Socioeconomic Status and Study Abroad: Participation, Academic Performance, and Graduation

Steven Douglas Bell
Old Dominion University

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SOCIOECONOMIC STATUS AND STUDY ABROAD: PARTICIPATION, ACADEMIC PERFORMANCE, AND GRADUATION

By

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A Dissertation Submitted to the Faculty of Old Dominion University in Partial Fulfillment of the Requirements for the Degree of

DOCTOR OF PHILOSOPHY

HIGHER EDUCATION

OLD DOMINION UNIVERSITY
December 2015

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ABSTRACT

SOCIOECONOMIC STATUS AND STUDY ABROAD: PARTICIPATION, ACADEMIC PERFORMANCE, AND GRADUATION

Steven Douglas Bell
Old Dominion University, 2015
Director: Dr. Dennis E. Gregory

Research into retention, academic performance, and degree completion of study abroad program participants positively correlates with the assertion of Kuh, Kinzie, Schuh, Whitt, and Associates (2005) that study abroad is a high-impact educational activity. Literature on study abroad participation, academic performance, and graduation status is limited. This quantitative study adds to the literature on study abroad, and specifically examines to what extent participation, academic performance, and graduation at four and six years for study abroad students differ by socioeconomic status.

Keywords: socioeconomic status, study abroad programs, participation, academic performance, graduation
This dissertation is dedicated to my family.
   And especially to my brother.
ACKNOWLEDGEMENTS

I am very blessed and I have much to be thankful for in my life. I am not sure how to express my appreciation and gratefulness for all that several people have done to help me complete this dissertation. But, I know where to start. And that is with my wife, Wendi. With assistance from our sons Manoa and Hudson, Wendi carried me throughout this process and across the finish line with her unflinching love, support, and encouragement. I am deeply appreciative and indebted to Wendi and our sons who sacrificed in untold ways for me over the past six years as I pursued my doctorate.

I also want to thank my sisters and my Mom and Dad for always believing in me and cheering me on. I am also grateful for the support of my in-laws and my family-of-the-heart for assisting and encouraging me to “stay the course.”

For me, family is much more than biology; it is about respect, love, shared values, and mutual support. I share these things with my ODU Study Abroad colleagues; they are my work family. I extend my profound appreciation to Michael, Patti, Beth, and Rachel for being such a great team to work, grow, and learn with, and for their steadfast support, friendship, and understanding through this odyssey. I am also grateful to Marcelo and Allison in International Programs for their help along the way.

I partnered with Mary and Elaine in the ODU Office of the Registrar to prepare this dissertation’s data for statistical analysis. I am grateful to Mary for her support of integrating records on all ODU study abroad students into the centralized ODU student academic records system and indebted to Elaine for expending hours upon hours for more than a year to prepare the data for my eventual use.
Additionally, I would like to thank my dissertation chair, Dr. Dennis Gregory, and committee members, Dr. Shana Pribesh and Dr. Chris Glass, for their mentoring, support, teaching, understanding, and encouragement. It has been quite a ride! Sincere thanks to each of you for helping me to grab and hold on to the reins while mentoring me and showing me the road forward.

Various ODU classmates have also helped along this path. Over the past six years many fellow ODU graduate students have helped me get to this point and I would hate to leave out any. Yet, two classmates stand out for me. I need to express special thanks to Jennifer Giblin for getting me through the labyrinth that Statistics can be for me. You went way above and beyond assisting a fellow graduate student. I intend to repay my debt to you or pay it forward to another student in the future. I also want to thank Bill Nuckols for his adept touch at commiserating and encouraging. Finish up, Bill. You are next!

My doctoral journey has been a long, grueling labor of learning, love, self-doubt, and dogged persistence. Several years ago I taped to the frame of my computer monitor a piece of paper that contains the following statement of Confucius, “it does not matter how slowly you go as long as you do not stop.” These words of encouragement have helped sustain me toward completion of various doctoral student course assignments and papers, and ultimately, this dissertation. Yet, the words of Confucius’ are merely a reminder and affirmation that life is not a race but rather a journey comprised of joys and challenges, peaks and valleys.

Some keys to a life well-lived are having purpose and perspective, as well as expressing love, respect, humility, compassion, grace, and gratitude. The dissertation
process and all of you have helped me to further cherish these qualities. And I aim to instill, practice, and strengthen these qualities in my thoughts and behaviors going forward. In closing, please accept my profound appreciation for helping me along my dissertation journey to a successful completion.
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CHAPTER 1
INTRODUCTION

Higher education enrollment in the United States grew 32% - from 15.9 to 21 million - in the period from 2001 to 2011 (NCES, n.d.a.) and is expected to increase by 15% from fall 2011 to fall 2020 (NCES, n.d.b.). Institutions continue to seek ways to retain and graduate greater numbers of their students (Wellman, 2001). Yet, how many of the growing postsecondary student population will remain in college and complete their degrees? And how well do higher education institutions retain and graduate students? One study noted that “more students leave their college or university prior to degree completion than stay” (Tinto, 1993, p.1). This is not a new phenomenon as “for the past 100 years, the institutional graduation rate has stubbornly held at the 50 percent mark” (Swail, Redd, & Perna, 2003, p. 6). For all 4-year public institutions, the first-year full-time undergraduate student retention rate was 79% for the fall 2010 to fall 2011 period, the most recent year for which statistics are available (NCES, 2012a). Relatedly, in 2006, the most recent year for which statistics are available, the average 4-year and 6-year graduation rates for public 4-year institutions were 33% and 57%, respectively (NCES, 2012b), while recent research posited that “graduation rates at less-selective colleges often hover at 25 percent or less” (Carey & Dillon, 2011, p. 1). These statistics underscore the need for continued research into activities that enhance retention, academic performance, and graduation outcomes for postsecondary students.

Kuh, Kinzie, Schuh, Whitt, and Associates (2005) assert that participation in study abroad programs is one of a select number of high-impact educational activities that contribute to increased student retention and graduation rates. Kuh et al. (2005)
came to their conclusions through a qualitative study that examined correlational relationships between various educational activities and student retention and graduation rates at twenty tertiary institutions. Their study did not investigate or suggest a causal link between the activities studied and improved retention and graduation rates. Findings from recent studies examining retention (Young, 2007), academic performance (Barclay Hamir, 2011, Malmgren & Galvin, 2008; Rubin & Sutton, 2001), and degree completion (Barclay Hamir, 2011; Indiana University, 2009; Malmgren & Galvin, 2008; O’Rear, Sutton, & Rubin, 2011; Redden, 2012; Rubin & Sutton, 2001; Sutton & Rubin, 2004, 2010) of study abroad program participants positively correlate with the assertion of Kuh et al. (2005), that study abroad program participation is a high-impact educational activity.

The socioeconomic status (SES) of study abroad participants is not provided in the Open Doors Report of International Educational Exchange (IIE, 2014b). Morse and Tolis (2013) reported that the U.S. Department of Education currently does not collect data on the SES of students in connection with university graduation rates. Yet, interest in the SES of university students may be growing as U.S. News collected income-based graduation rate data on the fall 2006 entering class starting in 2012 and included it in its ‘2014 Best Colleges’ rankings (Morse & Tolis, 2013). Currently, it is unknown to what extent socioeconomic status is related to the type of study abroad program students’ select. Further, it is unknown to what extent academic performance (GPA) pre- and post-study abroad program participation and graduation rates of low SES study abroad students differ from those of higher SES study abroad students.
This study investigates to what extent the type of study abroad program a student selects may be related to that student’s socioeconomic status. Additionally, this study investigates to what extent academic performance (GPA) pre- and post-study abroad program, and graduation rates at four and six years of low SES study abroad students differ from those of higher SES study abroad students. One hypothesis of this study is that the participation rates of low SES study abroad students would be statistically larger in semester-length study abroad programs than in faculty-led study abroad programs. A second hypothesis is that the academic performance (as measured by GPA) change of low SES study abroad students from pre- to post-study abroad will be statistically larger in comparison to higher SES study abroad students, even after controlling for gender, race/ethnicity, SAT composite score, and domicile status. A third hypothesis of this study is that graduation rates at four and six years of low SES study abroad students will be statistically larger in comparison to higher SES study abroad students.

For this study, students who had a Pell grant during the period of their study abroad program were operationally defined as low SES students, while students who did not have a Pell grant during the period of their study abroad program were operationally defined as higher SES students. By investigating study abroad programs through the lens of socioeconomic status this study aims to build on the research on study abroad and persistence (Young, 2007), academic performance (Barclay Hamir, 2011; Malmgren & Galvin, 2008; Rubin & Sutton, 2001), and degree completion (Barclay Hamir, 2011; Indiana University, 2009; Malmgren & Galvin, 2008; O’Rear et al., 2011; Redden, 2012; Rubin & Sutton, 2001; Sutton & Rubin, 2004, 2010). Specifically, this study
examines to what extent participation, academic performance, and graduation status at four and six years for study abroad students differ by socioeconomic status.

Among U.S. college and university students, study abroad enrollment numbers have “increased by 88 percent over the past decade” (IIE, 2011, p. 18), and “more than tripled over the past two decades as students and educators realize that international education forms an important part of any curriculum, irrespective of field of study” (IIE, 2010, p. 18). The number of U.S. students receiving academic credit for international study increased from 60,341 to 262,416, an increase of 335% during the 20 year period from 1987-1988 to 2007-2008 (IIE, 2009). Additionally, statistics show that enrollments continued to grow by four percent even in the sluggish U.S. economy of the period 2008-2009 to 2009-2010 (IIE, 2011). Johnson (2006) suggested that study abroad program enrollments will continue to increase due to several factors including robust student interest, enhanced student recruitment, and national security and economic competitiveness. Beyond straightforward student enrollment increases, study abroad’s stature and popularity among the U.S. general public is strong and growing as well. Confirmation of this perception was evident in a 2002 American Council on Education (ACE) poll referenced in U.S. Senate Resolution 308 of the 109th Congress designating 2006 as the ‘Year of Study Abroad.’ This resolution mentioned that “79 percent of people in the United States agree that students should have a study abroad experience sometime during college” (Government Printing Office, 2005).

This study examines the relationships between socioeconomic status and study abroad programs in terms of participation, academic performance, and graduation rates at a public metropolitan research university in the mid-Atlantic region of the United
States. The study does not explore questions of causation between independent and dependent variables.

**Background of the Studied Institution**

The setting for the research study was Atlantic Coast University (ACU), a public, high research activity university (The Carnegie Classification of Institutions of Higher Education, n.d.) in the mid-Atlantic region of the United States. ACU was founded in 1930 as a branch campus of an existing higher education institution in the region. Over the next four decades ACU transitioned from a two-year to four-year college, became independent in 1962, and then became a university in 1969 (Atlantic Coast University, 2013b).

