CHANGE IN MEASURED NONCOGNITIVE VARIABLES: A QUANTITATIVE EXAMINATION OF THE INFLUENCE OF SHORT-TERM STUDY ABROAD EXPERIENCES

By

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A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Higher, Adult and Lifelong Education

2013
ABSTRACT

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Students have different motivations for participating in education abroad experiences. Short-term study abroad programs offer students the opportunity to experience education abroad without spending an entire semester or year abroad. As a result of these opportunities, short-term study abroad programs have emerged to meet the demands for students who are interested in international educational abroad opportunities.

The purpose of my study was to examine the influence of short-term study abroad programs on change in noncognitive variables. The term noncognitive is used to refer to variables relating to adjustment, motivation, and perceptions (Sedlacek, 2004). Noncognitive variables have been useful in assessing students and also serve as a predictor of success for students. The eight noncognitive variables identified by Sedlacek (2004) that I examined were: Positive self-concept, Realistic self-appraisal, Successfully handling the system, Long-range goals, Strong support person, Leadership experience, Community involvement, and Knowledge acquired in a field.

The goal of this study was to investigate the change in noncognitive variables before and after participation in short-term study abroad programs. The results of my study support the ideal that short-term study abroad programs have an influence on noncognitive variables. Specifically of the eight noncognitive variables that were examined the following five exhibited changes from their initial examination: Positive self-concept, Successfully handling the system,
Long-range goals, Leadership, and Knowledge in a field. Furthermore, the results indicate that there are some specific factors that influence the change in noncognitive variables, these factors are: previous travel abroad, first time experience studying abroad, living with a family while abroad, and the geographic region which the short-term study abroad program takes place.
I dedicate this dissertation to my wife Bridgette Motley, my daughter Gisele Motley, my son Maxwell Motley, my mother Louise Motley and my father Lefrich Motley (deceased).
ACKNOWLEDGEMENTS

I would like to express my gratitude to my Guidance Committee. First, to my advisor, Dr. Kristen A. Renn, thank you for your guidance and your unlimited patience with me. I could not have asked for a better advisor to take me through each step of my dissertation process. I will forever be grateful and indebted to you for your wisdom. To Dr. Matthew R. Wawrzynski, thank you for accepting me as part of a Michigan State University team that presented at Nelson Mandela Metropolitan University in Port Elizabeth, South Africa. It was a conversation with you on the plane from Port Elizabeth to Cape Town that I began to develop my research question. Thank you for making me think about studying abroad from a different lens. To Dr. John Dirkx, thank you for writing my letter of recommendation for the Higher, Adult, and Lifelong Education program and your willingness to listen to my questions about short-term study abroad. You have provided me with a deeper understanding of adult learners and qualitative research methods. To Dr. John Metzler, whom I think of as my mentor and good friend. It was with you in 1995 that I went abroad for the first time in my life to Zimbabwe. That experience unknowingly changed my focus in life and began my quest to understand more about short-term study abroad programs. I want to also thank you for taking me abroad again in 2006, this time as faculty leader on a freshman seminar abroad to South Africa. You have supported of my higher education and career goals for over seventeen years and I want to say Thank You!

Thank you to the Department of Student Life at Michigan State University for taking me on as a graduate assistant for four years and treating me as a colleague. I want to acknowledge the entire Department of Student Life Staff: Dr. Lee June, Dr. Denise Maybank, Toni Fredline,
Rick Shafer, Tammye Coles, Fred Watson, Trace Camacho, Cathy Neuman, Kelly Schweda, Rob Biddle, Jan Winsor, Lisa Vanwelsenaers, and Amanda Scharnweber.

I also want to thank Dr. Pat Crawford, Senior Director for the Bailey Scholars Program, for taking me on to participate in study abroad research, and accepting me as a Bailey Scholar Graduate Fellow. I want to thank the Office of Study Abroad and Brett Berquist, Cindy Felbeck Chalou, Dr. Inge Steglitz, and Barbara Patterson for your support while working on my dissertation. I also want to thank Julie Rowan, Sheryl Mauricio, and Dr. Kristin Moretto my dissertation writing group. Thank you ladies, for keeping me focused and the countless days of finding a place to write in East Lansing. Thank you to Keith Williams and Ann Graves in the Office of Financial Aid for making sure that I always had enough money to get my books and supplies.

Finally, I want to thank my wife Bridgette for keeping me motivated through this entire process. Thank you for being my best friend and the love of my life. I also want to thank my children Gisele and Maxwell, who give me inspiration everyday of my life. I hope this dissertation will serve as motivation for my children to continue with your goals. Now that it is done, we can all hang out together!
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CHAPTER ONE

Introduction

The desire among students in higher education to study internationally for the purpose of enhancing and supplementing their academic coursework is on the rise (Abraham Lincoln Study Abroad Fellowship Program, 2005). However, the time involved in a semester or year-long study abroad experience makes it increasingly difficult to recruit students willing to engage in such a lengthy commitment (Chieffo & Griffiths, 2009). As a result, short-term study abroad programs have emerged to meet the demands for students who are interested in international educational opportunities but are unable to make a commitment to a semester or year abroad.

Students have different motivations for study abroad. Many scholars believe students who typically study abroad want to acquire cross-cultural skills and develop interpersonal skills (Bennett, 2008; Chambers & Chambers, 2008; Lalley, 2009; Lou & Bosley, 2008; Savicki, Binder, & Heller, 2008). Other scholars contend that participation in study abroad programs has significantly influenced the students’ personal growth while providing value to the campus community upon their return (Brubaker, 2006; Day-Vines, Barker, & Exum, 1998; Hembroff & Rusz, 1993; Lou & Bosley, 2008). Still other scholars acknowledged participation in international experiences could have a significant influence on the ability to develop cross-culturally and improve global competence (Abraham Lincoln Study Abroad Fellowship Program, 2005; Calhoon, Wildcat, Annett, Pierotti, & Griswold, 2003; Ingraham & Peterson, 2004; Sutton & Rubin, 2004). Finding ways to prepare for integration into a more global and diverse society is becoming more relevant, and study abroad programs seek to equip students with tools necessary to internationalize and globalize the higher education experience.
Higher education must develop programs that consider the needs of diverse students (Duderstadt, 2000; Sedlacek, 2004). Stanitski and Fuellhart (2003) acknowledged that study abroad opportunities serve to enlighten students in ways not possible in a traditional classroom setting. Sowa (2002) noted study abroad programs provide insight into the method in which colleges and universities in the United States are working toward internationalizing and globalizing higher education and providing students with an additional lens to view the world.

Knowledge and skills participants acquired from the study abroad experience are important to the development of students (Stanitski & Fuellhart, 2003). There is a widely accepted assumption that international education exchange will benefit the student in ways that are not always immediately noticeable upon their return from the experience (Black & Duhon, 2006; Fels, 1993). This assumption is supported as Kitsantas (2004) discovered participation in study abroad programs provided students with the opportunity to view the world from new and different perspectives. In addition to academic coursework, students can benefit from global study by gaining insight into the experience of traveling, studying in another country, and understanding other cultures. According to Wilson (1985) the way one understands other cultures through a study abroad experience will affect lives.

Experiential learning in other cultures supports post-secondary education students’ desire to become acquainted to global issues as well. Study abroad programs are a means to provide students with a healthy dose of experiential learning (Hopkins, 1999). Promoting and democratizing undergraduate study abroad is the next step in the evolution of American higher education (Abraham Lincoln Study Abroad Fellowship Program, 2005).
Participation

The literature suggests study abroad programs have been on the rise since the 1950s when programs were available for college students primarily in their junior year (Pfnister, 1969). Studying abroad has in recent years been used as a means to fulfill both the general and liberal education requirements of many American colleges and universities (Hopkins, 1999). A disparity continues to exist in the demographics and backgrounds of students who were study abroad participants in the early years, and the students who are current participants of study abroad programs. According to Lane (2003) students who were past participants in study abroad programs amounted to barely more than 1% of the students who attend college nationally.

Despite the current economic downturn, college students continue to participate in study abroad programs at record levels (Institute of International Education, 2009b; McMurtrie, 2005). The international terrorist attacks on September 11, 2001 did not appear to have a significant impact on students’ interest in traveling to countries outside of the United States. Study abroad programs have been on the rise nationally and increased 30% between the 2000-2001 and 2001-2002 academic years (Brown, 2002). However, the 2009 Open Doors report acknowledged study abroad participation decreased overall by less than 1% between the 2007-2008 and 2008-2009 academic years (Institute of International Education, 2009a). This trend reversed and by 2011 the Open Doors report revealed that study abroad by U.S. students was on the rise in 2010-2011 (Institute of International Education, 2011).

Defining Study Abroad

Study abroad, global study, and international education are terms that have been used interchangeably from the onset of study abroad programs (Abraham Lincoln Study Abroad Fellowship Program, 2005; Bakalis & Joiner, 2004; Carter, 1973; Chieffo & Griffiths, 2004,
However, I will use the term study abroad to describe any program that is pursued outside the geographical boundaries of the students’ country of residence. For the purpose of my study, I will use the term study abroad to denote global study outside of the United States.

Who Studies Abroad

Literature on the demographics of study abroad participants suggests a common trend among the majority of study abroad participants. They have historically been identified racially and ethnically as White, female, in their junior year of college, and majoring in the social sciences (Brown, 2002; Dawson, 2000; Day-Vines, et al., 1998; Hembroff & Rusz, 1993; Stewart & Talburt, 1999; Tolliver, 2000). During the 1995-1996 school year, the Institute of International Education (IIE) reported of the 85,000 undergraduates who studied abroad during the academic year only 2,348 (2.8%) were African-American (Dawson, 2000). There have been strides in research and practice to determine how to increase awareness in study abroad programs to reach populations that have not traditionally been participants (Calhoon, et al., 2003; Kasravi, 2009; Lucas, 2009)

The literature provides a historical outlook of the students who participated in study abroad programs and the demographics are consistent throughout. Based on the literature it is reasonable to conclude the demographics of study abroad participants are a reflection of students’ major areas of study. Hembroff and Russ (1993) concluded the largest source of study abroad participants came from colleges of arts and letters, which included majors in the foreign languages. However, the most recent data suggests the largest source of study abroad participants are majors in the social sciences, followed by business and humanities (Institute of International Education, 2009b). Students who studied abroad in 2008 with majors in foreign language were ranked seventh (Institute of International Education, 2009b), which is a
considerable change in the students who were participating in study abroad over 17 years ago (Freed, 1995).

**Student Destinations**

Previous literature in study abroad suggests 70% to 80% of those students who studied abroad traveled to Western Europe (Hembroff & Rusz, 1993). Conversely, the *Open Doors* report suggests that more study abroad programs will offer opportunities to study in the Middle East, Africa, and Asia (Institute of International Education, 2009a). The 2010 figures indicate that the United Kingdom is the top destination for American students participating in study abroad, followed by Italy and Spain (Institute of International Education, 2009b). Notable increases among leading destinations occur in the number of students going to less traditional places such as China, Ireland, Austria, and India (up about 20%), as well as Costa Rica, Japan, Argentina, and South Africa (up nearly 15% each) (Institute of International Education, 2009b). Many postsecondary institutions have seen an increase in destinations where English is the language of instruction (Institute of International Education, 2011) including faculty led programs in Africa and the Middle East.

**Theoretical Framework**

Astin (1993) advocates his input-environment-outcomes (I-E-O) model as a strategy for fully describing and assessing educational programs in student development. Astin’s model has been used extensively in higher education and a number of studies have been conducted using this model. Researchers have used this model to determine the influence of educational experiences on college students. One study used Astin’s model to examine whether college students’ participation in diversity related experiences instilled motivation to take actions for a diverse democracy (Zuniga, Williams, & Berger, 2005). The input characteristics in this study
included demographic information, year in college, and pre-tests relative to motivation to actively reduce prejudices, environments were introduced to students as they participated in relevant aspects of diverse interactions of the college experience, and the outcomes were the results of students’ motivation to actively reduce their own prejudices and take actions to promote diversity and social justice (Zuniga, et al., 2005). As a result of their study Zuniga, et al. (2005) reinforced the importance of providing diversity oriented opportunities in classrooms, in residence halls, and across campuses, to provide students who are already inclined to take social justice orientated actions with experiences that support their further development.

Furthermore, Villalpando (2002) examined the differential impact of a range of college diversity initiatives on White, African-American, Mexican-American, and Asian-American college students. Villalpando also used Astin’s I-E-O methodological framework for assessing student change. Gender, high school grades, and college entrance examination scores were used as input variables, environments were introduced to students as the institutional diversity and faculty diversity, and the outcomes included measurable changes of the students after having been exposed to the college environment (Villalpando, 2002). The results of the study support the idea that emphasizing multiculturalism on college campuses leads to generally positive outcomes (Villalpando, 2002)

Similarly, Mahan (2010) used Astin’s model to study the experience of first-generation students at a small independent university. His study was intended to measure student engagement, learning, and satisfaction. First-generation students were used as the input variable, environments included many simultaneous experiences and outcomes focused on the student characteristics after the experience (Mahan, 2010).
Astin’s model can be used to describe the components of short-term study abroad as well. According to Astin’s model: input refers to the characteristics of the student at the time of initial entry into the study abroad experience; environment refers to the various components of the program, policies, faculty, peers, residential experiences, and educational experiences to which the student is exposed; and outcomes refer to the student’s characteristics after exposure to the short-term study abroad experience. Change or development in the student during this study abroad experience is determined by comparing outcome characteristics with input characteristics (Astin, 1993). The short-term study abroad experience serves to focus on a population of students with a unique adventure related to motivation and personal development. Astin’s I-E-O model represented with demographic variables, noncognitive variables, and the influence of short-term study abroad programs is denoted in Figure 1.
Figure 1. Conceptual Framework for Astin’s I-E-O model and the effects of short-term study abroad programs on non-cognitive variable outcomes.
Short-Term Study Abroad

The popularity of short-term study abroad programs is a result of more students wanting an educational experience abroad but realizing the time abroad may produce a financial hardship and have an impact on securing job opportunities during the school year (McMurtrie, 2007). Short-term study abroad programs can be as short as seven days and as long as 12 weeks. Short-term study abroad programs take place at different points during the academic year, and these programs can occur at specific times during the months of December, January, March, May, June, July, and August. Furthermore, short-term study abroad programs are typically eight weeks or less during an academic semester (Institute of International Education, 2011). However, the growing trend is to define short-term study-abroad in terms of programs lasting less than an entire semester (Brown, 2002; Lewis & Niesenbaum, 2005a; McMurtrie, 2007; O'Sullivan, 2001). For the purpose of my study, I will define short-term study abroad as those programs that last for 8 weeks or less and provide academic credit for students.

A short-term study abroad program can consist of traveling to one or more locations abroad with a member of the faculty, listening to lectures from local instructors, and experiencing fieldwork or a service-learning component, all within time constraints of a period of less than a semester (Chieffo & Griffiths, 2009; Sindt & Pachmayer, 2007). Scholars contend there are multiple ways to have meaningful study abroad experiences and assert that short-term study abroad programs provide students with these meaningful experiences in global and cultural immersion (Chambers & Chambers, 2008; Lou & Bosley, 2008). Short-term study abroad programs bring faculty and students together for meaningful cultural and community experiences.
According to some scholars, the students who participate in short-term study abroad programs have been identified as either students who have an obligation to work or employees who have a desire to study (Chieffo & Griffiths, 2009). Students who are participants in short-term study abroad programs are diverse in terms of their background, age, diversity, and prior experience. The diversity in student demographics along with the desire to engage in study abroad can make short-term study abroad programs more appealing.

Short-term study abroad programs have the ability to gain increased momentum in higher education because of the appeal to participants whose characteristics are in line with diverse and non-traditional populations. The diverse and non-traditional population characteristics are evident as one begins to explore short-term study abroad programs at community colleges, colleges in the for-profit sector, and traditional 4-year degree granting institutions. The short-term study-abroad program model offers more flexibility to students with financial challenges and time constraints (Sindt & Pachmayer, 2007). The shorter time abroad is more attractive to those students who cannot afford to leave their families or jobs for an extended period of time. Therefore, short-term study abroad programs are the likely choice for many students who desire the experience of learning abroad but who have family, academic, financial, and employment obligations.

Recent trends have shown students’ desires to participate in short-term study abroad programs and these programs provide students with an alternative method to participate in an overseas experience without devoting an entire semester away (Lewis & Niesenbaum, 2005a; McMurtrie, 2007). Conversely, there are scholars who recommend the time spent abroad on the short-term study abroad experience should be lengthened to provide students with a richer experience (DeDee & Stewart, 2003). However, for some students being apart from home for
less than an academic semester may be the only academically and financially viable study abroad option available.

Experts in the field acknowledge that viable short-term study abroad programs must balance academic content, cultural activities, and select types of learning activities to increase cross-cultural exposure, personal development, and diverse learning (Koernig, 2007; Lucas, 2009). Many scholars acknowledged the desire of students to enroll in postsecondary education in recent years, and contend that students continue to enter higher education with diverse backgrounds (Braxton, 2000; Duderstadt, 2000; Kuh, 2005; Sedlacek, 2004). However, given the diverse nature of students’ backgrounds there is not an agreement on which components of short-term study abroad programs provide students with the best opportunity to make meaningful academic and social connections to enhance their study abroad experience and personal development.

One study contends students who participated on a single short-term study-abroad program were more likely to participate on a second short-term study-abroad program in the future (Lewis & Niesenbaum, 2005a). These short-term study abroad programs grant students the opportunity to interact with other students from both their home and visiting institutions in a short time frame but in a highly concentrated learning environment. The environment is highly concentrated because the faculty and program leaders are often expected to cover the equivalent of two or more classes in this shortened time period (Stanitski & Fuellhart, 2003).

Koernig (2007) contends that during a short-term study abroad program it is important to facilitate student interaction within the group so that the students feel comfortable interacting with a variety of students and building relationships with their peers on the study abroad experience. In order to build individual relationships while abroad, students should understand
the limitations of one-on-one interaction, especially if most time is spent interacting within a group. Bakalis and Joiner (2004) emphasized the importance of student interactions and contend that students with a higher degree of openness to new ideals and relationships are more likely to participate in a study abroad program.

Displaying problem solving skills is a key component noted for students to build positive relationships (Sedlacek, 2004). Positive relationships are accomplished as students begin to interact more casually with the faculty, program leaders, and the students on the study abroad program. Student participants in short-term study abroad programs are presented with many opportunities for problem solving, which require them to learn something about culture and personal development to make good decisions (Brubaker, 2006).

