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An "Island" Study Abroad Program and Its Impact on the Intercultural Sensitivity and Cross-Cultural Adaptability of Its Participants: Perspectives from a Research Intensive University

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AN "ISLAND" STUDY ABROAD PROGRAM AND ITS IMPACT ON THE INTERCULTURAL SENSITIVITY AND CROSS-CULTURAL ADAPTABILITY OF ITS PARTICIPANTS: PERSPECTIVES FROM A RESEARCH INTENSIVE UNIVERSITY

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ABSTRACT

AN "ISLAND" STUDY ABROAD PROGRAM AND ITS IMPACT ON THE INTERCULTURAL SENSITIVITY AND CROSS-CULTURAL ADAPTABILITY OF ITS PARTICIPANTS: PERSPECTIVES FROM A RESEARCH INTENSIVE UNIVERSITY

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Globalization touches every sphere of our modern lives, and it has become more critical than ever that today's generation gains an understanding of other cultures and develops the ability to adapt to ever-changing environments. One important way that higher education has attempted to prepare students for these challenges is to offer study abroad programs, in which students are given the opportunity for educational experiences in other countries.

Traditionally, study abroad programs have involved immersion in the host culture, with particular emphasis on using and learning the native language. However, other types of programs designed to make the experience of living in another country less intense for students have become more popular in recent years. One of these, the so-called "island" study abroad program, provides students with little or no foreign language skill the opportunity to study, travel and live together in the host country, without the immersion

that has been integral to other programs. While there is much anecdotal evidence that the island model programs have a positive effect on students, there exists a dearth of studies that have systematically and objectively assessed the impact of such programs on students' intercultural sensitivity and cross-cultural adaptability.

To be certain, there are important works that have measured the effects of study abroad on students' cultural growth, such as Hammer's Intercultural Development Inventory (IDI) (2007), based on Bennett's Developmental Model of Intercultural Sensitivity (DMIS) (1986, 1993), and Kelley and Meyer's Cross-Cultural Adaptability Skills Inventory (CCAI) (1995). By using the scales developed in these instruments, the present study has attempted to extend the research by examining more specifically the impact of a semester-long island study abroad program on the development of critical sensitivity and adaptability skills relating to other cultures.

Indeed, the findings indicate that the island model program has a positive impact on students, to the point that students who studied abroad exhibited a greater change in intercultural sensitivity and cross-cultural adaptability by the end of the semester than did students who remained at the home campus, and further, the results of this study have laid the groundwork for future research in this area.

DEDICATION

To my parents, daughters, husband, and extended family

And

To the Grace of God

ACKNOWLEDGEMENT

My sincere thanks are conveyed to my chair, Dr. Derek Whordley, and each member of my committee, Dr. Roberta Aronson, Dr. Jocelyn Gregoire and Dr. Gibbs Kanyongo. I have greatly valued their advice, guidance and support throughout this whole process. Of course, this study would not have been possible without the students who agreed to participate, and for them I am most sincerely appreciative. Also, my deep gratitude goes to the Executive Director of the Office of International Programs, who greatly supported my endeavor and provided constructive advice throughout. I would also like to thank the Director of Duquesne University Italian Campus program, the island program on which this study was based, as well as the faculty members and staff for their cooperation in the data collection process. In addition to the faculty and students, I am grateful for the support and generous input of my many friends, particularly those who assisted in the sometimes painstaking editorial process. I am also thankful for the encouragement of my classmates and colleagues at the university.

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enduring friendship every step of the way. And finally, my deepest gratitude goes to God who provided me with courage and health throughout this process.

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CHAPTER I: INTRODUCTION

Study Abroad Today

When students decide to embark on a course that will allow them to study and live abroad, they are making a commitment to leave their home culture for a time and to engage in academic and social pursuits in a new and strange setting (Cushner & Karim, 2004). It is an academic, cultural, intellectual and emotional journey, during which time students are afforded the opportunity to interact with people of a different culture in ways they may never have previously experienced. Study abroad programs are defined as educational programs that take place outside of the country of origin (NAFSA, 2003a). The multilevel experience of studying in another country and living among the people there can help students understand their own culture better by being exposed to the mores and values of another society, leading "to a higher degree of self-reflexivity, self-confidence and an increased propensity to strive for an open mind. Detecting the subtle and embedded aspects of their own, as well as the other culture, eventually brings about a more sensitive and receptive cultural competence" (Stier, 2003, p. 80).

The statistical reports, *Open Doors* (2008), published by the Institute of International Education (IIE) indicate that study abroad participation has been growing steadily in the past twelve years from 84,403 in 1994-1995 to 241,971 in 2006-2007. The last figure reflects an increase of about eight and half percent compared to the 2005-2006 number of 223,534. This increasing trend is expected to continue (NAFSA, 2003a). Traditionally, individual students have sought study abroad because it is an experience that involves immersion in the host culture and includes gaining proficiency in a foreign language. However, participation in other types of programs involving groups of students

from one institution, so-called island study abroad models, has been steadily increasing. These programs, which allow students to travel and live together in the host country, suit the needs of many who are not ready to be fully immersed in a new culture, and yet still wish to be involved in a study abroad experience and exposed to cultural differences (Hanouille & Leuner, 2001).

Rationale

Americans face many challenges at the beginning of the 21st century, including the need to develop competencies to adjust to and remain competitive in the rapidly changing and highly competitive global marketplace. Leaders in international education recognize the transformative nature of study abroad programs in developing students who become culturally sensitive and intellectually prepared to take their place in the world.

Due to the growing need for more effective program development and assessment in international education, the Institute for the International Education of Students (IES), an international consortium of more that 175 universities and colleges worldwide, developed a Model Assessment Program (MAP) in 1999 for evaluating island model, hybrid and direct enrollment study abroad programs. One of the four categories of MAP focuses on student learning and the development of intercultural competence. The organization suggests that colleges and universities should carry out qualitative and/or quantitative studies to effectively assess students' cognitive, personal and interpersonal growth by testing their abilities to appreciate and understand cultural differences (IES, 2003).

Today's parents and students tend to hold higher education institutions accountable for the quality of education being provided to meet the requirements of the

job market (Gingerich, 1988). Vande Berg (2001) further supports this argument by stating that today's consumers are looking for warranties that their investment in education will build the attitudes, knowledge, and skills for them to succeed upon graduation (p.31). Administrators in higher education are equally interested to know if a study abroad experience makes a difference in students' learning (Vande Berg , 2001) Consequently, during the past decade "international educators have 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).

So far, efforts to assess study abroad programs have been inconsistent and meager (Gillipsie, 2002). Over the past 25 years, the trend of evaluating the quality of education has shifted from teaching to learning (Fantini, Arias-Galicia, & Guay, 2001). Consequently, this type of evaluation compels educators and administrators to find out whether study abroad programs develop "intercultural learners" instead of academic tourists (Gillipsie, 2002, p.1).

Educators and administrators have anecdotal evidence from students about how study abroad has had a positive impact on their lives. Yet there is a lack of assessment tools that could show how international education expands a student's ability to recognize, understand and respect cultural differences, and how it can enhance personal development (Sell, 1983); a student's understanding of cultural differences prior to and after a study abroad experience is seldom empirically verified (Sell, 1983). Hence, it is imperative that universities and colleges develop methods to assess their study abroad programs to make sure that the intended goals are being met.

Proponents of higher education programs conducted in an international context agree that the development of intercultural and cross-cultural skills is crucial to the success of American students competing in the global workplace. A thorough examination of these efforts to expose students to other cultures is needed at national, state, and particularly on an institutional level on a regular basis in order to ensure that they are actually helping students to gain the necessary skills to thrive and survive in diverse and ever-changing environments. A number of studies have investigated the impact of study abroad on students' change in attitudes, personal development and intellectual level (Kauffmann, Martin, & Weaver, 1992; Hofman & Zak, 1969; Sharma & Klasek, 1986). However, very few studies have focused on the development of intercultural sensitivity and cross-cultural skills through participation in an island model program.

Students who have come back from island study abroad programs often talk about the impact the experience has made in their intercultural learning, and, as such, there is much anecdotal information available on the benefits of such programs. Unfortunately, there is little empirical research on the impact of an island study abroad program on students' development of intercultural sensitivity and cross-cultural adaptability skills over a semester-long period.

In the final analysis, given that the development of intercultural skills is widely accepted as a vital learning outcome in an increasingly interdependent and interrelated global community, as well as for the fostering of world peace and social justice, it is imperative that institutions of higher learning promote and utilize tools that can

accurately assess whether these learning outcomes are being fulfilled across the multiplicity of study abroad program models.

Statement of the Problem

Numerous studies have investigated the impact of study abroad on the intercultural competencies of students in higher education, yet very few have explored the effect of an "island" model program on students. Progressively, universities and colleges are now offering students a wide choice of study abroad programs varying in the level of immersion, duration and field of study. There has been a steady growth in the number of students participating in "island" study abroad programs. Universities are recognizing the need to provide students with little or no skill in a foreign language an opportunity to study abroad together with other students from the same home institution. Administrators of such programs cite anecdotal evidence from students concerning the positive learning outcomes of their experience. Unfortunately, little research exists to support the effectiveness of the island-type programs in promoting students' intercultural and cross-cultural skills.

Proponents of the traditional immersion study abroad model often contend that so-called island programs are culturally and academically inadequate. However, those that favor the latter model would argue that an island campus provides a safe and friendly environment for integrating into the host culture and for developing intercultural and cross-cultural skills (Hanouille & Leuner, 2001), although the lack of research in this area leaves uncertainty about the island model. The rapid growth of these programs, due to financial, curricular, and language limitations of American college students, compels us

to examine more closely their potential for cultivating intercultural sensitivity and cross-cultural adaptability.

Purpose of the Study

Given the rise in the overall number of students studying abroad, institutions in higher education have established goals and learning objectives for students studying abroad. Specific objectives for study abroad programs may vary from one institution to another, yet academic and intercultural competencies are common goals among all types and lengths of study abroad programs (Stier, 2003). Intercultural sensitivity and cross-cultural adaptability skills, as essential parts of intercultural competencies, are often identified as learning goals by institutions in higher education (Hammer, Bennett & Wiseman, 2003). The purpose of this study was to investigate the impact of a semester-long island model study abroad program on the actualization of these intercultural skills in a research intensive university.

Research Questions

The study addresses the following research questions:

1. Are there changes in the intercultural sensitivity of students studying abroad in an island program over a semester-long period as measured by the Intercultural Development Inventory (IDI)?
2. Are there differences in the intercultural sensitivity between students studying abroad in an island program and students studying at their home campus over a semester-long period as measured by the IDI?

3. Are there changes in the cross-cultural adaptability skills of students studying abroad in an island program over a semester-long period as measured by the Cross-Cultural Adaptability Instrument (CCAI)?
4. Are there differences in cross-cultural adaptability skills between students studying abroad in an island program and students studying at their home campus over a semester-long period as measured by the CCAI?

Significance of the Study

As the number of students participating in study abroad programs continues to grow, stakeholders, including students, student advisors, administrators, faculty and parents, are interested in finding out whether a study abroad experience helps students to develop the skills needed in a global community.

The assessment of study abroad programs in any university or college will assist the administration in analyzing the effectiveness of their programs in terms of cost, quality and learning outcomes. The outcome-based approach of planning and implementing study abroad programs necessitates an evaluation of the learning experience, focusing on how the institution's mission and goals are being met. The increasing costs and the limited resources available to manage private and state-funded post-secondary academic institutions in the United States warrant the need for assessment to justify the existence of present and the implementation of future study abroad programs. Paige, Cohen and Shively (2004) support this argument by stating, "In an era of ever-greater accountability and cost-benefit analysis, hard evidence is being demanded

to demonstrate that investments in various forms of education, including, study abroad, are worthy ones that are realizing their learning objectives." (p. 53)

The study seeks to provide administrators and educators in the field of international education with data that will help to evaluate the effectiveness of a semester-long island study abroad program on college students' development of intercultural sensitivity and cross-cultural adaptability skills. It is hoped that it will be of relevance to educators and administrators who are involved in the design, implementation, management and evaluation of study abroad programs.

The literature reveals that the desired learning outcomes for college and university students include an understanding of cultural differences and the development of intercultural skills to adapt to our global world. In order to comprehend how an island study abroad experience contributes to the fulfillment of these outcomes, it is necessary to carry out more studies in that area.

Given that there is a dearth of studies on island study abroad programs, this dissertation can serve as a resource to educators and administrators in international education and provide them with information about the impact of such programs on students' intercultural sensitivity and cross-cultural adaptability skills.

Finally, this study seeks to clarify perceptions about the learning outcomes of study abroad at the college level. It is hoped that this study contributes to a pool of research studies that have tried, are trying and will try to investigate the impact of a study abroad experience on college students.

Definition of Terms

Competence: competence is a social judgment depending on the context, the relationship between interactants, the goals of the interactants and verbal and nonverbal messages that are used to accomplish these goals (Lustig & Koester, 2006).

Cross-Cultural Adaptability: the ability to use communication skills (Hammer, Gudykunst, & Wiseman, 1978; Cui & Van Den Berg, 1991), interpersonal skills (Kealey, 1989), and psychological and socio-cultural adjustment skills (Hannigan, 1990; Searle & Ward, 1990; Ward & Seale, 1991) to live effectively in other cultures and to interact effectively with people of other cultures. In this study, the term is also being referred to as cross-cultural effectiveness.

Culture: "the sum total of ways of living: including values, beliefs, esthetic standards, linguistic expression, patterns of thinking, behavioral norms, and styles of communication which a group of people has developed to assure its survival on a particular physical and human environment" (Hoopes & Pusch, 1981, p.3).

Direct enrollment program: This type of study abroad program is described as traditional, meaning that students are directly enrolled in the host country's educational system and take courses taught by faculty from the host institution. The students are either housed with students from the host country or independently in the dormitory (Hanouille & Leuner, 2001).

Ethnocentrism: "assuming that the world view of one's own culture is central to all reality" (Bennett, 1993, p.30).

Ethnorelativism: "cultures can only be understood relative to one another and particular behavior can only be understood within a cultural context" (Bennett, 1993, p. 46).

Hybrid program: This model of study abroad provides students with the opportunities to simultaneously take courses offered at the host institution and courses instructed by faculty from the home university. Students have the choice of staying with a host family, hostels or in housing arranged by the host or home institutions (Hanouille & Leuner, 2001).

Intercultural competence: "the ability to communicate effectively in cross-cultural situations and to relate appropriately in a variety of cultural contexts" (Bennett & Bennett, 2004, p. 7).

Intercultural Development: "the progression from a monocultural to an intercultural mindset that reflects increasingly more complex perceptions and experience of cultural differences" (Hammer, 2007, 13).

Intercultural Sensitivity: "the construction of reality as increasingly capable of accommodating cultural difference that constitutes development" (Bennett, 1993, p. 24). In other words, it refers to the "ability to discriminate and experience relevant cultural differences" (Hammer, Bennett, & Wiseman, 2003, p. 422).

Island Program: a self-contained academic program, whereby faculty from the home academic institution may be teaching alongside faculty from the host country. Students from the home institution live together in a non-university setting. The means of instruction is English, except for foreign language courses (Hanouille & Leuner, 2001).

NAFSA: Association of International Educators. A professional organization involved in promoting internationalization of education and encouraging the exchange of students to and from the United States. It also provides opportunities for professional development in international education.

Study abroad: Credit-bearing educational programs that take place outside of the country of origin (NAFSA, 2003a). For the purpose of this paper, "study abroad" will refer to a semester-long period (at least 3 months).

Limitations

The organizational structure of study abroad programs differs by institution in the United States. This study was limited to students who participated in a semester-long island type study abroad in Italy, organized by a middle-sized urban private university. The responses of the participants may not be generalized to reflect the effect of study abroad on the overall population of college students in higher education institutions. In addition, programs of longer time period or in different locations may have projected different results.

This study consisted of students studying in a program organized by the Office of International Programs at the university under consideration. Programs of different types such as direct enrollment, hybrid, faculty-led, and shorter-term (less than a semester) could have produced different results using the CCAI and IDI instruments. Furthermore, this study examined a predominantly sophomore-level study abroad program. Results from an experience involving upperclassmen may have differed.

The pre- and post-test research design may have had a carry-over effect, meaning that the participants were already aware of the purpose of the study and familiar with the content of the two instruments at the time of the post-test. Therefore, students may have manipulated their responses accordingly during the post-test (McMillan & Schumacher, 2001).

The results of this study were based on a quantitative research design. A mixed qualitative and quantitative or a qualitative approach may have possibly projected different responses.

Delimitations

The experimental group consisted of students who have earned a minimum grade point average of 2.75, and who have applied and been approved to the Italian Campus study abroad program. Students who failed to complete both the pre- and post-tests were excluded from the study. All participants were informed of the purpose of the study and of their participation being voluntary. The program being investigated in this study is unlike other institutions' study abroad programs, due to its exclusive participation of students, faculty and administrators from a single institution. Consequently, the results of the study should be applied to other institutions with careful forethought.

CHAPTER II: LITERATURE REVIEW

Introduction

A public survey conducted by the Academic Council of Education (2001) reveals that over 70 percent of respondents stated that college and university students should have a study, work or internship experience abroad for some time during their college or university education. In response to such a demand and to the rise of globalization, educators and administrators have established study abroad programs of different types and in different contexts to meet the needs of the students. It is becoming increasingly important for students to become globally competent citizens. Hunter, White and Godbey (2004) suggest that the core of becoming a global citizen is to establish one's self-awareness, to have sensitivity towards cultural differences and to develop a nonjudgmental and open attitude toward those differences.

In an attempt to address these ideas, the literature review will focus on the following: (1) globalization and internationalization of higher education (2) trends in study abroad; (3) goals of study abroad in the internationalization of higher education in United States; (4) the concept of intercultural sensitivity; (5) the conceptual framework: Bennett's (1993) Developmental Model of Intercultural Sensitivity; (6) the concept and dimensions of cross-cultural adaptability; and (7) an overview of study abroad research findings.

Globalization and Internationalization of Higher Education

Globalization is often associated with the interconnectedness among nations of the world and to "the trends and policies related to marketisation (sic), increasing supra-national competition as well as growth of trans-national education and commercial

knowledge transfer" (Teichler, 2004, p.8). The term implies a worldwide process, in which standardization across cultures occurs in technology, migration and education. In contrast to globalization, internationalization focuses on the bilateral and/or multilateral processes that involve the development of business, social, educational and cultural relationships in a particular country (McCabe, 2001). Given the continued and inevitable growth of globalization, along with competition in the workforce and an expansion of multinational operations in and out of the United States, the internationalization of higher education has become inevitable.

The process of interdependence in the world's economy has led to an emerging need for American higher education to develop global citizens who can face the challenges of a highly competitive workforce (Stier, 2003). As our world continues to be characterized not only by interconnectedness and international economic competition but also by cultural pluralism, it is increasingly important for higher education institutions to develop students with the knowledge, skills and attitudes to become successful citizens of the world (McCabe, 2001).

Today's educators and administrators are establishing educational goals that aim to provide students with the skills and qualities needed to succeed in a global environment. This new trend has shifted the focus on education toward a competency-based education wherein educators need to evaluate what and how students are learning (Fantini, Arias- Galicia, & Guay, 2001).

The rationale of higher education for being involved in internationalization may vary, yet it centers on the argument that higher education should equip students with academic, professional and intercultural competencies to function in a global world

(Stier, 2003; Qiang, 2003). Qiang believes that the purpose of the internationalization of higher education is as follows:

> Academic and professional requirements for graduates increasingly reflect the demands of the globalization of societies, economy and labor markets and thus higher education must provide an adequate preparation for that. These requirements include not only academic and professional knowledge, but also multilingualism, and social and intercultural skills and attitudes. (p. 249)

One of the largest organizations that support international education efforts, the National Organization of International Educators (NAFSA) (2003b), identifies one of the goals of internationalization as the development of students' cultural awareness and understanding of cultural differences, whereby students must gain an understanding of other countries, regions, languages, and cultures through personal experience. Internationalization of higher education is further described as a process during which students acquire the attitudes, skills, knowledge and awareness needed to compete in the global working environment (Deardoff, 2004). Another identified goal of internationalization emphasizes the development of skills to produce a sufficiently large labor force, with adequate skills for competence-demanding jobs, in an increasingly more complex global and multicultural world (Stier, 2003).