ACU’s 722 full-time and 502 part-time faculty members teach in its seven colleges. ACU offers 70 bachelor’s degrees, 54 master’s degrees, 42 doctoral degrees, and two education specialist degrees. The student-to-faculty ratio is 21:1. For the fall 2013 semester, ACU’s enrollment comprised 24,828 students, of which 19,819 were undergraduate students and 5,009 were graduate students (SCHEV, n.d.a.). Seven-hundred and seventy-one students were international students (SCHEV, n.d.b.). ACU students in fall 2013 came from 49 U.S states (SCHEV, n.d.c.) and from 105 countries (Atlantic Coast University, 2013e). For fall 2012, ACU accepted 71% of first-time-in college undergraduate applicants and 36% of accepted applicants enrolled (SCHEV, n.d.d). Median SAT scores for the 2013-2104 first-time-in-college freshmen students were 510 Math, 510 Reading, and 1020 SAT Composite total, with a median high school GPA of 3.22 (SCHEV, n.d.d.). Thirty-two percent of ACU students in fall 2012 were full-time while 68% attended part-time (Atlantic Coast University, 2013f). Atlantic
Coast University 2013-2014 undergraduate in-state tuition was estimated at $8,820, while undergraduate out-of-state tuition was estimated at $33,392 (SCHEV, n.d.e.).

In 2012-2013, ACU enrolled 19,819 undergraduate students, 17,518 (or 88%) of whom were in-state residents (SCHEV, n.d.i.). Among the 17,518 in-state undergraduate students at ACU in 2012-2013, 10,303 students (or 59%) had financial need (SCHEV, n.d.i.). Information on the family income levels, the number of students at each income level, and the percentage of students at each income level for the cohort of 10,303 resident undergraduate students with financial need in 2012-2013 appears in Table 1.

Table 1

*Family Income Levels, Number of Students at Income Level, and Percentage of Students at Income Level of Atlantic Coast University Resident Undergraduate Students with Financial Need in 2012-2013*

<table>
<thead>
<tr>
<th>Family Income</th>
<th>Number (n = 10,303)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0 to $50,000</td>
<td>6,396</td>
<td>62</td>
</tr>
<tr>
<td>$50,001 to $100,000</td>
<td>2,809</td>
<td>27</td>
</tr>
<tr>
<td>Greater than $100,000</td>
<td>1,098</td>
<td>11</td>
</tr>
</tbody>
</table>

Among the cohort of 10,303 students with financial need, 7,998 families (or 78%) were estimated to be able to contribute less than $7,500, 1,528 families (or 15%) were estimated to be able to contribute between $7,500 and $15,000, and 777 families (or 8%) were estimated to be able to contribute more than $15,000 annually (SCHEV, n.d.i.).

The State Council of Higher Education for the state in which Atlantic Coast University is located reported that 40% of fall 2013 semester ACU students were
students of color (SCHEV, n.d.b). Within students of color, 23% were African American or Black (non-Hispanic), 6% were Hispanic, 5% were Multi-race, 5% were Asian-American or Pacific Islander, 4% were Unknown/Unreported, and 0.4% were American Indian/Native American (SCHEV, n.d.b.). Three percent of fall 2013 students were Foreign/International students (SCHEV, n.d.b.). In 2012-2013, the resident undergraduate population at Atlantic Coastal University totaled 10,303 students (SCHEV, n.d.i.). Table 2 presents a breakdown of the ACU resident undergraduate student population by race/ethnicity.

Table 2

<table>
<thead>
<tr>
<th>Race/ethnicity</th>
<th>Number (n= 10,303)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>White or Caucasian-American (non-Hispanic)</td>
<td>4,621</td>
<td>45</td>
</tr>
<tr>
<td>African-American or Black (non-Hispanic)</td>
<td>3,488</td>
<td>34</td>
</tr>
<tr>
<td>Hispanic</td>
<td>673</td>
<td>7</td>
</tr>
<tr>
<td>Multi-race</td>
<td>573</td>
<td>6</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>501</td>
<td>5</td>
</tr>
<tr>
<td>Unknown/Unreported</td>
<td>404</td>
<td>4</td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>41</td>
<td>.04</td>
</tr>
<tr>
<td>International students</td>
<td>2</td>
<td>.0001</td>
</tr>
</tbody>
</table>

A distinctive feature of Atlantic Coast University is its relationship with the military. “Approximately 25% of ACU students are military affiliated” (Atlantic Coast University, 2013d) and the university touts its “pro-military campus environment” (Atlantic Coast University, 2013a). ACU maintains an Office of Military Activities and
is the only civilian U.S. academic institution with a graduate program accredited by the North American Treaty Organization (Atlantic Coast University, 2013c).

ACU’s fall 2012 first-year full-time bachelor’s degree-seeking student retention rate of 80% (NCES, n.d.d.) almost exactly mirrored the national average of 79% (NCES, 2012a) for the fall 2010 to fall 2011 period. However, Atlantic Coast University’s 4-year and 6-year graduation rates of 23% and 50% (The Education Trust, 2013) in 2005 and 2004, respectively, significantly trailed the 4-year and 6-year public institution national graduation rate in 2005 for first-time-in-college, full-time bachelor’s degree-seeking students of 32% and 57% (NCES, 2012b).

During the 2012-2013 academic year ACU disbursed $210,332,669 in financial aid to 27,108 unique students (SCHEV, n.d.j.). Of the total disbursed, $149,825,111 (or 71%) was Federal financial aid, $22,740,874 (or 11%) was institutional and endowment aid, $19,070,522 (or 9%) was private and local government aid, and $18,696,162 (or 9%) was State financial aid (SCHEV, n.d.k.). Loans were the most popular form of financial aid ACU disbursed, with 13,596 students (or 63% of the total) receiving $132,035,320 (SCHEV, n.d.j.). Of the other forms of financial aid disbursed by ACU, 9,059 students (or 27% of the total) received grants totaling $57,749,443 and 3,361 students (or 9% of the total) received scholarships totaling $19,365,826 (SCHEV, n.d.j.). Workstudy awards were disbursed to 181 ACU students totaling $301,116 and aid disbursed in the category titled “other forms of financial aid” was disbursed to another 911 students totaling $880,964 (SCHEV, n.d.j.). Together, workstudy and “other forms of financial aid” amounted to less than 1% of the total financial aid ACU disbursed in 2012-2013 (SCHEV, n.d.j.).
As mentioned earlier, ACU students who received a Pell grant during the period of their study abroad program were operationally defined as low SES students, while students who did not have a Pell grant during the period of their study abroad program were operationally defined as higher SES students for this study. For the 2000 to 2006 period of the study, 26.2% of ACU undergraduates received Pell grants and the average award during this period was $2,391 per student. The mean family income of students who received Pell grants during the 2000 to 2006 period was $21,749. Pell grant data for Atlantic Coast University for the period 2000-2001 to 2005-2006 appear in Table 3.

Table 3

ACU Pell Grant by Year for the period 2000-2001 to 2005-2006

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Number of Unique Students</th>
<th>Mean Family Income</th>
<th>Average Award</th>
<th>Percentage of Fall UG students who received Pell Grant</th>
</tr>
</thead>
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<tr>
<td>2000-2001</td>
<td>3,151</td>
<td>$19,757</td>
<td>$2,096</td>
<td>24.6</td>
</tr>
<tr>
<td>2001-2002</td>
<td>3,395</td>
<td>$19,432</td>
<td>$2,339</td>
<td>25.9</td>
</tr>
<tr>
<td>2002-2003</td>
<td>3,672</td>
<td>$23,082</td>
<td>$2,450</td>
<td>27.0</td>
</tr>
<tr>
<td>2004-2005</td>
<td>4,007</td>
<td>$22,819</td>
<td>$2,503</td>
<td>27.8</td>
</tr>
<tr>
<td>2005-2006</td>
<td>3,799</td>
<td>$22,363</td>
<td>$2,464</td>
<td>24.9</td>
</tr>
</tbody>
</table>

Purpose of the Study

The purpose of this study was to examine socioeconomic status and its relationship to study abroad participation, academic performance, and graduation outcomes at Atlantic Coast University, a regional public U.S. university in the mid-
Atlantic region of the United States. The proposed study covered the six-year period of 2000 to 2006. Data stripped of individual student identifiers were collected and analyzed from the Atlantic Coast University central database (Banner®) maintained by the Office of the Registrar.

**Research Questions**

Questions that the researcher investigated in this study were:

1. a. To what extent is socioeconomic status related to the type of study abroad program students select?

1. b. To what extent is socioeconomic status related to the type of study abroad program students select after controlling for gender, race/ethnicity, SAT composite score, and domicile status?

2. a. To what extent does GPA change pre- and post-study abroad program participation for low socioeconomic status study abroad students in comparison to higher socioeconomic status study abroad students?

2. b. To what extent does GPA change pre- and post-study abroad program participation for low socioeconomic status study abroad students in comparison to higher socioeconomic status study abroad students after controlling for gender race/ethnicity, SAT composite score, and domicile status?

3. a. To what extent does graduation status at four years of low socioeconomic status study abroad students differ from higher socioeconomic status study abroad students?
3. b. To what extent does graduation status at four years of low socioeconomic status study abroad students differ from higher socioeconomic status study abroad students after controlling for gender, race/ethnicity, SAT composite score, and domicile status?

4. a. To what extent does graduation status at six years of low socioeconomic status study abroad students differ from higher socioeconomic status study abroad students?

4. b. To what extent does graduation status at six years of low socioeconomic status study abroad students differ from higher socioeconomic status study abroad students after controlling for gender, race/ethnicity, SAT composite score, and domicile status?

**Definitions of Terms**

Below are the definitions of various terms which appear in this research study.

**Academic year** – “The period of time generally extending from September to June; usually equated to 2 semesters or trimesters, 3 quarters, or the period covered by a 4-1-4 calendar system” (NCES, n.d.c).

**Affiliate (or third-party provider) study abroad program** – Any study abroad program organized by a private, independent body outside of the university. Universities contract with affiliate (or third-party) providers to offer study abroad programs for their students. Universities commonly accept and transfer academic credit that students earn on affiliate study abroad programs.

**Attrition** – “Attrition refers to students who fail to reenroll at an institution in consecutive semesters” (Berger & Lyon, 2005, p.7).
Composite SAT score – Composite SAT score equals the sum of a student’s scores on the SAT verbal and SAT quantitative portions of the SAT test.

Exchange program – Any study abroad program in which university students study for one or more semesters at an international partner institution. On exchange programs students pay tuition at their home institution.

Faculty-led study abroad program – Any study abroad program led by faculty members of the home university. Typically, faculty-led programs are short-term in duration.

Gender – “The state of being male or female (Merriam-Webster Online Dictionary, 2014)”.

Graduate student – “A student who holds a bachelor's degree or above and is taking courses at the postbaccalaureate level. These students may or may not be enrolled in graduate programs” (NCES, n.d.c.).

Graduation rate – “The rate required for disclosure and/or reporting purposes under Student Right-to-Know Act. This rate is calculated as the total number of completers within 150% of normal time divided by the revised adjusted cohort” (NCES, n.d.c.).

Grade Point Average (GPA) – “The grade point average is calculated by dividing the accumulated number of grade points earned by the accumulated number of credit hours attempted. Grades of F and WF and repeats are included, but official withdrawals, audits, and grades on noncredit courses, nondegree credit courses, and pass/fail degree courses are not included” (Atlantic Coast University, 2013g).