**Faculty and Program Leaders**

Scholars contend that the use of instructive strategies has an influence on the students (Barr & Tagg, 1995; Bok, 2006; Stanitiski & Fuellhart, 2003). Additionally, other scholars underscore the value of positive relationships with faculty members and faculty leaders (Smith, MacGregor, Matthews, & Gabelnick, 2004; Umbach & Wawrzynski, 2005). The relationship between the faculty leader and the student peer group members must be meaningful in the abbreviated period in short-term study abroad programs. Tinto (1993) argued that developing relationships early is key to the success of the student and their experience. How these relationships develop in a group setting abroad may have an impact on how well the student is able to integrate the academic learning and social development of the experience. Learning communities must create spaces for students to interact more closely with faculty and with fellow students (Smith, et al., 2004; Umbach & Wawrzynski, 2005). Furthermore, one must understand how the academic and social integration of the short-term study abroad experience
further influences the development of the student while abroad and subsequently upon their
turn to their home country.

**Development of the Student**

Some scholars contend that students who are willing to study abroad in a cultural climate that differs significantly from their personal cultural experience benefit most from study abroad programs (Douglas & Jones-Rikkers, 2001). One can infer that the site of the short-term study abroad program has a significant influence on a student’s academic development and social integration of the experience. Still others agree that the ability to speak English to communicate with the local residents has a greater appeal to student who are reluctant to participate in study abroad programs due to language requirements, these students are excited about the opportunity to interact with people in other countries but find it easier to communicate in English (Metzler, 2002).

Equally important is the notion that background demographics such as prior experience, field of study, gender, age, race, socio-economic status, and preparation for college, play in the willingness for an undergraduate student to select a site and program to participate. One can infer that the prior experience, personality, and background have an influence on where a student chooses to travel on a short-term study abroad program. The personality characteristics considered important when considering a site to study abroad are openness and tolerance of ambiguity (Bakalis & Joiner, 2004).

According to Bakalis and Joiner (2004) openness is discussed as the extent to which an individual is open to a wide variety of stimuli. Students who experience openness would be more likely to engage in experiences and dialog with colleagues who are and have diverse experiences from their own. Bakalis and Joiner (2004) define intolerance of ambiguity as the
tendency to interpret ambiguous situations as sources of threat. Those students who interpret anything unknown as a threat may view the overall study abroad experience as less than positive. Understanding why students choose specific short-term study abroad programs based on the site, faculty involvement, or the curriculum is necessary to explore which study abroad design models are better indicators of positive student outcomes and impact the students’ academic integration, social integration, and personal development.

**Living Arrangements**

The living arrangement influences the academic integration, social integration, and personal development of a student participating in short-term study abroad experience. Home stays allow students to live with a local family to gain a better understanding of the culture, and lifestyle of the country. Group stays allow students to experience short-term study abroad programs with peers and faculty leaders in an environment similar to living in a residence hall. Scholars agree that home stays provide students with the advantage of being fully immersed in the culture of the home country and is one very useful strategy to learn another language (Freed, 1995; Salaberry & Lafford, 2006). However, I assert that faculty leaders provide invaluable information on a short-term study abroad program and the more time spent on the faculty-student interaction helps students to become adjusted quickly to the emerging group culture. The living arrangement and group environment of the short term study abroad program underscores the student-student and faculty-student relationships in the program. However, the faculty-student relationship may be a necessity for those students who require more assistance as well as for those students with greater needs.
Noncognitive Variables

Personal development attributes can be measured in the use of variables relating to adjustment, motivation, and student perceptions. These variables relating to adjustment, motivation, and student perceptions have been categorized as noncognitive variables (Sedlacek, 2004). Noncognitive variables have been linked to student persistence. The connection is especially salient for students who are first-generation college students. Noncognitive variables are increasingly used in admission to higher education institutions for both undergraduate and graduate student programs (Noonan, Sedlacek, & Veerasamy, 2005; Sedlacek, 2001).

Sedlacek (2001) maintains, successful students in higher education must possess the ability to adapt to a changing environment, handle the system, and negotiate the system. In addition there is support that suggests in order to offer the best possible education for all students, educators must develop academic programs that consider the needs of students with varying experiences and abilities (Sedlacek, 2004). Other scholars suggest that the ability to function effectively in an environment depends upon skills in recognizing and responding appropriately to the values and expectations of others (Anderson, Lawton, Rexeisen, & Hubbard, 2005). The evidence demonstrates that in a global society there is a need for people who are open to diversity, adaptable to change, and who thrive in uncertain complex situations (Bakalis & Joiner, 2004).

Some standardized tests rely solely on the traditional and typical verbal and quantitative areas. However, noncognitive variables are best described as a contextual intelligence and do not rely on the typical verbal and quantitative metrics. Contextual intelligence is based on the ability to handle the environment and negotiate the changing environment (Noonan, et al., 2005).
Through extensive empirical research, Sedlacek (2004) identified eight noncognitive variables. They are:

- Positive self-concept.
- Realistic self-appraisal.
- Successfully handling the system.
- Preference for long-term goals.
- Availability of strong support person.
- Leadership experience.
- Community involvement.
- Knowledge acquired in a field.

Many scholars have found that noncognitive variables have validity in determining the success of students in higher education for both traditional and non-traditional students (Noonan, et al., 2005; Sedlacek, 2001, 2004; Thomas, Kuncel, & Crede, 2007). Conversely, some standardized tests fail to take into consideration the background and experience of non-traditional students. Educators and administrators would like to be able to relate measurement results of noncognitive variables to long-term outcomes such as retention and graduation rates (Sedlacek, 2004). Measuring student’s reactions to short-term study abroad programs would help relate the results of noncognitive variables to the long-term success of students at the institution. Noncognitive variables are important components in the experience of short-term study abroad programs because they relate to student success.

**Purpose and Research Questions**

There are growing numbers of students participating in short-term study abroad programs. Because more students are participating in short-term study abroad programs, now
there is an opportunity to understand how this experience changes the student. The purpose of this study is to investigate change in noncognitive variables before and after participation in short-term study abroad programs. Therefore the research questions are:

1. Is there change in students’ noncognitive variables (NCVs) after participating in a short-term study abroad program?

2. What influence do environmental and structural factors have on changes in noncognitive variables (NCVs) of short-term study abroad participants?

3. Are there differences in students’ noncognitive variables (NCVs) based on demographic differences in short-term study abroad participants?

**Conceptual Framework**

There are no student development models or learning models specific to short-term study abroad or study abroad in general. The conceptual framework for this study is based on the characteristics of noncognitive variables and the potential changes from the experience of short-term study abroad programs. In addition, the study examines how students are introduced and integrated into the dual curricular and co-curricular environment of a short-term study abroad program. Literature related to learning outcomes of study abroad participation reveals three emergent themes categorized as intercultural competence, academic competence, and personal development (Anderson, et al., 2005; Deardorff, 2006; Lucas, 2009; Sindt & Pachmayer, 2007; Steinberg, 2007).

Intercultural competence addresses the concern that students are expecting to utilize their study abroad experience to gain an understanding of the world in a larger context (Deardorff, 2006; Sindt & Pachmayer, 2007). The study abroad experience expands ideals and students begin to think critically about the world and begin to examine the importance of their own
identities. Intercultural competence consists of cultural awareness, deep understanding and knowledge of culture, culture specific information, and sociolinguistic awareness (Deardorff, 2006). In addition intercultural competence relates to the broad goal of enhancing student appreciation of differences among cultures. Moreover, intercultural competence includes an individual’s ability to listen, observe, interpret, analyze, evaluate, and relate information (Deardorff, 2006). These attitudes and skills help to define study abroad programs as a chance for students to better understand new people, places, and cultures.

Academic competence demonstrates the academic expectations of students (Sindt & Pachmayer, 2007). Students begin to realize that short-term study abroad programs offer an opportunity to complete required courses, elective courses, and gain new academic experiences in a new context. Additionally, academic competence focuses on the specific discipline studied such as historical knowledge and geographical knowledge.

Personal development serves as an opportunity for maturation, and students have an opportunity to meet new people from another country, gain independence, and gain a greater sense of their own self in a larger context (Lucas, 2009; Sedlacek, 2004; Sindt & Pachmayer, 2007). Students begin to show development in short-term study abroad programs while exhibiting skills necessary for future leadership roles. In addition, personal development explores advancement in skills in areas such as confidence, personal identity, flexibility, and creativity. As an example, one study affirms students who studied abroad acknowledged making new friends and personal contacts as a benefit to their personal development (Bakalis & Joiner, 2004). Bakalis and Joiner (2004) showed that students who studied abroad acknowledged they developed increased confidence in themselves by discovering strengths, weaknesses, confronting fears, and testing themselves in another country.
Noncognitive variables determine how one is able to handle and negotiate the changing environment of a short-term study abroad experience. I investigate the change in noncognitive variables among participants of short-term study abroad programs. The assessment of noncognitive variables provide an increased understanding of the dimensions of short-term study abroad programs that begin to impact the personal development of students. My study begins to show the outcomes of short-term study abroad programs and how it influences noncognitive variables.

In this chapter I have identified short-term study abroad programs as an emerging trend in higher education (Abraham Lincoln Study Abroad Fellowship Program, 2005). This trend will serve to increase opportunities available for all students to learn in a global arena. This study is important because it investigates the relationship of short-term study abroad programs to noncognitive variables. Investigating the change of noncognitive variables among participants of short-term study abroad programs will provide an additional lens to further enhance current programs and provide direction for the development of new programs.

In chapter two I will examine previous research in short-term study abroad and provide a literature review of noncognitive variables. Furthermore, I will provide information regarding the definition of noncognitive variables. In chapter three I will provide my methodology and discuss, data collection, the population for my study, and the survey instrument used for my study. In chapter four I will discuss the results of my study. Finally, in chapter five I will provide a discussion of findings and implications of my results.
CHAPTER TWO

Literature Review

The following bodies of literature inform my study: short-term study abroad and noncognitive variables. In this chapter I provide a brief section on the benefits of studying abroad. The next sections contain a review of the literature examining each of these bodies in the following order: previous short-term study abroad research and the examination of noncognitive variables.

Benefits of Studying Abroad

Students are motivated to participate in study abroad programs for various reasons. Some students participate in study abroad programs due to both the intended and unintended benefits achieved from the experience. Study abroad programs have definite cultural, economic, and academic benefits and are also recognized as giving students better chances in the employment market (Niser, 2010). The benefits of study abroad programs may provide students with the opportunity to achieve personal growth as well. According to Wright (2010) students who participated in study abroad programs discovered an increase of their own strengths and skills, and the knowledge that people across the globe have basic similarities. Study abroad experiences can be especially conducive to students’ goals directing their own learning and addresses individual students interests and needs (Stewart & Talburt, 1999). Students need opportunities to study abroad that meet their individual comfort levels, educational goals, and career goals (Mills, Deviney, & Ball, 2010).

Students also experience improvements in their personal development, academic goals, and career interests as a result of studying abroad. Kitsantas (2004) discussed how studying
abroad improved students’ cross-cultural skills and global understanding. Kasravi (2009) addressed the fact that students who participated in study abroad programs experienced changes in self-image, academic goals, professional goals, and attitudes about their roles in society. Dawson (2000) noted their are long term benefits of studying abroad, but most importantly studying abroad complements a student’s career interests.

As a result of students’ desires and inability to make long-term commitments, short-term study abroad programs are fast becoming the preferred means of a study abroad experience. Study abroad programs are often being described as programs that comprehend how tourism and education cohere together in a travel context (Yu, 2008). The literature suggests that it is important for people to travel in their educational career so they can incorporate travel experiences into their lives (Dawson, 2000). According to Niser (2010) study abroad programs have more recently become open to a wider student population and that population is interested in the shorter term experience. It is evident that students desire the experience of study abroad, however many students are unable to commit to a program that extends into an entire semester.

Previous Research in Short Term Study Abroad

In recent years there have been a number of studies aimed at determining the influence of short-term study abroad programs on students (Anderson, et al., 2005; Brubaker, 2006; Calhoon, et al., 2003; Chieffo & Griffiths, 2004; Keefe, 2008; Lewis & Niesenbaum, 2005b; Mills, et al., 2010; Sindt & Pachmayer, 2007; Stanitski & Fuellhart, 2003; Wright, 2010). These studies employed the use of various statistical models and utilized mixed methods, qualitative, and quantitative approaches to their research. Through these studies and research techniques, various themes have emerged from the their findings. Themes that have emerged are: global competence, language acquisition, and global awareness.
Global Competence

There are several studies that were conducted to address global competence. Brustein (2006) defines global competence as the ability to contribute, comprehend, analyze, and evaluate knowledge in an increasingly globalized world. Sindt and Pachmayer (2007) conducted a study with the goal of retrieving data to begin identifying specific learning outcomes and enhancing program offerings in short-term study abroad programs. Participants in the study by Sindt and Pachmayer were from Arizona State University and the study sought to examine individual learning outcomes from short-term study abroad programs. Sindt and Pachmayer in their findings concluded that students who participated in short-term study abroad programs developed global competence, academic development, cultural attitudes, and personal development.

Keefe (2008) addressed the relationship between short-term study abroad courses, the development of global competency, and intercultural sensitivity on the part of students. The analysis of the data collected indicated that the travel portion of the short-term study abroad courses had no measurable influence on the participating students’ development of intercultural sensitivity. However, Keefe indicated the results of the study did identify growth in students’ self awareness and openness to other cultures. Self-awareness is a major component in global competence, intercultural competence, and personal development.

Language Acquisition

Study abroad can help enhance students’ language acquisition as well. Language acquisition has been defined as an enhancement in the understanding of a foreign language (Brubaker, 2006; Lewis & Niesenbaum, 2005a, 2005b). Lewis and Niesenbaum (2005b) conducted research on a 2-week study abroad component in Costa Rica offered as part of a
hybrid semester long on-campus course to develop language skills, research skills, and interdisciplinary research projects. Similarly, Brubaker (2006) conducted a study to understand how undergraduate students made sense of their daily cultural encounters as they participated in a six-week short-term language and cultural study program. In both studies, an essential component of the research focused on language acquisition (Brubaker, 2006; Lewis & Niesenbaum, 2005b).

Acquiring second language competency was the goal of some short-term study abroad programs. According to the survey response, a majority of the students surveyed by Lewis and Niesenbaum (2005b) noted short-term study abroad programs were more attractive than a full semester or a year abroad to acquire competency in a second language. Brubaker (2006) concluded that second language acquisition was important however, cultural learning should be considered a priority and explicit an endeavor as language learning. In other words, the cultural learning outcomes of short-term study abroad programs should be considered as a priority in the learning experiences of students. Additionally, central to course learning were interdisciplinary research projects that the students developed on campus and then pursued while in the country abroad (Lewis & Niesenbaum, 2005b). Lewis and Niesenbaum (2005b) discovered that while studying language abroad can have specific learning outcomes, additional outcomes may emerge from the short-term study abroad experience as well. These learning outcomes are evident as their study concluded that the research project was an essential learning tool to assist students with learning a second language.

**Global Awareness**

The primary interest of a University of Delaware research project was to determine whether students taking courses abroad acquired global awareness (Chieffo & Griffiths, 2004).
Chieffo and Griffiths (2004) define global awareness by four categories: intercultural awareness, personal growth and development, awareness of global interdependence, and functional knowledge of world geography and language. Global awareness is a theme that has been consistently noted among many scholars researching study abroad (Kitsantas, 2004; Koernig, 2007; Lucas, 2009; Stanitski & Fuellhart, 2003). While focusing on acquired global awareness, Chieffo and Griffiths overlook the deeper issue of the prior knowledge and experience that each student brings to the short-term study abroad experience. Some may challenge the prior experience issue and may contend that demographic variables can also provide information on students and this background information may provide a means to measure their global awareness.

In their findings Chieffo and Griffiths (2004) concluded that students who go abroad even for as little as one month learn how to perform tasks associated with international travel and global awareness. Based on the program structures and the geographical sites the research team expected that the broad range of short term study abroad programs at the University of Delaware would lend a generalizing element to the data (Chieffo & Griffiths, 2004). In addition, students had much to say about the experience in terms of the out-of-classroom learning (Chieffo & Griffiths, 2004). The out-of-classroom learning helped students make sense of the experience and discover global awareness through their engagement with people from other cultures.

Other scholars discovered from their research the need for students to be prepared for today's global work environment abroad as well as the increasingly multicultural work environment within the United States (Mills, et al., 2010). Mills et al. (2010) examined students participating in two short-term study abroad programs, one with a high level of comfort and the other where the cultural immersion provided a deeper and different experience. Mills et al.
determined it was important to have program formats that will attract a variety of students and provide programs that will not place students in an environment where their comfort zone might be stretched beyond their ability to adapt.

Wright (2010) conducted a study with nurse educators as they were prepared to meet the health care needs of a population they would serve in the future. The study abroad program was conducted with senior nursing students in a rural village in Botswana. The students who participated in this study recognized they were looking at another culture through their own cultural lens (Wright, 2010). It was also noted that for many of the students their world view changed and for some their plans for the future also changed to include the desire to work in a country outside the United States (Wright, 2010).

According to existing research in short-term study abroad, global awareness is acquired through personal growth of the short-term study abroad experience (Brubaker, 2006; Chieffo & Griffiths, 2004; Lewis & Niesenbaum, 2005a, 2005b; Mills, et al., 2010; Wright, 2010). Global awareness is one theme that is consistently mentioned when discussing short-term study abroad programs. These studies show being prepared for the global work environment and obtaining a sense of global awareness will work to the student’s advantage.

**Noncognitive Variables**

The term noncognitive is used to refer to variables relating to adjustment, motivation, and perceptions (Sedlacek, 2004). More recently, noncognitive variables have been useful in assessing students for admission into postsecondary institutions and serve as a predictor of the success of the student, as an example the Gates Foundation uses noncognitive variables to select Gates Millennial Scholars (Sedlacek, 2004). According to Sedlacek (2004) noncognitive variables were used as far back as the 1950s in attempts to include personal and social
dimensions in assessment. In addition, scholars have expressed a desire to look beyond
cognitive predictors of academic performance when making admissions decisions (Noonan, et
al., 2005). Noncognitive variables employ the use of experiential intelligence and contextual
intelligence. Experiential intelligence involves the ability to interpret information in a changing
environment (Noonan, et al., 2005). Contextual intelligence is the ability to adapt to a changing
environment and negotiate the system (Noonan, et al., 2005).

The Noncognitive Questionnaire (NCQ) was developed to assess attributes that are more
predictive of success in higher education for both traditional and nontraditional students
(Sedlacek, 2001; Thomas, et al., 2007). Work in assessing noncognitive variables with the NCQ
supports the idea that nontraditional students often tend to show their abilities through
experiential and contextual intelligence. An illustration of nontraditional students include
various racial-cultural groups who are often categorized as: international students, women, gay,
lesbian, bisexual students, athletes, students with learning disabilities or physical disabilities, and
older students (Sedlacek, 2001).