The perspectives on internationalization suggest that students' mobility across countries of the world is needed to develop the competence to succeed in the global environment. In response to the increasing trend towards globalization, higher education institutions have identified different strategies to plan for internationalization. The strategies range from study abroad, recruitment of international students, exchange of

faculty, and internationalization of curriculum to student exchange (Qiang, 2003; Teichler, 2004).

The exigencies of a world economic system built on a global exchange of resources combined with an increasing reliance on international communication have resulted in the need for many Americans to become more effective at associating with cultures other than their own (Taylor, 1994). In the 1990's the reasoning behind increasing the number of study abroad students was associated with national security or the pressure to compete with other nations (Gutek, 2000). National policies continue to support study abroad to promote the acquisition of global knowledge. Organizations and academic institutions have increased their efforts to provide students with opportunities to study abroad. In addition, a wide range of activities sponsored by the U.S. Department of State have been developed to help students gain study abroad experience. These include the Fulbright U.S. Student Program, the Gilman Scholarships for undergraduates, and the National Security Initiative program for language learning (*Open Doors*, 2006).

NAFSA (2003b) strongly supports the argument that international and cross-cultural awareness and understanding on the part of U.S. citizens is crucial to effective U.S. leadership, competitiveness, prosperity, and national security in this century. In spite of the importance of international awareness and understanding on the part of U.S. citizens, NAFSA (2003b) reports that "the United States effectively lacks a coherent, clearly articulated, proactive policy for imparting effective global literacy to our people as an integral part of their education and for reaching out to future foreign leaders through education and exchange" (p. 6). In an effort to address the lack of global competence, the report of NAFSA's Strategic Task Force on Education Board proposed a

national effort to promote study abroad as an experience during which "Americans will gain an understanding of other countries, regions, languages, and cultures, through direct personal experience" (p. 6).

Many higher education institutions offer students opportunities to study abroad as a means to develop the competency to become more internationally knowledgeable and interculturally skilled. This "competency" approach of internationalization as described by some scholars (De Wit, 2002; Knight, 1997) focuses on the development of cross-cultural skills, knowledge, and awareness. Such an approach supports and promotes strategies for acquiring abilities to adapt to and interact with other cultures. Institutions have also adapted an "activity" approach of internationalization, involving student and faculty exchange, recruitment of international students, and curriculum with international perspectives (DeWit, 2002).

Trends in Study Abroad

Historical Background of Study Abroad in U.S. Higher Education

International travel goes back to the Egyptian age when the ancients traveled to faraway lands in pursuit of the knowledge and wisdom of other civilizations. For example, medieval monks and Renaissance scholars, such as Erasmus, traveled to Europe in search of libraries and other scholars (Hoffa, 1996).

During the time of colonization, sons of wealthy colonists attended European universities and finishing schools to acquire a better education. Hoffa (1996) states "this elitist pattern of study abroad continued up the end of the nineteenth century, when a grand tour or postgraduate study at German and British universities was seen as an essential part of a well-rounded gentleman's education" (p. 25). Prior to 1945, American

universities started study abroad programs in Europe for their undergraduates. After 1945, student exchange programs with Western Europe were viewed as a way of promoting democracy in Europe (Haug, 1996).

In the early part of the twentieth century, the trend of traveling overseas started to fade with the growth in graduate and professional education in America, though students continued to study abroad to seek highly challenging post graduate studies, such as Rhodes and Fulbright scholarships. In addition, American students began to pursue advanced specialized training in foreign countries after they completed college (Sell, 1983).

Shortly after World War I, study abroad became an institutionalized part of American higher education. After the establishment of the League of Nations, politicians and academic institutions became more vested in foreign universities (Gingerich, 1998). The U.S. government became aware of the growing importance of international educational exchange and of the need to respond to the increasingly interconnected world and consequently encouraged international education through endowed scholarships for foreign studies and international exchange, mainly in developing countries to initiate educational and health programs (Gingerich, 1998).

After World War II the character of programs started to change and students were offered semester- and quarter-long study environments, and a range of summer programs with opportunities in many diverse areas (Sell, 1983). The U.S. government began to support programs to send scholars and teachers to different countries to do research and teach. Hoffa (1996) says “foremost among these were the Fulbright program, begun in 1946; the Agency for International Development; and the language and area studies

funded under Title VI of the Higher Education Act" (p. 26). At that time the U.S. government supported initiatives and programs to promote international higher education and to address multi-cultural sensitivity and cross-cultural understanding (Gingerich, 1998). By the late 1970's, approximately 20,000 undergraduate students were studying abroad (Hoffa, 1996).

Toward the end of the 1980's, the United States Congress was concerned about the country's ability to compete in the global market and to remain the world's leader. In 1991, the National Security Education Act was established to provide more opportunities for students in higher education to study abroad. The act increased support for area and foreign language studies by offering more Fulbright fellowships and more curriculum grants to colleges and universities (Gingerich, 1998). From then on, the number of students studying abroad has been steadily increasing as higher education institutions introduced a multiplicity of programs allowing for varying durations abroad. As a result students began traveling to more countries than ever before. The following information will elaborate on these facts.

Current Types of Study Abroad Programs

Study abroad programs in United States fall under four categories: academic, religious, fraternal and service-oriented. Programs of these categories can be private and officially nonprofit, or commercial (Cushner & Karim, 2004). Academic programs are composed of students in scholastic study or of faculty involved in a research project; religious, fraternal and service-oriented programs are typically sponsored by organizations. Private and nonprofit programs are sponsored by foundations, schools, or charitable organizations and commercial programs are set up as for-profit ventures.

American students participate in different types of academic study abroad programs: those sponsored by their own university, by another university or by a consortium of institutions. Statistics indicate that 73% of American students enroll in a program sponsored by their own university. The rest of the students participate in programs sponsored by another American university and are able to transfer their credits to their own institution (Haug, 1996).

Many of these programs are branches (or "islands") established by American universities to teach a group of their own students over a semester or a year in a foreign country. The academic calendar for the branch is set according to the American university calendar. The island model contrasts with the European, Erasmus-type of study abroad, whereby students are fully immersed in the host institution and integrated into the courses offered by the host institution. Island programs are designed to fit well with the curriculum of the home campus. Another form of organized group study abroad program by the home institution is known as the hybrid program, whereby students have opportunities to be enrolled directly in courses of the host institution as well as in courses from the home institution (Hanouille & Leuner, 2001).

Study abroad experiences also exist in the form of internship, student-teaching overseas, service training programs, and Semester-At-Sea. All these opportunities are academic in nature and are recognized by educational institutions. The following statistical information will refer to university level study abroad programs which are academic in nature.

Recent Statistical Reports on Study Abroad

Statistical reports suggest that interest in study abroad is increasing. A study completed by the American Council of Education (ACE) on senior high school students' interests and motivation for higher education shows that 77% of incoming freshmen have gained some international experience prior to college years. The majority (98%) indicated that they have studied a foreign language, and 70% thought that their higher education institution should offer study abroad programs, with 48% interested in enrolling in a study abroad program during the college and university years (ACE, 2001).

Another study was done by the ACE on public opinion about issues in international education. The results reveal that about 70% of the respondents believe college and university students should have a study abroad experience during their higher education years and more than three out of four believe that international education opportunities are an important factor in the selection of a college or university (ACE, 2001). These findings support the argument that educators are seeing an increasing number of students interested in study abroad programs.

The statistical reports published by the Institute of International Education (IIE) (2008) indicate that study abroad participation has been growing. IIE, the leading non-profit educational and cultural exchange organization in the United States, publishes *Open Doors*, a comprehensive statistical report on American students studying abroad and international students in the United States. Data from the 2008 edition of *Open Doors* report that the annual number of students U.S. students studying abroad has been increasing steadily in the past years, from 84,403 in academic year 1994-1995 to 241,971

in 2006-2007. The last figure reflects an increase of eight and half percent compared to the previous year figure of 223,534.

Statistics in *Open Doors* (2008) reveal that only 5 of the 20 most popular countries for studying abroad are mainly English-speaking, with European countries listed as the most common study abroad locations. The statistics reveal that, in the year 2006-2007, Europe was the most popular destination with a participation percentage of 57.4, followed by Latin America (15%), Asia (10.3%), Oceania (5.7%), Africa (4.2%), Middle East (1.2%), and others (6.2%). In 2006-2007, leading destinations listed in descending order of American undergraduates' participation were: the United Kingdom, Italy, Spain, France, China, Australia, Mexico, Germany, Ireland, Costa Rica, Japan, Argentina, Greece, South Africa, the Czech Republic, Chile, Ecuador, Austria, New Zealand, and India. In addition, according to *Open Doors* (2008), the top three major fields of study of American students participating in a study abroad program are the Social Sciences (21%), Business Management (19%), and Humanities (13%).

While the Open Doors (2008) report reveals the significant growth of both student participation and study abroad programming, a notable trend is in the varying of the duration of the time abroad. The 2006-2007 Open Doors statistics report that the duration of study abroad programs is shortening in length (e.g., five-week summer programs and programs of duration less than one semester). Of the total number of undergraduate students who studied abroad in 2006-2007, 42% participated in a "semester abroad" model and only 5% in a full academic year program.

The same source reports that more females (65.1%) than males (34.9%) participated in a study abroad program in the year 2006-2007. The statistical break-down

by ethnicity is as follows: Caucasian (81.9%), Asian-Pacific (6.75), Hispanic (6.0%), African American (3.85), and others (1.7%).

Some of the growth in study abroad can certainly be traced to the proliferation of island model study abroad programs. The statistical report of a study on the economic impact of North American programs in Italy reveals that the total number of participating members in The Association of the American College and University Programs (AACUPI) in Italy was 76 in 2000 and grew to 130 in 2008 (AACUPI, 2008).

In spite of these impressive statistics, the report from *Open Doors* (2008) indicates that only 1% of students in higher education have participated in a study abroad experience by their graduation. On the positive side, the statistics also reveal that the number of students participating in study abroad programs has been increasing steadily over the last decade. The low rate of participation may be attributed to many reasons. The most common ones include lack of financial resources, fear of traveling, or a mismatch between the study abroad programs and students' programs of study (Hoffa & Pearson, 1997).

Overall, the trend in study abroad has evolved from the once elitist view of traveling overseas for a well-rounded education to today's view that students should be prepared to meet the challenging needs of the interrelated and interconnected world (Hoffa, 1998). In an effort to face this challenge, many higher education institutions have made study abroad a part of their mission. Institutions have also incorporated specific goals for their study abroad programs in their mission statement. It is important for leading educators to determine the goals and learning outcomes of study abroad in order for the students to reap the maximum benefit from the experience.

The Study Abroad Program

The program that has been investigated for this study is housed in a private urban university. In its effort to internationalize the curriculum and to meet the needs of the global market, the institution encourages students and faculty to take advantage of opportunities to study and teach abroad. Furthermore, it acknowledges the transformative nature of study abroad programs in developing adult students who become intellectually aware, culturally sensitive, and intellectually prepared to take their place in the competitive work force. The university has been committed to internationalizing the curriculum and exposing students to diversity and cultural differences around the world.

According to the mission statement of the research institution with respect to its island program in Italy, its goal is "to offer undergraduate students a general curriculum that allows students to fulfill important requirements common to all (and) students are given opportunities to develop a global perspective, to fuel their intellectual curiosity through first-hand experience of historical and cultural material, to cultivate a deeper spiritual connection, and to grow into more mature and self-confident students, (transforming)students into citizens of the world." Just as the participation in study abroad programs is growing on a national level (*Open Doors*, 2008), participation in the institution's island program is also increasing. Over the past seven years, the number of students participating in the program increased from 48 in 2001 to 112 in 2008.

Students in the program are taught by faculty from the home university as well as by instructors from the host country and are not required to be proficient in Italian language to participate in the program. They live together as a group in a dormitory, supervised by the director of the program and resident advisors. The courses taught at the

campus range from Art History, Classics/History, Italian I to Intercultural Communication, Economics, Theology and Sociology. Classes are conducted from Tuesdays to Thursdays in order to leave long weekends for students to explore the local community or to travel to other countries. In addition, the program includes trips to different sites in Italy and to various locations surrounding the country. In general, the goals of this program are to provide students with opportunities to observe and experience cultural differences, as well as to gain a better understanding of their society and themselves. What follows is a more in-depth discussion of the various goals of study abroad programs that have been identified and categorized by scholars in this area of research.

Goals of Study Abroad in U.S. Higher Education

Study abroad has been one of the strategies implemented by administrators of higher education for responding to the call for internationalization of higher education and for providing students with opportunities to acquire competence in facing diversity in our global world. Such competence would enable them to have an understanding of their own culture, as well as to develop an appreciation for the backgrounds, interests and points of view of others.

A number of attempts have been made to define the goals of study abroad in higher education. The literature reveals that most research on desirable goals focuses on the development of the intellect, personality, intercultural competence and international perspective (Gillipsie, 2002).

Some scholars have categorized these goals as follows: intellectual and professional development of students in their specialized fields of study; the general

education of students; stimulus to personal growth; and furthering of international understanding (Abrams, 1979). Study abroad experience is viewed as a stimulus to intellectual and personal growth. Others have indicated that international experience contributes not only to personal growth and intellectual development, but also to perceptual understanding. This approach of identifying the goals of study abroad is summarized by Hoffa(1998) as follows: "(1) creating a global outlook with other nations focusing on opportunities to develop global understanding, perspectives, and knowledge; (2) enhancing career preparation by learning cross-cultural and workplace skills needed in today's global job market; and (3) fostering intellectual and personal development" (p. 13). Similar to Hoffa (1998), Kauffmann, Martin & Weaver (1992) classify the goals of study abroad in three broad categories: intellectual development, personal growth; and international understanding. They believe that as students immerse themselves in a new culture, they become better aware of their own culture as well as of others.

Other scholars have explored how a study abroad experience is an emotional, cultural and intellectual journey (Stier, 2003) in which the students embark on a cultural journey that becomes enriching through interaction with and reflection on cultural differences and peculiarities. Like Stier, Hopkins (1999) believes that students are given an opportunity to reflect on their assumptions of others and of self. Study abroad gives the students the opportunity to find themselves inwardly as well as outwardly and to reconcile their views of themselves and their assumptions with the new cultural environment, with the process of experiential learning leading to self-development.

In spite of the shortcomings and limitations of measuring intercultural learning, Goodwin and Nacht (1988) point out that a study abroad experience enhances personal and intercultural development in the following way:

> The defenders of this goal speak especially of a personal metamorphosis in those who partake – a gestalt change that varies with the individual, cannot be predicted in detail, but is enormously important as an outcome. Students in this way become, it is said more mature, sophisticated, hungry for knowledge, culturally aware, and sensitive. They learn by questioning their prejudices and all national stereotypes. They ask the meaning of national culture. Their horizons are extended and they gain new perspectives. (p. 12)

As the world becomes more interconnected, the need for intercultural skills cannot be ignored. In this global economy, the goal of international education is to overcome the gaps in the information that most Americans have about the rest of the world (Lambert, 1994). Study abroad is considered to be one of the ways to narrow the gaps through the development of empathy for other cultures and favorable attitudes towards other people. Knowledge about cultural differences, empathy for other cultures, the ability to have interactive coping skills and foreign language competency are becoming increasing important (Lambert, 1994). Similar to Lambert, other scholars believe that the development of intercultural skills, including intercultural sensitivity, has become a significant goal of study abroad programs in higher education (Mahoney & Schamber, 2004).

The above literature suggests that the learning goals of study abroad can be summarized as intellectual and personal development, international understanding, and

enhancement of global competence, cross-cultural skills and intercultural sensitivity. This review does not suggest that other goals have not been identified by other scholars. For the purpose of this study, it is important to focus on how scholars have analyzed the goals of study abroad with respect to students' changes in cross-cultural adaptability skills and intercultural sensitivity. The next section will cover different scholars' perspectives of intercultural sensitivity focusing on the understanding of cultural differences and will elaborate on some of those approaches.

Intercultural Sensitivity: An Understanding of Cultural Differences

The term *intercultural sensitivity* has been closely related to the concept of intercultural communication competence because of the need for interaction to occur during the developmental process of intercultural sensitivity. To this effect, Bennett (1986) states that "the development of intercultural sensitivity demands attention to the subjective experience of the learner" (p. 179).

With regard to intercultural learning and an individual's understanding of cultural differences, Hoopes (1981) views communication as central to the cross-cultural encounter and to cross-cultural understanding. He states that "both the terms 'intercultural' and 'cross-cultural' refer to interaction, communication and other processes (conceptual analysis, education, the implementation of public policy, etc.) which involve people from two or more different cultures" (p. 6).

Scholars have interpreted the understanding of cultural differences through different contextual situations. Edward T. Hall (1976), often known as the father of the field, first published works that were related to intercultural communication and cross-cultural training. In his book *Beyond Culture* (1976), Hall shares his knowledge of how

our experience is molded by culture. His analysis of the effects of space and time and other non-verbal behavior on human interaction led to further research in culture learning and the impact of such learning in training programs. The goals of these programs were to provide individuals with the skills to comprehend and respond appropriately to new situations and to gain a better understanding of cultural differences.

Like other scholars in the research area of intercultural communication competence, Byram (1997) includes in his model an analysis of knowledge, skills and attitudes that enhances an understanding of cultural differences and differentiates between two areas of knowledge: 1) knowledge of others and of social processes of group and 2) knowledge of one's own beliefs, stereotypes, and prejudices. He adds that intercultural attitudes are built when the individual is aware of his or her own values, beliefs and behaviors, as well as of the values, beliefs and behaviors of other cultures. Byram (1997) also differentiates the skills of interacting and relating to others from skills of interpretation in order to point out that intercultural competence is developed not only through interaction but also through effective interpretation of communication.

Understanding of cultural differences is also enhanced by the knowledge, skills and motivation needed to interact with other cultures. Appropriateness (appropriate behavior) and effectiveness in cross-cultural interactions are achieved when these three elements co-exist. In other words, the scholars agree that effectiveness of intercultural communication has to be viewed with a holistic approach combining the individual's knowledge, skills and motivation (Wiseman, Hammer, & Nishida, 1989)

Adaptability skills are also important in the process of understanding cultural differences. Adaptability is viewed as the core of intercultural communication

competence and as a determinant of how individuals will change their cultural ways and learn new ones (Kim, 1988). Kim adds that adaptability implies that individuals apply different skills and behaviors under challenging circumstances. Hence, an individual with effective intercultural skills has an understanding of cultural communication differences, the ability to deal with those challenges and the motivation to demonstrate those skills.

The development of intercultural sensitivity has also been analyzed by Chen and Starosta (1996) as an integral part of the process of building intercultural communication competence. They list the three components of the process of acquiring intercultural communication as intercultural sensitivity (affective), intercultural awareness (cognitive), and intercultural appropriateness (behavioral), including verbal and non-verbal skills. The authors argue that successful intercultural communication requires the interactants' intercultural awareness by learning the similarities and differences, while the process of achieving awareness of cultural similarities and differences is enhanced by intercultural sensitivity.

Other scholars argue that an individual's ability to function effectively in any cultural environment is directly related to his or her acknowledging and responding appropriately to the values of the people (Brislin & Yoshida, 1994). These scholars add that the awareness of culture and cultural differences can be acquired through cross-cultural training or foreign travel to assist in people's adjustment to new cultures. The understanding of cultural differences has been acquired through cross-cultural training prior to overseas ventures. Landis and Bhagat (1996) point out that an individual's sensitivity to cultural differences along with the ability to adapt to a new culture is becoming increasingly important in our global economy. Overseas assignments

and frequent interactions among people of different cultures have necessitated the ability to adapt our behaviors appropriately to cultural differences.

The concept of intercultural sensitivity as described by Bennett (1993) is a developmental process during which individuals are emotionally involved in another culture and effectively interact with people of other cultures. Bennett's Developmental Model of Intercultural Sensitivity (1993) is based on a continuum from *ethnocentrism,* which assumes that "the worldview of one's culture is central to all reality" (p.30) to *ethnorelativism,* which assumes that "cultures can only be understood relative to one another and that particular behavior can only be understood within a cultural context" (p.46). The scholar points out that the key to this development of intercultural sensitivity is the process along the continuum.