Higher socioeconomic status student – An undergraduate student who does not have a Pell grant.
Mid-length study abroad program – Any study abroad program “lasting one semester or two quarters” (IIE, 2012, p. 20).

Long-term study abroad program – Any study abroad program for an “academic or calendar year” (IIE, 2012, p. 21).

Low socioeconomic status student – An undergraduate student who has a Pell grant.

Pell grant program – “The Federal Pell Grant Program provides need-based grants to low-income undergraduate and certain postbaccalaureate students to promote access to postsecondary education” (U.S. Department of Education, 2012).

Persistence – “Persistence refers to the desire and action of a student to stay within the system of higher education from beginning year through degree completion” (Berger & Lyon, p.7).

Retention rate – “A measure of the rate at which students persist in their educational program at an institution, expressed as a percentage. For four-year institutions, this is the percentage of first-time bachelors (or equivalent) degree-seeking undergraduates from the previous fall who are again enrolled in the current fall. For all other institutions this is the percentage of first-time degree/certificate-seeking students from the previous fall who either re-enrolled or successfully completed their program by the current fall” (NCES, n.d.c.).

Race/ethnicity – “Categories developed in 1997 by the Office of Management and Budget (OMB) that are used to describe groups to which individuals belong, identify with, or belong in the eyes of the community. The categories do not denote scientific definitions of anthropological origins. The designations are used to categorize U.S. citizens, resident aliens, and other eligible non-citizens. Individuals are asked to first
designate ethnicity as: Hispanic or Latino, or Not Hispanic or Latino. Second, individuals are asked to indicate all races that apply among the following: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, or White” (NCES, n.d.c).

SAT – “Previously known as the Scholastic Aptitude Test, this is an examination administered by the Educational Testing Service (ETS) and used to predict the facility with which an individual will progress in learning college-level academic subjects” (NCES, n.d.c.).

Semester study abroad program – Any study abroad program of one academic semester in duration.

Socioeconomic status (SES) – “The position of an individual on a social-economic scale that measures such factors as education, income, type of occupation, place of residence, and, in some populations, heritage and religion” (Mosby, 2013, p. 1658).

Short-term study abroad program – Any study abroad program which takes “place over the summer term or lasting eight weeks or less” (IIE, 2012, p. 20).

Study abroad – “Arrangement by which a student completes part of the college program studying in another country. Can be at a campus abroad or through a cooperative agreement with some other U.S. college or an institution of another country” (NCES, n.d.c.).

Third-party provider (or affiliate) study abroad program – See affiliate study abroad program.
Undergraduate student – “A student enrolled in a 4- or 5-year bachelor's degree program, an associate's degree program, or a vocational or technical program below the baccalaureate” (NCES, n.d.c.).

Significance of the Study

As noted earlier, postsecondary enrollment grew by 37% from 2000 to 2010 (NCES, n.d.a) while the literature (Tinto, 1993; Swail, Redd, & Perna, 2003; NCES, 2012b) illuminates the need for postsecondary institutions to retain and graduate a higher percentage of their students. Over the past decade, various research studies have pointed to the benefits of study abroad program participation in terms of persistence (Young, 2007, academic performance improvement (Barclay Hamir, 2011; Malmgren & Galvin, 2008; Rubin & Sutton, 2001), and graduation rates (Barclay Hamir, 2011; Indiana University, 2009; Malmgren & Galvin, 2008; O’Rear et al., 2011; Redden, 2012; Rubin & Sutton, 2001; Sutton & Rubin, 2004, 2010). Awareness of the academic outcomes and popularity of study abroad is not restricted to faculty researchers and study abroad officials. Rather, marketing and admissions departments at U.S. institutions commonly promote their institution’s study abroad opportunities in university printed and electronic recruitment and admissions materials. In a January 18, 2012 editorial, USA Today advocated that this practice was not far-fetched or off-target by stating that “four out of every five first-year students aspire to study overseas” (Steves, 2012). And in titling her Chronicle of Higher Education article “Study Abroad Blossoms into Big Business,” Farrell (2007) aptly captured the present-day experience of U.S. study abroad (p. A49).
Study abroad program curricular designs (faculty-led programs, international exchange programs, affiliated or third-party programs, internships, language immersion programs, etc.) have expanded and geographic program locations have diversified to include non-traditional destinations (IIE, 2011). Non-traditional locations such as India, Israel, and Brazil saw enrollments climb by 44%, 61%, and 12%, respectively, from 2008-2009 to 2009-2010 while China remained the fifth most popular country for U.S. study abroad (IIE, 2011).

A quick review of two prominent study abroad search engines – IIEPassport.org and studyabroad.com – revealed that thousands of different study abroad programs for academic credit are offered in the fall, spring, and summer semesters annually (IIE, 2014a, Education Dynamics Inc., 2013). Study abroad programs are offered by U.S. and international universities as well as affiliate (or third-party) study abroad program providers. Students can choose from short-term, mid-length, or long-term programs. Often short-term programs are faculty-led programs or summer programs (which are commonly for foreign language study). 2009-2010 study abroad national statistics revealed that 56.6% of participants study on short-term programs versus 43.3% who participated in programs over eight weeks in duration (IIE, 2011). At ACU, faculty-led and short-term study abroad programs predominate. Seventy-five percent of ACU students who studied abroad from 2006-2007 to 2012-2013 enrolled in short-term programs (Office of Study Abroad, Atlantic Coast University, 2013).

What is the specific definition of the term study abroad and how does it differ from education abroad? Twombly, Salisbury, Tumanut, and Klute (2012) included definitions of education abroad from the Forum on Education Abroad (Forum), and
study abroad from both the Forum and from the Institute of International Education (IIE). Twombly et al. reported that “the Forum of Education Abroad defines education abroad as simply ‘education that occurs outside the participant’s home country’ (Forum on Education Abroad, 2011). The Forum adds that study abroad ‘results in progress toward an academic degree’ (Forum on Education Abroad, 2011). IIE defines study abroad and the individuals who do it even more specifically as ‘U.S. citizens and permanent residents who received academic credit at their U.S. home institution for study in another country’” (p. 10). It is important to highlight that the IIE definition of study abroad pertains specifically to students enrolled in and receiving credit from their U.S. home institution. This research study utilized the IIE definition of study abroad. Study abroad programs are available to U.S. middle school, high school, and university students today. For purposes of this study, the researcher intentionally limited the scope of study abroad to academic coursework and program participation at the postsecondary level.

**Delimitations**

This research study has a few delimitations. The study is restricted to the six-year period of 2000 to 2006 and only included undergraduate students. Data analyzed in this study was collected and analyzed from the Atlantic Coast University central database of the Office of the Registrar. Nevertheless, prior to summer 2013, the ACU central database – which is maintained by the university on the computer software program, Banner® – was only able to collect and track semester study abroad program participation. Consequently, prior to summer 2013, faculty-led and summer short-term study abroad program records were collected and maintained by the ACU Office of
Study Abroad. Following ACU’s upgrade of Banner® in summer 2013, which allowed the Office of the Registrar central database to be able to collect and track ACU student participation on all types of study abroad programs (semester, faculty-led, and summer), the Office of Study Abroad provided their faculty-led and short-term study abroad program records to the Office of the Registrar. The Office of the Registrar then added these records to the ACU central database.

**Assumptions**

The research study contains the following assumptions about the data and subject matter.

1. The definitions of terms provided above accurately present the material in the study.
2. Data maintained and collected by Office of the Registrar and Office of Study Abroad at Atlantic Coast University were accurate and complete.

**Organization of the Study**

This research study contains five chapters. Chapter 1 consists of an introduction to this study examining socioeconomic status and study abroad in relationship to participation, academic performance, and graduation; background of the studied institution; purpose of the study; research questions; significance of the study; delimitations; and definitions. Chapter 2 reviews literature on study abroad pertaining to GPA and graduation outcomes. This chapter also reviews literature on socioeconomic status in relationship to academic performance and graduation. Chapter 3 presents the methodology of the research study. Chapter 4 contains the results of the research study. Chapter 5 provides discussion and recommendations for further study.
CHAPTER 2

LITERATURE REVIEW

Study Abroad

History of Study Abroad

Broadly defined, study abroad is the practice of students earning academic credit for study in a foreign country. In American vernacular, the term “study abroad,” also referred to as education abroad, is the enterprise of sending U.S. college students to study internationally. In 1783, Benjamin Rush, signatory of the U. S. Declaration of Independence, founded Dickinson College in Carlisle, Pennsylvania. Dickinson was America’s first college charted following execution of the Treaty of Paris which ended the American Revolution and provided international recognition of the United States of America (Dickinson College, 2012). Rush provided a time-period appropriate justification for the value of study abroad for Americans in a letter to Samuel Fisher dated July 29, 1768. Hoffa (2007) referenced that Rush stated in his letter to Fisher that “every native of Philadelphia should be sent abroad for a few years if only to teach him to prize his native country above all places on earth” (p. 29). 2013 Open Doors statistics show that 282,332 U.S. university students – or 9% of U. S. undergraduates who complete their degrees – studied abroad in 2011-2012 (IIE, 2013), falling dramatically short of Rush’s ambitious goal stated eight years prior to the nation’s founding.

U.S. higher education in the 18th and 19th centuries was nearly uniformly comprised of White male students (Cohen & Kisker, 2010). In the 18th century, male American elites imitated European aristocrats by initiating educational tours – which came to be known as “The Grand Tour” – to Western European capitals to pursue
social, diplomatic, familial, and pragmatic education much more than academic ends (Hoffa, 2007). European Grand Tours were not designed to be academic in a strict sense, but rather educational in general terms. Prominent and well-to-do American families sent their sons to learn European ways and to, in this way, expose them to learning opportunities not available in American colonial culture (Hoffa, 2007). Future U.S. President John Quincy Adams, *U.S. Declaration of Independence* signer Charles Carroll, prominent Virginian William Byrd II, and artist John Singleton Copley are some Americans who completed Grand Tours (Hoffa, 2007).

Additionally, Americans studied in British and German universities during the 18th and 19th centuries through both nonmatriculated and matriculated arrangements. Matriculated (or degree-seeking) American students in Europe often pursued graduate and doctoral degrees, which were unavailable from U.S. higher education institutions at the time (Cohen & Kisker, 2010). Germany was the predominant country in which American students pursued graduate studies (Cohen & Kisker, 2010; Hoffa, 2007). Hoffa (2007) reported that between 1815 and 1914 it is estimated that more than 10,000 Americans studied in German universities (p.32). A case in point is Edward Everett, who was the first American to earn a doctorate (Hoffa, 2007). Everett completed his Ph.D. at Germany’s Gottingen University, before returning to the U.S. to join the faculty at Harvard (Hoffa, 2007). U.S. President Theodore Roosevelt also completed coursework on a nonmatriculated basis at Germany’s Dresden University in 1873 (Hoffa, 2007).

At the time European universities were considerably higher in quality than American institutions (Cohen & Kisker, 2010). Additionally, European universities
offered levels and areas of educational training and courses not available in the U.S. (Cohen & Kisker, 2010). Thus, American students traveled to Great Britain and Germany to pursue both quality and forms of educational training not available stateside. Statistical data on the socioeconomic status (SES) of Americans studying in Europe in the 18th and 19th centuries is unavailable.