Noncognitive variables consisted of personality attributes, noting that personality
literature has yielded five series of traits (Sedlacek, 2004) they are:

- Extraversion
- Agreeableness
- Conscientiousness
- Emotional stability
- Intellect and imagination

Extraversion consists of demonstrating independence, decisiveness, and negotiating skills
(Sedlacek, 2004). Agreeableness includes relating and cooperating with others (Sedlacek, 2004).
Conscientiousness involves organizing, performing administrative tasks, following regulations, integrity, and motivation (Sedlacek, 2004). Emotional stability includes reacting to stress, adapting, and making decisions (Sedlacek, 2004). Intellect and imagination consists of planning strategically, demonstrating knowledge, analyzing, writing, and communicating orally (Sedlacek, 2004). The eight noncognitive variables as identified by Sedlacek (2004) are:

- Positive self-concept.
- Realistic self-appraisal.
- Successfully handling the system.
- Preference for long-term goals.
- Availability of strong support person.
- Leadership experience.
- Community involvement.
- Knowledge acquired in a field

*Positive self concept.* A positive self-concept is predictive of success in higher education for traditional and nontraditional students (Sedlacek, 2004; Thomas, et al., 2007). Successful students possess confidence, a strong sense of self, strength of character, determination, and independence (Noonan, et al., 2005). The student who is confident of making it through school is more likely to survive and graduate than those without such confidence. Determination is needed because many of the unique experiences have involved dealing with those setbacks developmentally, which helps them after entering college.

*Realistic self-appraisal.* Realistic self-appraisal is the ability to assess one’s strengths and weaknesses, allowing self-development (Sedlacek, 2004; Thomas, et al., 2007). Students who are able to make realistic assessment of their abilities, despite obstacles to making such an
assessment, do better in school than those less able to make that judgment (Noonan, et al., 2005; Sedlacek, 2004).

*Successfully handling the system.* How one learns to handle circumstances with which one is confronted tells much about one's ability and potential (Sedlacek, 2004; Thomas, et al., 2007). Those students who have demonstrated the ability to use the system to their advantage prior to college have more success once they get there compared to those who have not shown that ability (Noonan, et al., 2005). Students who are shown to be successful are committed to fighting to improve the existing system.

*Preference for long-term goals.* Having long-range goals is a predictor of success in college (Noonan, et al., 2005; Sedlacek, 2004; Thomas, et al., 2007). Developing those goals can be the more difficult task. When students have an opportunity to adjust to their environment, they are able to take a better command at developing long-range goals. Many students have difficulty understanding the relationship between current efforts and future outcomes.

*Availability of strong support person.* Students who have done well in school tend to have a person or persons of strong influence who confers advice particularly in times of crisis (Sedlacek, 2004; Thomas, et al., 2007). This person may be in the educational system or in the immediate family, but for many students he or she is generally a relative or a person in the community. Studies have concluded that a mentor is a critical part of success and successful mentors are aware of many cultural and racial variables that are relevant to the relationship with their mentee (Noonan, et al., 2005; Sedlacek, 2004).

*Leadership experience.* Students who show evidence of leadership prior to matriculation in college are more likely to be successful students than those without such leadership
experiences (Sedlacek, 2004). Students who are most successful in higher education have shown the ability to organize and influence others.

*Community involvement.* Having a community with which students can identify and from which they can receive support is critical to their academic success (Noonan, et al., 2005; Sedlacek, 2004; Thomas, et al., 2007). Those who have been involved in such a community are more successful than those not so involved. Students who are active in a community learn how to handle the system, exhibit leadership, and develop their self-concept in such groups (Sedlacek, 2004). Students need to develop communities within the larger society to find support.

*Knowledge acquired in a field.* Some students are more inclined to learn and develop by way of methods that are less traditional and outside the education system. Those students who have shown evidence of nontraditional learning prior to college tend to be more successful in college than those who show no such evidence (Noonan, et al., 2005; Sedlacek, 2004; Thomas, et al., 2007). Studies have shown that volunteering can be an important source of potential learning experiences and the important point is that the person learns from the opportunities presented (Sedlacek, 2004).

Scholars are looking beyond cognitive predictors of academic performance in higher education and noncognitive variables are becoming the preferred means to evaluate admission requirements (Noonan, et al., 2005). Noncognitive variables have emerged as both a useful assessment and a predictor of the success of students in higher education. Noncognitive variables provide educators and administrators with an overall assessment model that helps to interpret assessment results in terms of both present and future student success (Sedlacek, 2004). The student success focus strengthens the value of using noncognitive variables to many audiences in higher education including those participating in short-term study abroad programs.
The use of noncognitive variables as a means to evaluate short-term study abroad programs is an ideal concept because they address personality traits, which can be as important in the decision making process as are cognitive predictors.

**Conclusion**

In this chapter I have addressed benefits of studying abroad, short-term study abroad, and noncognitive variables. However, virtually no work has been accomplished to integrate two of the areas: short-term study abroad and noncognitive variables. Given there are demonstrated benefits of short-term study abroad programs, questions arise about how the benefits of short-term study abroad programs may translate and extend into student persistence and success models. Using the I-E-O model to frame my study, I examine the two areas by studying the potential for change in noncognitive variables that occur through participation in short-term study abroad programs. By examining short-term study abroad programs I determine the potential effects these programs have on changes in noncognitive variables. In the next chapter I discuss the methodology, data collection technique, and analysis of my study.
CHAPTER THREE

Methodology

My study has three components. First, I investigated change in noncognitive variables before and after participation in short-term study abroad programs. Second, I investigated the influence that environmental and structural factors have on changes in noncognitive variables of short-term study abroad participants. Third, I investigated the demographic differences of short-term study abroad program participants related to noncognitive variables. The goal of my study is to understand more about how short-term study abroad programs influence noncognitive variables: the adjustment, motivation, and perceptions of students. My quantitative study was conducted among a cross section of colleges and universities that have short-term study abroad programs. The purpose of this study was to investigate the change, if any, in noncognitive variables before and after participation in short-term study abroad programs. Therefore the research questions are:

1. Is there change in students’ Noncognitive Variables (NCVs) after participating in a short-term study abroad program?
2. What influence do environmental and structural factors have on changes in Noncognitive Variables (NCVs) of short-term study abroad participants?
3. Are there differences in students’ Noncognitive Variables (NCVs) based on demographic differences of short-term study abroad participants?

I use the Noncognitive Questionnaire (NCQ) to measure noncognitive variables. Additional questions are added to address residential learning community models and previous study abroad experience. The Noncognitive Questionnaire (NCQ) is a survey that has been
identified by many scholars as a tool to predict students’ propensity for success in higher education (Noonan, et al., 2005; Sedlacek, 2004; Thomas, et al., 2007; Wawrzynski & Sedlacek, 2003). Permission to use the Noncognitive Questionnaire (NCQ) was granted by the author, Dr. William Sedlacek, to all those who purchase the book Beyond The Big Test (Sedlacek, 2004). I received additional permission to use the Noncognitive Questionnaire (NCQ) directly from Dr. William Sedlacek through a series of email messages (personal communication, 07 August 2010).

**Data Collection**

I adopted a quantitative survey design to conduct the study. I utilized a longitudinal study with data collected at two points in time. It was designed with two instruments: a pre-departure survey instrument and a post-departure survey instrument. The pre-departure survey instrument was administered to students prior to participation in their short-term study abroad program. The post-departure survey instrument was administered to those students who completed the initial pre-experience survey, participated in a short-term study abroad program, and returned from their short-term study abroad experience.

The implementation of the survey instrument is an expansion of Astin’s I-E-O model. The model describes how the inputs one brings into an environment has an effect on the outcomes of the individual. The two survey instruments are denoted in Appendix A (pre-departure survey) and Appendix B (post-departure survey). The survey in Appendix A served as the pre-departure survey instrument for students who committed to participate in a short-term study abroad program but had yet to attend (pretest). The survey in Appendix B served as the post-departure survey instrument and follow up questionnaire (posttest) for those students who
participated in a short-term study abroad program and completed the questionnaire in Appendix A.

**Population**

The population of students to whom the study was intended to generalize included all short-term study abroad students from 4-year colleges and universities. The students for my study participated in a short-term study abroad experiences between May 2011 and August 2011. Typically mid to late May 2011 marks the end of the spring 2011 academic semester and the beginning of shortened spring or summer semester. The population included undergraduate, graduate, and lifelong education students participating in short-term study abroad programs during the summer semester of the 2010-2011 academic year. Students were selected based solely on their participation in a short-term study abroad program and their willingness to participate in my study.

I made contact with study abroad and global studies offices at various higher education institutions explaining the purpose of my study in order to locate participants. Contact with the offices occurred primarily through email but also included follow-up phone calls to clarify the details of my study. The contact with the higher education institutions began once my dissertation committee and the Institutional Review Board (IRB) both approved my study. Approval from the IRB was granted on February 17, 2011, and I began contacting higher education institutions immediately after this date.

I identified potential sites of those colleges and universities categorized as leading institutions in short-term study abroad as determined by the *Open Doors* Report (2009b). After identifying the 4-year colleges and universities that had the appropriate population for inclusion in my study, I contacted 12 study abroad offices and invited them to encourage their students to
participate in my study. I was able to get students to participate using various methods. After contacting the initial institutions I received follow up email messages and phone calls from five 4-year institutions that agreed to forward the instrument to students directly or through a web link I set up using Survey Monkey. One instructor preferred to have me send the survey in electronic form and agreed to forward the survey to students participating on a short-term study-abroad program for her class. Additionally, one institution provided me with the email addresses of the students who were participating on Short-Term Study Abroad programs between May 2011 and August 2011 and suggested that I contact the students directly.

As an incentive for completing the survey, I offered students the opportunity to receive one of fifty $20 dollar gift cards to Amazon.com for those students who completed both the pre-departure survey and the post-departure survey. The pre-departure survey asked students to provide the email address where they wanted the post-experience survey sent. Through the pre-departure survey I informed student they would be eligible for the gift card once they returned from their short-term study abroad experience and completed the post-departure survey.

I set up a web link for the survey for students whose email addresses I did not have. For those students for whom I received email addresses, I sent an email message with a personal link to the pre-departure survey. I sent 3 follow-up reminder emails for those students whom I had received email addresses. For my follow up reminder emails, I asked students to complete my survey, which I estimated would take approximately 15 minutes to complete, and included a reminder regarding the $20 gift card incentive. Because some institutions chose to send the survey directly I was unable to determine the total number of students who had an opportunity to complete the survey. I received the email addresses for 1716 students from one institution and
sent out requests to these students. There were a total of 539 students who completed the pre-experience survey.

I sent the post-experience survey in two phases, those students who returned from the short-term study abroad by July 15, 2011 and those students who returned by August 17, 2011. I sent two follow up reminder email messages for both phases to students to encourage the completion of the post-experience survey. In total there were 330 students out of 539 who completed the post-experience survey to yield a 61.2% response rate. Participants had the option of skipping questions and not answering questions as all. Therefore, the valid responses varied per question and per each cluster of questions. I found the questions that were typically skipped or not answered were the open-ended questions. The number of valid responses for calculating data ranged from 205 to 289. Which gave an overall response rate range between 38.0% and 53.6%.

**Instrument**

The Noncognitive Questionnaire (NCQ) consists of a total of 29 statements, with 6 questions to address demographic information and 23 questions directly related to noncognitive variables. Responses for the noncognitive variable section of the instrument are marked using various methods: a 5-point Likert scale ranging from 1 (*strongly agree*) to 5 (*strongly disagree*), multiple choice questions, and open-ended questions. The following are examples of the questions from the NCQ for each noncognitive variable:

- Positive self-concept: “Please list three things that you are proud of having done.”
- Realistic self-appraisal: “It should not be very hard to get a B (3.0) average at my college/university.”
• Successfully handing the system: “The college/university should use its influence to improve social conditions in the state.”

• Preference for long-range goals: “Once I start something, I finish it.”

• Availability of a strong support person: “If I run into problems concerning school, I have someone who would listen to me and help me.”

• Leadership experience: “In groups where I am comfortable, I am often looked to as a leader.”

• Community involvement: “Please list offices held and/or groups belonged to in high school, the community, or at your college/university.”

• Knowledge acquired in a field: “Please list three goals that you have for yourself right now.”

I chose the Noncognitive Questionnaire (NCQ) because it was designed specifically for college students and potential college students. The items in the questionnaire are tailored to student issues and draw on their previous experiences and expectations. The Chronbach’s Alpha for the Noncognitive Questionnaire (NCQ), which tests reliability estimates, ranged from .74 to .94 (Sedlacek, 2004). In addition alternate forms of the NCQ have shown test-retest reliability estimates in the .80 range (Sedlacek, 2004).

Furthermore, my research is an exploratory study therefore it is important in this instance to be liberal in determining significance. As a result of determining liberal significance, I examine the results of this study at significance levels of $p<.10$. By examining significance at $p<.10$, I am able to offer evidence regarding the importance of short-term study abroad intervention on noncognitive variables. The noncognitive variables are an important assessment tool to determine student success.
I use a modified version of the noncognitive questionnaire (NCQ) and the Student Experiences (SE) Survey from the Wabash National Study of Liberal Arts Education to guide my study. There are 26 questions from the NCQ, and 18 questions from the Wabash National Study of Liberal Arts Education Student Experiences Survey to address student experiences in short-term study abroad programs and residential learning community models. I received permission to use the questions from the Wabash study from the director, Dr. Charles F. Blaich (personal communication, 02 December 2010). There are 13 additional questions I use in my study to gather demographic and information regarding the study abroad experience. I added the Student Experience (SE) questions to my study to address the influence of faculty and in-classroom and out-of-classroom experiences on short-term study abroad programs. In all there are 60 questions for the pre-experience (pretest) survey instrument and 57 questions for the post-experience survey (posttest) instrument. Background demographics of the students are gathered to include: age, class year, grade point average, major, prior experience abroad, prior experience on a short-term study abroad, gender, and ethnicity. The background demographics also serve as the inputs in Astin’s I-E-O model. These questions are purposely removed from the post-departure survey, because I recognized this information will not change between the initial departure date and the return date.

A survey design provides a quantitative description of trends, attitudes, or opinions of a population by studying a sample of that population (Creswell, 2003). A survey is the preferred type of data collection procedure for this study because it offers flexibility in reaching a population of students from a cross section of colleges and universities participating on short-term study aboard programs at various times between May 2011 and August 2011. I designed the on-line version of the survey instrument using Survey Monkey. The survey instrument was
made available to students prior to their departure date. Upon arrival back in the United States, the post-experience survey instrument was given to participants to compare any changes in noncognitive variables and learning community questions. A paper copy of the survey instrument was made available for those participants unable to gain access to the electronic version of the survey, however no one indicated they were unable to access the on-line survey.

The pre-experience survey instrument was coded to match the post-experience survey instrument using a unique identifier. I accomplished the coding by using the first two letters of the first name, the first two letters of the last name, the first two letters of city the participant was born, and the last four digits of the cell phone (or phone) number of the participant. Using this method I matched the first survey with the second survey for comparison as well as to ensure the identities of the participants remained anonymous.

Scoring

The scoring key for the noncognitive questionnaire (NCQ) was used to score the noncognitive questions of both sections of my pre-experience survey instrument and post-experience survey instrument using a 5 point system (Sedlacek, 2004, pp. 171-174). Responses are marked on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). However, the scoring for both my pre-experience and post-experience survey instruments will be an inverse of the method recommended in the NCQ scoring key. This is done because I wanted the scale to ascend from strongly disagree to strongly agree, while the NCQ scale ascends from strongly agree to strongly disagree.

Questions 19, 20, 21, 23, 25, 27, 28, 29, 30, 33, 34, 35, and 36 in Appendix A (pre-experience survey instrument) were scored using a 5 point system with items scored as: 1=(strongly disagree), 2=(disagree), 3=(neutral), 4=(agree), 5=(strongly agree). Questions 21,
24, 26, 31, and 32 in Appendix A were scored so that $5=\text{(strongly disagree)}$, $4=\text{(disagree)}$, $3=\text{(neutral)}$, $2=\text{(agree)}$, $1=\text{(strongly agree)}$. I scored open-end questions related to noncognitive variables alone to have a consistent inter-rater reliability. Questions numbering 40-57 related to the learning community model were scored using a 5-point system with items scored as: $1=\text{(strongly disagree)}$, $2=\text{(disagree)}$, $3=\text{(neutral)}$, $4=\text{(agree)}$, $5=\text{(strongly agree)}$. Below are tables to further clarify the scoring scale of the survey.

Table 3.1: Pre-Departure NCV Scores 1

<table>
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<th>QUESTIONS</th>
<th>SCORE</th>
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| 19, 20, 21, 23, 25, 27, 28, 29, 30, 33, 34, 35, and 36 | 1=strongly disagree  
                                      2=disagree  
                                      3=neutral  
                                      4=agree  
                                      5=strongly agree |

Table 3.2: Pre-Departure NCV Scores 2

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<thead>
<tr>
<th>QUESTIONS</th>
<th>SCORE</th>
</tr>
</thead>
</table>
| 21, 24, 26, 31, and 32         | 1=strongly agree  
                                      2=agree  
                                      3=neutral  
                                      4=disagree  
                                      5=strongly disagree |

Table 3.3: Pre-Departure Learning Community Scores

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>SCORE</th>
</tr>
</thead>
</table>
| 40-57     | 1=strongly disagree  
                                      2=disagree  
                                      3=neutral  
                                      4=agree  
                                      5=strongly agree |

In Appendix B questions 6, 7, 9, 10, 12, 14, 15, 16, 17, 20, 21, 22, and 23 were scored using a 5 point system with items scored as: $1=\text{(strongly disagree)}$, $2=\text{(disagree)}$, $3=\text{(neutral)}$, $4=\text{(agree)}$, $5=\text{(strongly agree)}$.  

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4=(agree), 5=(strongly agree). Questions 8, 11, 13, 18, and 19 were scored so that 5=(strongly disagree), 4=(disagree), 3=(neutral), 2=(agree), 1=(strongly agree). Questions numbering 35-52 related to the learning community model were scored using a 5-point scale with items scored as: 1=(strongly disagree), 2=(disagree), 3=(neutral), 4=(agree), 5=(strongly agree).