In summary, the above literature has provided an analysis of the relationship between the concept of intercultural communication and the concept of intercultural sensitivity. There is a consensus among scholars that intercultural communication is crucial in increasing an understanding of cultural differences. The following section will focus on Bennett's Developmental Model of Intercultural Sensitivity (DMIS) (1986, 1993) as a conceptual framework for the development of intercultural sensitivity.

Conceptual Framework

Bennett's Model of Intercultural Sensitivity

The theoretical framework of this study is based on Bennett's Model of Intercultural Sensitivity (DMIS) (Bennett, 1986, 1993). This model is founded on Hoopes's (1981) phenomenological approach of intercultural learning with the following categories: ethnocentricism; awareness; understanding; acceptance/respect; appreciation/

valuing; selective adoption; and assimilation-adaptation-biculturalism-multiculturalism. Intercultural learning is considered as a developmental process, and the author states that "the critical element in the expansion of intercultural learning is not the fullness with which one knows each culture, but the degree to which the process of cross-cultural learning, communication and human relations have been mastered" (Hoopes, 1981, p. 20).

Bennett's DMIS is "a stage model of cognitive development based on personal construct theory and its extension, radical constructivism" (Hammer, 2007, p. 13.). The model is structured in six stages of increasing sensitivity to cultural differences and illustrates changes in learners' ability to comprehend and experience cultural differences. This phenomenological approach describes "a learner's subjective experience of difference, not just the objective behavior of the learner or trainer" (Bennett, 1993, p. 22).

The underlying assumption of the DMIS is that "as one's experience of cultural difference becomes more sophisticated, one's competence in intercultural relations increases" (Hammer, 2007, 13). Bennett assumes that each stage would be "indicative of a particular cognitive structure, and those certain kinds of attitudes and behavior would typically be associated with each configuration of worldview" (Hammer, 2007, p. 13). Furthermore, Bennett (1993) views his model as developmental rather than static because it can capture individuals' experience of cultural differences on a continuum ranging from *ethnocentricism*, a worldview that "one's culture is central to all reality" (p.30) to *ethnorelativism*, a worldview that "cultures can only be understood relative to one another and particular behavior can only be understood within a cultural context" (p. 46).

Intercultural sensitivity is described as not being natural to any one culture because the development of this ability demands that an individual of any cultural background create new awareness and attitudes (Bennett, 1986, 1993). When considering the model relative to study abroad, Bennett (1993) clarifies: "it is not assumed that progression through the stages is one-way or permanent" (p. 27). By specifying the stages of development along a continuum, such a model can be used to diagnose the level of individuals or groups before and after an experience. The model is divided into six stages*: Denial, Defense, Minimization, Acceptance, Adaptation, and Integration*. Each stage represents a way of experiencing cultural differences.

Table 1

Bennett's Developmental Model of Intercultural Sensitivity (DMIS)

The Ethnocentric Stages		
I. Denial	II. Defense	III. Minimization
A. Isolation B. Separation	A. Denigration B. Superiority C. Reversal	A. Physical Universalism B. Transcendent Universalism
The Ethnorelative Stages		
IV. Acceptance	V. Adaptation	VI. Integration
A. Respect for Behavioral Difference B. Respect for Value Difference	A. Empathy B. Pluralism	A. Contextual Evaluation B. Constructive Marginality

Note. From *Towards ethnorelativism: A developmental model of Intercultural sensitivity* (Bennett, 1993).

The first three stages of *Denial, Defense, and Minimization* are based on an ethnocentric assumption that "the worldview of one's culture is central to all reality" (Bennett, 1993, p. 30). The following is a brief description of these three stages as they relate to how students could perceive and understand cultural differences.

Denial: a stage that represents a worldview in which cultural difference is not an issue. Cultural difference is either not experienced at all, or it is experienced with a kind of undifferentiated attitude (Bennett, 1993). A form of denial is when people might recognize that "Asians are different from Westerners, without recognizing that Asian cultures were different in any way from one another" (Bennett, 1986, p. 183).

Defense: a stage when cultural difference is viewed as a threat to "one's own sense of reality and thus to one's identity, which at this point is a function of that one

cultural reality" (Bennett, 1993, p. 35). Bennett (1986) indicates that the attitude of denigration of difference, called "negative stereotyping," might be present at this stage. Defense can also be characterized by "cultural superiority" or by a position of "reversal" as in the case of Peace Corps volunteers who may consider the host culture superior to their own, while denigrating their own (p. 183).

Minimization: At this stage, cultural difference exists but is minimized. Bennett (1993) says, "the last attempt to preserve the centrality of one's own worldview involves an effort to bury difference under the weight of cultural similarities" (p. 21). Bennett (1986) says, "[A]t this stage, cultural difference is overtly acknowledged and is not negatively evaluated" (p. 184). The minimization of difference takes the form of physical and transcendent universalism. Physical universalism is characterized as a view that basic human patterns are sufficient for intercultural situations. Transcendent universalism is characterized as a view that people are products of the same economic, political and historical laws and principles, as in the case of Marxism (pp. 184-186).

The next three stages of *Acceptance, Adaptation and Integration* are based on "ethnorelativism" which represents a major change in the meaning attributed to cultural difference (Bennett, 1993). Cultural difference is no longer viewed as threatening, and individuals are more open to other worldviews.

Acceptance: a stage when individuals have more respect and acceptance for cultural difference. "[V]alues and assumptions are not seen as things so much as they are perceived as manifestations of human creativity" (Bennett, 1993, p. 50). At this stage, the assumption is that the individual will shift from ethnocentrism to ethnorelativism (Bennett, 1986, 1993).

Adaptation: a stage attributed "to the practical application of ethnorelative acceptance to intercultural communication" (Bennett, 1993, p. 51). New skills and attitudes are added to the subjects' worldview. Bennett (1993) points out that the most common form of *Adaptation i*s empathy. Empathy is defined as "the ability to experience differently in a communication context" (Bennett, 1993, p. 53). Another form of *Adaptation* is cultural pluralism, which is taken to mean the ability to shift into two or more rather complete cultural worldviews. For example, an American who has lived in Japan for a long time may develop an ability to shift easily into a Japanese worldview and be "bicultural" (Bennett, 1986, p. 186).

Integration: This stage is the application of ethnorelativism to one's own identity. Bennett (1993) compares this stage to Adler's (cited in Bennett, 1993) description of the multicultural person who is sensitive to many different cultures. One of the skills of intercultural sensitivity that occurs at this stage is the ability to define "one's relationship to cultural context" (Bennett, 1993, p. 59). At this stage, the lack of any absolute cultural identity can be constructive. Constructive marginality describes "individuals who are outside all cultural frames of reference by virtue of their ability to consciously raise any assumption to a meta-level" (p. 63). Finally, the individual who experiences *Integration,* sees cultural differences as an important and joyful part of all life (Bennett, 1986).

In summary, the DMIS can be used to identify an individual's intercultural sensitivity at each stage of development, thereby predicting attitudes and behaviors common to people of that cognitive stage. Changes that occur in knowledge, skills and attitudes are described as "manifestations of changes underlying the worldview"

(Bennett, 2004, p. 75). Programs incorporating training or intercultural interaction, including study abroad, are appropriately aimed at the worldview.

Relating study abroad to this conceptual framework, this study examined students' cognitive development, and predicted changes in students' behaviors and attitudes through the process. Few would argue that study abroad facilitates a better understanding of cultural differences and instills cross-cultural awareness (Paige, 1993). However, there is a need to assess students' intercultural sensitivity before and after a study abroad experience for educators and administrators to find out if students are gaining from the experience.

Scholars have identified other cross-cultural skills and traits that are associated with the ability to adapt to other cultures and can be developed through cross-cultural training or through an international experience, including study abroad. Following is a non-exhaustive summary of the literature that pertains to the concept of cross-cultural adaptability.

Concept of Cross-Cultural Adaptability

The literature indicates that research about the adaptation from one culture to another culture originated with the work of Oberg (1960) on culture shock, that is, the psychological reaction of an individual's experiences when he or she is in a host culture and the conflict that arises between his or her identity and the values, perceptions and social cues of the host culture (Kelley & Meyers, 1995). Other aspects of culture learning and ethnorelativism underlie Adler's (1977) "multicultural man" and Bochner's (1977) "mediating person".

Predictors of the success of cross-cultural training on Peace Corps volunteers also contributed to identifying criteria for cross-cultural adaptability (Harris, 1977). Ruben and Kealey (1979) identified several communicative behavior criteria that are potentially significant in cross-cultural effectiveness: display of respect, willingness to interact, keenness for knowledge, cultural empathy, interaction management and tolerance for ambiguity. In other words, these scholars define intercultural adaptability as the ability to develop communication, as well as cognitive and interpersonal skills, in a host culture.

Additionally, other scholars, Hammer, Gudykunst, and Wiseman (1978), have emphasized that empathy along with communication are key characteristics of intercultural competence. The ability to communicate effectively, the ability to establish interpersonal relationships and the ability to deal with psychological stress are identified as factors that determine the success of a participant's intercultural effectiveness. The study also explored the ability to empathize with individuals in the host culture; that is, to establish a relationship without being judgmental and to perceive cultural differences and similarities accurately.

Other dimensions of intercultural effectiveness have been analyzed by Pusch (1981). Three types of skills are identified to achieve intercultural effectiveness: the ability to manage stress, to communicate effectively, and to establish interpersonal relationships. The author identified specific affective skills that an individual should acquire through an intercultural learning experience, similar to study abroad. These skills include having an open mind towards new ideas and experiences; being empathetic toward people of other cultures; being perceptive regarding differences and similarities between host culture and one's own; being nonjudgmental; being willing to describe

behavior rather than evaluate it; having a state of non-critical observation of one's own and other's behavior; having relationship-building skills; and being free from ethnocentricity.

Like other scholars, Lambert (1994) considers empathy as a major characteristic of intercultural effectiveness. He defines the term as the ability to understand another culture without being judgmental. He describes the ability to develop international interpersonal relationships with people of other cultures as interaction management, whereby the individual is learning the acts, words and expressions associated in friendly or unfriendly behaviors.

Kelley and Meyers (1995) suggest that the terms *cross-cultural effectiveness*, *cross-cultural adjustment* and *cross-cultural adaptation* should not be confused and that there are distinctions among them. The following summary of the research done by Kelley and Meyers (1995) is related to cross-cultural effectiveness and provide a better understanding of the dimensions of cross-cultural adaptability

Cross-cultural effectiveness has been defined as the ability to use communication and cognitive skills. Other characteristics have been identified as being equally important in intercultural effectiveness: open-mindedness toward new ideas and experiences; the ability to empathize with people from other cultures; accuracy in perceiving differences and similarities between the sojourner's own culture and the host culture; being nonjudgmental; astute, non-critical observation of one's own and other people's behavior; the ability to establish meaningful relationships with people in the host culture; and being less ethnocentric are all part of the attitudes, skills, knowledge and awareness

needed to effectively understand cultural differences (Gudykunst, Hammer, & Wiseman, 1977).

Attitudes, skills, and traits for intercultural effectiveness incorporate effective communication, ability to enter into a meaningful dialogue with other people, ability to initiate interaction with a stranger, ability to deal with communication misunderstandings between self and others, and the ability to deal effectively with different communication styles (Hannigan, 1990, p. 93). These views are supported by Cui and Van Den Berg (1991), who argue that the development of cultural empathy, communication competence and traits of flexibility and patience are criteria for building intercultural effectiveness in a host culture. Those characteristics are identified as being crucial for adapting to different cultures.

In the discussion of differentiating cross-cultural adjustment and cross-cultural adaptation, Benson (1978) points out that constructs in the assessment of these two terms have to consider the population being targeted. Cross-cultural adjustment is defined as the "general psychological well-being, self-satisfaction, contentment, comfort with and accommodation to a new environment after the initial perturbations which characterized a culture shock have passed" (Ruben & Kealy, 1979, p. 21). Other criteria for cross-cultural adjustment include communication skills, interactions, socially appropriate behaviors and attitudes (Benson, 1978). On the other hand, cross-cultural adaptation denotes a long-term process of adjustment which involves the individual's psychological well-being through interaction with the host culture and attitudinal change, including feeling at home in a host culture (Hannigan, 1990; Ruben & Kealey, 1979). Social competence or communicative competence, which is comprised of the cognitive,

affective and behavioral capabilities by which individuals organize their activities in a host culture, is viewed as an integral part of the long-term process of cross-cultural adaptation (Kim, 2001).

Four Skill Sets of Cross-Cultural Adaptability

Emotional Resilience

Researchers have defined culture shock in terms of a negative reaction to events as a result of the lack of familiarity to culture-related cues (Oberg, 1960). Individuals can experience feelings of frustration, confusion, or loneliness when interacting in other cultures. On the other hand, emotionally resilient people have the ability to deal with stressful feelings in a constructive way and can "bounce back" from them (Kelley & Meyers, 1995, p. 35). They have the ability to cope with unfamiliar and stressful situations and react positively to new experiences. Other characteristics associated with emotional resilience are self-esteem, self-confidence, adventurousness, courage and tolerance for risk-taking.

Flexibility/Openness

Individuals are more willing to adapt to different ways of thinking when situations are approached with an open mind. Flexibility and openness are associated with tolerance, lack of rigidity, as well as a non-judgmental attitude, appreciation of diversity and comfort with people of other cultures (Ruben & Kealey, 1979; Hannigan, 1990; Gudykunst, Hammer, & Wiseman, 1978; Pusch, 1981; Lambert, 1994). "Flexible" individuals are described as eager and willing to listen to others, to become acquainted with people of other cultures and to try to understand their worldview.

Perceptual Acuity

People who are perceptually acute are attentive to language, verbal and nonverbal in behavior, interpersonal relations and communication contexts. Perceptual acuity involves the ability to read people's emotions, to be sensitive to one's effect on others, and to communicate accurately (Dinges, 1983; Gudykunst et al., 1978; Kim, 2001; Cui & Van Den Berg, 1991; Kelley and Meyers, 2005; Pusch, 1981; Lambert, 1994). Such individuals will be more likely to interpret accurately communication cues across cultures.

Personal Autonomy

Personally autonomous individuals have a strong sense of identity and can deal with cultural conflicts successfully. People with personal autonomy are self-directed, have clear personal values, and respect themselves and others. In addition, they tend to set up their goals, be able to make their own decisions, take responsibility for their own actions and have a sense of empowerment (Hannigan, 1990; Ruben & Kealey, 1979, Kelley and Meyers, 2005).

The above review on the concept of cross-cultural adaptability and its four skill sets is an attempt to provide a summary of the major scholarly works identifying criteria that would enable an individual to adapt to another culture. Kelley and Meyer's (1995) Cross-Cultural Adaptability Inventory (CCAI) is grounded in these four components that have been fully researched by authors in that area of study and by expert opinion.

Study Abroad Research Findings

The literature reveals that so far very few scholars have focused on investigating both the development of intercultural sensitivity and cross-cultural adaptability in one study. Due to the fact that there is a lack of research on island model study abroad programs, the studies described in this section focus on findings on other types of programs that have explored students' ability to understand cultural differences, to adapt to living effectively in another culture and to interact effectively with people in the host culture. Furthermore, the research on study abroad findings focused on studies that have used the IDI or CCAI methods.

One scholar has characterized research in educational exchange as persuasive rather than conclusive (Bachner, 1994). Bachner states:

> Taken as a body, exchange research is fraught with the types of methodological weaknesses that make confident cause-effect conclusions risky. Nevertheless, despite such weaknesses (e.g., non comparable studies, retrospective emphasis, non-longitudinality, little emphasis on the concrete behavioral manifestations of change, an over-reliance on tabulatory surveys) I believe that the risk is worth taking and have personally concluded that, methodological gaps notwithstanding, the research provides a sound basis for saying that exchange makes a significant difference towards increased participant competencies and the prospects of a better world. (p. 190)

Study abroad research is divided into three categories: (1) intellectual development (academic, language and knowledge acquisition, career-focused); (2) personal development (intrapersonal—understanding of self, and interpersonal—building

friendship, broadening values); and (3) development of international perspectives (perceptions of own and other's culture, and global understanding—knowledge acquisition, affective change and behavioral change (Kauffman, Martin & Weaver, 1992). These scholars consider the development of knowledge, skills and attitudes to be at the core of fostering intellectual development, personal development, and intercultural perspectives.

A plethora of studies have investigated the impact of study abroad on college students. Some have explored the effect of different durations of programs on students' intercultural learning, while others have specifically attempted to analyze students' development of intercultural sensitivity and cross-cultural effectiveness. The following section will review some of these studies.

A study conducted by Williams (2005) on the impact of study abroad on students' intercultural communication skills focuses on adaptability and sensitivity. The results of this study reveal that students who studied abroad generally showed a higher level of intercultural communication skills than the students who did not study abroad. The results also indicated that students who chose to study abroad had a higher level of intercultural communication skills both at the beginning and at the end of the semester compared to students who did not participate in the study abroad program. Two groups of students, sophomores and juniors, from Texas Christian University were chosen for the study. They attended study abroad programs in both native-English and non-English speaking countries. A quantitative pre- and post-test method of testing using Olsen and Kroeger's (2001) Global Competency and Intercultural Sensitivity Index (ISI) and Kelley & Meyers's (1995) Cross-Cultural Adaptability Inventory (CCAI) was administered to

both the treatment and control groups. The report also suggests that further studies are needed in this area to determine the impact of the duration of study abroad on intercultural sensitivity.

A study performed by Kitsandas and Meyers (2002) attempted to gauge the impact of study abroad on cross-cultural awareness. Twenty-four students between the ages of 20 and 28 were queried prior to and after their study abroad experience. The purpose of the study was to examine how prepared the participants were to enter another culture in terms of emotional resilience, flexibility, openness, perceptual acuity and personal autonomy, based on the Cross-Cultural Adaptability Inventory (CCAI) (Kelley & Meyers, 1995). The results revealed that the scores on all four scales were significantly higher after their return from study abroad. The study also compared the scores of the four scales of the control (stay-at-home campus) and experimental group. The results indicated there was a significant difference between the two groups, with the experimental group scoring higher. The study also reported that the scores revealed no significant change in the self-assessment of the control group at the beginning and end of the semester. These findings were consistent with those of Carlson and Wideman (1988), who reported that study abroad heightened intercultural understanding, particularly in regards to students' attitudes towards other cultures.

A study completed by Carlson and Wideman (1988) revealed that students who have studied abroad gained a higher level of global mindedness and cross-cultural understanding. The study was comprised of 450 students who completed a questionnaire to indicate their position on international perspectives, their knowledge and beliefs about global issues, and cultural understanding. The students were asked to reflect on these

issues and to indicate their perspectives at the beginning and at the end of their study abroad experience. A quasi-experimental measurement design was used for the study. The results indicated that sojourners had higher levels of cross-cultural and international understanding compared to the control home campus group. Furthermore, the data revealed that the experimental group had higher levels of both cultural and international understanding after the experience overseas.

Another study headed by Kitsantas (2004) reported that study abroad enhanced students' cross-cultural skills and global understanding. Interestingly, the research also indicated that even the students' mere intention to study abroad significantly impacted the development of these skills and global understanding.

A study conducted by McCabe (1994) explored the change in global perspective prior to and after a Semester-At-Sea experience, focusing on five dimensions: fear versus openness, naivety versus cross-cultural knowledge and understanding, pro or anti-American versus pro and anti-Americanism, ethnocentrism versus global centrism, and people as the same or different versus people as the same and different. The results indicated that the experience positively impacted the students.

A study done by Yachimowicz (1987) explored how a group of students changed their international understanding, attitudes towards the U.S. and attitudes towards other cultures. The study consisted of a control group studying at the home campus and an experimental group attending various universities in Europe. The results revealed that the group studying abroad increased their cultural and political knowledge and acquired more positive attitudes towards the host country compared to the group studying at the home campus, but that the increase in international understanding was not significant.