Eighteenth and 19th century American international study through Grand Tours and nonmatriculated and matriculated graduate coursework laid the groundwork for American study abroad programs (Hoffa, 2007). U.S. study abroad began to evolve in the late 19th and early 20th centuries with select U.S. universities beginning to organize international tours and programs. Examples include Indiana University’s summer study abroad tour in 1882, Princeton University’s administration of a volunteer program to Asia in 1898, the University of Delaware’s fall semester program to Paris in 1923, and Smith College’s program at the Sorbonne campus of the University of Paris in 1925 (Hoffa, 2000).

Development of the modular credit system in the last quarter of the 19th century was critical to the evolution of U.S. study abroad (Hoffa, 2007). For U.S. study abroad, the modular credit system allowed students to take courses not just from another U.S. domestic institution, but also from an accredited affiliated study abroad program providers (or directly from a university overseas) without impeding progress toward their U.S. degree (Hoffa, 2007). The modular credit system opened the door for affiliate (or third-party) study abroad program providers to begin developing and promoting courses designed specifically for U.S. students. No longer did U.S. study abroad students need to matriculate into a university overseas to earn credit. Rather, if
academic courses offered through a third-party study abroad program provider were accredited and approved by their home university, then students could take and apply those courses to their home university degree. Slowly, U.S. based affiliated study abroad program providers began to develop. The first three affiliated study abroad program providers were the following: the Experiment in International Learning, predecessor to the School for International Training (SIT), founded in 1932; the Council on Student Travel, founded in 1947, which became CIEE; and the Institute for European Studies (IES), founded in 1950 (Hoffa, 2007).

The 1920s are commonly seen as the birth period of U.S. study abroad (Hoffa & DePaul, 2010). Study abroad programs of this period were fall-to-spring junior year foreign language and cultural immersion programs (Hoffa & DePaul, 2010). Thus, these programs became known as Junior Year Abroad (JYA) programs. Most JYA participants were female Education majors as Teaching was one of the few professions that offered career opportunities for professional women at this time (Bolen, 2001; Hoffa & DePaul, 2010).

Typically, the University of Delaware is regarded as the first U.S. institution to offer study abroad as it is practiced today (Hoffa, 2007; Hoffa & DePaul, 2010). In addition to its Paris JYA program, the University of Delaware launched a “Junior Year in Munich” program at the University of Munich in 1931 (Hoffa & DePaul, 2010). Smith College, a women’s institution, is also regarded as an early leader in study abroad, especially as all students the institution sent abroad were female. Some Smith College students participated in Delaware’s Paris program in 1923, which prompted the institution to launch its own Paris program in 1925, followed by a JYA Madrid program
in 1930 (Hoffa & DePaul, 2010). Women’s higher education institutions, such as Vassar College, Wellesley College, and Radcliffe College, soon began sending their students on Smith’s programs (Hoffa & DePaul, 2010). In referencing Hoffa’s (2000) research on early study abroad history, Bolen (2001) noted that “economic or intellectual elites dominated American study abroad programs” (p. 185) from 1866 through World War II. Bolen (2001) did not define “economic and intellectual elites” nor provide elaboration and statistical data to substantiate how ‘economic and intellectual elites’ dominated U.S. study abroad. The reader is left to assume that Bolen meant that a strong majority of U.S. study abroad participants prior to World War II were of high socioeconomic status.

Following World War II, the American middle class prospered and grew quickly. U.S. higher education institutions which had operated study abroad programs before World War II revived their programs. Study abroad affiliates entered the scene offering programs delivered in English with easily-transferrable credits and British universities (such as Oxford, Cambridge, Edinburgh and the University of London) started admitting “occasional” students for a summer of coursework (Hoffa, 2007). Soon, U.S. colleges and universities of all varieties and locations – from liberal arts colleges to specialized private and public universities, such as Middlebury College, Dartmouth College, and Georgetown University in the East to Oberlin College, the University of Minnesota, and Kansas University in the Midwest to the College of Puget Sound, Whittier College, and Stanford University in the West – began to develop and offer study abroad programs. Reflecting increasing study abroad enrollment numbers, 19,836 students studied abroad in 66 countries in 1961 (Hoffa, 2007).
Historically and up through the present, the most popular study abroad destinations have been European (Hoffa, 2007; Hoffa & DePaul, 2010; IIE, 2013). Yet, there is growing interest among students in non-European program locations as evidenced by 2009-2010 *Open Doors* report statistics demonstrating that 12 of the top 20 study abroad destinations in terms of enrollment were outside Europe (IIE, 2011). From 2009-2010 to 2010-2011, study in South Korea, Brazil, India, and Israel, and grew by 16%, 13%, 12%, and 9%, respectively (IIE, 2012).

Records indicate that American university students participated in credit-bearing international programs as early as the 1880s (Hoffa, 2007). Yet, until the 1980s, study abroad experiences were, almost exclusively, for a semester or longer. This is no longer true. Contemporary study abroad programs vary in duration, from short-term (programs from a few weeks up to two months), to mid-term (semester-long programs), to long-term (programs lasting an academic or calendar year). Starting in the 1980s short-term programs flourished and eventually surpassed semester-long programs as the most popular type of study abroad program. Due to their length, there is a higher likelihood that students can fit short-term programs into their academic, personal, and work schedules. The average duration of study abroad programs is shortening. National statistics from 2011-2012 reveal that 59% of participants study on short-term study abroad programs and 41% who participate in programs over eight weeks in duration (IIE, 2013). Various short-term study abroad programs do not depend on home university faculty member participation. Summer programs – including programs offered by British universities for “occasional” students, programs run by study abroad affiliates, and programs specifically designed for foreign language immersion – are
examples. By a sizable margin, faculty-led programs, in which a faculty member takes a group of students to an international destination and teaches a course for the accompanying students on a topic compatible with the location, are the most popular type of study abroad programs today (IIE, 2013).

Atlantic Coast University short-term study abroad programs comprise a combination of faculty-led programs and summer programs. At ACU, for example, nearly 70% of students who studied abroad on an annual basis from 2006-2007 to 2011-2012 enrolled in short-term programs (Office of Study Abroad, Atlantic Coast University, 2011). ACU students prefer these programs as their brevity allows students the flexibility to study abroad without dedicating an entire semester and possibly adversely impacting job and/or family obligations.

Farrell (2007) asserted that study abroad has grown in prestige and popularity as business and political leaders have come to regard it as a highly effective means to develop globally literate citizens (Chronicle of Higher Education, 2010). Select U.S. institutions, such as Goucher College and St. Mary’s College of Maryland, both small institutions, have made each year the “Year of Study Abroad” by requiring their undergraduate students to study abroad in order to graduate (Stroud, 2010). Requiring study abroad for all students, though, is plainly unmanageable and undesirable for the vast majority of U.S. institutions. In 2008-2009, nevertheless, 30 U.S. institutions, primarily liberal arts colleges, sent 70% of their undergraduates abroad, while 52 universities awarded academic credit to 1,000 or more students who studied abroad (IIE, 2010).
In 2005, President Bush and the U.S. Congress concretely demonstrated their support for study abroad through appointment of the bipartisan Commission of the Abraham Lincoln Study Abroad Fellowship Program, a body which in its report, *Global Competence and National Needs: One Million Americans Studying Abroad*, boldly proposed to send one million university students abroad annually by 2016-2017 (Lincoln Commission, 2005). The report also asserted that promotion and democratization of undergraduate study abroad was the next step in the evolution of American higher education (Lincoln Commission, 2005). The Lincoln Commission report was drafted in 2005. In that year 223,534 post-secondary U.S. students received academic credit for coursework completed abroad (IIE, 2010). Consequently, to send one million students abroad would require more than quadrupling the number of U.S. college students going abroad based on 2005-2006 participation levels. Furthermore, one million students would represent approximately 50% of the U.S. undergraduate population who graduate annually (Stroud, 2010). To achieve this ambitious goal, the Lincoln Commission recommended creation of a national undergraduate study abroad fellowship program, which became the *Senator Paul Simon Study Abroad Foundation Act* (NAFSA, 2013a). Financially, the *Senator Paul Simon Study Abroad Foundation Act* authorized appropriation of $80 million a year for the foundation and allowed it to raise funds and accept gifts and donations (Fischer, 2009). On June 5, 2007, the U.S. House of Representatives, 110th Congress, passed the *Senator Paul Simon Study Abroad Foundation Act of 2007, H.R. 1469*, which was never passed by the Senate (govtrack.us, n.d.a.). On June 10, 2009, the U.S. House of Representatives, 111th Congress, approved the *Senator Paul Simon Study Abroad Foundation Act, H.R. 2410*,
as part of the Foreign Relations Authorization Act for Fiscal Years 2010 and 2011, which also was never passed by the U. S. Senate (Fischer, 2009; govtrack.us, n.d.b.; NAFSA, 2013a). To date, the Simon Study Abroad Foundation Act has yet to be approved by the U. S. Senate Appropriations Committee, thus precluding consideration and possible action by the full Senate.

As mentioned earlier, the Lincoln Commission asserted that promotion and democratization of undergraduate study abroad was the next step in the evolution of American higher education. Part of democratizing study abroad is having diversity in the socioeconomic status of participants. Open Doors reports do not provide data on the socioeconomic status of study abroad program participants. Yet, authors of study abroad history (Hoffa 2000, 2007; Bolen, 2001; Stallman, Woodruff, Kasravi, and Comp, 2010, in Hoffa & DePaul, 2010) asserted that the majority of study abroad participants up to at least the mid-1980s likely were from the upper classes of American society.

From the mid-1980s to 2008, when the world economic situation floundered, study abroad enrollment climbed sharply. In its Open Doors 2010 Report on International Educational Exchange, IIE reported that among university students in the United States study abroad “has more than tripled over the past two decades as students and educators realize that international education forms an important part of any curriculum, irrespective of field of study” (p. 18). As mentioned in chapter 1 of this study, U.S. study abroad program enrollment increased from 60,341 to 262,416, an increase of 335%, from 1987-1988 to 2007-2008 (IIE, 2009). In academic year 2008-2009, a total of 260,327 U.S. university students studied abroad (IIE, 2010). This minor
0.8% reduction from the previous year marked the only decrease in study abroad participation numbers since data began being tracked and compiled more than 25 years ago (IIE, 2010; Grasgreen, 2010). Study abroad program enrollment increased by 23% over the five year period from 2005-2006 to 2010-2011, by 78% during the decade from 2000-2001 to 2010-2011, and by 287% over the past two decades (IIE, 2012). In the 2011-2012 academic year, 289,408 students studied abroad (IIE, 2014b), a record number of U.S. students studying abroad. And based on Hoffa and DePaul’s (2010) estimate that at least 90% of U.S. higher education institutions offered study abroad programs by 2008, it is clear that study abroad is widely available to U.S. postsecondary students.