Table 3.4: Post-Departure NCV Scores 1

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>6, 7, 9, 10, 12, 14, 15, 16, 17, 20, 21, 22, and 23</td>
<td>1=strongly disagree</td>
</tr>
</tbody>
</table>

Table 3.5: Post-Departure NCV Scores 2

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>8, 11, 13, 18, and 19</td>
<td>1=strongly agree</td>
</tr>
</tbody>
</table>

Table 3.6: Post-Departure Learning Community Scores

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>35-52</td>
<td>1=strongly disagree</td>
</tr>
</tbody>
</table>

Table 3.7: Long Range Goals coding rubric: Question 16 Appendix A & Question 3 Appendix B

| 1 | A vague and/or immediate, short-term goal (i.e., “to meet people,” “to get a good scheduled,” “to gain self confidence” |
Table 3.7 (cont’d)

| 2 | A specific goal with a stated future orientation that could be accomplished during undergraduate study (i.e., “to join a sorority so I can meet more people”, “to get a good schedule so I can get good grades in the fall, “ “to run for a student government office”) |

| 3 | A specific goal with a state future orientation that would occur after undergraduate study (i.e., “to get a good schedule so I can get the classes I need for graduate school,” “to become president of a Fortune 500 company”) |

Table 3.8: Knowledge Acquired in a Field coding rubric Question 18 Appendix A & Question 5

Appendix B

| 1 | Not at all academic or school-related; vague or unclear (i.e., “to get married”, “to do better,” “to become a better person”) |
Table 3.8 (cont’d)

<table>
<thead>
<tr>
<th></th>
<th>School related, but not necessarily or primarily education oriented (i.e., “to join a fraternity,” “to become student body president”)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Directly related to education (i.e., “to get a 3.5 GPA”, “to get to know my teachers”)</td>
</tr>
</tbody>
</table>

Table 3.9: Self Concept coding rubric Question 37 Appendix A & Question 24 Appendix B

<table>
<thead>
<tr>
<th></th>
<th>At least 75 percent of participants could have accomplished it (i.e., “graduated from high school,” “held a part-time summer job”)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>At least 50 percent of participants could have accomplished it (i.e., “played on an intramural sports team,” “was a member of a school club”)</td>
</tr>
<tr>
<td>3</td>
<td>Only the top 25 percent of participants could have accomplished it (i.e., “won an academic award,” “was captain of team”)</td>
</tr>
</tbody>
</table>
Scoring of Noncognitive Variables

The scoring of the noncognitive variables was achieved by adding the scores of questions using specific formulas for each variable. Scoring for Positive self-concept in the pretest (Appendix A) was achieved by the following formula (Q15+Q17+Q18+(6-Q28) + Q31+(6-Q36). Scoring for Realistic self-appraisal was achieved by the following formula (Q17+(6-Q20)+(6-Q29). Scoring for Successfully handling the system was achieved by the formula ((6-Q19)+ Q26+(6-Q30)+(6-Q34)+(6-Q35). Scoring for Prefers long-range goals was achieved by the following formula (Q16+Q21+(6-Q27). Scoring for the Availability of a strong support person was achieved by the following formula ((6-Q23)+Q32+(6-Q33). Scoring for Successful leadership experience was achieved by the following formula ((6-Q22)+(6-Q25)+Q37). Scoring for Community involvement was achieved by the following formula (Q24+Q37). Scoring for Knowledge acquired in a field was achieved by the following formula (Q16+Q37).

The scoring for the eight noncognitive variables for the pre-experience survey instrument (Appendix A) are addressed in Table 3.10

<table>
<thead>
<tr>
<th>Noncognitive Variable</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive self-concept</td>
<td>Q15+Q17+Q18+(6-Q28)+Q31+(6-Q36)</td>
</tr>
<tr>
<td>Realistic Self appraisal</td>
<td>Q17+(6-Q20)+(6-Q29)</td>
</tr>
<tr>
<td>Successfully handling the system</td>
<td>(6-Q19)+Q26+(6-Q30)+(6-Q34)+(6-Q35)</td>
</tr>
<tr>
<td>Prefers long-range goals</td>
<td>Q16+Q21+(6-Q27)</td>
</tr>
<tr>
<td>Availability of strong support person</td>
<td>(6-Q23)+Q32+(6-Q33)</td>
</tr>
<tr>
<td>Leadership experience</td>
<td>(6-Q22)+(6-Q25)+Q37</td>
</tr>
</tbody>
</table>
Table 3.10 (cont’d)

<table>
<thead>
<tr>
<th>Noncognitive Variable</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community involvement</td>
<td>Q24+Q37</td>
</tr>
<tr>
<td>Knowledge acquired in a field</td>
<td>Q16+Q37</td>
</tr>
</tbody>
</table>

The scoring for the eight noncognitive variables for the post-experience survey instrument (Appendix B) are addressed in Table 3.11.

Table 3.11 NCV Scoring Table Appendix B

<table>
<thead>
<tr>
<th>Noncognitive Variable</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive self-concept</td>
<td>Q2+Q4+Q16+(6-Q15)+Q18+(6-Q24)</td>
</tr>
<tr>
<td>Realistic Self appraisal</td>
<td>Q4+(6-Q7)+(6-Q16)</td>
</tr>
<tr>
<td>Successfully handling the system</td>
<td>(6-Q6)+Q13+(6-Q17)+(6-Q21)+(6-Q22)</td>
</tr>
<tr>
<td>Prefers long-range goals</td>
<td>Q3+Q8+(6-Q14)</td>
</tr>
<tr>
<td>Availability of strong support person</td>
<td>(6-Q10)+Q19+(6-Q20)</td>
</tr>
<tr>
<td>Leadership experience</td>
<td>(6-Q9)+(6-Q12)+Q24</td>
</tr>
<tr>
<td>Community involvement</td>
<td>Q11+Q24</td>
</tr>
<tr>
<td>Knowledge acquired in a field</td>
<td>Q3+Q24</td>
</tr>
</tbody>
</table>

Analysis

First, I imported the data from the pre-departure survey in Appendix A, from Survey Monkey into SPSS version 16.0. The data were a combination of quantitative data and qualitative data. The qualitative data were primarily the open-ended questions from the noncognitive questionnaire. The data from the open-ended noncognitive variable responses were coded using the rubric in Table 3.7, Table 3.8, and Table 3.9. I coded all of the open-ended noncognitive variable responses alone because I did not want any variance in the inter-rater
reliability. By coding the open-end noncognitive variables alone I saved time by not having to teach others how to code the noncognitive variables. Coding the open-ended noncognitive variables alone left me as the sole evaluator but also required many hours to complete the coding. Once the coding for the open-ended noncognitive variable responses were complete, I focused on giving a numerical score to each of the eight noncognitive variables in the pre-departure survey denoted in Appendix A. Using Table 3.10, I gave a numerical score to each of the noncognitive variables for each participant of my survey. The numerical score was achieved by creating a formula for each of the eight noncognitive variables using SPSS 16.0 and the formulas in Table 3.10.

Second, I imported the data from the post-departure survey in Appendix B, from Survey Monkey into SPSS version 16.0. In order to combine the data from the pre-departure survey in Appendix A with the data from the post-departure survey in Appendix B, I merged the data in SPSS 16.0 using the unique identifier. Using SPSS 16.0, I transformed the unique identifier into a string variable with a width of 10 characters. The string variable was converted to lowercase letters and numbers to allow for a match with the data from the post-departure survey. I repeated the process to transform the unique identifier in the post-departure survey into a 10-character string variable as well. The post-departure identifier was converted to lowercase letters and numbers to match the string variable in the pre-departure survey. The data from the pre-departure survey was merged with the data from the post-departure survey using the unique identifier as my key variable using SPSS 16.0. Once the data from both surveys were merged, I eliminated the merged data that did not include information from both surveys. I was unable to determine a way to have the program in SPSS 16.0 eliminate the data, therefore I eliminated the
data that did not merge using a line by line process until I was left with the results from the surveys where participants completed both pre-departure and post-departure survey.

Third, I coded the open-ended responses from the post-departure survey in the combined data set using Table 3.7, Table 3.8, and Table 3.9. Again, I chose to personally perform all coding of the open-ended noncognitive variable responses alone to reduce any error in inter-rater reliability. I used the formulas in Table 3.11 to compute the noncognitive variable scores of the post-departure survey using SPSS 16.0. By creating a pre-departure noncognitive variable and a post-departure noncognitive variable for each of the eight noncognitive variables I was able to have pre-departure and post-departure data for each participant in my study.

The demographic information was used for descriptive statistics and served as independent variables, they are listed in Table 3.12. Regression models were used and the independent variables were identified as the demographic information, learning communities, home stay participation, and faculty led short-term study abroad experiences. The dependent variables were identified as the eight noncognitive variables listed in Table 3.13. Results from the pre-experience survey and the post-experience survey were compared using SPSS version 16.0 by using a t-test, an ANOVA, and a regression model equation depicted in equation 3.1,

\[ Y_{\text{pred}} = a + B_1X_1 + B_2X_2 + \ldots + B_nX_n \]  

where \( a \) is a constant, the \( B_n \) weights are the coefficients associated with the predictors, and \( X_n \) are the independent variables.

<table>
<thead>
<tr>
<th>Table 3.12 Independent Variables Table</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INDEPENDENT VARIABLES</strong></td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>GPA</td>
</tr>
</tbody>
</table>
Table 3.12 (cont’d)

<table>
<thead>
<tr>
<th>Class Year</th>
<th>Major</th>
<th>Age</th>
<th>Ethnic Background</th>
<th>Travel outside the United States</th>
<th>Previous Study Abroad Experience</th>
<th>Country of Short-Term Study Abroad</th>
<th>Program</th>
<th>Language of Instruction</th>
<th>Short-Term Study Abroad Living</th>
<th>Environment</th>
</tr>
</thead>
</table>

Table 3.13 Dependent Variables Table

<table>
<thead>
<tr>
<th>DEPENDENT VARIABLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive self-concept</td>
</tr>
<tr>
<td>Successfully handling the system</td>
</tr>
<tr>
<td>Preference for long term goals</td>
</tr>
<tr>
<td>Availability of strong support person</td>
</tr>
<tr>
<td>Leadership experience</td>
</tr>
<tr>
<td>Community involvement</td>
</tr>
<tr>
<td>Knowledge acquired in a field</td>
</tr>
<tr>
<td>Faculty experiences</td>
</tr>
</tbody>
</table>
Careful steps were taken to ensure that the data I collected and analyzed were reflective of students and their experiences with short-term study abroad programs. However, there are limitations that are important to note. One important limitation is regarding the type of study, this was a quantitative study with a few open-ended responses, and I did not take into account the differences in the requirements of each program and each syllabi. Faculty and staff of their respective institutions administered each short-term study abroad program, and instructors had the autonomy to develop short-term study abroad programs as determined by their institution. Therefore, I could not account for the variances in the requirements set forth by each institution and their program leaders.

A second limitation is that I cannot determine the exact number of students who received the survey. I sent an email message with the survey link to the email addresses I received from one institution, the survey link to all other students was sent by the individual instructor of the short-term study abroad program of the specific institutions. As a result, I am unable to determine the exact number of students who had an opportunity to view the survey and decide whether or not to participate in the research.

A third limitation is that I collapsed the Race variable into White vs. Non-White because of the low number of responses from students who identified with the non-White races. By collapsing the variable Race I am unable to determine the effect individual Race responses has on the statistical analysis. However, I am able to determine the effect of students who identified
their Race as White. All other students were categorized as non-white for statistical analysis of my data. The next chapter I discuss each of the research questions and discuss the statistical tests used to analyze the data. Chapter four includes analysis of the statistical tests and discuss the results.
CHAPTER FOUR

Results

This chapter details the results of investigating the change in noncognitive variables before and after participation in short-term study abroad programs. First, I will provide demographic information about my sample then, I discuss the findings in the order of the research questions I posed in chapter three. I provide a full description of their association with the influence of structural factors and background demographics.

Sample Demographics

The demographic information about the sample population for my study is consistent with demographic information for study abroad participants as discussed in the Open Door report. Respondents in my study classified their gender in the following way: 76% female (n=228) and 24% male (n=73). The racial composition of the respondents in my study was as follows: 1% American Indian or Alaskan Native (n=2), 5% Asian (n=15), 4% Black or African American (n=13), 3% Hispanic/Latino (n=10), less than 1% Native Hawaiian or Other Pacific Islander (n=1), 84% White (n=268), 2% International (n=5), and 2% Other (n=5). Additionally respondents in my study varied in reporting their overall Grade Point Averages with 60% identifying a 4.00-3.50 gpa (n=181), 32% identifying a 3.49-3.00 gpa (n=96), 7% identifying a 2.99-2.50 gpa (n=24), and 1% identifying a 2.49-2.00 gpa (n=2).

The demographic data in the most recent Open Door (2011) report identified the following information: Students who participated in study abroad programs during the 2010-2011 school year classified their gender as: 64% female and 36% male. The racial composition of students who participated in study abroad programs during the 2010-2011 school year was as
follows: 1% American Indian or Alaskan Native, 8% Asian/Native Hawaiian or Other Pacific Islander, 5% Black or African American, 7% Hispanic/Latino, and 78% White. In addition, the academic level for study abroad students during the 2010-2011 school year was as follows: 3% Freshman, 13% Sophomore, 36% Junior, 23% Senior, and 25% Graduate students.

The respondents in my study provided additional information regarding their age and the highest level of education expected in their lifetime. With respect to age the respondents who participated in my study identified their ages between 18 and 52 years old. The median age for the respondents in my study is calculated at 20 years old. Respondents in my study also reported how much education they expected to receive during their lifetime. The respondents reported the following: 1% expect to receive less than a Bachelors degree, 14% expect to receive a Bachelors degree, 56% expect to receive a Masters degree, 3% expect to receive a Law degree, and 26% expect to receive a Doctorate.

The respondents in my study also provided additional background details regarding the highest degree obtained by their parents and their parents’ annual income. The highest degree obtained by respondent’s fathers was reported as: 2% Less than high school, 16% High school degree, 14% Some college but no degree, 39% College degree, and 29% Graduate or professional degree. The highest degree obtained by respondent’s mothers was reported as: 1% Less than high school, 11% High school degree, 16% Some college but no degree, 45% College degree, 27% Graduate or professional degree. With regards to the parents annual family income the respondents reported the following: 3% earned below $20,000, 4% earned between $20,000 and $30,000, 11% earned between $30,001 and $50,000, 10% earned between $50,001 and $70,000, 17% earned between $70,001 and $90,000, 20% earned between $90,001 and
$110,000, 11% earned between $110,001 and $130,000, 7% earned between $130,001 and $150,000, and 17% earned more than $150,000.

The respondents in my study identified as attending one of four higher education institutions. One institution is identified as a large Midwestern land grant institution with an attendance of over 48,000 students. A second institution is identified as a large Midwestern research institution with an attendance of over 49,000 students. A third institution is identified as a large Midwestern public research institution with an attendance of over 42,000 students. A fourth institution is identified as a large Southern public land grant institution with an attendance of over 33,000 students.

Research Question One: Is there change in students’ Noncognitive Variables (NCVs) after participating in a short-term study abroad program?

For this research question I was interested in determining if there was any change in the measurement of Noncognitive Variables among students who participated in short-term study abroad programs. I wanted to focus on a comparison of the initial eight noncognitive variables before students went abroad and those same eight noncognitive variables subsequently after students had returned from abroad. In order to determine the change in noncognitive variables, I conducted a paired samples t-test or correlated t-test among the pre-experience (pretest) noncognitive variables and the post-experience (posttest) noncognitive variables (Meyers, Gamst, & Guarino, 2006). Using a paired samples t-test, I compared the means of the eight noncognitive variables prior to the study abroad experience with the means of the eight noncognitive variables upon returning from abroad.

Each of the noncognitive variables had a cluster of questions to determine its score. As illustrated in table 4.1 the number of students who completed the cluster of questions for each
noncognitive variable of the pretest ranged from $N=281$ to $N=286$. The data depicted in table 4.1 include the mean of each noncognitive variable in the pretest along with the minimum and maximum scores possible for each variable. I found the results of the posttest revealed a drop in the number of participant responses and therefore, the subsequent $t$-test had a range of participant responses from $N=205$ to $N=287$ for each of the eight noncognitive variables.

The variances in the range of the complete pairs of noncognitive variables are attributable to the fact some participants did not complete the posttest survey, and participants had the option of skipping questions. Some students’ answers were omitted from the cluster of questions for the noncognitive variables as a result of the option of skipping questions. The most commonly skipped questions were those that required an open-ended answer. Positive Self Concept had the lowest number of complete responses ($n=205$) and was also the noncognitive variable with the most open-ended questions. Conversely, the noncognitive variable, Realistic Self Appraisal received the highest number of complete responses ($n=289$) and was also the variable that included the most questions using a Likert scale.

Table 4.1: Pretest Descriptives of Noncognitive Variables

<table>
<thead>
<tr>
<th></th>
<th>Descriptive Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Positive Self Concept</td>
<td>287</td>
</tr>
<tr>
<td>Realistic Self Appraisal</td>
<td>296</td>
</tr>
<tr>
<td>Successfully Handing the System</td>
<td>293</td>
</tr>
</tbody>
</table>
Table 4.1 (cont’d)

<table>
<thead>
<tr>
<th>Preference for Long Range Goals</th>
<th>295</th>
<th>3.00</th>
<th>11.00</th>
<th>6.9220</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong Support Person</td>
<td>293</td>
<td>6.00</td>
<td>11.00</td>
<td>7.8362</td>
</tr>
<tr>
<td>Leadership</td>
<td>281</td>
<td>6.00</td>
<td>12.00</td>
<td>8.2954</td>
</tr>
<tr>
<td>Community Involvement</td>
<td>281</td>
<td>3.00</td>
<td>7.00</td>
<td>5.5338</td>
</tr>
<tr>
<td>Knowledge in a Field</td>
<td>282</td>
<td>2.00</td>
<td>6.00</td>
<td>4.2234</td>
</tr>
</tbody>
</table>

With respect to change, seven of the eight noncognitive variable means showed an increase between the pre-experience (pretest) and the post experience (posttest) tests: (a) Positive Self Concept, (b) Successfully Handling the System, (c) Preference for Long Range Goals, (d) Strong Support Person, (e) Leadership, (f) Community Involvement, and (g) Knowledge in a Field, this is shown in table 4.2. Realistic Self Appraisal, on the other hand, was the only noncognitive variable to show a decrease in the mean. Information about the pre-experience (pretest) and post-experience (posttest) means, sample sizes, and standard deviation are also included in table 4.2.

