving her Masters, Paula began her career as an opera singer in Europe for several years. After returning to the U.S., she performed leading roles with numerous American Opera companies including San Diego Opera, Des Moines Metro Opera, Ohio Light Opera, Texas Opera Theatre out of Houston, and Opera Carolina. She was a regional finalist and education grant recipient of the Metropolitan Opera auditions as well as a finalist in the San Francisco Opera Center, Chicago Lyric Opera and Pittsburgh Opera Center auditions. For the last ten years, Paula has worked with Study Abroad Programs at Missouri State University in Springfield, Missouri and traveled to Australia and China. She also teaches voice for the music department as an adjunct professor and Introduction to University Life for Freshmen and conducts a local church choir.

Paula continues her singing locally and is well-known to Springfield audiences through her work in opera, theater, oratorio, and recitals. During the past several years, she has appeared as a soloist with the Springfield Symphony, the Chamber Orchestra of the Ozarks, Southwest Baptist University choirs and orchestra, and other local venues. She is a frequent performer with Springfield Regional Opera, Springfield Little Theatre, and the Vandervort Center Theatre. During her spare time, she enjoys spending time with her husband, Steve Fisk, and their two dogs, Buddy and Foxy.