**Demographics**

Study abroad enrollments have expanded significantly over the past two decades (IIE, 2012). Nevertheless, there are some aspects of the demographics of study abroad – namely ethnicity, gender, class standing, and major field of study – that resemble the trends from many years prior. “Even today, the overwhelming majority of education abroad participants are White, female, young, single, financially comfortable, and without disability” (Stallman et al., 2010). In 1993-1994, IIE’s *Open Doors* report began presenting demographic statistics on study abroad participation (Stallman et al., 2010). Stallman et al. reported that in the 1993-1994 academic year, 84% of study abroad participants were White, Asian and Hispanic students comprised 5% each, African American and multiracial students comprised another 3% each, and Native American students totaled 0.3%. By 2010-2011 the population of study abroad students who were White had declined six percent to 78% and the population of multiracial students who
studied abroad dropped a percentage point to two percent, while the populations of Asian, Hispanic, African American, and Native American students participating in study abroad all increased (IIE, 2012). Specifically, Asian student participation in study abroad increased three percent to 8%, Hispanic participation climbed two percent to 7%, African American participation grew two percent to 5%, and Native American participation increased slightly to 0.5% (IIE, 2012).

In the ten year period from 2001-2002 to 2010-2011, the gender breakdown in study abroad participation was largely uniform with females outnumbering males roughly two to one. Additionally, in this same period, juniors and seniors consistently comprised 50% or more of the study abroad population, while Social Science, Business and Management, and Humanities majors totaled the three largest academic disciplines of students who studied abroad (IIE, 2012). Hoffa (2007) reported that this study abroad student profile – including ethnicity, gender, class standing, and major fields of study – has been the norm since the 1920s.

Again, Open Doors reports do not provide data on the socioeconomic status of study abroad participants. Consequently, it is unknown to what extent SES is related to the type of study abroad program students select. Moreover, it is unknown to what extent academic performance (as measured by grade point average) pre and post study abroad program and graduation rates at four years and six years of low SES study abroad students differ from those of higher SES study abroad students.

**Benefits of Studying Abroad**

The benefits of study abroad are wide and varied. Studies have reported personal
(Andriano, 2010; Banning, 2010; Black & Duhon, 2006; Carpenter & Garcia, 2012;
Sobania and Braskamp (2009) explained that many of the student learning benefits commonly attributed to study abroad are not related to or inherit to crossing international borders but rather to well-conceived and implemented educational pedagogy. And that off-campus programs implemented within the United States can be educationally-worthwhile, global learning experiences from cross-cultural, linguistic, and diversity perspectives as well. They reiterated that “the U.S. population is no longer majority and historic minorities, but inclusive of large immigrant populations…. We are a global nation.” (P. 23) For this reason, they argue for the adoption of the term “study away” to encompass both international and domestic global learning experiences for students.

Studies have also reported benefits to the institution in terms of student retention, student engagement, and graduation outcomes. Research describing student and institutional benefits in connection with study abroad program participation will be presented in the following sections. This section will start with personal benefits for
students – which include various areas of intercultural awareness and competence – before reporting on academic, graduation, and time-to-degree benefits for students.

**Student Benefits – Personal**

A review of recent research on the personal benefits for students in relation to study abroad participation showed that this is the most prevalent area of study abroad research. And much of the research on personal benefits for students from study abroad participation has been focused on various intercultural themes. Recent studies have been done on the personal benefits for students of study abroad participation in relation to intercultural competence (Salisbury 2011; Salisbury et al., 2013), intercultural growth (Gullekson et al., 2011), cultural intelligence (Banning, 2010), intercultural awareness and personal growth (Ingraham & Peterson, 2004), cultural awareness and personal development (Black & Duhon, 2006), global awareness (Chieffo & Griffiths, 2004), global perspective development (Chickering & Braskamp, 2009; Engberg, 2013), intercultural proficiency and openness to diversity (Clarke et al., 2009), cultural adaptability (Mapp, 2012), and cultural competency development among Nursing students (Carpenter & Garcia, 2012). Andriano (2010) investigated the association between study abroad participation and student engagement, Palmer and Menard-Warwick (2012) explored the relationship of study abroad participation on students in the areas of empathy and critical consciousness, and Zimmerman and Neyer (2013) investigated personality development among study abroad alumni. All these studies focus on areas of personal benefit for students in relationship to study abroad participation. To date, no research on personal benefits for students in relation to study abroad program participation has included data on the socioeconomic status of
participating students. Equally, research is unavailable on to what extent the SES of study abroad students may temper, sharpen, or neutralize the potential quality, depth, and impact of study abroad participation in areas of intercultural or personal benefits.

**Student Benefits – Academic**

Research on the academic benefits for students in connection with study abroad participation has investigated foreign language learning (Carlson et al., 1990), intellectual development (McKeown, 2009), academic performance (Barclay Hamir, 2011; Rubin & Sutton, 2001, 2004, 2010), degree completion (Barclay Hamir, 2011; Malmgren & Galvin, 2008; O’Rear et al., 2011; Rubin & Sutton, 2001, 2004, 2010), and time-to-degree (Barclay Hamir, 2011; Ingraham & Peterson, 2004).

In their book, *Study abroad: The experience of American undergraduates*, Carlson et al. (1990) presented pioneering research pertaining to American students and their U.S. home institutions from the Study Abroad Evaluation Project (SAEP). Initiated in 1982, the SAEP was one of the first systematic and comprehensive study abroad-focused research projects. The SAEP provided empirical data on learning outcomes derived by U.S. study abroad students as well as what effect, if any, participation in study abroad had on students’ undergraduate careers post-program and their lives many years post-graduation. Four U.S. institutions – the University of California (Berkeley, Los Angeles, and Santa Barbara), the University of Massachusetts at Amherst, the University of Colorado at Boulder, and Kalamazoo College – along with nearly 30 European universities in France, West Germany, Sweden, and the United Kingdom participated in the study. To measure immediate outcomes of study abroad on U.S. students, two cohorts were investigated in the SAEP – a group who studied abroad for
their junior year in 1984-1985, and a second cohort who studied on their home campus during this same period. Pertaining to academic outcomes, the SAEP project found the following: the majority of students who went to France or West Germany advanced from intermediate to advanced foreign language proficiency; minimal interaction with fellow American students while abroad correlated positively to international learning, lack of problems experienced abroad, integration into the host culture, and high academic performance; participants who performed the best academically while abroad also benefited the most from non-academic experiences they encountered; and study abroad students were more satisfied with their junior year of studies than those who remained at home.

McKeown (2009) examined intellectual development in association with study abroad participation, and sought to dispel the charge that study abroad lacks “demonstrable disciplinary learning outcomes and is excused from the normal rigor” (p. 95) of university academic courses. Toward this aim, McKeown’s study focused specifically on the intellectual development U.S. students’ gain through studying abroad for the first time, what he referred to as “the first time effect.” McKeown defined intellectual development as “a student’s ability to think in complex ways, to view and interpret information in a diverse and pluralistic world, to embrace multiple and relativistic viewpoints instead of rigid ‘black-or-white’ arguments, and ultimately to commit to beliefs and ways of thinking that reflect both a more sophisticated intellect and a more responsible worldview” (p. 3). McKeown utilized the Measure of Intellectual Development (MID) of Knefelkamp (1974) and Widick (1975) to conduct pre and post-program quantitative analyses employing a series of paired t-tests to compare means.
The study population comprised 226 spring 2004 study abroad students from eight State University of New York (SUNY) campuses. Some students showed gains in intellectual development after one semester of study abroad while some did not. Some students began their study abroad experiences at a lower intellectual development than others, and students who had traveled abroad prior to studying abroad had higher levels of intellectual development than their peers. The study found that the disparity in intellectual development levels between the groups (those who had prior international travel experience versus those who did not) vanished after a semester studying abroad. In other words, students who had significantly lower levels of intellectual development prior to studying abroad concluded their semesters abroad with the same level of intellectual development as their peers. McKeown argued that this was the “first time effect” study abroad has on intellectual development.

In the area of student academic performance, graduation outcomes, and time-to-degree in association with study abroad participation, Barclay Hamir (2011) investigated degree completion and time-to-degree at the University of Texas at Austin (UT Austin), Rubin and Sutton (2001, 2004, 2010) completed a 10-year longitudinal study on student learning, academic performance, and student graduation rates at several campuses of the University of Georgia (UGA) system, Malmgren and Galvin (2008) studied graduation rates of study abroad students at the University of Minnesota Twin Cities (UofM), and Ingraham and Peterson (2004) researched study abroad students’ time-to-degree at Michigan State University (MSU). These studies are explored below.

Barclay Hamir (2011) examined whether study abroad affected degree completion and time-to-degree. Barclay Hamir employed a mixed-methods approach to
study a cohort of 7,845 first-time-in-college freshmen who entered UT Austin in 2002. The study population was divided into three groups, participants, applicants, and nonparticipants. The participants group comprised students who participated in study abroad (13.7% of the population), the applicants group comprised students who applied to study abroad but chose not to participate (3.6%), and the nonparticipants group included students who did not apply to study abroad (82.7%). The population of ‘applicants’ (or study abroad applicants) were intentionally delineated in the study to serve as a proxy for the motivational factors that differentiate study abroad participants from nonparticipants.

Overall, the study found that study abroad participation did not predict the time it took students to graduate from UT Austin yet it did predict whether or not a student would graduate from UT Austin. Additionally, the study found that study abroad participants graduated at higher rates than applicants and nonparticipants, and that retention of students was also strongest among academically at-risk study abroad students. Specifically, results indicated that study abroad participation increased the probability of graduating in five years by 64% and in six years by 202%. Study abroad participants were 46% more likely to graduate in five years and 185% more likely to graduate in six years in comparison to peers who did not study abroad. Study abroad participants had shorter average time-to-degree than nonparticipants (4.11 versus 4.16 years). Additionally, 60% of study abroad participants graduated in four years in comparison to 45% of nonparticipants, and graduation rates were 20% higher among study abroad participants than nonparticipants at both five and six years following admission.
By comparing the graduation rates of the applicant and nonparticipant groups and discovering that they did not differ, the study showed that differences in the likelihood of graduation were not attributable to motivational factors or academic performance indicators (SAT or GPA scores). Time-to-degree was somewhat shorter for participants in comparison to nonparticipants, yet not significant when comparing participants to nonparticipants.

The Georgia Learning Outcomes of Students Studying Abroad Research Initiative or GLOSSARI project was a 10-year, 35-institution University System of Georgia project which compared the graduation and GPAs of 19,109 Georgia study abroad students with a control group of 17,903 Georgia students who did not study abroad. From 2000 to 2010, O’Rear et al. (2011) matched the institution, semester of study, and class standing of both the study abroad students and control group in an effort to have the study population be representative of all students in the Georgia system.

The authors found that following study abroad participation Georgia students had improved academic performance, higher graduation rates, and improved knowledge of cultural practices in comparison to Georgia students who do not study abroad. The four-year graduation rate for study abroad participants was 49.6% versus 42.1% for the student control group; the six-year graduation rate for study abroad participants was 88.7% versus 83.4% for the control group. Findings also showed that study abroad helped the academic performance of at-risk students. Specifically, four-year graduation rates for African-American study abroad alumni were 31% higher than that of African-Americans in the control group. And four-year graduation rates for non-White study abroad alumni were 18% higher than their peers in the control group. Regarding
academic performance, the study found that study abroad students had a mean GPA of 3.24 prior to study abroad and a mean GPA of 3.30 following international study. For the control group, their GPAs rose from 3.03 to 3.06 over the same period.