Table 4.2: Paired Samples Statistics Noncognitive Variables

<table>
<thead>
<tr>
<th>Paired Samples Statistics</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>N</td>
<td>SD</td>
<td>Std. Error Mean</td>
</tr>
<tr>
<td>Pre Positive Self Concept</td>
<td>16.94</td>
<td>205</td>
<td>2.24</td>
<td>.16</td>
</tr>
<tr>
<td>Post Positive Self Concept</td>
<td>17.86</td>
<td>205</td>
<td>2.19</td>
<td>.15</td>
</tr>
<tr>
<td>Pre Realistic Self Appraisal</td>
<td>8.50</td>
<td>289</td>
<td>1.62</td>
<td>.10</td>
</tr>
<tr>
<td>Post Realistic Self Appraisal</td>
<td>8.44</td>
<td>289</td>
<td>1.67</td>
<td>.10</td>
</tr>
</tbody>
</table>
Table 4.2 (cont’d)

<table>
<thead>
<tr>
<th>Pair</th>
<th>Pre Successfully Handling the System</th>
<th>13.83</th>
<th>285</th>
<th>2.47</th>
<th>.15</th>
<th>.02</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Post Successfully Handling the System</td>
<td>14.11</td>
<td>285</td>
<td>2.27</td>
<td>.13</td>
<td></td>
</tr>
<tr>
<td>Pair 4</td>
<td>Pre Preference for Long Range Goals</td>
<td>6.91</td>
<td>287</td>
<td>1.47</td>
<td>.09</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post Preference for Long Range Goals</td>
<td>7.29</td>
<td>287</td>
<td>1.49</td>
<td>.09</td>
<td></td>
</tr>
<tr>
<td>Pair 5</td>
<td>Pre Strong Support Person</td>
<td>7.83</td>
<td>284</td>
<td>.90</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post Strong Support Person</td>
<td>7.84</td>
<td>284</td>
<td>.93</td>
<td>.06</td>
<td></td>
</tr>
<tr>
<td>Pair 6</td>
<td>Pre Leadership</td>
<td>8.29</td>
<td>265</td>
<td>.78</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post Leadership</td>
<td>8.55</td>
<td>265</td>
<td>.86</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>Pair 7</td>
<td>Pre Community Involvement</td>
<td>5.53</td>
<td>265</td>
<td>.79</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post Community Involvement</td>
<td>5.58</td>
<td>265</td>
<td>.86</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>Pair 8</td>
<td>Pre Knowledge in a Field</td>
<td>4.23</td>
<td>266</td>
<td>.72</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post Knowledge in a Field</td>
<td>4.83</td>
<td>266</td>
<td>.52</td>
<td>.03</td>
<td></td>
</tr>
</tbody>
</table>

The paired sample $t$-test was found to be statistically significant with five of the eight Noncognitive Variables:

- Positive Self Concept $t(204)=6.83$, $p<.001$
- Successfully Handling the System $t(284)=2.14$, $p<.05$.
- Preference for Long Range Goals $t(286)=4.38$, $p<.001$
- Leadership $t(264)=4.65$, $p<.001$
- Knowledge in a Field $t(265)=12.964$, $p<.001$

These $t$-tests indicates there is in fact a positive and statistically significant change in the mean of the noncognitive variables among students who participate in short-term study abroad programs. The results also indicate that not only are these noncognitive variables statistically significant, but they also show an improvement in the mean scores between the participants. The interpretation of this finding reveals Short-Term Study Abroad programs lasting less than eight weeks have an improvement on the mean of: the Positive Self Concept, the ability to
Successfully Handle the System, the ability to articulate Long Range Goals, Leadership, and Learning for those students who participate in these programs. The result of the paired samples $t$-test including the mean difference between the posttest and the pretest is indicated in Table 4.3.

Having found a change in the noncognitive variable means, I calculated the differences among noncognitive variables. Table 4.3 presents the change in the mean of the noncognitive variables. A positive mean difference denotes an increase in the change in mean from the pretest score to the posttest score. Similarly, a negative difference in mean denotes a decrease in the change in mean from the pretest score to the posttest score. The $t$-tests reveal, change occurs in the differences in means of noncognitive variables of students who participate in short-term study abroad programs both positively and negatively. The results of this study and $t$-tests indicate there is a statistically significant change in the mean of noncognitive variables among students who participate in Short-Term Study Abroad programs.
Table 4.3: Paired Samples t-test Noncognitive Variables

<table>
<thead>
<tr>
<th>Pair</th>
<th>Pre/Post Variables</th>
<th>Paired Differences</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>Pre Positive Self Concept - Post Positive Self Concept</td>
<td>.92683, 1.94269, .13568, -1.19435, -6.831</td>
<td>.65931</td>
<td>-1.19435</td>
<td>-6.831</td>
<td>204</td>
</tr>
<tr>
<td>Pair 2</td>
<td>Pre Realistic Self Appraisal - Post Realistic Self Appraisal</td>
<td>-.06574, 1.73980, .10234, -.13569</td>
<td>.26718</td>
<td>.642</td>
<td>n.s.</td>
<td></td>
</tr>
<tr>
<td>Pair 3</td>
<td>Pre Successfully Handling the System - Post Successfully Handling the System</td>
<td>.27368, 2.16295, .12812, -.52587</td>
<td>-.02149</td>
<td>-2.136</td>
<td>284</td>
<td>**</td>
</tr>
<tr>
<td>Pair 4</td>
<td>Pre Preference for Long Range Goals - Post Preference for Long Range Goals</td>
<td>.37631, 1.45487, .08588, -.54534</td>
<td>-.20727</td>
<td>-4.382</td>
<td>286</td>
<td>*</td>
</tr>
</tbody>
</table>
Table 4.3 (cont’d)

<table>
<thead>
<tr>
<th>Pair</th>
<th>Pre Strong Support Person - Post Strong Support Person</th>
<th>Pre Leadership - Post Leadership</th>
<th>Community Involvement - Post Community Involvement</th>
<th>Knowledge in a Field - Post knowledge in a Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>.00704</td>
<td>.98753</td>
<td>.05860</td>
<td>-.12239</td>
</tr>
<tr>
<td></td>
<td>-.12239</td>
<td>.10830</td>
<td>-.12239</td>
<td>.10830</td>
</tr>
<tr>
<td></td>
<td>.283</td>
<td>n.s.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>.26415</td>
<td>.92423</td>
<td>.05678</td>
<td>-.37594</td>
</tr>
<tr>
<td></td>
<td>-.37594</td>
<td>-.15236</td>
<td>-.15236</td>
<td>-.15236</td>
</tr>
<tr>
<td></td>
<td>264</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>.04906</td>
<td>.87983</td>
<td>.05405</td>
<td>-.15548</td>
</tr>
<tr>
<td></td>
<td>-.15548</td>
<td>.05736</td>
<td>.05736</td>
<td>-.908</td>
</tr>
<tr>
<td></td>
<td>264</td>
<td>n.s.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>.60150</td>
<td>.75675</td>
<td>.04640</td>
<td>-.69286</td>
</tr>
<tr>
<td></td>
<td>-.69286</td>
<td>-.51015</td>
<td>-.51015</td>
<td>12.964</td>
</tr>
<tr>
<td></td>
<td>265</td>
<td>*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* \( p < .001 \), **\( p < .05 \)
These findings suggest that the effect of short-term study abroad programs may be more pronounced than initially realized. As a result of this t-test and realizing the influence of Short-Term Study Abroad programs on Noncognitive Variables, I found it wise to determine which environmental and structural influences, as well as which demographic factors contribute to the change in the mean of noncognitive variables. Determining the environmental and structural influences on the change in the mean of noncognitive variables could have implications for future development of short-term study abroad programs. The next section explores tests to determine which environmental and structural factors contributed to the change in the mean of the five noncognitive variables (a) Positive Self Concept, (b) Successfully Handling the System, (c) Preference for Long Range Goals, (d) Leadership, (e) and Knowledge in a Field.

Research Question Two: What influence do environmental and structural factors have on changes in Noncognitive Variables of Short-Term Study Abroad participants?

For this question I was interested in determining if variables related to the structural design of the short-term study-abroad experience had an influence on the change in the mean of the noncognitive variables. Therefore, for this question I focused on the five noncognitive variables that had a statistically significant change in mean. I ran a one-way ANOVA with the noncognitive variables as my dependent variables. The independent variables that I tested relative to the environmental and structural factors of the short-term study abroad experience included: (a) Region/Continent of Short-Term Study Abroad Experience, (b) Short-Term Study Abroad Living Environment, and (c) Language of Instruction.

I began my analysis by focusing on the demographics of the region/continent of short-term study abroad experience. This variable was recoded into the eight geographical regions and continents and renamed Continent (Continent of Short Term Study Abroad Experience).
Countries such as Spain, France, and Germany were collapsed into the continent Europe (continent code=3) as an example. The following is demographic information on the number of students who studied in each continent: Africa 11.2% (n=28), Asia 3.2% (n=8), Europe 60.2% (n=151), Latin America 19.1% (n=48), Middle East 0.8% (n=2), Oceania 5.2% (n=13), and Antarctica 0.3% (n=1). North America (continent code=6) was included in my survey for continent of short-term study abroad, however there were no participants in my survey that participated in a study abroad program in North America (n=0). Similarly, Antarctica (continent code=8) had only one participant (n=1), and the Middle East (continent code=5) had two participants (n=2). Despite the fact that these variables were included in my survey, I opted not to include the data for North America, Antarctica, and the Middle East in my analysis because use of these regions would not give me a true indication of statistical significance and may ultimately give my tests false readings. The results of the demographic information are depicted in Table 4.4.

Table 4.4: Bar Graph of Participants in each Region/Continent
Next, I turned my focus to the demographics of the short-term study abroad living environment. This variable was recoded and collapsed into a dichotomous variable with group stays as a Yes response (yes=1) and home stays and other types of stays as a No (no=0) response. A Yes (yes=1) response to the short term study abroad living environment question indicated the student stayed with the group members who attended the program, and the student participated in a living community with other students attending the program. Conversely, a No (no=0) response to the short-term study abroad living environment question indicated the student stayed in family homes and other types of living arrangements other than group and community living. Students living in group/community living amounted to 55.4% (n=139), and students living in Home stays amounted to 44.6% (n=112). These data revealed more short-term study abroad participants reside in group/community living than in home stays. Although the difference among students living in groups/communities and home stays are modest, the data reflect more short-term study abroad students participating in community living.

Finally, I focused on the demographic data from Language of Instruction. This variable was recoded into English (yes=1) and non-English (no=0). Therefore, a response of Yes (yes=1) to the question of language of instruction indicated English was the language of instruction while on the short-term study abroad experience. Conversely, a response of No (no=0) indicated the language of instruction was a language other than English. More students received instruction in English, this amounted to 75.7% (n=190). While students who received instruction in Non-English amounted to 24.3% (n=61). These data are noteworthy, because it gives an indication that a majority of short-term study abroad programs are designed and developed to address subjects other than foreign language competency for my sample. Table 4.5
depicts the demographics of the environmental and structural variables used in the One-Way ANOVA.

Table 4.5: Demographics of the environmental and structural variables

<table>
<thead>
<tr>
<th>Demographics of Environmental and Structural Variables</th>
<th>Value</th>
<th>Label</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continent Numeric Code</td>
<td>1</td>
<td>Africa</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Asia</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Europe</td>
<td>151</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Latin America</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Middle East</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Oceania</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Antarctica</td>
<td>1</td>
</tr>
<tr>
<td>Group Stay vs All Other Types of Stays</td>
<td>0</td>
<td>No</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Yes</td>
<td>139</td>
</tr>
<tr>
<td>English vs Non English Instruction</td>
<td>0</td>
<td>No</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Yes</td>
<td>190</td>
</tr>
</tbody>
</table>

A One-Way ANOVA was performed using the five Noncognitive Variables whose change in mean was found to be statistically significant in my pretest and posttest evaluation. These Noncognitive variables indicated an improvement in the mean scores of students who participated in short-term study abroad programs. Having determined the change in the mean scores of five noncognitive variables were statistically significant, I used them as my dependent
variables. The Noncognitive Variables found to have a statistically significant change in mean scores were:

- Positive Self Concept
- Successfully Handling the System
- Preference for Long Range Goals
- Leadership
- Knowledge Acquired in a Field

To analyze the data using a One-Way ANOVA, I created new variables using the change in mean differences from the noncognitive variables of the pre-experience survey (pretest) and the post-experience survey (posttest). These new variables were renamed: DiffPosSelfconcept, DiffSuccHandSystem, DiffPrefLongGoals, DiffLeadership, and DiffKnowledge. The change in the mean differences of these five Noncognitive Variables served as my dependent variables and can be found in the Mean Diff. column of the paired samples t-test in Table 4.3.

I conducted a One-Way ANOVA using region, living environment, and language of instruction as my factors. The first One-Way ANOVA was conducted using the five recoded noncognitive variables whose change in mean was statistically significant from my first research question, and using Region/Continent of Short-Term Study Abroad Experience as the factor, the results are detailed in Table 4.6. As a result of this ANOVA, Leadership was the only noncognitive variable to show statistical significance, all other noncognitive variables showed no statistical significance. The results of this ANOVA reveal Leadership as a noncognitive variable and Region/Continent of short term study abroad experience are statistically significant at $p<.10$. The effect size, calculated using the sum of squares between groups divided by the total sum of squares was .03, indicating a small effect size. I found that a significant amount of the variance
in the environmental and structural factors was attributable to the between-region components of
the short-term study abroad experience. A summary of the findings are located in Table 4.6.

Table 4.6: One-Way ANOVA with Country of Short Term Study Abroad Experience

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DiffPosSelfConcept</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>10.69</td>
<td>4</td>
<td>2.67</td>
<td>.69</td>
<td>n.s.</td>
</tr>
<tr>
<td>Within Groups</td>
<td>719.21</td>
<td>185</td>
<td>3.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>729.90</td>
<td>189</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DiffSuccHandSystem</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>15.73</td>
<td>4</td>
<td>3.93</td>
<td>.85</td>
<td>n.s.</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1208.95</td>
<td>262</td>
<td>4.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1224.68</td>
<td>266</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DiffPrefLongGoals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>10.49</td>
<td>4</td>
<td>2.62</td>
<td>1.29</td>
<td>n.s.</td>
</tr>
<tr>
<td>Within Groups</td>
<td>538.59</td>
<td>264</td>
<td>2.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>549.08</td>
<td>268</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DiffLeadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>6.78</td>
<td>4</td>
<td>1.70</td>
<td>1.98</td>
<td>*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>209.25</td>
<td>244</td>
<td>.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>216.03</td>
<td>248</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DiffKnowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>1.92</td>
<td>4</td>
<td>.48</td>
<td>.84</td>
<td>n.s.</td>
</tr>
<tr>
<td>Within Groups</td>
<td>140.46</td>
<td>245</td>
<td>.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>142.38</td>
<td>249</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* \( p < .10 \)

As a result of the statistical significance of the ANOVA for Region/Continent and Leadership, I performed a Post-Hoc test (Meyers, et al., 2006). This test is used to indicate the differences between continents. North America, Antarctica, and Middle East regions/continents
were deleted because of the low response rates for students participating in short-term study abroad programs in these continents and regions. The descriptive statistics and eta squared for region/continent are depicted in Table 4.7.

Table 4.7: Descriptive Statistics and Eta Squared for Region/Continent

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Africa</th>
<th>Asia</th>
<th>Europe</th>
<th>Latin America</th>
<th>Oceania</th>
<th>Sig</th>
<th>Eta²</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>28</td>
<td>8</td>
<td>151</td>
<td>48</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean Diff.</td>
<td>.40</td>
<td>.13</td>
<td>.99</td>
<td>.34</td>
<td>.13</td>
<td>1.25*</td>
<td>.03</td>
</tr>
<tr>
<td>SD</td>
<td>1.03</td>
<td>.99</td>
<td>.92</td>
<td>.73</td>
<td>.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Eta²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.03</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05

As illustrated in table 4.8, the difference between countries in the regions/continents of Africa and Oceania and the difference between countries in the regions of Europe and Oceania are both significant at \( p<.05 \). These findings indicate that students who attend short-term study abroad programs on the African continent showed a greater positive change in their Leadership mean as a result of their experience than those students who attended programs in the Oceania region. Similarly, the findings in table 4.8 indicate, those students who attended short-term study abroad programs in European countries exhibited a greater positive change in their Leadership mean than those students in the Oceania region. This conclusion is better illustrated in table 4.9 as a bar graph, and gives a better visual of the difference. The graph in table 4.9 reveals the mean difference is highest in Leadership for those students who attend short-term study abroad programs on the African continent (\( M = .3929 \)) with the mean difference for those students who attend programs in Europe (\( M = .3444 \)) second, Latin America (\( M = .1250 \)) and Asia (\( M = -.1250 \)), third and fourth respectively.
Table 4.8: Between Region/Continent Comparison Chart

**Multiple Comparisons**

<table>
<thead>
<tr>
<th>(I) Continent</th>
<th>(J) Continent</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>Asia</td>
<td>.52</td>
<td>.37</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Europe</td>
<td>.05</td>
<td>.19</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Latin America</td>
<td>.27</td>
<td>.22</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Oceania</td>
<td>.61*</td>
<td>.30</td>
<td>*</td>
</tr>
<tr>
<td>Asia</td>
<td>Africa</td>
<td>-.52</td>
<td>.37</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Europe</td>
<td>-.47</td>
<td>.34</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Latin America</td>
<td>-.25</td>
<td>.35</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Oceania</td>
<td>.09</td>
<td>.41</td>
<td>n.s.</td>
</tr>
<tr>
<td>Europe</td>
<td>Africa</td>
<td>-.05</td>
<td>.19</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Asia</td>
<td>.47</td>
<td>.34</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Latin America</td>
<td>.22</td>
<td>.15</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Oceania</td>
<td>.56*</td>
<td>.26</td>
<td>*</td>
</tr>
<tr>
<td>Latin America</td>
<td>Africa</td>
<td>-.27</td>
<td>.22</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Asia</td>
<td>.25</td>
<td>.35</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Europe</td>
<td>-.22</td>
<td>.15</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Oceania</td>
<td>.34</td>
<td>.28</td>
<td>n.s.</td>
</tr>
<tr>
<td>Oceania</td>
<td>Africa</td>
<td>-.61*</td>
<td>.30</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Asia</td>
<td>-.09</td>
<td>.41</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Europe</td>
<td>-.56*</td>
<td>.26</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Latin America</td>
<td>-.34</td>
<td>.28</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

* The mean difference is significant at the 0.05 level.