The impact of the duration of study abroad programs on students' intercultural sensitivity was explored by Mendez-Lopez-Portillo (2004). The Intercultural Development Inventory (IDI), a combined design of qualitative and quantitative measures, was employed to examine the different perspectives on student experience. The mixture of data gathering methods was purposely done to enhance the study's validity. The study was designed to measure the changes in the intercultural sensitivity of University of Maryland students by comparing two programs of different durations: a seven-week summer program in Taxco, Mexico, and a 16-week semester program in Mexico City. The findings showed little statistically significant evidence that a semester or a seven-week long program in Mexico increased the level of intercultural sensitivity. In comparing the impact of the duration of the two programs, the results revealed that students who attended a 16-week long program developed a relatively higher level of intercultural sensitivity than those who attended a seven-week long program. The qualitative data supported the findings that students gained a better understanding of cultural differences while participating in a 16-week program as compared to a seven-week long program.

Contrary to Medina-Lopez-Portillo's findings, Paige et al. (2004) found that students' participation in short study abroad programs in French and Spanish-speaking countries led to a significant gain in intercultural sensitivity. Prior language training was a determinant variable; yet Paige et al. (2004) suggested that more research needs to be done to assess the impact of study abroad on students' intercultural sensitivity, without pre-departure training. A control group was not used for the study.

Another study conducted by Engle and Engle (2004) assessed the impact of the duration of study abroad on intercultural sensitivity and level of openness. Using Hammer's research instrument (IDI), the scholars reported that the students who had two years of a foreign language, and who chose an immersion program showed promising levels of openness and intercultural sensitivity. The statistics further indicated that students who participated in a yearlong program gained a higher level of intercultural sensitivity as compared to students who participated in a semester-long program. Without the data from a control group made up of students studying at the home campus, the results were interpretatively based on a subjective/objective comparison of students' profiles at the beginning and end of their study abroad experience.

Further research was carried out by Anderson, Lawtin, Rexeisen, and Hubbard (2006) explored the impact of a four-week long study abroad program on students' intercultural sensitivity. The IDI instrument was used for a pre- and post-test design. Preliminary statistics indicated that short-term programs can have a positive effect on the overall development of intercultural sensitivity. The scholars suggest that additional studies are needed to evaluate the impact of study abroad programs of different duration on intercultural sensitivity. It is an open question whether equivalent or greater gain in intercultural sensitivity would have been made if students had attended a semester-long program. The scholars pointed out that one of the limitations of their study is the absence of a control group which would have provided greater assurance that it was the study abroad program and not some external factor that brought about the changes.

A quasi-experimental study by Patterson (2006) explored the effect of a semester-long study abroad program on intercultural sensitivity. A pre- and post-test experimental

and control group design was used to assess the change based on Bennett's DMIS (1993) and Hammer's IDI (2001). The results showed that the group of students who took an intercultural communication and foreign language courses at the home campus demonstrated no change in the development of intercultural sensitivity, whereas the group of students who studied overseas showed a relatively small level of change on the IDI scales. There was no significant difference in the intercultural sensitivity measurement of the two groups of students. The results also indicated regression in some of the post-test results of the IDI scales. The qualitative data revealed growth in students' worldview for both off-campus and on-campus groups. The scholar concluded that among the limitations of the study was the short duration of the program, which ranged from two to four weeks, and implied that future research is needed to assess the effect of a longer study abroad experience.

A study conducted by Sharma and Klasek (1986) investigated attitudinal dimensions of American students studying abroad. The findings indicated that "international education brings about changes in students' attitudes and open avenues of communication among institutions and people… . [S]tudents have a more cosmopolitan outlook, better understanding of American culture, international career aspirations and politically liberal views" (p.300). A total of 1,045 students from six major universities within a 500-mile radius of Southern University of Illinois at Carbondale participated in the study. A pilot test with a random population of 35 students was administered for the reliability and validity of the quantitative research.

A study by Golay (2006) investigated the impact of a semester-long study abroad experience on the development of global-mindedness among students enrolled in

International Programs at Florida State University. Global-mindedness was defined as a "worldview in which one sees oneself as connected to the world community and feels a sense of responsibility for the members of the community. This commitment is reflected in an individual's attitudes, beliefs and behaviors (p. 27)." A total of 196 students filled out a Global Mindedness Scale survey. The results confirmed the hypothesis that there would be a significant difference in the global-mindedness of students after one semester and that there would be a significant difference between the global-mindedness of students who studied abroad and those who studied at their home campus.

Experimental and control groups of students were compared by Abrams (1979) to evaluate the study abroad experience of 424 former Antioch students who participated in the College's overseas programs. The findings indicated that 79% of the students had a very positive experience; 92% felt the experience had challenged their perceptions of themselves as Americans; and 80% revealed that they had effectively communicated with the host nationals and had gained a better understanding of their own culture and the host culture.

A study completed by Armfield (2004) revealed that students' level of intercultural sensitivity increased upon their return from their study abroad program. The study did not find significance between aspects of students' interactions with host nationals and their development of intercultural sensitivity. Allport's (1954) theoretical framework of contact and Chen & Starosta's (2000) Intercultural Sensitivity Scale were used for the study. The conclusion suggests that additional research is necessary to determine the impact of students' interactions with host nationals on intercultural sensitivity during their study abroad experience.

Another study by Cushner and Mahon (2002) examined the nature of an international student teaching experience and its impact on the professional and personal development of new teachers. Data were collected through evaluation of fifty teachers participating in the Consortium for Overseas Student Teaching (COST), which was comprised of 15 universities from the United States and Canada. Research in the field of culture learning suggests that as a result of intercultural experience, "there is an increase in world-mindedness, a decrease in ethnocentrism and the use of negative stereotypes, and greater sophistication in one's thinking about others" (p. 47). The responses from students in regard to beliefs about themselves and others give evidence of an increase in cross-cultural sensitivity based on Bennett's (1993) Developmental Model of Intercultural Sensitivity (DMIS) and the IDI instrument. The findings also indicate that the participants developed increased confidence, self-efficacy, adaptability, resourcefulness and persistence.

Some studies have found a negative and conflicting impact of study abroad on college students. Smith (1955) surveyed 183 students who participated in a study abroad program to Europe. The study included a control group which did not participate in the overseas experience. The results revealed no change in world-mindedness, ethnocentrism, authoritarianism, political-economic conservatism, and belief in democratic group processes for either the experimental group or the control group. Furthermore, the results indicated a significant decrease in favorable attitudes towards those living and traveling to France and West Germany. Nash's (1976) study reported conflicting results in a study that compared overseas and control groups. The results indicated a significant difference

in autonomy and differentiation of self between the two groups, but no differences were found on tolerance, self-assurance, and confidence.

A study by Gmelch (1997) investigated the impact of week-end travel to different parts of Europe using 51 students in a hybrid study abroad program. The results showed that group travel over the week-end prevented interaction with host nationals. Students gained more from the experience by traveling alone or in small group of two or three, allowing for more opportunities to focus on the people and the environment. Changes were revealed in areas of self-confidence, adaptability, flexibility, confidence in dealing with changes and confidence in addressing strangers. The scholar concluded that group excursion trips organized by the home university should be kept to a minimum, and that students should be encouraged to travel alone or in groups of two or three to gain from the experience of interacting with the people and learning to solve problems.

The above literature review on the study abroad findings on the students' attitudes, intercultural sensitivity, cross-cultural awareness, cross-cultural skills and global understanding, perspectives on global issues and cross-cultural understanding, and global mindedness is not exhaustive. The review indicates that the results regarding the positive impact of study abroad on students in higher education are not all conclusive. This is partly due to lack of consistency in the variables used in the research instruments (Sell, 1983). Sell stated,

> The impact of foreign experiences on participants is complex and multifaceted. It involves attitudes, behaviors, preconceptions, motivations, the country visited, and length of stay. No longer will pre- and post-measurement of a particular attitude or opinion scale suffice in analyzing this impact...Only when researchers

include the entire range of contributing factors will attitudinal and behavioral changes be more detected. (p.144)

In conclusion, this review shows that there is an increasing trend in American college students' participation in study abroad. The findings indicate that the concept of intercultural sensitivity and cross-cultural adaptability is complex and that they can be analyzed from the perspective of various interchangeable terms. These findings suggest that study abroad could contribute to students' intercultural learning. However, scholars point out that research in this area is more persuasive than conclusive (Sell, 1993). Hence, there is a need for additional research to be conducted to determine the impact of different types of study abroad programs on students' intercultural sensitivity and cross-cultural adaptability. Overall, the literature supports the general belief that study abroad is effective in helping students develop intercultural skills; yet, very few studies have explored the impact of island programs on such development.

CHAPTER III: RESEARCH METHODOLOGY

Introduction

In an attempt to investigate the impact of an island model study abroad program on the intercultural sensitivity and cross-cultural adaptability skills of students, a quantitative study was carried out using two instruments to assess the participants' changes and differences in changes over a semester-long period. This chapter describes in details the study's research design, subjects, instrumentation, data collection procedures, research questions, research hypotheses, analysis of results, and the Internal Review Board (IRB) procedures.

Research Design

The study was conducted using a quasi-experimental pretest-posttest comparison group design whereby the groups were not randomly selected (Mc Millan & Schumacher, 2001). A convenience sampling was utilized to enable the researcher to better understand the impact of a particular type of study abroad program on students. The design included a non-equivalent control group, consisting of students who were studying on campus and not randomly chosen. A survey was administered to gather selected demographic information about the participants. Hammer's (2007) Intercultural Development Inventory (IDI) and Kelley and Meyers's (1995) Cross-Cultural Adaptability Instrument (CCAI) served as the testing instruments for both the pretest and posttest for both the control and treatment groups at the beginning and end of the fall 2008 semester.

The literature indicates that the pre-test and post-test method minimizes the chance of error, is economical and is powerful in determining how changes occur over time. This design was found by Shannon and Davenport (1994) to be effective in

determining the extent to which a treatment has an influence on subjects' performance over time. Furthermore, referring to this design, they say that "determining that there is some overall difference between treatment and control groups is helpful. However, the interaction between the with-in subjects factor and the between-subjects factor is most helpful in that it will allow to determine whether subjects' change from pretest to posttest was dependent upon membership in a particular treatment group" (p. 273). Thus, a Repeated Measures ANOVA design was deemed the most appropriate for comparing the development of intercultural sensitivity and cross-cultural adaptability skills in students studying abroad and students studying at the home campus.

Subjects

The study comprised of students from an urban research intensive university in the mid-east of the United States. The sample included 131 undergraduate students. The participants consisted of two groups, a treatment group of 53 students who participated in the island program in the fall 2008 semester and a control group of 78 students who studied on-campus in the fall 2008 semester. The control group consisted of 62 students who were studying in the same program in the spring 2009 semester and 16 students who were enrolled in an Education program but did not participate in the study abroad program in the spring 09 semester. The program is structured in such a way that students majoring in education participate in the program in the fall semesters only. The reason for including education students in the control group was to end up with a comparable sample to the treatment group as much as possible.

Given that the program is predominantly attended by sophomores and relatively few upperclassmen, the treatment group was largely made up of sophomores and only a

few juniors and seniors. The control group (on-campus) was also comprised mainly of sophomores and a few juniors. Furthermore, all the students in both the control and treatment groups had a minimum grade point average of 2.75 and above. All the participants were over the age of 18.

A survey was administered to the participants to determine if they met specific criteria needed to qualify for the study. For example, international students and those with prior college-level study abroad experience were not eligible. Students were purposely screened for prior experience in a foreign country to eliminate the probability of a contaminated sample (McMillan & Schumacher, 2001).The subjects included males and females majoring in various schools within the university in both the study abroad group and the on-campus group to have a representative sample.

Instrumentation

A background questionnaire (see Appendix C) was administered to the participants to gather demographic data from the students. These included gender, age, class level, ethnicity, first language, previous travel experience, school enrollment within the university and major field of study. Two items of the survey, residence/immigration status and country of residence during formative years, served as a way to screen students who were not eligible for the study.

As the literature review indicates, the widely known instruments being used to assess the impact of study abroad programs on participants' intercultural sensitivity are Hammer's (2007) Intercultural Development Instrument (IDI), Chen and Starosta's (2000) Intercultural Sensitivity Scale (ISS), and Bhawuk & Brislin's (1992) Intercultural Sensitivity Inventory (ICSI) . For the purpose of this study, the most updated version of

Hammer's IDI (2007), grounded in Bennett's (1993) Developmental Model of Intercultural Sensitivity was administered to investigate changes in students' intercultural sensitivity. The literature also reveals that among the well-known instruments being utilized to evaluate changes in cross-cultural adaptability skills, Kelley and Meyers' (1995) Cross Cultural Adaptability Inventory (CCAI) offers a unique approach of assessing an individual's changes in four dimensions of cross-cultural adaptability: Emotional Resilience, Flexibility and Openness, Perceptual Acuity and Personal Autonomy. The following is a description of the instruments and supportive literature regarding their validity and reliability.

Intercultural Development Inventory

Hammer's IDI was selected for this study because it is grounded in Bennett's Developmental Model of Intercultural Sensitivity (DMIS) (Bennett, 1986, 1993), a theoretical framework which examines an individual's intercultural sensitivity, a concept interchangeably referred to as intercultural competence. As indicated in Chapter 2, Bennett (1986, 1993) posits a phenomenological model of intercultural learning which can be used to diagnose groups and individuals. The model explains how one responds to cultural differences. It is based on the assumption that individuals' views of other cultures change and develop on a predictable path as they gain experience in other cultures (Bennett, 1986, 1993). This view of intercultural sensitivity is supported by Bhawuk and Brislin (1992), who describe intercultural sensitivity as one's reaction to cultural differences and state that this reaction changes and develops with personal intercultural experiences as well as training. Bhawuk and Brislin's instrument measures intercultural sensitivity as an individual's ability to work with other people. The concepts of

individualism and collectivism are the main constructs used to assess how individuals behave in their own and other cultures. This instrument is commonly utilized to assess the effectiveness of different cross-cultural interventions on individuals by measuring their changes in intercultural sensitivity (Hammer, 2007).

Another reason for choosing the IDI instrument is that several studies have been conducted to assess its reliability and validity (Bennett, 1986, 1993; Hammer, Bennett & Wiseman, 2003; Paige, Jacobs-Cassuto, Yershova, & DeJaeghere, 2003). The results of those studies demonstrate that the IDI is a reliable measure of assessing intercultural sensitivity.

The content and construct validity were addressed in the study done by Hammer, Bennett and Wiseman (2003). The five main dimensions of the DMIS were validated by "confirmatory factor analyses, reliability analyses, and construct validity tests" (p. 421). The results demonstrate that measured concepts were fairly stable.

Research conducted by Paige et al. (2003) used a set of psychometric procedures, namely social desirability analysis, validity and reliability testing and factor analysis. The IDI was administered to 378 high school students, college students, and instructors in foreign language, language and culture, and intercultural education courses. The results reveal that the IDI is a "reliable measurement of the DMIS with little or no social desirability bias and reasonably, although not exactly, approximates the DMIS" (p. 467). The study also proves that the IDI is reliable for group and individual profiling and diagnosis purposes.

The IDI is a 50-item, paper and pencil test that measures five stages towards cultural difference based on based Bennett's (1986, 1993) DMIS. Hammer (2007) points

out that the instrument should not be confused with the DMIS model itself because the IDI does not define the dimensions of intercultural sensitivity. Hammer (2007) adds that the IDI is a measurement of "the primary constructs identified in the DMIS" (p.26). The instrument was designed to identify the different stages of development of intercultural sensitivity ranging from denial to integration, as described under the DMIS section in Chapter 2. The participants' score on the IDI will reflect their degree of intercultural understanding. Participants will rate their agreement or disagreement to each of the 50 items on a five-point Likert scale ranging from 1 for disagree to 5 for agree. The instrument is divided in subscales with the intent of measuring the participants' worldview development on the continuum from ethnocentricism to ethnorelativism. It consists of five subscales: *Denial/Defense, Reversal, Minimization, Acceptance/Adaptation, and Encapsulated Marginality.* The *Denial* subscales are *Disinterest* and *Avoidance*. The *Minimization* scale is divided in two subscales: *Similarity* and *Universalism*. The *Adaptation* cluster consists of *Cognitive* and *Behavioral* subscales.

The 50-item IDI measures intercultural sensitivity on the following five scales: (1) DD (Denial/Defense) scale consisting of 13 items; (2) R (Reversal) scale consisting of 9 items; (3) M (minimization) scale consisting of 9 items; (4) AA (Acceptance and Adaptation) scale consisting of 14 items; and (5) EM (Encapsulated Marginality) scale consisting of 5 items. The *Denial* cluster has two subscales, *Disinterest* (4 items) and *Avoidance* (3 items). The *Minimization* scale is divided between the *Similarity* (5 items) and *Universalism* (4 items) subscales. The *Adaptation* cluster is comprised of the *Cognitive* (4 items) and *Behavioral* (5 items) subscales.

The scales and subscales do not indicate that an individual necessarily has to move sequentially on the continuum from *Denial* to *Encapsulated Marginality* (Hammer, 2007). Thus, individuals do not have to fully resolve a scale before moving to another. The instrument is not included in the Appendices due to the fact that it is a proprietary document. The following table briefly describes the scales and subscales of the instrument (Bennett, 1986, 1993; Hammer, 2007).

Table 2

Description of IDI scales

Denial/Defense	Measures a worldview that simplifies and/or polarizes cultural difference. The denial sub-scale indicates a tendency to withdraw from cultural difference through disinterest and avoidance, where as the defense sub-scale indicates a tendency to view the world in terms of "us and them", where us is "superior".
Reversal	Measures a worldview that reverses "us" and "them" polarization, where "them" is superior.
Minimization	Measures a worldview that highlights cultural commonality and universal values. The similarity sub-scale indicates a tendency to assume that people from other cultures are basically like "us", whereas, the universalism sub-scale indicates a tendency to apply one's own cultural values to other values.
Acceptance/Adaptation	Measures a worldview that can comprehend and accommodate complex cultural difference. The acceptance sub-scale indicates a tendency to recognize patterns of cultural difference in one's own and other cultures, where as the adaptation sub-scale indicates a tendency to shift from perspective and behavior according to cultural context.
Encapsulated Marginality	measures a worldview that incorporates a multicultural identity with confused cultural perspectives, where one's identity is not confined to one specific cultural context.

Cross-Cultural Adaptability Inventory

The Cross-Cultural Adaptability Inventory (CCAI) is a criterion referenced questionnaire that is based on constructs rather than on theory. A criterion referenced questionnaire is opinion and viewpoint oriented as compared to a theory referenced inventory, which focuses on the relationships among the constructs being measured (Hammer, 2007). The CCAI has been commonly used to measure an individual's ability to adjust to cross-cultural situations and to track developments in cultural diversity. The CCAI is a "training instrument designed to provide information to an individual about his or her potential for cross-cultural effectiveness" (Kelley & Meyers, 1995, p.1). The CCAI is a culture-general approach focusing on universal aspects of culture shock and cultural adjustment rather than aiming at a particular culture. This instrument is often utilized for assessing cross-cultural training programs by educators and cross-cultural trainers to assist individuals identify their traits related to cross-cultural effectiveness and adaptability.

The 50-item instrument measures four dimensions of Cross-Cultural Adaptability: (1) Emotional Resilience (ER) consisting of 18 items, (2) Flexibility/Openness (FO) consisting of 15 items, (3) Perceptual Acuity (PAC) consisting of 10 items, and (4) Personal Autonomy (PA) consisting of 7 items. The ER scale focuses on aspects of negative feelings resulting from cross-cultural experience. FO measures the positive attitude toward another culture. PAC focuses on communication cues and skills and appropriate interpretation of verbal and non-verbal cues. PA measures the extent to which an individual has developed a personal system of values and beliefs that would enable him or her to be enough confident to act in unfamiliar settings. It also measures an

individual's respect for others and an individual's empowerment in unfamiliar environments (Kelley & Meyers, 1995).

The instrument is not included in the Appendices because it is a copyright document. The following table is a brief description of the four dimensions of the CCAI instrument (Kelley & Meyers, 1995).

Table 3

Description of CCAI scales

Emotional Resilience	Measures the ability to deal with stressful feelings in a constructive way along with a sense of positive attitude.
Flexibility/Openness	Measures the ability to listen to others, to become acquainted with people of other cultures and to try to understand their worldview.
Perceptual Acuity	Measures the ability to perceptually be attentive to verbal and non-verbal cues.
Personal Autonomy	Measures the ability to deal with cultural conflict independently and successfully and to be self-directed.