Consistent with the positive effect of study abroad on graduation outcomes, the authors found that among students who entered college with the lowest SAT scores (800 on the verbal and math portions), study abroad had a pronounced effect. Specifically, low SAT score students who studied abroad finished college with average GPAs of 3.21 compared to 3.14 of similar students who did not study abroad. The study also showed that study abroad can positively impact the functional knowledge of cultural practices in varied contexts, such as what is humorous in other cultures, or how to use public transportation in another country. The GLOSSARI project found that studying abroad had no significant effect on knowledge of world geography between study abroad alumni and the control group.

Using chi-square analyses, Malmgren and Galvin (2008) examined the graduation rates of freshmen cohorts in 1999, 2000, and 2001, in five colleges at the University of Minnesota, Twin Cities, to analyze how the graduation rates of students who studied abroad compared to those of students who had not. In addition, using data of students’ self-reported race on their university admission application, the researchers examined the graduation rates of non-Caucasian students who studied abroad. Malmgren and Galvin (2008) found that the difference in graduation rates between study abroad participants and non-study abroad participants was significant at the $p \leq .05$ level, study abroad participants had overall higher graduation rates, and that study abroad participation did not delay graduation among the cohorts studied. The study’s findings
also revealed strong correlations between study abroad participation and graduation rates for students of color.

In the section on personal benefits in relation to study abroad participation earlier in this chapter, the personal benefits Ingraham and Peterson (2004) found in relationship to study abroad program participation at Michigan State University were mentioned. At this time, findings that Ingraham and Peterson found in relation to academic benefits of study abroad participation will be presented. Ingraham and Peterson’s findings in this area pertained mainly to time-to-degree. Within the field of study abroad, there is common perception among parents and students that studying abroad can delay student graduation. Comparing statistical data on the study’s cohort, Ingraham and Peterson showed that the perception that study abroad delays graduation is false. The researchers found that MSU study abroad participants often graduate in less time than nonparticipants as study abroad students often enroll for more semesters than nonparticipants. More semesters of study coupled with faster time-to-graduation occurred as study abroad participants often earned credits through study abroad during winter break or over the summer.

In comparison to studies on student intercultural-related topics in connection with study abroad participation, there has been less research on academic benefits in relation to study abroad. And none of the studies of study abroad participation in relation to academic benefits have examined the socioeconomic status of participants. Consequently, it was unknown to what extent academic performance pre and post study abroad program and graduation rates at four and six years of low SES study abroad students differ from those of higher SES study abroad students.
Equity in study abroad

This section focuses on three factors that affect equity in study abroad, namely the (a) increasing costs of a college education and exploding student debt, (b) disparate participation of minorities in study abroad, and (c) financial aid and scholarship funding.

Costs of a college education and student debt

The rising costs of a college education and rapidly-escalating student debt negatively affect equity in study abroad. U.S. college tuition costs have increased 538% since 1985 (Jamrisco & Kolet, 2013) while public university enrollments have expanded by more than 15% from 2006-2007 to 2011-2012 (State higher education finance FY 2012, 2013) and by 30% over the past decade (Hicken, 2013). “All states subsidize higher education, but some are more generous than others. Students who pay less borrow less, and that affects the borrowing to credential ratio” (Carey and Dillon, 2011, p. 5).

“There is a strong statistical correlation between how much states invest in their higher education systems and how much students ultimately borrow per degree” (Carey and Dillon, 2011, p. 6). From 2010-2011 to 2011-2012, the average tuition cost at public universities grew 8.3%, the largest one-year increase on record, while state and local funding for public higher education simultaneously fell by 8.9%, the lowest funding level in 25 years (Hicken, 2013). In the one-year period of 2010-2011 to 2011-2012, 41 U.S. states cut public higher education funding, with “a third plummeting [state public education funding] by double digits” (Slotkin, 2013). In the five-year period from 2006-2007 to 2011-2012, state and local funding support for public education declined 23% and 48 of 50 U.S. states slashed appropriations for public higher education (State higher
(Only Illinois and North Dakota increased public education funding during this period.) Simultaneously, as state funding for public higher education dried up during this five-year period, public higher education enrollments climbed in every state in the nation (State higher education finance FY 2012).

In fall 2009, nearly 13 million U.S. students were enrolled in four-year, public higher education colleges or universities (NCES, 2011). As state and local funding for public higher education declined, student debt ballooned to the point that Class of 2013 graduates at all U.S. higher education institutions averaged $35,200 in debt (Ellis, 2013). In 2004, public four-year graduates averaged $19,839 in student debt while in 1999, this same population averaged $16,732 in debt (Chronicle of Higher Education, 2009).

Hence, average student debt has grown by 77% in five years and by 110% in 10 years. Since 2003-2004, the percentage of public university undergraduate borrowers has remained constant at roughly 60% annually (Chronicle of Higher Education, 2009). “Lower income students tend to owe the most money, but the biggest increase in indebtedness over the past decade has been among higher income students” (Boushey, 2003). These alarming student debt statistics coupled with declining state and local financial support for public higher education significantly affect equity in study abroad.

**Participation of minorities in study abroad**

Earlier in this chapter it was mentioned that 78% of study abroad participants in 2011-2012 were White (IIE, 2012). During this same academic year, Asian, Native Hawaiian or Other Pacific Islander students comprised just under 8%, Hispanic or Latino/a students totaled roughly 7%, Black or African-American students encompassed 4.8%, Multiracial students totaled just over 2%, and Alaska Native
students were 0.5% of the study abroad student population (IIE, 2012). Salisbury, Paulsen, and Pascarella (2011) reported that from 1998-1999 to 2007-2008 the rate of study abroad students who were White declined from 85% to 81.8%. Nevertheless, the percentage of White higher education students in 1998-1999, 2007-2008, and 2010-2011 were 72.4%, 64.4% (Salisbury et al., 2010), and 60.5% (NCES, 2011b) respectively. So, from 1998-1999 to 2007-2008, the percentage of White students studying abroad decreased only 3.2% while the percentage of minority higher education students increased eight percent. And as mentioned to start this paragraph, in 2011-2012, the percentage of study abroad students who were White was 78% (IIE, 2012) while the percentage of higher education students who were White in 2010-2011, the most recent year for which we have data, was only 60.5% (NCES).

Recent studies have examined the disproportionate participation of minorities in study abroad and found that financial obstacles are the most common reason that ethnic and racial minorities cite for not studying abroad at a similar ratio to White students (Salisbury et al., 2011; Stallman et al., 2010; Kasravi, 2009). However, Salisbury et al. (2011) found that receipt of a grant affected minority student groups differently in their likelihood to study abroad. Receipt of a grant increased the likelihood that Asian-American and Hispanic students would study abroad in comparison to White students. Yet receipt of a loan had a contrasting effect on Hispanic students as they would be less likely to study abroad in comparison to White students. In their study Salisbury et al. (2011) suggested that Hispanic students may be unwilling to increase their borrowing for study abroad. While there have been a number of initiatives started in the past 10 years to increase the number of ethnic minorities who go abroad by providing them
with more funding, the actual increase to this date has been minimal (Stallman et al., 2010).

Salisbury et al. (2011) also found that African-American, Asian-American, and Hispanic students “are affected differently by similar measures of human, financial, social, and cultural capital and elements of habitus when developing their aspiration to study abroad” (p. 140). The researchers then utilized this finding to challenge study abroad professionals to learn to understand the differing decision-making patterns of African-American, Asian-American, and Hispanic students across the dimensions of human, financial, social, and cultural capital, and how these measures impact study abroad intent in order to better promote student abroad programs to specific minority populations.

Kasravi (2009) used a mixed methods approach to investigate the personal, social, and institutional factors which positively influenced students of color at the University of California, San Diego (UCSD), to pursue international study. The study’s experimental group comprised study abroad students of color while the control group comprised all UCSD students of sophomore or higher standing, regardless of race, who decided not to apply to study abroad. Kasravi (2009) found that students of color were primarily influenced to apply to study abroad by personal and social factors while finances and academics were the main challenges to overcome. A qualitative finding from Kasravi’s (2009) study found that minority study abroad students experienced negative stereotyping in considering to study abroad.

Kasravi (2009) investigated personal, social, and institutional factors which positively influence students of color at a single, large, public four-year institution to
study abroad. Similarly, Gaines (2012) also examined underrepresentation of minorities in study abroad programs. Gaines’ study, nevertheless, differed from Kasravi’s in various ways. Gaines focused her study specifically on the participation of Black students in study abroad programs, the study’s population of 298 undergraduate students hailed from four historically Black colleges and universities (HBCUs), and the researcher employed a qualitative design to implement the study. Gaines investigated three areas in the study: (a) how Black undergraduates enrolled at HBCUs perceive study abroad; (b) how individual and institutional characteristics relate to Black HBCU undergraduate students’ desire to participate in study abroad; and (c) to what degree individual student and institutional factors can predict Black undergraduate students desire to study abroad. The author found that a significant relationship existed between students who initiated discussions with their professor or advisor, and the students’ intention to study abroad. A significant relationship was also found between professors who discussed study abroad with specific students outside of class and those students desire to study abroad. In essence, the author found that a statistically significant relationship exists between HBCU students and faculty in terms of discussing study abroad, both when students initiate conversations with faculty, and when faculty initiate conversations with students. Additionally, the study found that foreign born or raised HBCU students were less inclined to study abroad than U.S. born students.

The research studies of Salisbury et al. (2010), Kasravi (2009), and Gaines (2011) suggested that in order to increase the participation of minorities in study abroad, study abroad advocates must appeal to minorities’ personal (or human) and social factors for participating while insuring that financial and academic barriers are
overcome. Gaines’ findings underscored the significance of faculty supporting and communicating with students about studying abroad. The studies by Salisbury et al. (2010) and Kasravi (2009) underscored the paramount importance of financial aid and scholarships for study abroad, a third factor which affects equity in study abroad. Students’ use of financial aid coupled with myriad scholarships available for study abroad can positively impact equity within study abroad.

**Financial aid and scholarship funding**

Title IV of the *Higher Education Act of 1965* (PL No. 89-329, 8 November 1965) (HEA) – which Congress is required to review, amend (if necessary), and reauthorize every five years – governs the administration of federal student financial aid programs.

This act, along with subsequent amendments to it, signaled the expansion of federal aid programs and put into place most of the kinds or federal assistance available today…. It also specifically allowed the use of federal assistance for study abroad programs. (Cooper, Cressey, & Stubbs, 1989, p. 4)

Direct Plus and Parent Plus loans, while “campus based” programs comprise Federal Work-Study, FESOG, and Perkins loans.