*p<.05
I conducted a One-Way ANOVA using Short-Term Study Abroad Living Environment as the factor, the results are detailed in Table 4.10. For this analysis I collapsed the data for Short-Term Study Abroad Living Experience into Group Living (yes=1) and Non-Group Living (no=0). Responding Yes (yes=1) indicted the short-term study abroad participant lived with other students participating on the short-term study abroad experience. Responding No (no=0) indicated the short-term study abroad participant lived in home stays or other type of stays that were not with the students on the short-term study abroad experience. The results of this ANOVA indicated the change in mean of Successfully Handling the System as a noncognitive variable and the environment factor Short-Term Study Abroad Living Environment is statistically significant at the $p<.10$ level. All other noncognitive variables showed no statistical significance. These findings suggest that those students who resided in home stays during the short-term study abroad program increased their mean of the noncognitive variable, Successfully Handling the System. These findings indicate those students who lived in home stays, with families increased their awareness of successfully handing the system.
Table 4.10: One-Way ANOVA with Short-Term Study Abroad Living Experience

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Positive Self Concept</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.13</td>
<td>1</td>
<td>.13</td>
<td>.03</td>
<td>n.s.</td>
</tr>
<tr>
<td>Within Groups</td>
<td>941.56</td>
<td>204</td>
<td>4.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>941.69</td>
<td>205</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Successfully Handling the System</td>
<td>16.79</td>
<td>1</td>
<td>16.79</td>
<td>3.52</td>
<td>*</td>
</tr>
<tr>
<td>Between Groups</td>
<td>971.93</td>
<td>204</td>
<td>4.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>988.72</td>
<td>205</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Preference for Long Range Goals</td>
<td>1.28</td>
<td>1</td>
<td>1.28</td>
<td>.54</td>
<td>n.s.</td>
</tr>
<tr>
<td>Between Groups</td>
<td>483.52</td>
<td>204</td>
<td>2.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>484.80</td>
<td>205</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Leadership in a Field</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.21</td>
<td>1</td>
<td>.21</td>
<td>.68</td>
<td>n.s.</td>
</tr>
<tr>
<td>Within Groups</td>
<td>61.52</td>
<td>204</td>
<td>.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>61.73</td>
<td>205</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.10

A review of the descriptive statistics in Table 4.11 revealed that with a population N=206, students reported Group/Community Living at 54.9% (n=113). Conversely, students reported to Home Stays and Other Living at 45.1% (n=93). This indicates the number of
students who stayed in living communities was modestly higher than students who resided in home stays during their short-term study abroad programs.

Table 4.11: Descriptive Statistics for Students Short-Term Study Abroad Living Experience

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Positive Self Concept</td>
<td>0</td>
<td>93</td>
<td>17.99</td>
<td>2.30</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>113</td>
<td>17.94</td>
<td>2.02</td>
</tr>
<tr>
<td>Total</td>
<td>206</td>
<td></td>
<td>17.96</td>
<td>2.14</td>
</tr>
<tr>
<td>Post Successfully Handling the System</td>
<td>0</td>
<td>93</td>
<td>14.44</td>
<td>2.23</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>113</td>
<td>13.87</td>
<td>2.14</td>
</tr>
<tr>
<td>Total</td>
<td>206</td>
<td></td>
<td>14.13</td>
<td>2.20</td>
</tr>
<tr>
<td>Post Preference for Long Range Goals</td>
<td>0</td>
<td>93</td>
<td>7.35</td>
<td>1.64</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>113</td>
<td>7.51</td>
<td>1.45</td>
</tr>
<tr>
<td>Total</td>
<td>206</td>
<td></td>
<td>7.44</td>
<td>1.54</td>
</tr>
<tr>
<td>Post Leadership</td>
<td>0</td>
<td>93</td>
<td>8.62</td>
<td>.76</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>113</td>
<td>8.50</td>
<td>.83</td>
</tr>
<tr>
<td>Total</td>
<td>206</td>
<td></td>
<td>8.56</td>
<td>.80</td>
</tr>
<tr>
<td>Post knowledge in a Field</td>
<td>0</td>
<td>93</td>
<td>4.74</td>
<td>.53</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>113</td>
<td>4.81</td>
<td>.56</td>
</tr>
<tr>
<td>Total</td>
<td>206</td>
<td></td>
<td>4.78</td>
<td>.55</td>
</tr>
</tbody>
</table>

Table 4.12 indicates the results of the mean plot of Successfully Handling the system with Short-Term Study Abroad group living. The results of this test indicated there is a statistical significance between those who reported living within a group or community during their short-term study abroad experience and those students who reported living with families during a home stay. The results also reveal those students who participated in home and other stays had a higher mean (M=14.44) than the mean of those students who participated in group and
community living (M=13.86). Additionally, the results confirm students who participate in home and other stays, report a higher mean for Successfully Handling the System than those students who participate in group and community living.

Table 4.12: Means plot of Successfully Handling the system with Short-Term Study Abroad Living Experience

| Mean of Successfully Handling the System with Group Living Experience |
|---|---|
| Home | Group |
| Mean |

Finally for Question Two, I conducted a One-Way ANOVA using Language of Instruction as the factor, the results are detailed in Table 4.13. For this analysis I collapsed the data for Language of Instruction into English (yes=1) and Non-English (no=0). A Yes (yes=1) response indicted the student received instruction in English during the short-term study abroad program, while a No (no=0) response indicated the student received instruction in a language other than English while abroad. The result of this ANOVA reveal that none of the noncognitive variables showed a change in the mean that was of any statistical significance. This indicates having instruction in English while on a short-term study abroad program has no influence on the change of the mean of noncognitive variables.
Table 4.13: One-Way ANOVA with Language of Instruction

<table>
<thead>
<tr>
<th>ANOVA</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Positive Self Concept</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.001</td>
<td>1</td>
<td>.001</td>
<td>.000</td>
<td>n.s.</td>
</tr>
<tr>
<td>Within Groups</td>
<td>932.877</td>
<td>202</td>
<td>4.618</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>932.877</td>
<td>203</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Successfully Handling the System</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>9.750</td>
<td>1</td>
<td>9.750</td>
<td>2.014</td>
<td>n.s.</td>
</tr>
<tr>
<td>Within Groups</td>
<td>977.677</td>
<td>202</td>
<td>4.840</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>987.426</td>
<td>203</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Preference for Long Range Goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.296</td>
<td>1</td>
<td>.296</td>
<td>.125</td>
<td>n.s.</td>
</tr>
<tr>
<td>Within Groups</td>
<td>477.743</td>
<td>202</td>
<td>2.365</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>478.039</td>
<td>203</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.340</td>
<td>1</td>
<td>.340</td>
<td>.537</td>
<td>n.s.</td>
</tr>
<tr>
<td>Within Groups</td>
<td>127.832</td>
<td>202</td>
<td>.633</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>128.172</td>
<td>203</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post knowledge in a Field</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.358</td>
<td>1</td>
<td>.358</td>
<td>1.180</td>
<td>n.s.</td>
</tr>
<tr>
<td>Within Groups</td>
<td>61.270</td>
<td>202</td>
<td>.303</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>61.627</td>
<td>203</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A review of the descriptive statistics in Table 4.14 reveals that with a population N=204, more students reported receiving instruction in English at 77.0% (n=157) during their short-term study abroad program. Conversely, less students reported receiving instruction in a language other than English at 23% (n=47) during their short term study abroad program.

Table 4.14: Descriptive Statistics for Language of Instruction

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Positive Self Concept 0</td>
<td>47</td>
<td>17.98</td>
<td>2.30</td>
<td>.34</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>157</td>
<td>17.97</td>
<td>2.10</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>204</td>
<td>17.98</td>
<td>2.14</td>
</tr>
<tr>
<td>Post Successfully Handling the System 0</td>
<td>47</td>
<td>14.53</td>
<td>1.98</td>
<td>.29</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>157</td>
<td>14.01</td>
<td>2.26</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>204</td>
<td>14.13</td>
<td>2.21</td>
</tr>
<tr>
<td>Post Preference for Long Range Goals 0</td>
<td>47</td>
<td>7.36</td>
<td>1.80</td>
<td>.26</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>157</td>
<td>7.45</td>
<td>1.45</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>204</td>
<td>7.43</td>
<td>1.53</td>
</tr>
<tr>
<td>Post Leadership 0</td>
<td>47</td>
<td>8.64</td>
<td>.79</td>
<td>.12</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>157</td>
<td>8.54</td>
<td>.80</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>204</td>
<td>8.56</td>
<td>.79</td>
</tr>
<tr>
<td>Post knowledge in a Field 0</td>
<td>47</td>
<td>4.85</td>
<td>.51</td>
<td>.07</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>157</td>
<td>4.75</td>
<td>.56</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>204</td>
<td>4.77</td>
<td>.55</td>
</tr>
</tbody>
</table>

These results confirm change occurs in the mean of students’ noncognitive variables after participating in short-term study abroad programs. Those noncognitive variables that displayed a change in the mean that were statistically significant were: positive self concept, successfully handling the system, preference for long range goals, leadership, and knowledge in a field. The
results of the tests of my second research question indicate that the environmental and structural factors do have an influence on the change in the mean of noncognitive variables. Specifically, the continent of the short-term study abroad experience and the living environment of the short-term study abroad experience have an influence on the change in the mean of noncognitive variables. Both students who participate in short-term study abroad programs on the African continent, and those students who participate in short-term study abroad programs on the European continent experience a statistically significant change in the mean for the Noncognitive Variable, Leadership than those students who travel to the Oceania region. Similarly, those students who live with a family (homestay) during their short-term study abroad experience a statistically significantly change in the mean for the noncognitive variable, Successfully Handle the System. The next section will address my final research question.

Research Question Three: Are there differences in students’ Noncognitive Variables based on demographic differences of short-term study abroad participants?

For this question I was interested in determining if the student’s demographic variables had an influence on the change in the means of their noncognitive variables. The following eight demographic variables were used as the independent variables: (a) GPA, (b) class year, (c) major, (d) age, (e) gender (f) previous travel outside the United States, (g) previous study abroad experience, and (h) weeks spent on STSA outside the United States.

A standard multiple regression was conducted with each of the five noncognitive variables found to be statistically significant in my first question. Positive Self Concept was the only noncognitive variable found to have independent variables that were significant in determining the change in the mean. I conducted a multiple regression using the independent variables listed previously. Table 4.15 is a list of the coefficients and their significance, using
Positive Self Concept as the dependent variable. No other noncognitive variables had any significant independent variables.

Table 4.15: Regression for Positive Self Concept

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.10</td>
<td>1.68</td>
<td>- .60</td>
<td>n.s.</td>
</tr>
<tr>
<td>Grade Point Average</td>
<td>- .05</td>
<td>.26</td>
<td>- .02</td>
<td>- .21</td>
</tr>
<tr>
<td>Class Year</td>
<td>.29</td>
<td>.26</td>
<td>.10</td>
<td>1.13</td>
</tr>
<tr>
<td>STEM Majors</td>
<td>- .02</td>
<td>.53</td>
<td>- .00</td>
<td>- .04</td>
</tr>
<tr>
<td>Education Majors</td>
<td>.43</td>
<td>.73</td>
<td>.06</td>
<td>.58</td>
</tr>
<tr>
<td>Social Science Majors</td>
<td>.36</td>
<td>.51</td>
<td>.07</td>
<td>.72</td>
</tr>
<tr>
<td>Other Majors</td>
<td>.16</td>
<td>.51</td>
<td>.03</td>
<td>.30</td>
</tr>
<tr>
<td>Travel outside the United States for longer than one week?</td>
<td>- .60</td>
<td>.37</td>
<td>- .15</td>
<td>- 1.63</td>
</tr>
</tbody>
</table>
Table 4.15 (cont’d)

| Participated in a Short-term study abroad program through a college or university? | Weeks spent outside the United States on the STSA Program? |
|---|---|---|---|---|
| | | | | |
| | | | | |
| 1.13 | .62 | .16 | 1.83 | * |
| -.10 | .24 | -.03 | -.40 | n.s. |
| -.20 | .43 | -.04 | -.47 | n.s. |

Dependent Variable: DiffPosSelfConcept
*p<.10

Table 4.15 shows the results of the regression for the dependent variable Positive Self Concept. Two of the eight independent variables (Previous Travel outside the US and Previous Short-Term Study Abroad experience) contributed significantly to the prediction of Positive Self Concept (*p<.10). The survey asked students to identify if they had previously traveled outside the United States for longer than one week. The responses to this question was coded into a dichotomous variable with a response Yes (yes=1) and No (no=2). A Yes (yes=1) response indicated the student had previously traveled outside the United States for longer than one week.
While, a No (no=2) response indicated the student had not previously traveled outside the United States for longer than one week. The data in Table 4.16 give information on the frequency of the response to this question.

As reflected in Table 4.16 the students who responded they had previously traveled outside the United States amounted to 60.6% (n = 183), and those who had not previously traveled outside the United States amounted to 39.4% (n = 119). This table reveals the majority of students who participate in short-term study abroad programs, have previously traveled outside of the United States for at least one week. Reviewing Table 4.15, the data explain that for every one-unit change in the response to having traveled outside the United States there is a decrease in the Positive Self Concept mean by (-.60). In other words, a student having previously experienced non-academic related travel outside the United States had a decrease in the mean change of the noncognitive variable, Positive Self Concept. These finding suggest the change in the mean of Positive Self concept is positively influenced by the lack of experience traveling outside the United States. In other words, students who have no experience traveling abroad will increase the change in the mean of Positive Self Concept after participating in a short-term study abroad experience.

Table 4.16: Frequency Table for Previous Travel Outside the United States

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>183</td>
<td>60.6</td>
<td>60.6</td>
</tr>
<tr>
<td>No</td>
<td>119</td>
<td>39.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>302</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>302</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Class Year was defined by asking the participants to self-report their class year by the number of credits earned. Table 4.17 provides information on the descriptive statistics for the class year. Students choose from the following options to report their class year standings: Freshman 0.4% (n=1), Sophomore 12.9% (n=32), Junior 44.0% (n=109), Senior 42.7% (n=106). More students who participated in the short-term study abroad experience were Juniors at 44.0% (n=109) followed by Seniors at 42.7% (n=106). However, both categories were marginally different in the number of students who reported attending short-term study abroad programs. The difference between Juniors and Seniors varied only by 3 students or 1%.

Table 4.17: Descriptive Statistics for Class Year

<table>
<thead>
<tr>
<th>Class Year</th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Sophomore</td>
<td>32</td>
<td>13.0</td>
</tr>
<tr>
<td>Junior</td>
<td>109</td>
<td>44.0</td>
</tr>
<tr>
<td>Senior</td>
<td>106</td>
<td>42.9</td>
</tr>
<tr>
<td>Total</td>
<td>248</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Previous Study Abroad Experience was defined by asking students if they had previously participated in a short-term study abroad program through a college or university. The responses to this question were coded into a dichotomous variable with a response Yes (yes=1) and No (no=2). A Yes (yes=1) response indicated the student had previously participated in a short-term study abroad program lasting eight weeks or less. While, a No (no=2) response indicated the student had not previously participated in a short-term study abroad experience and
this was the first time the student participated in a short-term study abroad program with a college or university.

The data in Table 4.18 includes information on the frequency of the responses to the question regarding previous study abroad experience. As reflected in Table 4.18 the students who responded they had previously participated in a short-term study abroad program were 17.3% \((n = 52)\). While, those students who responded they had not previously participated in a short-term study abroad program amounted to 82.7% \((n = 249)\). These findings reveal this is the first time many students have participated in a short-term study abroad program. Additionally, these data reveal the majority of students who participate in short-term study abroad programs have not previously participated in a short-term study abroad program sponsored through a college or university. The results of the regression conducted for the difference in positive self concept as viewed in table 4.15 explains for every one-unit increase in Previous Study Abroad experience, the change in mean for Positive Self Concept is improved by (.834). In other words, students who participate in short-term study abroad programs and have not participated in a pervious Short-Term Study abroad program through a college or university will increase the change in mean for Positive Self Concept. The dependent variables Successfully handling the System, Preference for Long Range Goals, Leadership, and Knowledge in a Field did not have any statistically significant results using this test.

Table 4.18: Previous Study Abroad Experience

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Valid</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Yes</td>
<td>52</td>
<td>17.3</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>249</td>
<td>82.7</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>301</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>301</td>
<td></td>
</tr>
</tbody>
</table>
Summary of Results

The results of the current study indicated there is a statistically significant change in noncognitive variables as a result of short-term study abroad programs. Utilizing a paired samples *t*-test, means were compared among pretest noncognitive variables and posttest noncognitive variables of students participating in short-term study abroad programs. The test revealed positive statistically significant changes in the mean of five noncognitive variables: Positive Self Concept, Successfully Handling the System, Preference for Long Range Goals, Leadership, and Knowledge in a Field.

Next, I turned my attention to examining the influence of environmental and structural factors involved in the mean changes of the statistically significant noncognitive variables. Using a One-Way ANOVA, I tested the noncognitive variables that exhibited a change in the mean and used the following independent variables as my environmental and structural factors: Region/Continent of the short-term study abroad experience, short-term study abroad living environment, and language of instruction.

The ANOVA examining the Region/Continent as the independent variable revealed Leadership was the only noncognitive variable to show the change in mean had a statistical significance. I found that a significant amount of the variance was attributable to the between-region components of the short-term study abroad experience. The post-hoc test indicated the statistical significance occurs in Leadership between students attending programs both in Africa and the Oceania region and Europe and the Oceania region. These results reveal students who attend short-term study abroad programs in Africa and Europe experience a greater change in
their Leadership mean than those students who attend short-term study abroad programs in the Oceania region.

The ANOVA examining the Living environment as the independent variable revealed Successfully Handling the System was the only noncognitive variable to show statistical significance in the change in mean. The findings indicated those students who participated in short-term study abroad programs and resided in home environments showed an improvement in the mean of the noncognitive variable Successfully Handling the System. These results reveal students who attend short-term study abroad programs and reside in home environments during the experience were better at successfully handing the system and dealing with change.

Finally, I wanted to determine if any demographic differences had a significant contribution to the change of the five statistically significant noncognitive variables of short-term study abroad programs. The eight independent demographic variables I examined were: gender, grade point average, class year, major, age, ethnic background, previous travel outside the United States, and previous study abroad experience. Using a standard multiple regression, the test revealed Positive Self Concept was the only noncognitive variable found to have independent variables that were significant in determining the change in the mean. As a result of using the noncognitive variable Positive Self Concept, the independent demographic variables determined to be statistically significant were: previous travel outside the United States and previous study abroad. This test revealed that those students who had not previously traveled abroad and those students who were participating on their first study abroad experience all produced a positive increase in the mean of the noncognitive variable Positive Self Concept. These findings indicate students who have no previous experience outside of the United States and students who were on
their first study abroad experience show an improvement in the mean of their Positive Self Concept after participating in a short-term study abroad program.