The instrument was tested for three types of validity: face, content, and construct. Face validity ensures that individuals who read the items find them relevant and appropriate for a measure of cross-cultural adaptability. Content validity refers to the extent that the instrument covers the subject matter which is the four dimensions of cross-cultural adaptability. Finally, construct validity relates to the extent to which the instrument measures the construct or trait, which is cross-cultural adaptability. Validity was supported by data from 653 individuals who were subjected to principal factor

analyses and other statistical analyses. Overall, the instrument is considered to have face-value, content and construct validity, and to have a high reliability.

Data collection

The demographic questionnaire and instruments were administered to both the control and treatment groups. A coding procedure was used to maintain anonymity. Participants were told that participation was voluntary. The students signed a consent form if they decided to participate in the study (see Appendix A).

Pre-test data were collected by the researcher from the treatment group during the pre-departure orientation of students studying abroad in the fall 2008 semester. Post-test data were collected by the Director of the program at the end of the fall 2008 semester during the pre-departure orientation in the host country. Written directions about data collection and storage of all documents and data were given to the Director by the researcher to assure security and confidentiality.

Pre-test data from the control group consisting of students who were studying on campus in the fall 2008 semester and attending the Italian campus program in the spring 2009 semester were collected at visa application information sessions at the beginning of the fall 2008 semester. Post-test data from that group were collected at the end of the semester through pre-departure social gatherings. Pre-test data from students majoring in Education were collected by requesting the permission of an instructor teaching an Educational Psychology course (see Appendix B). Upon approval of the instructor, data was collected in the second week of and at the end of the fall 2008 semester. The instructor was asked to be excused from the classroom while the students completed the demographic survey and instruments. A total of 12 students were enrolled in the class and

11 completed both the pre-and post-test for both instruments. An additional four students enrolled in the School of Education were referred by an academic advisor in that school and accepted to participate in the study. They completed both the pre- and post-test for both instruments.

Research Questions

The study addressed the following research questions:

1. Are there changes in the intercultural sensitivity of students studying abroad in an island program over a semester-long period as measured by the Intercultural Development Inventory (IDI)?
2. Are there differences in the intercultural sensitivity between students studying abroad in an island program and students studying at their home campus over a semester-long period as measured by the IDI?
3. Are there changes in the cross-adaptability skills of students studying abroad in an island program over a semester-long period as measured by the Cross-Cultural Adaptability Instrument (CCAI)?
4. Are there differences in cross-cultural adaptability skills between students studying abroad in an island program and students studying at their home campus over a semester-long period as measured by the CCAI?

Description of Variables

The independent variables were the groups (study abroad and on-campus) and the pre- and post-test. The dependent variables were the different scales and subscales of the of the IDI and CCAI instruments respectively used to measure the changes in intercultural sensitivity and cross-cultural adaptability skills.

Analysis of Results

Quantitative data were obtained from the demographic questionnaire and the two surveys that had been completed by students studying abroad and students studying at the home campus. The latest version of SPSS 16 was used to run the data and to generate statistical results. The survey on demographics yielded quantitative data and those were summarized in tabular form.

The research questions I and IV were analyzed to determine changes in the study abroad group comparing results between the pre- and post-test. Statistical analysis including descriptive statistics and Paired *t*-tests was performed to find out if there were any changes in the different scales and subscales of intercultural sensitivity and the four dimensions of cross-cultural adaptability skills of students who participated in the study abroad program over a semester-long period. The results were summarized in tabular forms, showing the degrees of freedom (*df)*, observed *t* value, and significance level (*p*). The tests were analyzed at an alpha value (*p*) of .05.

For research questions II and IV, descriptive statistics, profile plots and a Repeated-Measures analysis of variance (ANOVA) were conducted to determine the differences and compare the intercultural sensitivity and cross-cultural adaptability skills of the study abroad group and the on-campus group over a semester-long period. The results were presented in tables including the sum of squares (SS), mean squares (MS), observed *F* value, and the level of significance (*p*). Alpha value (*p*) of .05 was utilized to determine the statistical significance of two main effects and the interaction effect. The first main effect is the significance of the differences when comparing the mean scores of the two groups (study abroad and on-campus). The second main effect is the significance

of differences between the mean scores of the two groups when comparing the pre- and post-test. The interaction effect shows the significance of the differences between the mean scores of the groups across the across the pre- and post-test. Such analysis was conducted to obtain a closer look at the results between the two groups over a semester-long period (Field, 2005).

Institutional Review Board Procedures

A proposal was submitted to the Institutional Review Board (IRB) of Duquesne University for the approval of conducting this study. The process consisted of three steps: (1) submission of the initial research proposal to the dissertation committee for approval; (2) review of the proposal by IRB representatives for approval; and (3) completion of all the IRB forms along with a proposal paper briefly describing the study, the research questions, the purpose and significance of the study, the survey instrument(s), the research design, the data collection method and the data analysis procedures.

CHAPTER IV: RESEARCH RESULTS AND ANALYSIS

Introduction

This chapter presents the results of the research that was designed to investigate the impact of a semester long island model program on the intercultural sensitivity and cross-cultural adaptability of its participants. It includes the results of data collected from a survey on demographics and the two instruments utilized for this study: (1) Intercultural Development Inventory (IDI) (Hammer, 2007) based on Bennett's Developmental Model of Intercultural Sensitivity (1986, 1993), and (2) Cross-Cultural Adaptability Inventory (CCAI) (Kelley and Meyers, 1995). A quasi-experimental study was carried out and a convenience sampling was utilized.

All participants completed a one-time demographic profile and two surveys each consisting of 50 questions. The students studying abroad were given the pretest survey during the orientation session prior to their trip and the posttest during the orientation in the host country at the end of fall 2008 semester. The control group, consisting of students who would be participating in the island study abroad program in the following semester, completed their surveys at the beginning and end of the fall 2008 semester. The analysis of the results is divided into the following sections: (1) participant responses (2) respondent demographics (3) group comparisons measuring intercultural sensitivity based on each scale and subscale of the IDI instrument (4) group comparisons measuring cross-cultural adaptability based on each scale of the CCAI instrument, and a summary.

Responses

A total of 130 students participated in the study, 53 in the study abroad group and 77 in the on-campus group. Out of a total of 130 students, 104 students completed both

the pre- and post-test for the CCAI and IDI surveys, for an overall participation rate of 80%.

After post-testing, the pre- and post-responses were matched based on the last four digits of students' social security number. The process indicated that out of 53 students in the treatment group, 51 completed the pre- and post-tests for both surveys, resulting in a participation rate of 96% of that group. Of the 77 students in the control group, 53 students completed the pre- and post-test for both surveys, resulting in a participation rate of 80% for that group.

Demographics of Respondents to Surveys

The demographic data of the participants in the study are summarized in Table 4. The table shows the descriptive statistics of the control and treatment group according to gender, age, classification, ethnicity, residence/immigration status, primary residence till the age of 18, native language, amount of travel in another country, school enrolled in at the university and major declaration. A close look at the data reveals that both the study abroad group and the on-campus group shared similar characteristics.

Table 4

Demographic Table – On-campus and Study Abroad Groups

Variables	Total	%	On-campus	%	Study Abroad	%
Sample size	104	100	53	51	51	49
Gender						
Male	34	33	18	34	16	31
Female	70	67	35	66	35	69
Age (years)						
18-20	99	95	50	94	49	96
21-23	4	4	2	4	2	4
24+	1	1	1	2	0	0
Classification						
Freshman	0	0	0	0	0	0
Sophomore	89	86	50	94	38	75
Junior	11	10	1	2	11	21
Senior	4	4	2	4	2	4
Ethnicity						
African-American	3	3	1	2	2	4
Caucasian	99	95	52	98	47	92
Hispanic	1	1	0	0	1	2
Asian	0	0	0	0	0	0
Other	1	1	0	0	1	2
Immigration Status						
U. S. Citizen	104	100	53	100	51	100
Primary Residence						
United States	104	100	53	100	51	100
First Language						
English	104	100	53	100	51	100

Table 4 (continued)

Variables	Total	%	On-campus	%	Study Abroad	%
Amount of Travel In Other Country						
Never Traveled	28	27	13	25	15	29
1-4 Weeks	52	50	24	45	28	55
5-16 Weeks	19	18	12	23	7	14
17-52 Weeks	4	4	4	7	0	0
1+ Years	1	1	0	0	1	2
Schools Within the university						
Business	31	30	15	28	16	31
Education	30	29	15	28	15	29
Health Science	2	2	0	0	2	4
Liberal Arts	31	29	16	30	15	30
Nursing	0	0	0	0	0	0
Pharmacy	6	6	6	11	0	0
Natural & Env. Sciences	2	2	1	2	1	2
Music	2	2	0	0	2	4
Declaration of Major						
Yes	85	82	41	77	44	86
No	19	18	12	23	7	14

Note: Natural & Env. = Natural and Environmental

The sample includes 104 students, 53 (51%) from the on-campus group and 51 (49%) from the study abroad group. Among the students who studied abroad in the fall 2008 semester, females (67%) constituted a larger proportion than males (33%) and the majority (95%) were in the age group from 18 to 20. The participants consisted mainly of sophomores (86%), followed by juniors (10%) and seniors (4%). In terms of ethnicity,

the majority of the students (95%) were of Caucasian ethnic group, followed by African-American (3%), Hispanic (1%) and other (1%). All the participants were born in the United States and indicated that the United States is their primary place of residence. All the students reported that English was their first language. Furthermore, 27% of the respondents never travelled overseas, 50% had done so for 1-4 weeks, 18% for 5-16 weeks, 4% for 17-52 weeks, and 1% for over a year. The breakdown of enrollment by schools within the university was 30% in Business, 29% in Education, 29% in Liberal Arts, 6% in Pharmacy, 2% in Health Sciences, 2% in Natural and Environmental Sciences**,** and 2% in Music. While 82% of the students declared their major within their school of study, the rest has not yet decided on a major.

Research Question I

Research question I: Are there changes in the intercultural sensitivity of students studying abroad in an island program over a semester-long period as measured by the Intercultural Development Inventory (IDI)?

This question was meant to determine the effect of a study abroad experience on the intercultural sensitivity of participants over a semester-long period. To allow for the analysis of changes in students' attitudes, the results of the pre- and post-test were compared for each of the scales and subscales of Hammer's IDI instrument (2007) based on Bennett's (1986, 1993) Developmental Model of Intercultural Sensitivity (DMIS) (refer to Table 2 in Chapter II). According to Bennett's DMIS, people develop their sensitivity on each of the stages of the developmental model simultaneously and do not necessarily have to move from one stage to another progressively (Bennett, 1993), hence

justifying the detailed analysis of the findings for each scale and subscale of the IDI (see Table 3 in Chapter III).

The responses were analyzed by comparing paired sample *t*-tests scores of study abroad students before and after their experience. These results are summarized for each scale and subscale in Table 5. All the tests were analyzed at an alpha level of .05.

Table 5

Paired Samples t-Test Comparisons of Intercultural Sensitivity for the Study Abroad Group

Scale	Mean (SD) Pre-test	Mean (SD) Post-test	*t*(df = 50)	*p*
Denial/Defense	1.97 (.614)	2.08 (.680)	1.219	.229
Denial Cluster	1.87 (.584)	1.86 (.597)	0.043	.966
Denial (Disinterest)	1.97 (.693)	1.83 (.681)	1.648	.106
Denial (Avoidance)	1.73 (.577)	1.89 (.756)	-1.467	.149
Defense Cluster	2.10 (.766)	2.31 (.907)	-1.785	.080
Reversal	2.59 (.778)	2.31 (.678)	2.411	.020*
Minimization	3.59 (.678)	3.30 (.707)	2.527	.015*
Minimization (Similar)	3.75 (.930)	3.41 (.888)	2.794	.007*
Minimization (Universe)	3.08 (.692)	2.92 (.643)	1.305	.198
Acceptance/Adaptation	2.30 (.662)	3.40 (.544)	-4.736	<.001*
Acceptance Cluster	3.24 (.818)	3.50 (.790)	-2.307	.025*
Adaptation Cluster	2.86 (.687)	3.35 (.551)	-5.008	<.001*
Adaptation (Cognitive)	2.87 (.806)	3.47 (.685)	-4.605	<.001*
Adaptation (Behavioral)	2.85 (.747)	3.26 (.640)	-3.878	<.001*
Encapsulated Marginality	1.97(.614)	2.08(.680)	1.219	.229

* $p < .05$

The scores for the *Denial*/*Defense* scale (*t*(*50*)=-1.219, p=.229) revealed that there was no significant difference between the pre-test mean of 1.98 and the post-test mean of 2.08 (-.101.) Similarly, the separate results of the Denial (*t* (50*)* =.043, p=.966) *a*nd *Defense (t* (50) = -1.785, p=.080) clusters displayed little variance, as did the Denial cluster subscales, *Disinterest* (*t* (50) = 1.65, p=.106) and *Avoidance* (*t* (50) = -1.467, p=.149).

On the other hand, the *Reversal* scale, which is a "mirror image" of the *Denial/Defense* measure, exhibited a statistically significant difference (*t* (50) =.281, p=.020)) with pre-mean of 2.60 and a post-mean of 2.31, for an average change of -.29, thus indicating a regression. Likewise, the results of the *Minimization* scale indicated a substantial change (*t*=50) =.289, p=.015), with a pre-mean of 3.60 and a post-mean of 3.30, for an average difference of -.29, again pointing to a regression. The scores of the *Similarity* subscale (*t* (50) =.341, p=.007) with a pre-mean of 3.75 and a post-mean of 3.40 averaging to a difference of 0.34, also exhibited a meaningful change, although the second subscale of *Minimization*, *Universalism*, revealed only a difference of .09.

Perhaps most critical to the findings were the results of the *Acceptance/Adaptability* scale (*t* (51) =.40, p<.001)). With a pre-mean of 2.99 and a post-mean of 3.40, averaged to an increase of .41, this measure revealed the highest aggregate variance when compared to all other scales and subscales. The *Acceptance* scale by itself indicated a telling change (*t* (51) =.26, p=.025), with an increase of .30 from the pre-mean (3.20) and post-mean (3.50). The *Adaptation* scale represented an even greater statistical deviance

(*t* (51) =5.01, p<.001), increasing by 0.48 from the pre-mean (2.87) to the post-mean (3.35). Moreover, the results of the subscales within the Adaptation cluster displayed similar tendencies, with the *Cognitive* subscale (51) =4.61), p<.001) showing a post-mean increase of .60, from 2.87 pre-mean to 3.47 post-mean, and the *Behavioral* (t (51) =3.88, p<.001) advancing .41 from 2.85 to 3.26. Critically, the difference between the pre- and post-means in the *Cognitive* scale was larger than the difference in the *Behavioral* scale, indicating that the students who studied abroad adapted more cognitively to the new culture than they did behaviorally.

Finally, the statistical analysis of the *Encapsulated Marginality* scale also evidenced a significant difference (51) =2.13, p=.038), averaging a decrease of .24 from the pre-mean (1.94) to the post-mean (1.70), thus revealing a regression.

Research Question II

Research Question II: Are there differences, as measured by the IDI, in the development of intercultural sensitivity between students studying abroad in an island program and students studying at their home campus over a semester-long period?

A Repeated Measures ANOVA was conducted to determine if there were significant differences between the means of the study abroad group and the on-campus group. The with-in factors were the five scales (*Denial/Defense, Reversal, Minimization, Acceptance/Adaptability, Encapsulated Marginality*) and the subscales (*Denial cluster, Denial/Disinterest, Denial/Avoidance, Defense cluster, Minimization/Similarity, Minimization/Avoidance, Acceptance cluster, Adaptation cluster, Adaptation/Cognitive and Adaptation/Behavioral*) (see Table 2 in Chapter 3). Each of the scales and subscales

has two levels (pre and post). The between-factor was the two groups of students, one group (treatment) studying abroad and the second (control) studying on-campus.

The results of Repeated-Measures ANOVA display two main effects as well as an interaction effect. The first outcome is the significance of the differences when comparing the overall mean scores of the two groups (treatment: studying abroad and control: studying on campus), the second is that between the mean scores when comparing the pre- and post-test, while the interaction effect points to the variance between the average scores of the groups across the across the pre- and post-test. This analysis was conducted to obtain a closer look at the results between the two groups over a semester-long period. All the tests were analyzed at an alpha level of .05. A summary of the statistical analysis of the Repeated-Measures ANOVA is found in Table 6.

Table 6

Results of Repeated-Measures ANOVA for Comparison of Intercultural Sensitivity between the Study Abroad Group and the On-campus Group

Source	SS	*df*	MS	*F*	*p*
Group	.142	1	.142	.235	.629
Denial/Defense	1.163	1	1.163	.068	.009*
Group*Denial/Def	.122	1	.122	.744	.390
Error (Denial/Def)	16.786	102	.165		
Group	.095	1	.095	.192	.662
Denial Cluster	.275	1	.275	1.702	.195
Group*Denial	.300	1	.300	1.858	.176
Error (Denial)	16.492	102	.162		
Group	.023	1	.023	.034	.855
Denial (Disinterest)	.017	1	.017	.080	.778
Group*Denial/Dis	1.277	1	1.277	7.192	.014*
Error (Denial/Dis)	21.027	102	.206		
Group	.002	1	.002	.007	.932
Denial (Avoidance)	1.498	1	1.498	5.209	.025*
Group*Denial/Avoi	.002	1	.002	.007	.932
Error (Denial/Avoi)	29.331	102	.288		
Group	.207	1	.207	.224	.637
Defense Cluster	2.947	1	2.947	9.451	.003*
Group*Defense	.017	1	.017	.053	.818
Error (Defense)	31.809	102	.312		
Group	.686	1	.686	.940	.335
Reversal	.698	1	.698	2.344	.129
Group*Reversal	1.409	1	1.409	4.731	.032*
Error (Reversal)	30.373	102	.298		

Table 6 (continued)

Source	SS	*df*	MS	*F*	*p*
Group	.946	1	.946	1.383	.242
Minimization	.942	1	.942	2.697	.104
Group*Minimization	1.238	1	1.238	3.542	.063
Error (Minimization)	35.642	102	.349		
Group	1.088	1	1.088	1.035	.311
Mini/Similarity	1.295	1	1.295	3.088	.082
Group*Mini/Similar	1.747	1	1.747	4.166	.044*
Error (Mini/Similar)	42.776	102	.419		
Group	.586	1	.586	.859	.356
Mini/Universalism	2.651	1	2.651	6.671	.011*
Group*Mini/Univer	.915	1	.915	2.303	.132
Error (Mini/Univer)	40.529	102	.397		
Group	.668	1	.688	1.463	.229
Acceptance/Adapt	4.041	1	4.041	21.448	<.001*
Group*Acce/Adapt	.881	1	.881	4.674	.033*
Error (Acce/Adapt)	46.601	102	.188		
Group	.433	1	.443	.488	.486
Acceptance Cluster	.419	1	.419	1.427	.235
Group*Acceptance	1.485	1	1.485	5.059	.027*
Error (Acceptance)	29.945	102	.294		
Group	.815	1	.815	1.908	.170
Adaptation Cluster	7.608	1	7.608	30.519	<.001*
Group*Adaptation	.617	1	.617	2.477	.119
Error (Adaptation)	25.427	102	.249		
Group	.212	1	.212	.344	.559
Adapt/Cognitive	14.475	1	14.475	38.568	<.001*
Group*Adap/Cogni	.233	1	.233	.593	.443
Error (Adap/Cogni)	38.286	102	.375		
Group	1.518	1	1.518	2.587	.111
Adap/Behavioral	3.764	1	3.764	11.770	.001*
Group*Adap/Behav	1.058	1	1.058	3.309	.072
Error (Adap/Behav)	32.618	102	.320		

Table 6 (continued)

Source	SS	*df*	MS	*F*	*p*
Group	.163	1	.163	.229	.633
Encap Marginality	.345	1	.345	1.230	.270
Group*Encap Marg	1.359	1	1.359	4.841	.030*
Error (Encap Marg)	28.623	102	.281		

$p < .05$

Note: Denial/Def = Denial/Defense; Denial/Dis = Denial/Disinterest; Denial/Avoi = Denial/Avoidance; Mini/similar = Minimization/Similarity; Mini/Univer = Minimization/Universalism; Acce/Adapt = Acceptance/Adaptation; Adapt/Behav = Adaptation/Behavioral; Adapt/Cogni = Adaptation/Cognitive; and Encap Marg = Encapsulated Marginality

Statistical analysis of the first main effect indicates that there was inadequate evidence to conclude that there were significant differences in the measurement of intercultural sensitivity between the students studying abroad and students studying on campus. However, the findings of the second main effect, the analysis of the mean scores of the two groups when comparing the pre- and post-test, proved that there were definite, measurable differences in the direction of the study abroad group when compared to the on-campus group. Furthermore, there was an interaction effect, weighing the mean scores of the groups across the pre- and post-test, the results of which skewed towards the study abroad group. The following is a detailed analysis of each scale and subscale of the IDI instrument.