As mentioned earlier, the *HEA of 1965* (PL No. 89-329, 8 November 1965) provided for the use of federal assistance funds for study abroad programs. Still, across the country, universities interpreted HEA language on usage of “entitlement” and “campus-based” federal assistance for study abroad differently as language in the original *HEA of 1965* (PL No. 89-329, 8 November 1965) legislation was unclear on this point (Cressey & Stubbs, 2009). To guarantee blanket applicability for all forms of federal financial assistance with study abroad programs, explicit, clear language was inserted into the 1992 reauthorization of the *HEA of 1965* (PL No. 89-329, 8 November 1965) which allowed federal aid to be used on all study abroad programs approved by the student’s home university (Bolen, 2001; Cressey & Stubbs, 2009; Hannah, 2009). Specifically, the language of the *Higher Education Amendments of 1992* (PL No. 102-325, 23 July 1992) stated, “nothing in this Act shall be construed to limit or otherwise prohibit access to study abroad programs approved by the home institution at which the student is enrolled” (PL No. 102-325, 23 July 1992).

Education abroad professionals regard the *HEA of 1992* (PL No. 102-325, 23 July 1992) reauthorization through its explicit support of utilizing financial aid to fund study abroad as a bright-line stamp of legitimacy for the appropriateness, quality, and importance of study abroad to a university education. Like the *Servicemen’s Readjustment Act of 1944* (PL No. 78-346, 58 Stat. 284m) (GI Bill) and the original *HEA of 1965* (PL No. 89-329, 8 November 1965), the *HEA of 1992* (PL No. 102-325,
23 July 1992) reauthorization is regarded as a fundamental component of efforts to enlarge and diversify the population of students able to study abroad.

Starting in 1992 Federal, State and institutional financial aid in the form of loans, grants, and scholarships came to be applied to study abroad by institutions across the country. Additionally, study abroad students can use funding from competitive governmental and private fellowships, from familial and personal funds, or a combination of all of the previous. Correspondingly, universities, Federal and State governments, and private organizations have developed financial practices and policies to support study abroad.

Like costs for U.S. higher education, study abroad program costs continue to escalate, though not nearly as rapidly as public and private institution tuition (Cressey & Stubbs, 2010). From 1965 to 2007, tuition at public universities generally increased at a rate double the rate of inflation while tuition at private institutions increased at a slightly steeper rate over this same period (Cressey & Stubbs, 2010). Cressey & Stubbs (2010) highlighted that tuition increases were greatest in the 1980s when most institutions experienced rises of 10-12% per year (p. 262). The Consumer Price Index (CPI) from 1976 to 2007 grew by 264%. Over this same period, study abroad costs rose 449%, almost double that of the CPI, yet private institution tuition, room and board rose 760% and corresponding costs at public tertiary institutions climbed 634% (Cressey & Stubbs, 2010). With higher education and study abroad costs rising disproportionally to the CPI, clarification in the HEA of 1992 (PL No.102-325, 23 July 1992) reauthorization that all forms of federal financial aid could apply to study abroad became even more important.
Scholarships provide another means to fund study abroad experiences. Unlike most forms of Federal financial aid, scholarships are not solely need-based. Merit-based, competitive scholarship programs for study abroad also exist. Several U.S. government and private organization competitive scholarships cover significant portions of all programmatic, travel, and related expenses of study abroad programs.

The U.S. Federal government, under sponsorship of the U.S. Department of State, funds several international education scholarships. The most prestigious, oldest, and largest program is the Fulbright Program, which was established following World War II in 1946 by Senator J. William Fulbright to, in his words, “bring a little more knowledge, a little more reason, and a little more compassion into world affairs, and thereby to increase the chance that nations will learn at last to live in peace and friendship” (Fulbright Commission Ireland, 2014). Today, the Fulbright program awards about 1,900 grants annually and operates in 140 countries (Fulbright U.S. Student Program, 2013). Fulbright scholarships have been awarded to 122,800 Americans since program inception (Fulbright U.S. Student Program).

Other U.S. Federal government scholarships include the Benjamin A. Gilman International Scholarship (Gilman), the Boren Awards for International Study (Boren Awards), and the Critical Language Scholarships (CLS). Each of these scholarship programs differs in focus, eligibility requirements, duration of study, and method of implementation. The Gilman scholarship is specifically targeted toward undergraduate students with limited financial means or who are from backgrounds traditionally underrepresented in study abroad (Gilman, 2014c). Gilman eligibility is limited to Pell grant recipients (Gilman, 2014b). Boren Awards provide funding for the study of
foreign languages critical to national security (Boren, 2014). The CLS program is a group-based, summer intensive language training program in less commonly taught languages such as Arabic, Bengali, Chinese, Korean, Russian, Turkish, Urdu, and others (CLS, 2014).

**Student choice and the intent to study abroad**

Salisbury et al. (2011) utilized an integrated model of college choice to investigate which undergraduate students planned to study abroad and which did not. Study data were gleaned from the Wabash National Study of Liberal Arts Education (WNSLAE), a longitudinal study of 4,501 undergraduate students at 19 four-year and two-year institutions. The study by Salisbury et al. is the only research the author of this specific study found that examined the interaction between socioeconomic status and the intent to study abroad participation. Salisbury et al.’s study specifically “investigated the dynamic interaction between SES and social and cultural capital in college freshmen to determine predictors of study abroad” (Stallman et al., 2010, p. 141).

Salisbury et al. (2011) found that financial, human, social, and cultural capital can impact students’ intention to student abroad. Beyond intention to study abroad, students also go through a process of choosing to participate in study abroad. The research of Stallman et al. (2010) presented two themes. First, the researchers asserted that the student-choice construct can be extended beyond the areas of pre-college enrollment or persistence to apply to decisions that students make during their college careers, including participation in educational experiences such as study abroad. Exploring the often-lengthy process of stages that study abroad participants go through to consider, investigate, and eventually apply for a study abroad program in a particular
location, the researchers contended that the decision-making process mirrors the student-choice construct.

Next, the authors utilized Perna’s (2006) integrated model of college choice to investigate factors that influence college freshmen to participate in study abroad. On this point the authors’ contended that a student’s intent to study abroad was related to, and influenced by, that student’s socioeconomic status, as well as that student’s social and cultural capital prior to and throughout that student’s academic experience. The authors found that considerations of program affordability, curricular fit, intellectual and professional applicability, and cultural accessibility are connected to study abroad program selection. Cultural accessibility refers to how easily and well a student can adjust to differences between their home and the host cultural environments. Potential barriers students perceive and may encounter to studying abroad including cost, lack of awareness, perceived unimportance, application process length and complexity, social and/or familial obligations or constrains, academic program curricular limitations, and fear of discrimination and racism abroad were also highlighted. In analyzing the data from the WNSLAE, the researchers found several findings pertinent to study abroad. They found that socioeconomic status influenced student intent, expectations, and ability to study abroad, and that students receiving financial aid were 11% less likely to study abroad than ones not on financial aid. Also, males were 8% less likely than females to study abroad. Black and Latino students did not differ from Whites in their interest in studying abroad. However, Asian/Pacific Islander students were 15% less likely than Whites to study abroad. The researchers also found that social and cultural capital accumulation prior to university was positively related to intent to study abroad, and
students with high interest in reading and writing (as measured by attitude toward literacy) were more likely to study abroad. Not surprisingly, students who are more open to diverse ideas and peoples were more likely to study abroad. Specifically, the researchers found that each single statistical deviation increase in openness to diversity equated to a nine percentage point increase in likelihood to study abroad while a one statistical deviation increase in diverse interactions during college resulted in a five percent increase in probability to study abroad. A one percentage point increase in college co-curricular involvement resulted in a three percentage point increase in probability to plan to study abroad.

Among types of higher education institutions, the results showed that students attending liberal arts colleges were the most likely to study abroad. Community college students were 29% less likely, and students at regional, comprehensive or research universities were 10-13% less likely than liberal arts college students to study abroad. In examining curricular areas, Salisbury et al. (2011) found that social science students were the most likely to plan to study abroad. And this group was 10% more likely to study abroad than humanities and arts students. Yet, they found no statistically significant difference in intention to study abroad between humanities and arts students and business or Science, Technology, Engineering, and Mathematics (STEM) students. These curricular findings differed from the 2006 Institute of International Education study results. Overall, the findings of Salisbury et al. (2011) suggested the complex interplay between socioeconomic status, capital accumulation (both before and during undergraduate studies), and students’ intent to participate in study abroad.
Some aspects of this complex interplay that the study revealed were that approximately 59% of low-income students who have average pre-college capital and high during-college capital accumulation plan to study abroad. This 59% figure was similar to the 63% rate of students who entered college with high or average pre-college capital accumulation but accumulated only low capital in college. In regards to potential study abroad participation, the initial finding underscored the importance of student engagement during college for low socioeconomic status students. Yet even if engaged, less than 60% of this population intended to study abroad. The 63% statistic highlighted the moderate intention to study abroad for high or average pre-college capital accumulating students who do not increase their cultural capital during college. The study also found that 31% of low socioeconomic status students with low pre-college capital accumulation and low first-year college capital accumulation intended to study abroad. This finding points to the supposition of Salisbury et al. (2011) that even if low or average socioeconomic status students with low pre-college cultural capital accumulation were provided full financial assistance to study abroad, the students’ low pre-college capital accumulation could likely prevent them from valuing the potential educational benefits enough to invest the time or foregone earnings (from in-college employment) to enroll and participate in study abroad. The authors also suggested that if students do not intend to study abroad, they are unlikely to ever explore whether financial assistance exists. In analyzing the data on high socioeconomic students with both high pre-college and high first-year-in-college capital, the researchers found that 85% intend to study abroad, a finding which suggests that socioeconomic status clearly impacts student probability of intent to study abroad. In summary, the impact of social
and cultural accumulation before college is influential for all students, no matter their socioeconomic status.

**Socioeconomic Status**

There are “many different ways that one might measure a student’s socioeconomic status” (Astin & Oseguera, 2004). The internet homepage of the National Center for Education Statistics (NCES) of the U.S. Department of Education – nces.ed.gov – describes itself as the “the primary federal entity for collecting and analyzing data related to education” (NCES, n.d.e). Typing the words socioeconomic status into the website’s search box results in 1,790 different links related to socioeconomic status. Clicking on the first link at the top of the page, one is taken to a NCES document which explains that in that particular document “socioeconomic status was measured by a composite score based on parental education and occupations and household income at the time of data collection” (NCES, n.d.f). In that explanation the reader learns how SES was measured and what elements comprised SES composite score in it but does not learn how the elements of parental education and occupations and household income were calculated. Linking to another document accessed by typing ‘socioeconomic status’ into the NCES website search box takes the reader to another NCES document which states that “low SES signifies the bottom 20 percent of the variable’s definition, middle SES the middle 60 percent, and high SES the top 20 percent” (NCES, n.d.g.). This document provides three differing levels of SES – low, middle, and high – but does not define what elements were included in calculating SES nor what amounts and/or weights of each element were included.
In the National Assessment of Educational Progress (NAEP) glossary on the NCES website, the definition of socioeconomic status is “a combination of social and economic factors that are used as an indicator of household income and/or opportunity” (NCES, 2013b). NAEP’s definition does not delineate what specific ‘social and economic factors’ were included in the calculation of socioeconomic status nor define ‘opportunity.’ The American Heritage New Dictionary of Cultural Literacy (available on the internet at www.dictionary.com) defines socioeconomic status as “an individual's or group's position within a hierarchical social structure. Socioeconomic status depends on a combination of variables, including occupation, education, income, wealth, and place of residence”. The dictionary.com’s definition of socioeconomic status provides greater specificity than the NAEP definition on the variables included in determining individual and group position or socioeconomic status.