Additionally, the lack of significance in other variables of the noncognitive variables positive self concept, successfully handling the system, preference for long range goals, leadership, and knowledge in a field indicate that short term study abroad programs can influence positive mean changes in all students. The results of this study indicate short-terms study abroad programs can be good for all students regardless of gender, GPA, class year, major, age, or ethnic background.

Having examined the influence of short-term study abroad programs on noncognitive variables I turn my focus on the discussion of my conclusion and implications. Chapter five discusses the conclusion of my study along with implications for research and practice. I conclude the next chapter by discussing implications for future research.
CHAPTER FIVE

Conclusion and Implications

In this final chapter, I begin by revisiting my research questions. Then I discuss factors influencing the changes in the means of the noncognitive variables. Next, I discuss findings of my current study and will be considering the implications for practice, theory and research. Finally, I end the chapter by discussing the conclusions of my research. I sought to examine the influence of Short-Term Study Abroad programs on Noncognitive Variables. Specifically, I investigated the following research questions:

1. Is there change in students’ Noncognitive Variables (NCVs) after participating in a short-term study abroad program?

2. What influence do environmental and structural factors have on changes in Noncognitive Variables (NCVs) of short-term study abroad participants?

3. Are there differences in students’ Noncognitive Variables (NCVs) based on demographic differences of short-term study abroad participants?

From March 2011 through October 2011, I collected data from students who were participants in Short-Term Study Abroad programs between May 2011 and August 2011. I used a pretest and posttest survey to determine the change in means of noncognitive variables. In addition, I used a $t$-test, an Analysis of Variances (ANOVA), and a multiple linear regression, to determine what factors influenced change in the means of noncognitive variables.

Changes in the Means of Noncognitive Variables

In this section I discuss the noncognitive variables that experienced a statistically significant change in mean. I discuss each of the five noncognitive variables and the specific factors that influence a change in their mean. My study is an affirmation that short-term study
abroad programs have a positive influence on the change in mean of some noncognitive variables. Table 5.1 gives a description and an overview of each of the noncognitive variables that exhibited a change in the mean from the pretest to the posttest.

Table 5.1: Noncognitive Variables and Factors Influencing Change in Mean

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Description</th>
<th>Short-Term Study Abroad Influencing Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Self Concept</td>
<td>Demonstrates confidence, strength of character, determination, and independence.</td>
<td>Previous Travel First Time on a Short-Term Study Abroad Experience</td>
</tr>
<tr>
<td>Successfully Handling the System</td>
<td>Exhibits a realistic view of the system on the basis of personal experience, committed to improving the existing system, takes an assertive approach to dealing with existing wrongs.</td>
<td>Home Stays</td>
</tr>
<tr>
<td>Preference for Long Range Goals</td>
<td>Able to respond to deferred gratification, plans ahead and sets goals.</td>
<td>Not affected by specific factors.</td>
</tr>
<tr>
<td>Leadership</td>
<td>Demonstrates strong leadership in any area of personal background.</td>
<td>Region/Continent Africa vs. Oceania Europe vs. Oceania</td>
</tr>
<tr>
<td>Knowledge in a Field</td>
<td>Acquires knowledge in a sustained or culturally related way in any field.</td>
<td>Not affected by specific factors.</td>
</tr>
</tbody>
</table>
**Positive self concept.** The results of this study demonstrate the mean of the noncognitive variable Positive Self Concept is influenced by the factors: previous travel outside the United States and the first time students are on an academic short-term study abroad program. Having examined these results, my findings reveal that students who are first time attendees on a short-term study abroad program or students for whom this would be their first meaningful experience abroad had an improvement on their Positive Self Concept as well. My findings suggest that as students have their first international experience they begin to understand more about themselves. Additionally, this study reveals that even studying abroad for a short period of time can influence change in a students’ noncognitive variables. Scholars have acknowledged the increased confidence students were able to develop by confronting fears associated with studying abroad (Bakalis & Joiner, 2004). I recommend colleges and universities spend a considerable amount of time and money marketing short-term study abroad programs to those students who would be first time study abroad participants. There is research supporting the personal development that occurs as one is exposed to the academic and cultural experience of a short-term study abroad program (Sindt & Pachmayer, 2007). My findings reveal that short-term study abroad programs have an influence on the personal development of students.

**Successfully handling the system.** The results of the study demonstrate the mean of the noncognitive variable, Successfully Handling the System is influenced by the short-term study abroad living environment. Using an ANOVA, I examined the influence the living environment has on the noncognitive variables. My results indicate students who participated in home stays had a better sense of successfully handling the system on short-term study abroad programs than their counterparts who participated in group stays. Based on educational offerings, more
prospective faculty leaders may want to include a home stay in their short-term study abroad programs to better equip students with the tools to handle foreign and unfamiliar environments.

As a result of successfully handling the system abroad, students may be able to utilize these skills to show independence and handling more of the unfamiliar experiences of their home universities. I recommend those who design and lead short-term study abroad programs place an emphasis on increasing time spent with local families, students, and faculty members with those who go abroad. This can be done by giving short-term study abroad students the opportunity to interact with local families, local students, and local faculty members in the visiting country on a social level rather than on an academic level. Short-term study abroad students could use time to have all day explorations of the local areas followed by a short overnight stay.

Leadership. The results of the study demonstrate the mean of the noncognitive variable Leadership, was positively changed when compared among students who attended short-term study abroad programs on the African and European continents with those students who attended programs in the Oceania region. The results offer an important contribution in determining short-term study abroad destinations for both those designing and attending these programs. These findings offer clear evidence that students who are attending short-terms study abroad programs on the African and European continents are developing their leadership skills at an increased rate than their counterparts who are attending programs in the Oceania region. The results demonstrate how the destination of the short-term study abroad program influences noncognitive variables. More specifically, the results demonstrate the influence of the destination of short-term study abroad programs have on leadership growth. Europe was the continent attended by most students who participated in my study at 60.2%. While students attending programs on the African continent amounted to 11.2%. These finding are clearly a
reflection of the students’ attendance in the short-term study abroad experience of these regions. According to recent data most students attend short-term study abroad programs in European countries (Institute of International Education, 2011). I would recommend more short-term study abroad programs be offered and developed in African countries as well. Colleges and universities could offer short-term study abroad programs that combine experiences in both the European and African continents.

Preference for long range goals and knowledge in a field. The results of the study demonstrates that both the noncognitive variables Preference for Long Range Goals and Knowledge in a Field did not exhibit any specific factors in the demographic differences that influenced change. These findings offer evidence that the change in mean for Preference in Long Range Goals and for Knowledge in a Field is a change that occurs with respect to all participants in short-term study abroad programs. My study indicates that short-term study abroad programs influence change in noncognitive variables for all students regardless of demographic differences. These results provide clear evidence that more institutions can market short-term study abroad programs to all students regardless of race, ethnicity, gender, age, and year in college.

Discussion of Findings

What are the benefits of short-term study abroad? Some critics argue short-term study abroad opportunities will benefit students, but not in ways that are immediately noticeable upon their return from the experience (Black & Duhon, 2006; Fels, 1993). Despite this assumption and as a result of changes in the means of noncognitive variables, my study reveals that almost immediately upon returning, students are able to benefit from the experience of a short-term
study abroad program. My study also reveals how short-term study abroad programs are changing college students for the better.

Traditional methods of assessing short-term study abroad programs focused on language acquisition and intercultural competence (Brubaker, 2006; Keefe, 2008; Lewis & Niesenbaum, 2005a; Sindt & Pachmayer, 2007). The traditional methods provided valuable information regarding short-term study abroad yet lacked research in the exploration of noncognitive variables. Furthermore, there was little information regarding the use of noncognitive variables as a means to measure the influence of short-term study abroad programs. As a result of the research presented in this study, there is now a means by which scholars can evaluate short-term study abroad programs by measuring noncognitive variables before and after a short-term study abroad program. My study provides scholarly research regarding change in noncognitive variables as a result of a short-term study abroad intervention.

The purpose of my study was to introduce and explore the possibility that short-term study abroad programs could contribute to the changes in students’ noncognitive variables. In particular, I wanted to introduce the idea that short-term study abroad intervention could influence and have a positive change in noncognitive variables. According to Sedlacek (2004) most assessments are not deemed to be related to other attributes. However, a positive change in noncognitive variables would indicate students have an improvement in their predictor for success in higher education. Noncognitive variables have been used in college admissions as a predictor of success in higher education for a number of years (Sedlacek, 2001; Thomas, et al., 2007). Noncognitive variables employ the use of experiential intelligence and contextual intelligence. In a changing environment, experiential intelligence involves the ability to interpret
information, and contextual intelligence is the ability to adapt and negotiate the system (Noonan, et al., 2005).

My study has contributed to noncognitive variable research by showing that even after a short-term intervention there is measurable change in noncognitive variables. Use of noncognitive variables as a measurement allows educators to find answers to specific evaluation or assessment questions and to tie those answers to a larger plan whose fundamental principle is the facilitation of student success (Sedlacek, 2004). My study allows educators to evaluate short-term study abroad programs with the goal of determining its influence on student success. According to Sedlacek (2004) the student success focus of the assessment model of noncognitive variables strengthens the value of assessment to many audiences in higher education. By studying student reactions to a short-term study abroad intervention, measurements of noncognitive variables can relate the results of this short-term study abroad assessment to student success. The measurement of the short-term study abroad programs was determined by examining the changes that occur in the means of noncognitive variables.

Changes in the means of the noncognitive variables occur as a result of comparing outcome characteristics with input characteristics (Astin, 1993). Changes in the noncognitive variables are evident as the input-environment-outcomes (I-E-O) theoretical model was used to relate the influence of the short-term study abroad experience with noncognitive variables. The gains in the calculation of the means of noncognitive variables introduce the concept that short-term study abroad programs matter in the personal development of students.

The input-environment-outcomes (I-E-O) model is associated closely with describing and assessing educational programs (Astin, 1993), and my study reveals the influence that short-term study abroad programs have on the noncognitive variables of students who participate in short-
term study abroad programs. The background and prior experience students bring to a short-term study abroad program begins to shape the noncognitive variables of the student. Included in the background of the student are the noncognitive variables, previous experience abroad, and previous experience on a short-term study abroad program. The environment of the short-term study abroad program experience influences the background characteristics as well. The environment includes whether students participated in home stays and the region of the short-term study abroad experience and this begins to shape the outcome. The outcome is reflected as a change in the noncognitive variables.

The ideal of applying the I-E-O model to research noncognitive variables and short-term study abroad programs is new. This study used noncognitive variables as an input variable in the I-E-O model. In addition, noncognitive variables have typically been used as a means for selection into higher education and for scholarships (Noonan, et al., 2005; Sedlacek, 2004), however, this study has extended the use of noncognitive variables as an input variable in the short-term study abroad programs.

But why does the measurement of the effects of short-term study abroad programs on noncognitive variables matter? Short-term study abroad programs provide students with a meaningful experience in global and cultural emersion (Chambers & Chambers, 2008). Many experts acknowledge that short-term study abroad programs provide a balance between academic content and cultural activities (Koernig, 2007). Sindt and Pachmayer (2007) in their study concluded that students who participated in short-term study abroad programs improved their personal development, and the current study offers important information regarding how the personal development of students can be influenced. The personal development is influenced by the experience of the short-term study abroad program, along with the environmental and
structural design factors of the short-term study abroad program. The factors that influence the changes in noncognitive variables are: previous experience traveling abroad, first time on a short-term study abroad program, participation in home stays, and region of the short-term study abroad program. These factors influence the change in means of the noncognitive variables of the students who participate and establish the change in personal development.

By increasing gains in noncognitive variables students are developing the skills to become more successful in college. Those who have successfully incorporated noncognitive variables into the design of their classrooms have experienced gains in retention efforts (Sedlacek, 2004). It is important to document how students develop the skills in adjustment and motivation and noncognitive variables are means to document those skills. The skills developed from gains in noncognitive variables are directly associated with personal development.

Realizing how personal development is affected, Keefe (2008) noted that students who participate in short-term study abroad programs recognized a greater sense of self awareness. The five noncognitive variables in my study found to have a positive change in the mean demonstrate that in a global society people are open to diversity, adaptable to change and thrive in uncertain complex situations (Bakalis & Joiner, 2004). More college students are making themselves aware of the opportunities of participation in short-term study abroad programs. There is now evidence that as a result of participation in short-term study abroad programs, change occurs in the personal development of students through the measurement of noncognitive variables. Scholars agree students can experience changes in self-image, academic goals, professional goals, and attitudes about their role in society as a result of participation in short-term study abroad programs (Kasravi, 2009). Those charged with the task of creating and implementing short-term study abroad programs should take notice to use the results to advocate
for the development and implementation of more short-term study abroad programs for college students. As more students begin to weigh in on the decision to participate in short-term study abroad programs, the results of this study should be used to assist both those involved in the planning and those considering attending these programs and the environment and structural components of the design of these programs.

This study reveals the influence of short-term study abroad programs on the adjustment and motivation changes on students who participate. Practitioners should begin to design short-term study abroad programs in a manner that will take into account noncognitive variables and how background information and select environments can influence change. My research attempts to add to the on-going discussion regarding how short-term study abroad programs affect students. Additionally, my research provides information on the influence of short-term study abroad programs on noncognitive variables.

More attention should be given to design and implementation of short-term study abroad programs, which provide participants with opportunities in global awareness. The existing literature on short-term study abroad sheds light on the benefits students derive from participation, including greater interaction with peers and persistence (Jessup-Anger, 2009). The results of this study clearly illustrate that students who are willing to participate in short-term study abroad programs will have beneficial experiences in personal development, the personal development manifests through positive changes in noncognitive variables.

**Implications for Practice, Theory, and Research**

**Implications for Practice**

There are several implications for practice that can be drawn from this study. First, short-term study abroad programs must consider experiences in the design that focus on enhancing
noncognitive variables. Noncognitive variables have been found to be effective in predicting student success in higher education and employed by many institutions in their retention programs (Sedlacek, 2004). Short-term study abroad programs need to offer core elements in the course requirements that focus on the five noncognitive variables found to have increased as a result of the short-term study abroad experience (i.e., positive self concept, successfully handling the system, preference for long range goals, leadership, knowledge in a field). Offering core elements in the course requirements can be accomplished by designing and revising short-term study abroad programs to successfully work as both an educational abroad and a personal development experience. The syllabi should emphasize active reflection and assessment, goal setting, finding resources while abroad, discovering leadership opportunities while abroad, understanding a new culture, and developing academic study skills. Increasing the mean scores of students’ noncognitive variables will likely increase their persistence rate in higher education.

Second, short-term study abroad programs should consider adopting a strategy that seeks to attract students who have not previously attended study abroad programs. The results of my study reveal that students who experienced their first short-term study abroad experience had greater gains in their positive self concept. This strategy could include actively designing programs for students who lack study abroad and travel experience. In other words, programs should consider designing programs specifically for students for whom this would be their first experience abroad. Improving students’ positive self concept would demonstrate improvement in confidence, strength of character, determination, and independence (Sedlacek, 2004).

Third, short-term study abroad programs should consider adding or enhancing a home stay component to the students’ learning. More effort needs to be made to engage students in the culture of the country where they are participating in a short-term study abroad. The results of
my study revealed that students had gains in the noncognitive variable, successfully handling the system when they had greater participation in home stays. By adding home stays to the experience, students will be able to take an assertive approach to dealing with the unknowns of a culture or society. Programs should have each short-term study abroad participant stay with a family in the host country and engage in those items associated with a familial structure. The stay should include short-term study abroad students engaging in conversations, and can be accomplished while eating meals with a family from the host country. The meals I believe will be most beneficial and engaging to accomplish meaningful conversations will be the breakfast and dinner meals.

Fourth, another implication of my study is to confirm that participation in short-term study abroad programs can benefit all students. The results of my study highlighted specific factors that influence the change in noncognitive variables of students who participated in short-term study abroad programs. However, there were two noncognitive variables that exhibited changes in their means that were not influenced by demographic, design, or environmental factors (preference for long range goals and knowledge in a field). The two noncognitive that were not influenced by independent variables underscore the importance of providing opportunities to participate in short-term study abroad program for all students, including those students who have traditionally and historically have not been participants. Program leaders of short-term study abroad programs should make available the opportunity for students to engage in active reflection and assessment before, during, and after the experience. Students need the opportunity to share with their peers and program leaders their attitudes and opinions of the experiences abroad.
Implications for Theory

My study is the first time that anyone has addressed the issue of the influence of short-term study abroad programs on the changes in noncognitive variables. Noncognitive is a term used to refer to variables relating to adjustment, motivation, and perceptions (Sedlacek, 2004), and noncognitive variables serve as a useful predictor of the success of students in higher education. The findings of my study offer an important contribution to theory in higher education and in noncognitive variables. The ability to interpret information in the changing environment of a short-term study abroad experience (Noonan, et al., 2005) is illustrated as the input-environment-outcomes model is reinforced.

The use of input-environment-outcomes model (Astin, 1993), examines how the attributes a student brings into the short-term study abroad experience along with the environment of the short-term study abroad has an influence on the outcomes. The use of noncognitive variables to measure the influence of short-term study abroad programs is a new concept. By using noncognitive variables and the noncognitive questionnaire (NCQ) scholars now have a means to evaluate short-term study abroad programs and make meaning of how these variables are subject to change as a result of a changing environment. The changes in the means of noncognitive variables were a result of some specific background, design, and environmental factors. Furthermore, there is more to be done to understand short-term study abroad programs, their influence on noncognitive variables and how the design and implementation of the program will change students. By influencing positive change in noncognitive variables through participation in short-term study abroad programs, colleges and universities can influence retention efforts in higher education.
Implications for Research

The contributions of my study to higher education and short-term study abroad research are worth noting. First, one implication of my study is to confirm that a short-term study abroad intervention can have an influence on the changes in noncognitive variables. According to Sedlacek (2004) noncognitive variables can be useful in higher education assessment after a student matriculates. In the case of this study, the results of the research revealed the influence of a short-term study abroad intervention on five noncognitive variables among students currently enrolled in higher education institutions.

Second, my study provides the evidence that would prove beneficial to conduct additional studies. More research in short-term study abroad is necessary to improve the design and outcomes of these educational experiences abroad. Future research should investigate whether or not different academic programs, from different academic institutions yield different results as it relates to changes in noncognitive variables. Furthermore, research should be conducted to investigate how the syllabi from different academic and institutional programs have an influence on short-term study abroad programs and the affect these programs have on noncognitive variables.