The first group of data, the findings of the *Denial/Defense* scales, revealed no significant main effect when comparing the mean scores of the two groups of students ($F(1,102) = .235$, $p = .629$), but one was demonstrated when comparing the pre- and post-

test mean scores of the groups (F (1,102) = 7.068, p = .009), though there was no interaction effect across the pre- and post-test (F (1, 102) = .744, p = .390). The on-campus group showed a higher increase of .20 between the pre-test mean (1.87) and the post-test mean (2.07) than the study abroad group, whose increase was .10 (1.97, 2.07).

The results of the *Denial* cluster proved no significant difference between the mean scores of the groups (F (1,102) = .192, p = .662), nor any in the second main effect comparing pre- and post-test scores of the groups (F (1,102) = 1.702, p=.195) and no interaction effect (F (1,102 = 1.558, p = .176). The *Denial/Disinterest* subscale revealed no main effect between groups (F (1,102) = .034, p = .855) and between tests (F (1, 102) = .080, p = .778). However, there was a measurable interaction effect across the pre-post-tests (F (1, 102) = 6.192, p = .014), with a decrease of .14 from the pre-mean of 1.97 to a post-mean of 1.83 for the study abroad group and an increase of .17 from a pre-mean of 1.83 to a post-mean of 2.00 for the on-campus group. The results of the *Denial/Avoidance* demonstrated no significant main effect between groups (F (1,102) = .766, p = .384) nor between the pre- and post-test (F (1, 102) = 5.209, p = .025). The increase in the mean from the pre- and post-test was the same for both groups, averaging .18. There was no interaction effect across the tests (F (1,102) = .007, p = .932).

The Defense cluster was analyzed separately and the results revealed little variance between the mean scores of the groups (F (1, 102) = .224, p = .637) nor relevant difference between the mean scores of the groups when comparing the pre- post-tests (F (1, 102) = 9.451, p = .003). The study abroad group showed an increase of .22 from the pre-test mean (2.09) to the post-test mean of (2.31) similar to the increase of .26 for the

on-campus group. There was no obvious interaction effect across the tests (F (1, 102) = .053, p= .818)

The Reversal scale indicated no relevant shift in the main effect between groups (F (1,102) = .940, p = .335) and none between the pre- and post-tests (F (1,102) = 2.344, p =.129). However, there was an interaction effect across the tests (F (1, 102) = 4.731, p = .032) with the mean for the study abroad groups decreasing from to 2.60 to 2.30, and that for the on-campus group increasing only slightly from 2.31 to 2.36.

There was no evidence of main effects (F (1,102) = 1.383, p = .242) and (F (1,102) = 2.687, p = .104) nor interaction effect (F (1, 102) = 3.542, p = .063) for the *Minimization* scale. An analysis of the two subscales was further carried out. For the *Minimization/Similarity* subscale, the two main effects were not statistically relevant (F (1, 102) = 1.035, p = .311) and (F (1, 102) = 3.080, p = .082). However, there was a noticeable interaction effect (F (1, 102) = 4.166, p = .044). The mean score for the study abroad group decreased from 3.75 to 3.41 while the score for the on-campus group revealed an insignificant change of .02 across the tests. The study abroad group demonstrated a higher level of shift in their worldview with respect to commonalities among cultures compared to the on-campus group over a semester-long period. Furthermore, the results of *Minimization/Universalism* subscale, while showing no significant difference for the main effect comparing the groups (F (1, 102) = .859, p = .356), one was revealed in the main effect for the pre- post-tests (F (1, 102) = ...671, p = .011). The score increased from a pre-mean of 3.07 to a post-mean 3.17 for the study abroad group and from 3.05 to 3.41 for the on-campus group. No significant interaction effect was found across the tests.

Similar to the findings to Research Question I, the results of the *Acceptance/Adaptation* scale for this question revealed the highest degree of measurable differences in the mean scores of the groups comparing the pre and post-test (second main effect) and in the means scores of the groups across the tests (interaction effect), compared to the other scales and subscales. While the first main effect comparing the groups was not relevant statistically (F (1,102) = 1.463, p = .229), the second, which correlated the mean of the tests proved to be significant (F (1,102) = 21.448, p < .001) as did the interaction effect (F (1, 120) = 4.674, p = .033). The difference from the pre-test mean (3.00) to post-test mean (3.40) of the study abroad group revealed an increase of .40 as compared to an increase of .15 from 3.01 to 3.16 for the on-campus group. This indicates that the students who studied abroad demonstrated a higher increase in their ability to comprehend and accommodate complex cultural differences (Hammer, 2007) than did the on-campus group by the end of the semester (refer to Figure 1 in Appendix D).

Further analysis was conducted to compare the results of the *Acceptance* and *Adaptation* clusters. The findings proved that the *Acceptance* subscale had no significant difference for the two main effects (F (1, 102) = .488, p = .486) and (F (1,102) = 1.427, p = .235). However, there was a strong interaction effect (F (1,102) = 5.059, p = .027) across the pre- and post- test. When comparing the average scores of the groups across the tests, the study abroad group demonstrated an increase from a pre-mean of 3.24 and a post-mean of 3.50 while the on-campus group showed a decrease from a pre-mean of 3.31 to 3.23. These figures suggest that the study abroad group developed a higher level of *Acceptance* compared to the on-campus group over a semester-long period.

The findings of the *Adaptation* cluster point out that although there was no marked divergence between the groups (F (1, 102) = 1.908, p = .170 and the interaction effect across pre- and post-test (F (1,102) = 2.477, p =.119), there was a significant variance between the mean score of the groups, comparing the pre- and post-test (F (1, 102) = 30.519, p < .001). The increase in score for the on-campus group was .27 (from 2.84 to 3.11) and for the study abroad group .49 (from 2.86 to 3.35). The figures suggest that the study abroad group developed a higher level of *Adaptation* than did the on-campus group over a semester-long period.

An analysis of the *Adaptation/Cognitive* subscale was also conducted to find out how the changes occurred in this particular dimension. Although there was no meaningful difference in the mean score between the groups (F (1, 102) = 3.44, p= .559) and no apparent interaction effect (F (1, 102) = .593, p = .443), there was a measurable main effect comparing the group scores of the pre- and post-test (F (1, 102) = 38.563, p <.001). Both groups started at the same initial score but the increase in the results of the study abroad group from a pre-mean of 2.87 to a post-mean of 3.47, averaging .60, was higher than the increase of .47 for the on-campus group. This suggests that the study abroad group developed a higher level of cognitive adaptation as compared to the on-campus group by the end of the semester.

A look at the *Adaptation/Behavioral* subscale showed no evidence of much difference between the mean score of the groups (F (1, 102) = 2.587, p = .111) and no discernible interaction effect across the pre- and post-test (F (1, 102) = 3.309, p = .072). On the contrary, the main effect measuring the difference between the pre- and post-tests scores of the groups did prove to be quite significant (F (1, 102) = 11.770, p = .001).

When comparing the results of the tests, the study abroad group showed a much larger increase from pre- to post-test (2.85, 3.26), averaging an increase of .41, than that for the on-campus group (2.82, 2.94), suggesting that the students who studied abroad exhibited a higher level of behavioral adaptation than the on-campus group during the period examined.

The results of the last scale of the IDI instrument, *Encapsulated Marginality*, indicated no significant difference in first main effect comparing the mean score of the groups ($F(1, 102) = .227$, $p = .633$) and there was also none between the groups, comparing the mean score of the pre- and post-test ($F(1, 102) = 1.230$, $p = .270$). However, there was an interaction effect with a measurable difference in the mean score of the groups across the tests ($F(1, 102) = 4.841$, $p = .030$). The study abroad group showed a decrease of .24 from the pre-mean (1.94) to the post-mean (1.70), while the on-campus group exhibited almost no change with a mean difference of .08 (1.73, 1.81).

Research Question III

Research question III: Are there changes in the cross-cultural adaptability skills of students studying abroad in an island program over a semester-long period as measured by the Cross-Cultural Adaptability Instrument (CCAI)?

To address this question, Paired Samples *t*-Tests were run and the mean between the pre- and post-test was compared. The analysis of data was data was done separately for each of the following scale: Emotional Resilience (ER), Flexibility/Openness (FO), Perceptual Acuity (PAC), and Personal Autonomy (PA) (refer to Table 3 in Chapter 3) and for all four scales combined for an overall score. The Paired *t*-test results are summarized in Table 7. All the tests were analyzed at an alpha level of .05.

Table 7

Results of Repeated-Measures ANOVA for Comparison of Intercultural Sensitivity between the Study Abroad Group and the On-campus Group

Scale	Mean(SD)	Mean(SD)	t(df) = 50	p
Emotional Resilience	4.64(.437)	4.85(.401)	-3.137	.046*
Flexibility/Openness	4.70(.499)	4.87(.491)	-2.050	.008*
Perceptual Acuity	4.69(.533)	4.76(.515)	-0.818	.417
Personal Autonomy	4.70(.486)	5.12(.387)	-5.449	< .001*
Overall	4.64(.437)	4.85(.401)	-3.137	.003*

* $p < .05$

The results of the CCAI revealed that there were critical changes in students' cross-cultural adaptability after a semester-long period of studying abroad. The increase in Emotional Resilience, Flexibility/Openness and Personal Autonomy scales and overall scores was found to be statistically significant, though one measure, the Perceptual Acuity scale, did not exhibit much change.

The Emotional Resilience scale showed a statistically relevant change (t (51) =2.05, p=.046) with a mean difference of .17 between the pre-mean (4.70) and post-mean (4.87). The findings reveal that students increased their emotional resilience through their participation in the island program. In a similar way, the analysis of the Flexibility/Openness scale pointed up a meaningful shift (t (51) =3.11, p=.003); averaging a difference of .23 between the pre-mean (4.57) and post-mean (4.74),

indicating that the students developed stronger flexibility and openness skills after their study abroad experience.

An examination of the Perceptual Acuity scale showed that there was no significant difference between the pre- and post-test results (t (51) =.818, p=.417) with a difference of .06 between the pre-mean (4.70) and post-mean (4.76). The slight change in this scale indicates that the students did not improve their perceptual acuity skills in the study period.

There was, however, a marked difference in the mean score of the students in the Personal Autonomy scale (t (51) =3.14, p=.003), averaging an increase of .43 from the pre-mean (4.70) post-mean (5.13). This figure represents the highest mean difference compared to that of the other three scales, making it evident that the greatest change in the self-development of the study abroad participants occurred in the area of Personal Autonomy.

When comparing the overall pre- and post-test scores combining the four scales, a quantifiable deviation (t (51) =3.13, p=.003) was found, with the pre-test mean of 4.64 increasing by .21 to a post-test mean of 4.85. This is a critical finding, since it demonstrates clearly that the island brought about a positive impact on the overall cross-cultural adaptability skills of the students who took part in it.

Research Question IV

Research question IV: Are there differences in cross-cultural adaptability skills between students studying abroad in an island program and students studying at their home campus over a semester-long period as measured by the CCAI?

To answer this question, a Repeated-Measures ANOVA analysis of the data was conducted. The with-in factors were the four scales of the CCAI, namely Emotional Resilience (ER), Flexibility/Openness (FO), Perceptual Acuity (PAC) and Personal Autonomy (PA) (refer to Table 3 in Chapter 3). Each of these scales has two levels (pre and post) and the between-factor was the two groups of students (study abroad and on-campus).

The results of Repeated-Measures ANOVA show two main effects and an interaction effect (see Table 8). The first measured the relative import of the deviations when comparing the mean scores of the two groups (treatment: studying abroad and control: studying on campus), the second illustrated the differences between the mean scores of the two groups when comparing the pre- and post-test, while the interaction effect pointed to differences between the mean scores of the groups across the pre- and post-test. This analysis was conducted to obtain a closer look at the results between the two groups over a semester-long period. The results of the Repeated-Measures ANOVA analysis are summarized for each scale in Table 8. All the tests were analyzed at an alpha level of .05.

Table 8

Results of Repeated-Measures ANOVA for Comparison of Cross-Cultural Adaptability Skills between the Study Abroad and the On-Campus Group

Source	SS	*df*	MS	*F*	*p*
Group	.126	1	.126	.400	.528
Emotional Resilience	.315	1	.305	2.166	.144
Group*Emo. Res.	.382	1	.382	2.713	.103
Error (Emo. Res.)	14.361	102	.141		
Group	.215	1	.215	.508	.478
Flexibility/Openness	.720	1	.720	5.950	.016*
Group*Flex./Open.	.713	1	.713	5.887	.017*
Error (Flex./Open.)	12.350	102	.121		
Group	.356	1	.356	.964	.329
Perceptual Acuity	.240	1	.240	1.688	.197
Group*Perc. Acuity	.001	1	.001	.004	.950
Error (Perc. Acuity)	14.518	102	.142		
Group	.003	1	.003	.011	.917
Personal Autonomy	3.300	1	3.300	23.607	<.001*
Group*Personal Auto.	1.570	1	1.570	10.975	.001*
Error (Personal Auto.)	14.593	102	.143		
Group	.013	1	.013	.050	.823
Overall (all four scales)	.652	1	.652	7.573	.007*
Group*Overall	.422	1	.422	4.909	.029*
Error (Overall)	8.776	102	.086		

* $p < .05$

The results of Emotional Resilience scale showed no discernible first main effect when comparing the mean scores of the groups (F (1,102) = .40, p =.528), and neither was one evidenced in the second main effect (F (1,104) =2.17, p=.144) nor in the interaction effect (F (1,102) =2.72, p=.103). In spite of the fact that there was no significant difference in the main and interaction effects, a closer look at the average level of change across the pre- and post-test reveals that the score of the study abroad

group increased from 4.70 to 4.87 while the score of the on-campus group slightly decreased from 4.84 to 4.83 (refer to Figure 2 in Appendix E).

The examination of the Flexibility/Openness scale showed no significant difference in the first main effect comparing the mean scores of the study abroad group and the on-campus group (F (1,102) =.508, p=.478). There was however a marked difference in the second main effect (F (1,104) =5.95, p=.016) comparing the pre- and post-test scores of the two groups. The interaction effect was also relevant (F (1,102) =5.887, p=.017), showing a measurable change in the mean scores of the groups across the pre- and post-test. When comparing the average level of change for both groups across the pre- and post-test, the score of the study abroad group increased from 4.51 to 4.75, while that of the on-campus group remained the same, confirming why a significant interaction effect was found. This indicates that students who studied abroad gained a higher level of Flexibility/Openness at the end of the semester, while the on-campus group exhibited no change (refer to Figure 3 in Appendix E).

The analysis of the Perceptual Acuity scale showed no significant difference in between the mean scores of the groups in the first main effect (F (1,102) =.96, p=.33), in the second main effect (F (1,102) =, 1.69, p=.20), and the interaction effect (F (1,102) =.004, p=.95.Hence, the results indicated no change in both the study abroad and on-campus groups

For the last scale, Personal Autonomy, there was no apparent variance in scores in the first main effect (F (1,102) =.01, p=.92), although there was a significant difference in the mean scores of the groups when comparing the pre- and post-test (F (1,104) =23.07, p<001, as there was with the interaction effect (F (1,102) =10.98, p=.001.) The mean

score increased from 4.70 to 5.12 (.32) for the group studying abroad, as opposed to the slight .08 increase in the mean score from 4.88 to 4.96 for the on-campus group. These figures established that students who studied abroad exhibited a much larger mean increase from pre- to post-test, as compared to the on-campus group. This indicates that students who participated in the island program demonstrated a higher level of personal autonomy at the end of the semester compared to students who stayed on campus (refer to Figure 4 in Appendix E).

Further analysis of the results revealed that there was no evidence for a significant variance in the overall mean score of the cross-cultural adaptability skills (all four scales combined) between students studying abroad and those studying at the home campus (F (1,102) =.05, p=.823). However, there was a marked shift in the main effect for the pre- and post-test (F (1, 98) =7.58, p=.007), which means that there was an important and measurable difference in the cross-cultural adaptability skills of the groups at the beginning and end of the semester. Furthermore, there was a strong interaction effect between the two groups of students across the pre- and post-tests (F (1,102) =4.91, p=.029. A closer look at the average this level of change shows that the mean score of the study abroad group increased from 4.65 to 4.85 while the on-campus group exhibited hardly any change (4.75, 4.78). These figures indicate that students who studied abroad gained in their overall cross-cultural adaptability skills while the students who studied on campus did not change in this area.

Summary

First, we investigated if there were any changes in the intercultural sensitivity of students studying abroad over a semester-long period, as measured by the scales and

subscales of the IDI. The analysis of intercultural sensitivity revealed that there were distinct differences in the intercultural sensitivity of students studying abroad over a semester-long period, as measured by the *Reversal*, *Minimization*, *Adaptability/Adaptation* and *Encapsulated Marginality* scales of the IDI, though these were not in evidence in the *Denial/Defense* scale.

Secondly, we looked at whether there were differences in the intercultural sensitivity of students studying abroad and students studying on campus over a semester-long period, as measured by the scale and subscales of the IDI. Statistical analysis revealed that there was insufficient evidence to conclude that there was significant digression between the two groups. However, the outcomes were decidedly different between the two groups in *Reversal, Minimization,* A*daptability/Adaptation* and *Encapsulated Marginality* scales when comparing the results of the pre- and post-test. The highest level of variance between the groups was revealed in the *Acceptance/Adaptation* scale across the pre- and post-test, with the study abroad group exhibiting a much higher rise in score than the on-campus group.

Next, the results were analyzed to find out if there were any changes in the cross-cultural adaptability of students studying abroad over a semester-long period, as measured by the scales of the CCAI. The analysis indicated that there was a marked evolution in the cross-cultural adaptability skills of students studying abroad over a semester-long period, as measured by the Emotional Resilience, Flexibility/Openness and Personal Autonomy scales, with only the Perceptual Acuity scale evidencing no change. The comparison of the scores showed that the students gained a higher level of cross-cultural adaptability skills after their experience in the host culture, with the greatest

change displayed in the areas of Personal Autonomy, Flexibility/Openness and Emotional Resilience.

Lastly, statistical analysis was conducted to find out if there were differences in cross-cultural adaptability skills of students studying abroad and students studying on campus over a semester-long period, as measured by the scales of the CCAI. The findings revealed that although there was insufficient evidence to conclude that there was definite divergence in the measurement of cross-cultural adaptability skills between the two groups, however, there was a significant difference between the two groups when comparing the pre and post-test, as measured by the Flexibility/Openness and Personal Autonomy scales. The study abroad group had a higher score in both of these scales at the end of the semester compared to the on-campus group. The score, combining all four scales of the CCAI, was also significantly different for the study abroad group when comparing the pre- and post-results. This means that the study abroad group demonstrated a higher level of cross-cultural adaptability skills at the end of the semester. On the other hand, the on-campus group did not show any significant differences in any of the scales and in the combination of all four scales when comparing the scores at the beginning of the semester to those at the end of the semester.

In conclusion, the overall results of the CCAI and IDI Acceptance/Adaptability scales strongly indicate that student who studied abroad have increased their cross-cultural adaptability and skills and intercultural sensitivity at a higher level than students who studied on campus when comparing the pre- and post-survey results. Moreover, more significant changes occurred in the direction of the study abroad group than in the on-campus group. The results indicate that the island study program of the type

undertaken by the research university can have a positive impact on students who participate in them by promoting not only intercultural sensitivity marked by an increased ability to adapt to and accept cultural differences but also personal growth manifested by an enhanced independence, flexibility, open-mindedness and self-confidence.