Third, the next steps in research would be to utilize a method that embraces a qualitative study. The purpose of the qualitative study is to collect data using interviews and observations of the entire class of a faculty-led short-term study abroad program whose students would be traveling together as a group. My quantitative study utilized a survey with over 200 participants. Finding a faculty-led short-term study abroad program with a 7 to 1 student to faculty ratio would prove beneficial in terms of observations and number of interviews conducted. By using qualitative research such as a phenomenological study, research identifying the essence of the
human experience can be explored (Creswell, 2003, 2007). The procedure would involve studying a small number of participants through an extensive and prolonged engagement (Creswell, 2003) where more in depth questions can be addressed and the participants can be observed.

Fourth, consideration should be given to a study that offers a comparison between short-term study abroad programs and semester long study abroad programs. My study focused on the influence of short-term study abroad programs on noncognitive variables. My research was the first time short-term study abroad programs were evaluated using Sedlacek’s noncognitive variables. Similarly, there is no current research on the influence of semester long study abroad programs on noncognitive variables. Therefore, it would be beneficial to conduct a similar study on a semester and year-long program using the same methodology.

Fifth, a study should be conducted to compare the short-term study abroad experiences of first-generation college students with those who are not first generation college students. Noncognitive variables have been used as predictors for success with nontraditional and other students with disadvantaged backgrounds (Sedlacek, 2004). As such, first generation students would be an ideal population to study to determine if there were any changes in their noncognitive variables after participation in a short-term study abroad experience.

Sixth, researchers should consider the influence of short-term study abroad programs among community college students. Because short-term study abroad programs have gained momentum in higher education, more college students are encouraged and finding ways to participate in this experience. Students in community colleges have diverse backgrounds and include traditional and nontraditional students. The diversity in community college students would provide a unique population to study the influence of short-term study abroad experiences
on noncognitive variables. To date there has been very little research on short-term study abroad programs in community colleges, and this proposed study would provide an opportunity to add to the existing literature on both community college and short-term study abroad research.

**Conclusion**

Short-term study abroad programs have emerged as a means to gain valuable experience in education abroad. In addition, short-term study abroad programs offer an opportunity for college students to improve their personal development. The purpose of my study was to examine the influence of short-term study abroad programs on noncognitive variables. The results of my study support the notion that short-term study abroad programs have an influence on the noncognitive variables of the students who participate in these programs. Furthermore, the results indicate some specific factors namely, previous travel abroad, first time experience studying abroad, living with a family while abroad, and the geographic region which the program takes place has an influence on the change in noncognitive variables.

My study provided a new method of evaluating short-term study abroad programs. The use of measuring noncognitive variable data is not new, however, using noncognitive variable data to investigate the influence of short-term study abroad programs is new. My study is an important step for those looking to design or redesign short-term study abroad programs as a means of personal development and encouraging retention.

Those charged with the task of developing and managing short-term study abroad programs should realize the influence short-term study abroad programs have on students. Short-term study abroad programs should be viewed as an experience to enhance education and also a necessary requirement that is proven to help students with gains in noncognitive variables.
As a result of gains in noncognitive variables, students have an improvement in their predictor for success in higher education. The results of this study are important for faculty, administrators, and students interested in the design and implementation of short-term study abroad programs.
APPENDICES
Appendix A

Pre-Experience Survey for Students Prior participating in a Short-Term Study Abroad Program

Demographic Information – Answer or Check as appropriate:

1. Unique Identifier (Will be used to identify your first set of answers with your second set of answers)
   a. First two letters of your first name_____________
   b. First two letters of your last name_____________
   c. First two letters of the city in which you were born _______
   d. Last four digits of your phone number_________

2. Gender:
   - Male
   - Female
   - Transgender

3. Grade Point Average:
   - 4.00-3.50
   - 3.49-3.00
   - 2.99-2.50
   - 2.49-2.00
   - Under 2.00

4. Class Year (by number of credits earned):
   - Freshman
   - Sophomore
   - Junior
   - Senior
   - Other

5. Major:__________
6. Age: __________

7. Select your ethnic background from **One or More** of the ethnic backgrounds from the following groups:
   - [ ] American Indian or Alaska Native
   - [ ] Asian
   - [ ] Black or African-American
   - [ ] Hispanic/Latino
   - [ ] Native Hawaiian or Other Pacific Islander
   - [ ] White
   - [ ] International
   - [ ] Other ____________________

8. What College/University do you attend? ______________________________

9. Have you ever traveled for longer than one week outside of the United States?
   - [ ] Yes
   - [ ] No

10. Have you ever participated in a Short-Term Study Abroad Program through a College or University?
    - [ ] Yes
    - [ ] No

11. What countries are you visiting for your short-term study abroad experience? ________________

12. What is the highest degree obtained by your father/guardian?
    - [ ] Less than High School
    - [ ] High School Degree
    - [ ] Some college, no degree
    - [ ] College degree
    - [ ] Graduate or professional degree

13. What is the highest degree obtained by your mother/guardian?
    - [ ] Less than High School
□ High School Degree
□ Some college, no degree
□ College degree
□ Graduate or professional degree

14. What is your parents’/guardians’ annual family income (approximately)?
□ Below $20,000
□ $20,000-$30,000
□ $30,001-$50,000
□ $50,001-$70,000
□ $70,001-$90,000
□ $90,001-$110,000
□ $110,001-$130,000
□ $130,001-$150,000
□ more than $150,000

15. How much education do you expect to get during your lifetime?
□ Less than a bachelor’s degree
□ Bachelor’s degree (B.A., B.S., etc.)
□ Master’s degree (M.A., M.S., M.B.A., M.F.A., etc.)
□ Law degree (J.D.)
□ Doctorate (Ph.D., Ed.D. M.D., D.O., etc.)

16. Please list three goals that you have for yourself right now:
   a.
   b.
   c.

17. About 50 percent of College/University Students typically leave before receiving a degree. If this should happen to you, what will be the most likely cause?
□ Absolutely certain that I will obtain a degree
□ To accept a good job
□ To enter military service
□ It will cost more than my family can afford
□ Marriage
Disinterest in study
Lack of academic ability
Insufficient reading or study skills
other

18. Please list three things that you are proud of having done:
   a.
   b.
   c.

   Please indicate the extent to which you disagree or agree with each of the following items. Respond to the statements with your feelings at present or your expectation of how things will be:

19. The college/university should use its influence to improve social conditions in the state.

20. It should not be very hard to get a B (3.0) average at my college/university.

21. I get easily discouraged when I try to do something and it doesn’t work.

22. I am sometimes looked up to by others.
23. If I run into problems concerning school, I have someone who would listen to me and help me.

- [ ] Strongly Agree
- [ ] Agree
- [ ] Neutral
- [ ] Disagree
- [ ] Strongly Disagree

24. There is no use in doing things for people; you only find that they are ungrateful.

- [ ] Strongly Agree
- [ ] Agree
- [ ] Neutral
- [ ] Disagree
- [ ] Strongly Disagree

25. In groups where I am comfortable, I am often looked to as a leader.

- [ ] Strongly Agree
- [ ] Agree
- [ ] Neutral
- [ ] Disagree
- [ ] Strongly Disagree

26. I expect or have had a harder time than most students at my College/University.

- [ ] Strongly Agree
- [ ] Agree
- [ ] Neutral
- [ ] Disagree
- [ ] Strongly Disagree

27. Once I start something, I finish it.

- [ ] Strongly Agree
- [ ] Agree
- [ ] Neutral
- [ ] Disagree
- [ ] Strongly Disagree

28. When I believe strongly in something, I act on it.

- [ ] Strongly Agree
- [ ] Agree
- [ ] Neutral
- [ ] Disagree
- [ ] Strongly Disagree
29. I am as skilled academically as the average applicant at my College/University.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

30. I expect or have had to encounter racism at my College/University.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

31. People can pretty easily change me even though I thought my mind was already made up on a subject.

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36. My high school grades don’t really reflect what I can do.

☐ Strongly Agree
☐ Agree
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☐ Disagree
☐ Strongly Disagree

37. Please list three offices held and/or groups belonged to in high school, the community, or your college/university?
   a. 
   b. 
   c. 

38. I have participated in a short-term study abroad program in the last 6 months.

☐ Yes
☐ No

39. How would you describe your living arrangements for the current school year?

☐ Residence Hall Living
☐ Off-Campus Housing
☐ Other

40. The faculty with whom I have had contact are genuinely interested in students.

☐ Strongly Agree
☐ Agree
☐ Neutral
☐ Disagree
☐ Strongly Disagree
41. The faculty with whom I have had contact are interested in helping students grow in more than just academic areas.

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48. Since entering the college/university I have developed a close personal relationship with at least one faculty member.

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- [ ] Disagree
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- [ ] Strongly Agree

49. I am satisfied with my opportunities to meet and interact informally with faculty members.

- [ ] Strongly Disagree
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- [ ] Neutral
- [ ] Agree
- [ ] Strongly Agree

50. The courses I have taken helped me understand the historical, political and social connections of events.

- [ ] Strongly Disagree
- [ ] Disagree
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- [ ] Agree
- [ ] Strongly Agree

51. The courses I have taken helped me see the connections between my intended career and how it affects society.

- [ ] Strongly Disagree
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- [ ] Strongly Agree
52. My out-of-class experiences have helped me connect what I have learned in the classroom with life events.

53. My out-of-class experiences have helped me translate knowledge and understanding from the classroom into action.

54. The students with whom I have had contact are willing to spend time outside of class to discuss issues of interest and importance to me.

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</tr>
</thead>
</table>

58. What do you hope to learn from this short-term study abroad experience? ____________

59. What are the dates of your study abroad experience? ____________

60. What is your email address (to be used to send Post-Departure survey only)? ____________
Appendix B

Post-Experience Survey for Students who have participated in a Short-Term Study Abroad Program

**Demographic Information** – Answer or Check as appropriate:

1. Unique Identifier (Will be used to identify your first set of answers with your second set of answers)
   a. First two letters of your first name________________
   b. First two letters of your last name_________________
   c. First two letters of the city you were born in___________
   d. Last four digits of your phone number______________

2. How much education do you expect to get during your lifetime?
   - [ ] Less than a bachelor’s degree
   - [ ] Bachelor’s degree (B.A., B.S., etc.)
   - [ ] Master’s degree (M.A., M.S., M.B.A., M.F.A., etc.)
   - [ ] Law degree (J.D.)
   - [ ] Doctorate (Ph.D., Ed.D. M.D., D.O., etc.)

3. Please list three goals that you have for yourself right now:
   a.
   b.
   c.

4. About 50 percent of College/University Students typically leave before receiving a degree. If this should happen to you, what will be the most likely cause?
   - [ ] Absolutely certain that I will obtain a degree
   - [ ] To accept a good job
   - [ ] To enter military service
   - [ ] It will cost more than my family can afford
   - [ ] Marriage
5. Please list three things that you are proud of having done:
   a. 
   b. 
   c. 
   Please indicate the extent to which you disagree or agree with each of the following items. Respond to the statements with your feelings at present or your expectation of how things will be:

6. The college/university should use its influence to improve social conditions in the state.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

7. It should not be very hard to get a B (3.0) average at my college/university.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

8. I get easily discouraged when I try to do something and it doesn’t work.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
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</table>

9. I am sometimes looked up to by others.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
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</thead>
</table>
10. If I run into problems concerning school, I have someone who would listen to me and help me.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
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</tr>
</thead>
</table>

11. There is no use in doing things for people; you only find that they are ungrateful.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
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<th>Neutral</th>
<th>Disagree</th>
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</table>

12. In groups where I am comfortable, I am often looked to as a leader.

<table>
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13. I expect to have a harder time than most students at my College/University.

<table>
<thead>
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14. Once I start something, I finish it.

<table>
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15. When I believe strongly in something, I act on it.

<table>
<thead>
<tr>
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<th>Agree</th>
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16. I am as skilled academically as the average applicant to my College/University.

<table>
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17. I expect I will encounter racism at my College/University.

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<tr>
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18. People can pretty easily change me even though I thought my mind was already made up on a subject.

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21. If course tutoring is made available on campus at no cost, I would attend regularly.

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☐ Strongly Disagree  ☐ Disagree  ☐ Neutral  ☐ Agree  ☐ Strongly Agree

23. My high school grades don’t really reflect what I can do.

☐ Strongly Disagree  ☐ Disagree  ☐ Neutral  ☐ Agree  ☐ Strongly Agree

24. Please list three offices held and/or groups belong to in high school, the community, or your college/university:

a.  
b.  
c.  

The following questions pertain to your experiences in your short-term study abroad program.

25. During my short-term study abroad experience I would describe my living arrangements as.

☐ Group/ Cohort Community Living
☐ Home Stay
☐ Combination Group/Home Stay
☐ Other

26. On a scale from 0% to 100% how much time would you say was spent on Group/Cohort Community Living?___________

27. On a scale from 0% to 100% how much time would you say was spent on Home Stay Living?___________

28. On a scale from 0% to 100% how much time would you say was spent on other Living?___________

29. How many total days was your short-term study abroad program?___________
30. How many total days of your short-term study abroad program was spent outside the United States? __________

31. What was the language of instruction during the short-term study abroad experience for the period outside of the United States? __________

32. How many students participated on your short-term study abroad program? __________

33. How many faculty and staff members led your short-term study abroad program? __________

34. What college/university do you attend? __________

**The following questions pertain to your experiences with your short-term study abroad program.**

35. The faculty with whom I have had contact are genuinely interested in students.

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43. Since participating in a Short Term Study Abroad Program, I have developed a close personal relationship with at least one faculty member.

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53. What did you learn from your short-term Study Abroad Experience?

54. How do you believe this short-term study abroad experience has motivated you as a student?

55. Can you describe any event or situation that you believe significantly impacted your short-term study abroad experience?

56. Anything else you would like to share about your experience?

57. What countries are you visiting for your short-term study abroad program?
APPENDIX C

Participant Consent Form

Dear Participant:

This survey is part of a research study designed to find out about change in noncognitive variable among students who participate in short-term study abroad programs. Your participation will contribute to research on short-term study abroad and assist college and university practitioners in understanding how to best support students.

This survey has two components, a pre-experience survey and a post-experience survey. This survey is the pre-experience survey. The post-experience survey will be sent to you later after you have returned from your Short-Term Study Abroad experience, should you decide to complete this survey. Should you complete both surveys, you will be entered into a drawing to receive a $20 gift card from amazon.com. There will be 50 gift cards given out. The survey should take about 15 minutes to complete. Your privacy will be protected to the maximum extent allowable by law. There is a possibility that information gathered from this study may be used in future research or publications. All data will be treated in a confidential manner and no student will be identified by name in reports. Anonymity is guaranteed in reports and data summaries through the use of pseudonyms and unique identifiers. The data will be kept for a minimum of three years after the project closes. The data will be maintained by the primary investigator and stored on a computer in the primary investigator’s home office.

Your participation is confidential, completely voluntary, and you may choose not to participate. Only the investigators will have access to your data. The IP address of your computer will not be linked to your survey. You may refuse to answer any particular question. Responses will be numerically coded for statistical analysis. Any identifiable information will be removed. You may discontinue your participation at any time. There are no known risks associated with participation in this study. You must be at least 18 years old to participate in this study. If you are not at least 18 years old, your interest in this study is appreciated, but please do not proceed.

If you have any concerns or questions about this study, such as scientific issues, how to do any part of it, or to report an injury (i.e. physical, psychological, social, financial, or otherwise) please contact researcher Reginald J. Motley by phone: 313-559-2103, by email: motleye@msu.edu, or by regular mail: 101 Student Services Building, East Lansing, MI 48824. Or you may contact Dr. Kristen A. Renn, Associate Professor in Educational Administration, 428 Erickson Hall, Michigan State University, by phone: (517) 353-5979, or email address: renn@msu.edu.

If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint
about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 207 Olds Hall, MSU, East Lansing, MI 48824.

By checking yes, I agree that I have read the description of the study, I meet the requirements of the study, and I agree to participate.
APPENDIX D

Email to Recruit Students

Dear Short-Term Study Abroad Faculty Leader:

I am a graduate student at Michigan State University in the Higher, Adult & Lifelong Education (HALE) department, where I am working on a study for my dissertation. My research is designed to determine more about change in noncognitive variables among students who participate in short-term study abroad programs. I am writing to ask for permission to use your students in my research. Their participation will contribute to research on short-term study abroad and assist college and university practitioners in understanding how to best support students.

It would be helpful if I could obtain students for my research that will be participating in study abroad programs that occur between May 2011 and August 2011. My survey has two components, a pre-experience survey and a post-experience survey. The pre-experience survey will be given to those students who will be participants in short-term study abroad programs prior to their departure on the program. The post-experience survey will be sent to those students who have completed the initial pre-experience survey, and have returned from their short-term study abroad experience. Should the students complete both surveys, they will be entered into a drawing to receive a $20 gift card from amazon.com. There will be 50 gift cards given out. The survey should take about 15 minutes to complete. If there are any concerns regarding the drawing then I will not use it as an incentive to attract participants for my survey. I have attached the link for the pre-experience survey
https://www.surveymonkey.com/s/QJCP5MM.

If there are any questions or concerns about my study, I can be reached at motleyre@msu.edu or 313-559-2103 (cell), 313-499-0023 (home), or 517-355-8286 (office).

Thank you for your consideration of my request.

Reg Motley
Doctoral Candidate
Higher, Adult, & Lifelong Education
Graduate Assistant
Department of Student Life
Michigan State University
101 Student Services
East Lansing, MI 48824
APPENDIX E

Post Departure Email to Students Who Participated in Pre Departure Survey

Study abroad participant:

You previously assisted with my dissertation study by completing my Pre-Experience survey prior to your departure for your Short-Term Study abroad experience for this summer. I believe you have completed your Short-Term Study Abroad program and have returned from the experience. I am now asking you to complete my Post-Experience survey, this should take approximately 15 minutes to complete.

Should you complete this post-experience survey, you will be entered into a drawing to receive a $20 gift card from amazon.com to be issued in September 2011. There will be 50 gift cards available to those who have completed both the pre-experience and post-experience surveys.

If there are any questions or concerns about my study, I can be reached at motleyre@msu.edu or 313-559-2103 (cell).

Again, the survey only takes approximately 15 minutes to complete and I would greatly appreciate if you could complete my survey to assist me with my dissertation research completion. Thank you for your consideration of my request.

If you cannot access the survey please try this link https://www.surveymonkey.com/s/XMY33RT

Reg Motley
Doctoral Candidate
Higher, Adult, & Lifelong Education
College of Education
Michigan State University
101 Student Services
East Lansing, MI 48824

Please note: If you do not wish to participate in this study please click the link below, and you will be automatically removed from my mailing list.
https://www.surveymonkey.com/optout.aspx
REFERENCES
References


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