CHAPTER V: DISCUSSION, RECOMMENDATIONS, AND CONCLUSIONS

The main purpose for the venture undertaken by this researcher was to compare the differences in the intercultural sensitivity and cross-cultural adaptability of college students who have participated in a semester-long island model study abroad program to those who have studied on-campus for a semester-long period. The Intercultural Development Inventory (IDI) instrument (Hammer, 2007) based on Bennett's Developmental Model of Intercultural Sensitivity (DMIS) (Bennett, 1986, 1993) was used to investigate the changes in each scale and subscale of the inventory. It is worth noting, as Bennett (1986, 1993) points out, that an individual does not have to complete one stage of development measured by a particular scale to move to another and that there is no right or wrong change along each stage. In addition, the Cross-Cultural Adaptability Inventory (CCAI) (Kelley and Meyers, 1995) was utilized to measure the cross-cultural adaptability skills of students Emotional Resilience, Flexibility/Openness, Perceptual Acuity and Personal Autonomy.

The discussion in this chapter is based on the detailed statistical results in Chapter IV. The implications of the results will also be discussed in the context of the literature review of this study. Finally, recommendations for both future research and institution practice will be addressed.

Discussion of Results

Demographics

The demographic statistics on gender revealed that more females (67%) than males (33%) participated in the program. This is consistent with the literature, which indicates that more females (65.1%) than males (34.9%) participated in study abroad

programs in the year 2006-2007 (Open Doors, 2008). The breakdown by ethnicity showed that the majority (95%) are of Caucasian origin, followed by African-American (3%), Hispanic (1%) and other (1%). Again this supports the national statistics on study abroad participation by ethnic group, which showed the following figures: Caucasian (81.9%), Asian-Pacific (6.75), Hispanic (6.0%), African American (3.85), and others (1.7%) (*Open Doors*, 2008).The data of the demographic survey by schools indicated that most of the participants are from the Business (30%) and Liberal Arts (29%) schools, comprising more than half of the students who studied abroad. These figures are consistent with the national statistics on study abroad showing that Business (20%) and Social Sciences (21%) were the two main fields of study for American students in the years 2006-2007 (*Open Doors*, 2008).

Research Question I

Research question I: Are there changes in the intercultural sensitivity of students studying abroad in an island program over a semester-long period as measured by the Intercultural Development Inventory (IDI)?

The findings garnered from the analysis of this question point to a definitive development in the intercultural sensitivity of students in an island program over a semester-long period as measured by the *Reversal*, *Minimization*, *Acceptance/Adaptation* and *Encapsulated Marginality* of the IDI, although the *Denial/Defense* scale, did not exhibit any changes.

The regression discovered in the examination of *Reversal,* where an "adopted culture is experienced as superior to the culture of one's primary socialization" (Hammer, 2007, p. 49), could mean that the students became less likely to project the

culture of the host country in their own culture's terms (Hammer, 2007). This finding is quite different compared to two other studies which explored the impact of study abroad on students using the IDI instrument (Patterson, 2006; Anderson et al., 2006) which found a progression in *Reversal*. The result of this study may imply that students should be given more opportunities to explore and to reflect on the cultural differences between the host and home culture during the study abroad experience. Some type of intervention, for example, service learning, group discussions or journal-keeping might reduce the tendency to see other cultures as better than their own (Hammer, 2007). Scholars have suggested that intervention on culture learning during the study abroad process enhances the effectiveness of understanding cultural differences (Engle & Engle, 2004; Hoff, 2005; Paige, Cohen & Shively, 2004). The researcher supports the mentioned scholars' views about the impact of cross-cultural activities on the learning of cultural differences and suggests that service learning and journal-keeping would be helpful for all students during their study abroad experience allowing for further processing of culture learning.

Another measure that was utilized in the examination of the responses to this question, *Minimization*, is manifested by the idea that "cultural difference is the state in which elements of one's own cultural worldview are experienced as universal" (Hammer, 2007, p. 49). In this stage, cultural differences are acknowledged, however the differences are considered as important as the cultural similarities. The backward shift in this scale may imply that students became less likely to notice the differences between other cultures and their own. The researcher was not surprised by this finding since other studies which have used the IDI instrument to assess the impact of study abroad on intercultural development found the same results (Anderson et al., 2006; Patterson,

2006). Those studies were discussed in this study's literature review in the section on study abroad research findings. Anderson et al. (2006) point out "recognizing the value of differences can be very difficult to internalize for those growing up in a culture such as the US that perceives itself as *the* world leader". As pointed earlier, the fact that the students regressed in the Minimization scale should not be surprising because complex understanding of cultural differences is not easy process for individuals who have spent very little time overseas. The demographics statistics in this study indicated that the majority of the participants (80%) have spent up to four weeks in another country, perhaps explaining the lack of forward change in this particular stage.

Once more, the researcher would suggest that interventions, such as group discussion, service learning projects, journal-keeping and opportunities for interaction with people in the host culture, may reduce their tendency to assume that people from other cultures are basically like "us". To this effect, it is the researcher's opinion that a semester-long experience in a host culture is not sufficient to change students' views about their own culture. Perhaps, a longer time period overseas may bring about a significant development in students' ability to identify distinct differences between their own and another culture.

A further revelation made manifest by this study, the forward change in *Acceptance/Adaptation*, means that students increased their "tendency to recognize patterns of cultural difference in one's own and other cultures" and "tendency to shift perspective and behavior according to cultural context" (Hammer, 2007). The progression suggests that the students who studied abroad improved their ability to accept and adapt to cultural differences. This finding is supported by the results of a survey

conducted by the Office of International Programs of the university in this study. The findings show that 91% (198 of 218) of the students, who participated in the Italian campus program in the years 2005-2007 and completed the survey, responded that the experience highly increased their understanding of cultural differences. The strong significant difference in this scale is also supported by the findings of the CCAI instrument in this study, showing that there was a broad development in the participants' cross-cultural adaptability skills in the Emotional Resilience, Flexibility/Openness and Personal Autonomy dimension after a semester of studying abroad.

By the same token, the improvement in students' *Acceptance/Adaptation* after their study abroad experience is consistent with the literature review, which asserts that adaptability skills are crucial to the process of understanding cultural differences (Kim, 1988). The progression in *Adaptation/Cognitive* and *Adaptation/Behavioral* subscales is supported by this study's literature review on the understanding of cultural differences. An analysis conducted Chen and Starosta (1996) on the development of intercultural sensitivity suggested that the process of acquiring cognitive and behavioral skills in a host culture enhances intercultural sensitivity and leads to a deeper understanding of cultural differences. In the eyes of the researcher, the results prove a long-held belief that growth in behavioral and cognitive adaptation is possible through participation in an island program that provides the students opportunities to be exposed to cultural differences through travel in other countries. The researcher also notes that the findings of the study support the personal assumption that students would gain a higher level of acceptance of cultural differences and adaptation in a host culture after their experience.

In a related vein, the analysis of the results in the *Encapsulated Marginality* scale, indicating "a worldview that incorporates a multicultural identity with confused cultural perspectives" (Hammer, 2007) is best understood when it is related to the degree of cultural disengagement an individual or group possesses. In a recent publication by Hammer (2008), this terminology is defined as such: "cultural disengagement reflects a sense of being disconnected and not feeling fully part of one's cultural group" (p. 251). The scholar points out that from the point of view of the intercultural development continuum from an ethnocentric worldview to an ethnorelative worldview (Bennett, 1986, 1993), the *Encapsulated Marginality* scale is not part of the developmental process and is being analyzed independently. The result in this scale suggests that the students still have trailing issues about cultural identity that might be resolved through intervention such as reflections, journal-keeping, and cross-cultural training sessions among other related activities (Hammer, 2007). The researcher strongly agrees with the scholar in this area since these "intervention" activities can only serve to broaden cultural awareness and personal growth. This result is not surprising because, according to Bennett (1993), individuals who have spent time overseas for at least two years or have been subject to cross-cultural training programs would have resolved issues in that particular stage of development. Consequently, the researcher believes that the lack of progression found in this dimension may be accounted for by the fact that the island model program was only a semester long, an aspect addressed by the researcher in the recommendations below.

In summary, and in spite of the limitations noted, the results indicate that students who studied abroad demonstrated several changes over a semester-long period. The

increase in the *Acceptance/Adaptation* dimension by itself provides enough evidence to conclude that students learn more about cultural differences when participating in an "island" study program, and, by contrast, the lack of change in the *Denial/Defense* scale and the regressive changes in the *Reversal, Minimization and Encapsulated Marginality* scales point to the need for various types of intervention, as discussed above, that may broaden the learning outcomes achieved, as well as for programs that are conducted for periods longer than a semester.

Research Question II

Research question II: Are there changes in the intercultural sensitivity of students studying abroad in an island program and student studying on campus over a semester-long period as measured by the Intercultural Development Inventory (IDI)?

Here, the broader statistical analysis indicated that there was insufficient evidence to conclude that there were discernible differences in the intercultural sensitivity of students studying abroad and students studying on campus over a semester-long period, as measured by the scales and subscales of the IDI instrument. It is worth noting that this particular finding is similar to another study conducted by Patterson (2006), as discussed in the literature review. However, the present study did discover striking changes in attitudes when comparing the two groups at the beginning of the semester and at the end of the semester. The analysis also showed significant interaction effect; that is, there were marked differences between the groups across the pre- and post-test, with the changes in intercultural sensitivity directing more towards the study abroad group than to the on-campus group.

Although there was no obvious difference between the groups in the *Denial/Defense* scale, there was a clear variance between the groups when comparing the pre- and post-tests, with the on-campus group maintaining the biggest increase, though no significant deviation was found in the *Denial c*luster. A statistical analysis of the *Denial/Disinterest* subscale across the pre- and post-test suggests that the study abroad group was less interested in cultural differences than the on-campus group at the end of the semester, while both groups exhibited a decrease in their tendency to avoid interaction with people of other cultures (*Denial/Avoidance*). According to the analysis of the *Defense* cluster across the pre- and post-test, the students in both groups decreased their "tendency to view the world in terms of "us" and "them", where "us" is superior when pre- and post-test responses were compared. Hammer (2007) suggested that a growth in this stage can be interpreted as a step forward in reducing the tendency to view one's culture as superior to others. It is worth pointing out that the change in this scale on the part of both the study abroad and on-campus groups may imply that experience of being abroad is not only the factor that would change students' view of their own culture. Students' exposure to other cultures on the home campus is also effective in developing an understanding of cultural differences.

Interestingly, the statistical analysis in the *Reversal* scale, which indicates a worldview that reverses the "us" and "them" polarization, where "them" is superior (Hammer , 2007) showed a regression on the part of the students who studied abroad, and no significant change for those on campus. As mentioned in the discussion for research question I, the study abroad experience may have likely enhanced the students' view of the host culture and created a somewhat negative one of their own. According to Hammer

(2007), individuals who do not progress in this stage might be dealing with unresolved issues. As pointed out in the discussion in the previous question, interventions such as cross-cultural training might assist individuals in resolving worldview issues. This reinforces the personal observations of the researcher, who finds that the students' tendency to view the host culture as superior to their own may be associated with their ability to identify certain aspects of the host culture that they highly valued

In another research analysis, the difference between the groups was evidenced in the *Minimization/Similarity* and *Minimization/Universalism* scales across the pre- and post-test. In the *Similarity* scale the on-campus group manifested no change, while the study abroad group showed a regression in the "tendency to assume that people from other cultures are basically like "us" (Hammer, 2007). The lack of progressive change in the Minimization scale was puzzling. The students were still showing a tendency to minimize cultural differences in spite of the fact that the study abroad experience provided opportunities to improve in this area. It is worth noting that this result is similar to the one reported in the studies conducted by Anderson et al. (2006) and Paige et al. (2004), using the IDI instrument. The findings of the *Minimization*/*Universalism* scale suggest that the on-campus group had slightly more of a tendency to apply its own cultural values to other cultures than did the study abroad group by the end of the semester. The post-test score in this particular scale was in a direction that was expected by the researcher.

In one of the most important findings revealed by this survey, the highest degree measurable variation between the two groups appeared in the analysis of the *Acceptance/Adaptation* scale, showing a greater increase for the study abroad group than

for the on-campus group across the pre- and post-test. The students who participated in the island program featured a greater degree of growth in this stage compared to students who studied on campus. In particular, the examination of the separate results of the *Acceptance* and *Adaptation* clusters strongly suggests that the study abroad group significantly developed in those dimensions compared to the on-campus group. For the latter, there was no manifest change in the Acceptance scale, but instead a regression was shown to have occurred at that stage. Furthermore, the development in the *Adaptation/Behavioral* and *Adaptation/Cognitive* subscales was higher for students who studied abroad than those who stayed on campus. The contrast between the study abroad group and on-campus group proves that study abroad in an island program has a positive effect on students' acceptance of and adaptability to cultural differences. Because the results show a difference in outcomes between the study abroad and on-campus group, it would be interesting to identify ways that students who studied abroad manifested their abilities to adapt to a different culture by carrying out a qualitative study, for example, portraitures of students sharing their experience in depth.

Finally, although the analysis of the last scale, *Encapsulated Marginality*, showed no significant divergence in either group, the regression of the study abroad group in this stage when comparing the pre- and post-test might well indicate that the students "have not yet resolved the identity issues raised by such highly developed intercultural sensitivity" (Hammer, 2007, p. 45). The word "such" refers to the stage that reflects an ethnorelative worldview (Bennett, 1986, 1993) with complex cultural perspectives Bennett (1993) pointed out that development in this stage requires significant and extended living experiences in other cultures. Thus, the lack of progress in this dimension

could very well point up one of the limitations of the island model programs with respect to the advancement of depth in cultural awareness.

Research Question III

Research question III: Are there changes in the cross-cultural adaptability skills of students studying abroad in an island program over a semester-long period as measured by the Cross-Cultural Adaptability Instrument (CCAI)?

As has was detailed above, statistically significant changes in the cross-cultural adaptability of students studying abroad in the island program over a semester-long period were found in the Personal Autonomy, Flexibility/Openness and Emotional Resilience scales of the CCAI, but not in the area of Perceptual Acuity.

The results are consistent with this study's literature review on study abroad research findings and goals of study abroad. Three studies (Kitsantas & Meyers, 2001; Williams, 2005; and Black & Duhon, 2006) have investigated the impact of study abroad on students using the CCAI instrument and have concluded that study abroad programs increase the cross-cultural adaptability skills of students more or less in the four scales of the CCAI.

Further, the findings for this question support this study's literature on the goals of study abroad in higher education. In the process of identifying the goals of any type of study abroad programs, scholars have classified the goals in three categories: intellectual development, personal growth and international understanding (Hoffa, 1998; Kauffmann, Martin, & Weaver, 1992). They suggested that personal growth occurs as students are exposed to different experiences in a new culture and become more aware of their own as well as others' cultures. This study has explored the effectiveness of the island program

on personal growth through the CCAI instrument and the findings indicate that students who have studied abroad have become more tolerant (Flexibility/Openness), self-confident (Emotional Resilience) and independent (Personal Autonomy) as measured by the CCAI instrument. The researcher does not find these results surprising since, according to the demographic information on travel time overseas, the majority of the participants in this study had not been previously exposed to extended journey in other countries and consequently a semester long experience in a host country would have made a positive change in their personal growth.

The analysis of the results for this question supports the findings of a survey which was conducted by the university in this study. The results revealed that the majority of the students who participated in the Italian campus program in the years 2005-2007 responded that the experience increased their personal growth. Out of 218 students who completed the survey, 80% responded that the experience highly increased their understanding of themselves, and 76% responded that the experience highly increased their self-confidence. Therefore, the results of this study and the university's survey are consistent.

Finally, the finding that there was no significant change in the Perceptual Acuity dimension, described as the ability to be "attentive to verbal and non-verbal behavior, to the context of communication, and to interpersonal relations" (Kelley & Meyers, 1995, p. 15) is likely related to the fact that the island study abroad model does not require students who participated in the program to be verbally and orally proficient in the host language. For the researcher, this lack of change was expected since the development of verbal and non-verbal skills is facilitated by language proficiency fostered by frequent

communication with the people of the host culture over an extended period of time, a fact that further points to the need for increased time abroad as well as exposing an inherent limitation of the island model.

Research Question IV

Research question IV: Are there differences in cross-cultural adaptability skills between students studying abroad in an island program and students studying at their home campus over a semester-long period as measured by the CCAI?

The analysis of the statistical results comparing the study abroad group and the on-campus group across the pre- and post-test revealed that there were distinct changes for the study abroad group as compared to the on-campus group. The changes for the study abroad group comparing the scores of the pre- and post-tests were manifested at its highest in the Personal Autonomy measure, followed by the Flexibility/Openness scale. These results support the work of other scholars ((Kitsantas & Meyers, 2001; Williams, 2005; and Black & Duhon, 2006) who found that students who studied abroad do in fact show a greater change in these dimensions than students who stay on campus. These results would imply that the island program under consideration has met its mission to promote students' personal growth. The growth in independence, flexibility and open-mindedness were expected given that there was much anecdotal evidence from students and administrators to suggest that the program effectively resulted in participants' growth in those particular traits.

Although there was no significant difference in the *Emotional Resilience* scale between the two groups, the study abroad group did demonstrate a higher increase in this dimension compared to the on-campus group at the end of the semester. Finally, no

significant differences were found between the two groups for the *Perceptual Acuity* scale. This means that the duration of the study abroad experience did not provide students with sufficient opportunities to identify verbal and non-verbal cues in language and behavior. As mentioned earlier, such findings were perhaps associated to the fact that students were not required to be proficient in the Italian language to participate in the program.

Even though the total research did not reveal appreciable distinctions between the study abroad group and on-campus group in all the scales and subscales of the instruments, there were enough notable differences to draw some valuable observations. In fact, the findings may raise questions about, as well as highlight the limitations of, sample size and the methodology used in the study. For example, the use of non-equivalent control groups nearly always renders this type of pre- and post-test design used in this study less credible than a true control group method of design, where the equivalent groups are formed by random assignment (Fitz-Gibbon & Morris, 1987). However, this study has provided as much information as possible that shows that the study abroad group and the on-campus group are initially alike, in terms of interest to study abroad, major, class classification, ethnicity, age, overseas travel, gender, declared major, and nationality. Consequently, this research design is as strong as a true control group design (Fitz-Gibbon & Morris, 1987). In spite of these limitations, the study was conducted with two highly validated instruments used in this area of research and has generated results that could be of future use.

Summary

The results of the CCAI and IDI Acceptance/Adaptability scales strongly indicate that student who studied abroad have increased their cross-cultural adaptability and skills and intercultural sensitivity at a higher level than students who studied on campus when comparing the pre- and post-survey results, and, furthermore, in nearly every category of the study, more significant changes occurred in the direction of the study abroad group than in the on-campus group. Indeed, even when the IDI scales exhibited a backward shift, namely in the Reversal and Encapsulated Marginality measures, this proved to be a valuable finding, illustrating that a longer time period of exposure to the host culture may be necessary for deeper and more complex understanding of cultural differences to be cultivated.

In the final analysis, after all the numbers have been "crunched" and all the statistics have been measured, it is abundantly clear that island study programs of the type undertaken by the research university can have a positive impact on students who participate in them by promoting not only intercultural awareness marked by an increased respect and understanding for the customs and history of other people, but also personal growth manifested by an enhanced self-awareness and self-confidence with respect to one's own cultural belief system.

In conclusion, it is the fervent hope of the researcher that the results of this study will encourage administrators and educators in higher education to examine and build on their existing study abroad programs. Furthermore, the researcher is confident that this study has not only added to the pool of research in international education but also has contributed to the literature on the island model study abroad program. As has been

noted, international educators and administrators have ample anecdotal evidence from students about how island model programs have made a positive impact on their learning experience, but this study has gone further by providing empirical evidence that this type of program can improve the cross-cultural adaptability skills of students and afford them an opportunity to gain a better understanding of other peoples and cultures.

Recommendations

In an effort to contribute more research to international education and to build on the findings of this study, the following section covers recommendations for future use. These are broken down into suggestions for further studies and for proposed applications that could be employed in institutional practice.

Recommendations for Further Studies

In order to more thoroughly understand the advantages and disadvantages of the various types of study abroad programs, researchers need to carry out more studies to investigate the differences in cross-cultural adaptability skills and intercultural sensitivity of students enrolled in island programs as compared to direct enrollment programs, in which students have the opportunity to be fully immersed in the host culture. The purpose of this research would be to find out how participation in different types of programs affects the development of students in the dimensions that have been examined in this study, and to use the data collected to assess the relative effectiveness of each model.

While the current study has used a control group comprised of students who were planning to participate in the island program the following semester, it may be further illuminating to conduct the same study with a control group of students who had not anticipated studying abroad during their time in college. Educators and administrators

might obtain different perspectives on the intercultural sensitivity and cross-cultural skills of students who have varying degrees of interest in learning about and living in the midst of other cultures.

Additional research might also focus on how students who participated in courses on intercultural communication and cultural diversity on the home campus differ from those who have participated in the island program. The purpose would be to investigate what impact that course work in on-campus classes related to intercultural learning has on the cultural sensitivity and adaptability skills of these students as compared to those who have completed a study abroad experience.

In a related vein, more analysis is needed in order to examine the effect of cross-cultural training programs on the participants in the island study abroad program prior to departure and upon return compared to another group in the same program that did not have the pre- and post-experience of cross-cultural training. This information would be helpful to administrators in deciding whether cross-cultural training programs enhance the learning outcomes of study abroad students and thus result in a higher level of cross-cultural skills development.

In addition to comparative studies of a quantitative nature, it may be useful to investigate in a qualitative manner what students in an island model program have learned and assimilated on a personal level, beyond the impact on measurable intercultural sensitivity and cross-cultural adaptability skills on which the current study has focused. Given that this type of program allows students from the same nationality to stay, travel and study together as a group in another culture, it would be interesting to find out how such a model may assist in the broadening of character in such areas as

empathy, compassion and the development of interpersonal bonds among peers who have shared the experience abroad.

Another important area of potential research would examine whether the study abroad experience has a lasting impact after students return to their home culture. Longitudinal studies would help educators and administrators understand the effects of time on the intercultural sensitivity and cross-cultural skills of students in island model and other types of study abroad programs.

On the other side of the coin, it would also be interesting to explore the development of intercultural sensitivity and cross-cultural adaptability skills of international students who study in the U.S., using the IDI and CCAI instruments, and comparing the results to a group a U.S. students participating in an island model study abroad program over a semester-long period. This information would provide insights on how different groups of students develop intercultural competence based on different cultural context and level of immersion in the host culture.

The present study was conducted using a predominantly Caucasian population in a mid-size private institution. Further research similar to this is needed in academic institutions with a larger non-Caucasian population, so that a more diverse group of students can be tested in future studies. Similarly, the researcher would recommend a study in which students go abroad to non-Western countries, which, as we have seen, are sorely underrepresented in the likely destinations for island model and traditional programs alike.

With respect to the use of potentially different models for research, it may also be beneficial to educators to conduct a "portraiture" study that essentially follows a single

student in order to focus more closely the individual cultural experiences through personal narration. Moreover, a mixed research design combining a qualitative and quantitative approach may reveal richer and more in-depth data on the experiences of students during their study abroad experience. A qualitative measure incorporating portraitures could provide more supportive documentation of the quantitative statistical results.

Along these lines, it would also be beneficial to conduct a study of island model programs at other institutions. A comparative analysis using a similar sample size from other institutions' island programs might indicate if such a model has the same kind of impact on students in various academic institutions as was revealed in the current study. Furthermore, additional research that focuses on the duration of island programs in different academic institutions would be useful. Information on the impact of programs of varying lengths might assist educators and administrators in deciding the optimum duration of these programs.

With respect to the testing methods, research should be conducted that employs the instruments used together in this study, the IDI and CCAI, each in separate inquiries. During the data collection process for this paper, the students were asked to complete the CCAI instrument first and IDI immediately after, answering a total of 100 questions. The length of the surveys and the order in which the students completed the surveys might have had an effect on the responses, and ultimately the collected data. Future research using only one of these instruments on the examination of the island model programs would provide information on whether the results would be different or similar to this study.

Also, although the IDI and CCAI instruments have been tested for their validity and found to be effective as scientific research tools, future studies should be conducted employing other validated instruments on the measurement of intercultural sensitivity and cross-cultural skills, such as Olsen and Kroeger's (2001) Global Competency and Intercultural Sensitivity Index (ISI) and Chen & Starosta's (2000) Intercultural Sensitivity Scale. The information would allow for comparisons and a wider understanding of students' learning experience.

Ideally, future analysis of island model programs would build on the results of this study and investigate students' lack of progression in the *Denial/Defense* and the regression in the *Reversal, Minimization and Encapsulated Marginality* scales of IDI upon their return to the home campus. It would be also interesting to find out what exactly led to the regression and lack of progression. In addition, a qualitative approach or focus group model might allow the researchers to dig deeper and to gather information from students' experience in the host country.

Finally, from a practical standpoint, the literature review indicates that parents, administrators, advisors and students are interested in discovering if a study abroad experience during college is an investment that would enhance the ability to thrive in a multinational organization or in other international endeavors (Vande Berg, 2001). In light of this, it is important for more longitudinal research to be done to investigate how many alumni students who have participated in the island model and other types of study abroad programs are working in an international arena, or report that the study abroad experience had a significant impact on their career development. This information would

be helpful to all the stakeholders interested in the learning outcomes of a study abroad experience.

Recommendations for Institutional Practice

Although the results of the study imply that the participants of the island program experienced growth in some dimensions of IDI and almost all of CCAI, it would be interesting to explore the effect of supplemental intervention on students. Given that both the IDI and CCAI instruments are useful for tools for the development of intervention strategies (Hammer, 2007, Kelley & Meyers, 1995), it would be of interest for academic institutions to investigate the impact of such strategies on students. One of the ways that students might further develop their intercultural skills could be through cross-cultural training sessions based on the different stages of the DMIS and scales of the IDI and CCAI prior to their departure and upon their return to the home culture. Journal-keeping, occasional focus group discussions on cultural differences, and more opportunities for interaction with host natives during their stay might also help students reflect on what they are experiencing and deepen their understanding of more complex issues in cultural differences.

Further information may be generated from this study regarding the differences and similarities in the responses of participants from the different schools within the university under consideration. The Office of International Programs in various institutions may find such information useful in the preparation of its study abroad orientation sessions. In any case, it is vital for educators and administrators in higher education to regularly assess the goals and objectives of their program. Frequent assessment in the form of quantitative or qualitative research is needed to discover and

document the development of students who have had study abroad experiences. Input from faculty and the program director would certainly be helpful in evaluating the success of the programs.

Given that there is dearth of research on island models study abroad programs, administrators in higher education should find ways to share the results of their studies among each other, once they identify an institution offering such programs. The information will not only benefit the administrators, but also students who are weighing the pros and cons of different types of study abroad programs before deciding on an opportunity to gain cross-cultural experience.

Finally, upon their return students should be provided with opportunities to continue to share their reflections on the study abroad experience through face-to-face group meetings or via the Blackboard program using the blog option. It would be interesting to carry out follow-up studies to explore how the students evaluate their own intercultural sensitivity and cross-cultural adaptability skills and how they re-assimilate in their home culture after a few months on campus.

Conclusions

Today's interconnected world requires individuals to recognize and understand cultural differences as well as develop the ability to live effectively in other cultures and to interact effectively with people from other societies. This research concludes that a semester-long island model study abroad program can have a positive impact on students' intercultural sensitivity, particularly in its dimension of *Acceptance/Adaptation.* The study also found that the students who studied abroad demonstrated a higher ability to accept and adapt to cultural differences than the students who studied solely on campus.

In the absence of additional gain in the other scales of the IDI, this may suggest that additional incentives should be introduced to encourage students to continue along the path of higher understanding of cultural differences that the island model and other programs seek to promote.

This study also provides conclusive evidence that a semester-long island model study abroad program has a positive impact on students in many other areas. The students who studied abroad in a semester-long island program improved their overall cross-cultural adaptability skills and significant changes occurred in the Personal Autonomy, Flexibility/Openness and Emotional Resilience dimensions, while the students who studied on campus exhibited no significant change in those areas. Such results demonstrate that an island model program significantly contributes to students' ability to not only function in and adapt to our multicultural world but also to gain more independence, self-confidence, flexibility and openness.

It is also hoped that educators and other leaders in higher education will find this study to be a valuable resource in helping them make decisions about the importance of international education and study abroad programs. As the researcher recognizes the significance of intercultural awareness and cross-cultural skills in this global community, it is crucial for colleges and universities to prepare individuals to deal effectively with a variety of cross-cultural situations. In this day and age of accountability, the findings of research such as this should assist educators and administrators in weighing the effectiveness, in terms of cost and learning potential alike, of the various types of study abroad programs.

One central point that this present study clearly demonstrates is that not only should island model and other programs continue to be promoted, but also that they need to be assessed in an in-depth and consistent manner to ensure that they are designed to be personally fulfilling and at the same time beneficial in both practical and humanitarian ways. For there is no doubt that, if one of the goals of higher education is to produce a generation prepared to face the challenges of the global universe, then programs like study abroad that cultivate knowledge of other cultures and understanding of what it takes to survive in a diverse world, are vital to that mission.

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APPENDICES

APPENDIX A: LETTER OF CONSENT

Letter of Consent

An "island" study program and its impact on the intercultural sensitivity and cross-cultural adaptability of its participants: Perspectives from a research intensive university

Investigator: Gita Maharaja
447 Pinkerton Road
Wexford, PA 15090
(724) 935-9442
(412) 396-6396

Faculty Advisor: Dr. Derek Whordley
School of Education
(412) 396-6599

Thank you for considering participation in this study. This study is being performed as partial fulfillment of the requirements for the Doctoral degree in Instructional Leadership in the School of Education at Duquesne University.

The purpose of this study is to investigate how study abroad experience and on-campus classes develop students' intercultural sensitivity and cross-cultural adaptability. You are being asked to complete the attached survey and research instruments that will require approximately 25-30 minutes of your time. Because this is a pre- and post-test study, you'll be asked to complete the survey and instruments again at the end of the Fall 08 semester. These will be the only request that will be made of you.

There are no risks greater than those encountered in everyday life. The information obtained through your participation in this study will contribute to the research in the area of international education. The study will be of benefit to educators and administrators in higher education.

There will be no compensation for your participation in this project. Participation in this study will require no monetary cost to you. Your name will never appear on any survey or research instruments. No identity will be made in the analysis of the data. The researcher will have identifiers of the students who participate in the study, however, will not hold identifiers to specific survey responses. The responses will only appear in statistical summary forms. A summary of the results of this project will be supplied to you, at no cost, upon request. To request a copy of the results, please contact the researcher at the contact information listed below.

You are under no obligation to participate in this study. You are free to withdraw your consent to participate at any time.

For security purpose, the survey, instruments and consent forms will be

stored in a locked file in the researcher's home. All materials will be destroyed at the completion of the study.

I have read the above statements and understand what is being requested of me. I also understand that my participation is voluntary and that I am free to withdraw my consent at any time, for any reason. On these terms, I certify that I am willing to participate in this research project. I understand that should I have any further questions about my participation in this study, I may call the investigator, Gita Maharaja (724-935-9442), the Faculty Advisor, Dr. Derek Whordley (412-396-6599), and the Chair of the Duquesne University Institutional Review Board, Dr. Paul Richer, (412- 396-6326).

Participant's Name: _____ Date:

Participant's Signature: _____ Date:

Researcher's Name: _____ Date:

Researcher's Signature: _____ Date:

APPENDIX B: REQUEST FOR CLASSROOM PARTICIPATION

Request for Classroom Participation

An "island" study abroad program and its impact on the intercultural sensitivity and cross-cultural adaptability of its participants: Perspectives from a research intensive university.

This study is being performed as partial fulfillment of the requirements for the Doctoral degree in Instructional Leadership in the School of Education at Duquesne University.

The purpose of this study is to investigate how study abroad experience and on-campus classes develop students' intercultural sensitivity and cross-cultural adaptability. This study will contribute to the body of knowledge in the area on international education and will benefit administrators and educators in higher education. I am requesting permission to administer the survey and instruments which will require approximately 25-30 minutes of class time at the beginning and end of the semester. Because this is a pre- and post-test study, I am asking you permission to administer the surveys at the beginning and end of the fall 2008 semester. This will be the only request made of you. You are under no obligation to accept my request.

You may contact me at the phone number or email address below or the Faculty Advisor, Dr. Derek Whordley (412- 396-6599), and Dr. Paul Richer, Chair of the Duquesne University Institutional Review Board at (412) 396-6326 if you have any questions regarding this request.

Gita Maharaja
447 Pinkerton Road
Wexford, PA 15090
(724) 935-9442
maharaja@duq.edu

I have read the above statements and understand what is being requested of me. On these terms, I certify that I am willing to grant you permission to administer the surveys in my classroom.

Instructor's Signature: Date:

Researcher's Signature: Date:

APPENDIX C: DEMOGRAPHIC INFORMATION

Demographic Information – Please choose one for each below.

1. Gender

☐ Male

☐ Female

2. Age

☐ 18-20

☐ 21-23

☐ 24+

3. Classification

☐ Freshman

☐ Sophomore

☐ Junior

☐ Senior

4. Ethnicity

☐ African American

☐ Caucasian

☐ Hispanic

☐ Asian

☐ Other

5. Residence/Immigration Status

☐ US Citizen

☐ Permanent Resident

☐ International Resident

☐ Other Non-Immigrant Status

6. In what country did you primarily live during your formative years to 18?

☐ United States

☐ Other (please indicate) _____

7. What is your first language?

☐ English

☐ Other (Please indicate)_____

8. Amount of travel time in another country

☐ Never traveled or lived in another country

☐ 1-4 weeks

☐ 5-16 weeks

☐ 17-52 weeks

☐ 1 + years

9. In which school are you enrolled at the university?

☐ Business

☐ Education

☐ Health Sciences

☐ Liberal Arts

☐ Music

☐ Nursing

☐ Pharmacy

☐ Natural and Environmental Sciences

10. Have you declared your major? ☐ yes ☐ no

If yes, indicate here _____

APPENDIX D: FINDINGS OF IDI INSTRUMENT

Figure 1. Acceptance and Adaptation

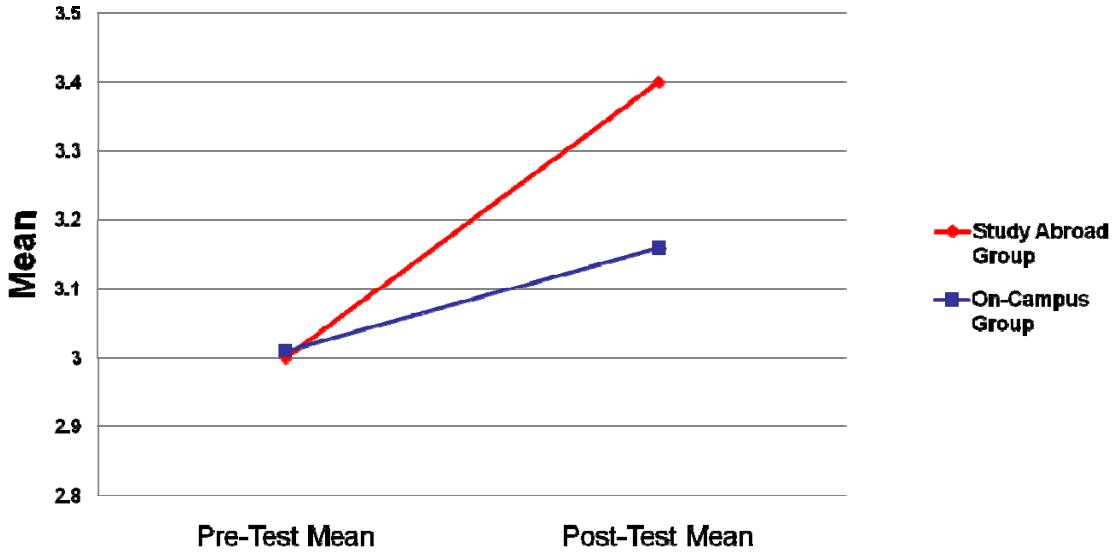

Figure 2. Emotional Resilience

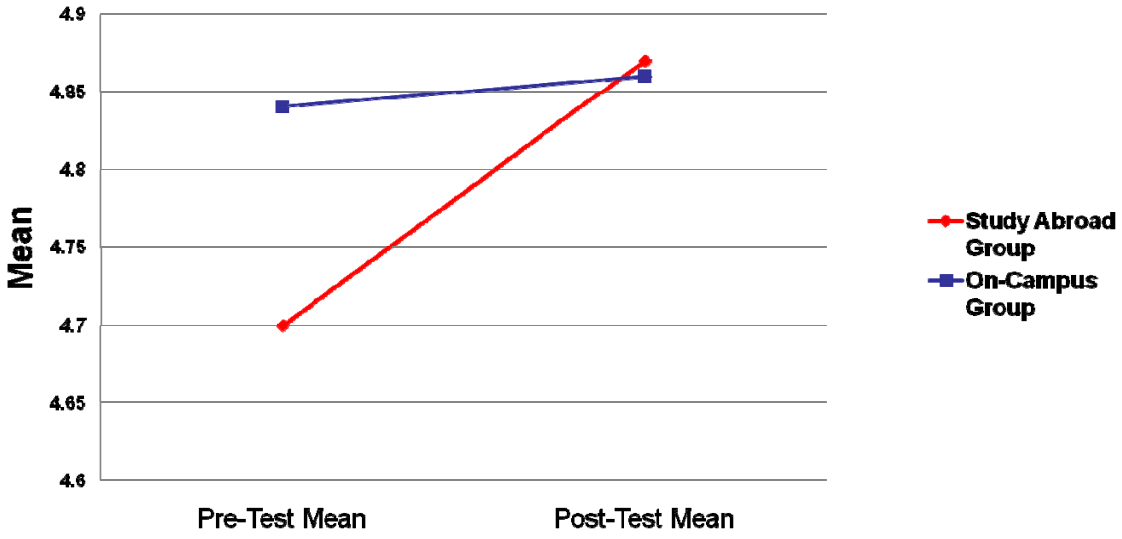

Figure 3. Flexibility and Openness

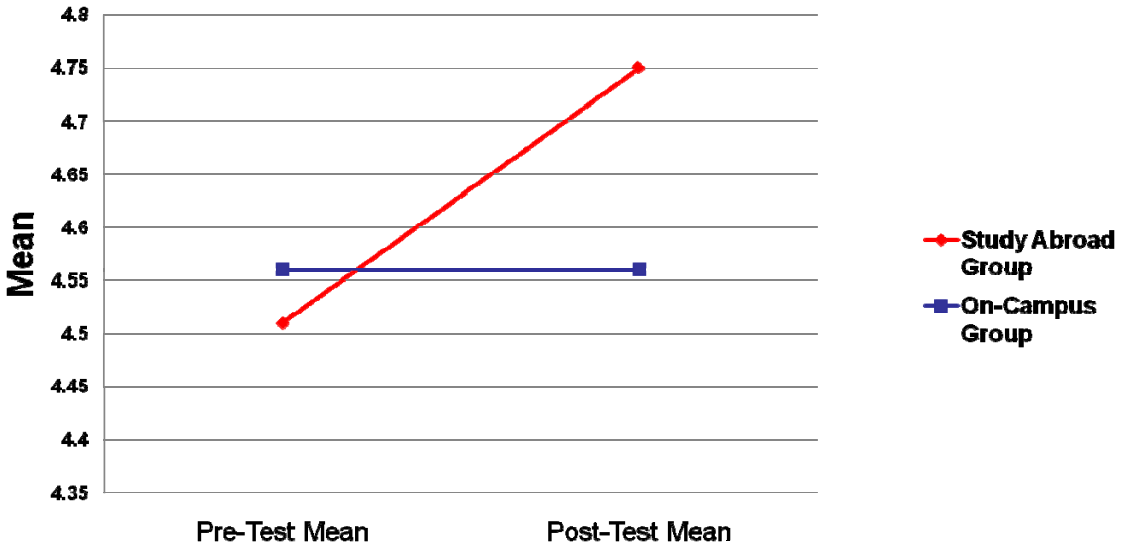

Figure 4. Personal Autonomy