Mosby (2013) provides yet another definition of socioeconomic status. For Mosby, socioeconomic status is “the position of an individual on a social-economic scale that measures such factors as education, income, type of occupation, place of residence, and, in some populations, heritage and religion” (p. 1658). Mosby’s definition provides a similar level of specificity to the dictionary.com definition of socioeconomic status, but adds the variables of “heritage and religion” “in some populations” (Mosby, 2013). The lack of clarity and agreement on the definition of socioeconomic status as well as what elements and how much of each element comprise socioeconomic status may complicate research on this subject. Additionally, it may complicate the ability of researchers and policy makers to compare socioeconomic status data and findings from different studies. In this study, the researcher has operationally defined low SES students
as ones who had a Pell grant during the period of their study abroad program, while students who did not have a Pell grant during the period of their study abroad program were operationally defined as higher SES students.

**Socioeconomic Status and Accessibility**

In the 1960s and 1970s many higher education institutions initiated outreach efforts to recruit and include underrepresented student populations which resulted in greater educational accessibility and equity within U.S. higher education (Astin & Oseguera, 2004; Baum & Ma, 2007). Today, the access and equity picture in high education is different. Yesteryear’s link which jointly enhanced educational accessibility and equity has been broken (Astin & Oseguera, 2004; Lundy-Wagner, 2012). In theory and by law, underrepresented student populations continue to have access to a postsecondary education across the current higher education landscape of form, style, level, location, and selectivity. Yet, in practice, by 2000, high SES students were overrepresented at highly selective institutions “by a factor of more than 2, while students from the poorest families are underrepresented by a factor of one-half” (Astin & Oseguera, p. 330). On the other end of the socioeconomic spectrum “low SES students are disproportionately enrolled in institutions with lower levels of financial resources and a higher dependence on tuition as a source of total revenue” (Titus, 2006, pp. 393-394).

In her chapter *Studying College Access and Choice: A Proposed Conceptual Model*, Perna (2006) explicated the stratification of contemporary higher education by SES and race/ethnicity while Walpole (2003) echoed Titus’ statement in noting that “students from low SES backgrounds often enroll in institutions positioned lower in the
stratified higher education system instead of enrolling in institutions which have been found to positively influence aspiration and persistence” (p. 48). The growing disparity within U.S. society has resulted in regressing educational equity (Astin, 1993; Astin & Oseguera, 2004; Lundy-Wagner, 2012; Tough, 2014). Terenzini, Cabrera, and Bernal (2001) asserted in their report, *Swimming Against the Tide*, college attendance is stratified by SES status and low SES students are less likely to earn a degree from a four-year institution compared to other students.

Student financial aid increased in the ten year period from 1994-1995 to 2004-2005 by 120% (Chen & Desjardins, 2008). However, in this period, student aid in the forms of grants increased only 86% while loans jumped 130% which further widened the financial gap between high and low SES students (Chen & Desjardins, 2008). More than 90% of Pell grants are awarded to students who hail from households with annual incomes of less than $40,000 (Houle, 2013) and the buying power of the Pell grant – which is strictly for low SES students – has been decreasing (Chen & Desjardins, 2008).

**Socioeconomic Status and College Experiences**

Research (Paulsen & St. John, 2002) found that low SES and high SES students exhibit very different behaviors in high school and in selecting colleges. Yet, overall, Walpole (2003) noted that research on the behaviors of low SES students in college is limited. To investigate the similarities and differences in activities of low SES and high SES students, Walpole used longitudinal data collected from over 12,300 students at 209 four-year postsecondary institutions that are part of the Cooperative Institutional Research Program (CIRP). Data were collected in three administrations over nine years (in 1985, 1994, and 1994) of students at the highest and lowest quintiles. After imposing
the high and low SES quintile restrictions, Walpole’s subsample totaled approximately 2,400 students in the two quintiles. Walpole investigated cultural, social, academic, and economic activities of college students to ascertain whether these activities differed by SES status. Specific areas that Walpole researched included: interaction with faculty; time spent studying, working, volunteering, or involved in groups and sports; and college GPA. The outcome measures that Walpole recorded were income at the nine year mark following college entry, educational attainment, graduate school attendance, and educational aspirations.

Findings from Walpole’s (2003) study showed that while in college low SES and high SES students exhibit some similarities in their patterns of behavior, there were also differences. The behaviors of low and high SES students were similar in how often they interacted with faculty outside of class as well as assisted faculty with teaching classes. Low SES students were more likely than high SES students to work on a professor’s research project while high SES students were more likely to visit a faculty member’s home than low SES students. The groups differed on the types of activities they participated in and amount of time spent on these activities. Low SES students spent less time participating in clubs and groups, and worked more hours than high SES students. Over 50% of low SES students mentioned that they worked more than 16 hours weekly, or even full-time while undergraduates. Low and high SES students reported participating in sports as well as volunteering or service activities at similar proportions. Regarding the amount of time spent studying, 50% of low SES students and 44% of high SES students reported that they devoted 10 or fewer hours weekly to the activity. Low SES students had lower GPAs in college than high SES students. Walpole’s (2003)
study also examined the habitus of low and high SES students nine years following the beginning of college. Results from Walpole’s study showed that “students from low SES backgrounds had lower levels of income, graduate school attendance, and educational attainment than their peers from high SES backgrounds” (p. 56). Walpole concluded her study by expounding that “the social status origins of a college student continue to affect his or her college experiences and outcomes” (p. 63) while calling for more research in two areas: (a) the effects of student involvement on campus as it has shown a “positive impact on student’s cognitive development and persistence” (p. 66); and (b) the “effects of social class on college and university students” (p. 67).

**Socioeconomic Status and College Completion**

Various studies (including Baum & Ma, 2007; Baum, Ma, & Payea, 2013; Chen & DesJardins, 2008; Engle & Tinto, 2008; Houle, 2013; Lundy-Wagner, 2012; Terenzini, Cabrera, & Bernal, 2001; Titus, 2006; Walpole, 2003) have elaborated the relationship between socioeconomic status and degree completion outcomes. Houle (2013) asserted that “parents’ SES is an important determinant of children’s academic performance, expectations, and ability to gain access to elite postsecondary institutions” (p. 54), while research by Hossler and Stage (1992) twenty-one years earlier found that parents educational expectations had the greatest impact on their children’s likelihood to attend college. “Postsecondary institutional choice is strongly linked to socioeconomic background” (Houle, 2013, p. 55). Once in college, SES “has a contextual and positive effect on college completion” (Titus, 2006, p. 393) and “higher family incomes and higher parent education levels are associated with higher degree completion rates” (Baum & Ma, 2007, p. 37). Nevertheless, SES alone does not account for student
college completion rates (Titus, 2006). Instead, Titus (2006) found that “college completion is positively influenced by such demographic-structural characteristics as racial/ethnic diversity” (p. 393). Lundy-Wagner (2012) added that some element of social class (or socioeconomic status) is significantly related to college completion for each race/ethnicity, no matter whether the student is White, African-American, Asian, or Latino.

Lundy-Wagner (2012) completed a study of bachelor’s degree completion using data from the Beginning Postsecondary Student Study of 1996 (BPS: 96/01) which employed a two-phase structure that first sampled 1,760 institutions followed by 23,090 students who started full-time in fall 1996 at those schools. From the initial data set, Lundy-Wagner (2012) received 408 useable records which she used to investigate how the “relationship between social class (as measured by socioeconomic status) and the likelihood of bachelor’s degree completion vary by ethnicity/race and gender” (p. 3). The overall six-year graduation rate was 59% in Lundy-Wagner’s (2012) study although women graduated three points higher than the overall rate on average and men finished six points lower than women on average. Focusing on six-year degree completion by SES in addition to gender, Lundy-Wagner (2012) found that six-year graduation rates were 11 percentage points higher for moderately or highly disadvantaged female students over males and four percentage points for minimally disadvantaged (or middle class) females over males. Taking men and women together and focusing specifically on SES and six-year graduation rates, Lundy-Wagner (2012) found the graduation rates were 66% for non-disadvantaged (or most privileged) students, 52% for minimally-
disadvantaged (or middle class) students, and 39% for moderately or highly socioeconomically disadvantaged students.

In her study Lundy-Wagner (2012) also examined degree completion rates by race/ethnicity and by SES and gender. She found that among most privileged students the six-year graduation rates of females over males were 11% higher for African-Americans and Asians, 10% higher for Latinos, and 7% for Whites. Further, her research showed that the gender gap varied by race/ethnicity and SES. For African-Americans the gender gap was largest among moderately or highly disadvantaged students (17%), followed by minimally disadvantaged (14%), and not disadvantaged (11%). All African-American gender gaps favored females. For Asians the gender gap was largest among not disadvantaged students (11% favoring females), followed by moderately or highly disadvantaged students (9%), and middle class students (8%). Asian females favored males in all socioeconomic strata gender gaps. For Latinos, the gender gap was largest among not disadvantaged students (11% favoring females), then moderately or highly disadvantaged students (8% favoring females), and lastly minimally disadvantaged (1% favoring males). Among Whites, the gender gap breakdown was largest among moderately or highly disadvantaged (11%), followed by not disadvantaged students (7%), and middle class students (4%). White females favored males in all gender gaps socioeconomic strata. An interesting finding from the gender gap data was that females favored males in all socioeconomic strata except among minimally disadvantaged Latino students. In this comparison, males favored females by one percentage point.
Using NCES 2003 data on first-time college freshmen in 1995-1996, Chen and DesJardins (2008) found that 56% of high SES students attained bachelor’s degrees in contrast to only 26% of low SES students. They asserted that the attainment gap was partly due to the fact that low SES students have insufficient funds to afford college and are more sensitive to financial and policy shifts. Not surprisingly, studies (Astin & Oseguera, 2004; Houle, 2014; Paulsen & St. John, 2002) reported that low SES students were greater affected by tuition changes than higher SES students.

In his May 15, 2014 *New York Times* magazine article, Who gets to graduate?, Paul Tough reported that “more than 40 percent of American students who start at four-year colleges haven’t earned a degree after six years. If you include community-college students in the tabulation, the dropout rate is more than half, worse than any other country except Hungary.” Tough then continued:

whether a student graduates or not seems to depend today almost entirely on just one factor – how much money his or her parents make. To put it in blunt terms: Rich kids graduate; poor and working-class kids don’t. Or to put it more statistically: About a quarter of college freshmen born into the bottom half of the income distribution will manage to collect a bachelor’s degree by age 24, while almost 90 percent of freshmen born into families in the top income quartile will go on to finish their degree. (para. 9)

And “if they come from families in the bottom quartile, they have just a 1 in 6 chance of making it to graduation” (Tough, 2014, para. 10).

Carey and Dillon (2011) echoed Tough’s grim assessment in stating, “barely half of the students who start college get a degree within six years, and graduation rates at
less selective colleges often hover at 25 percent or less. And at the same time, student loan debt is at an all-time high, recently passing credit card debt in total volume” (p. 1). Low SES students from less-educated families are “considerably more likely to take on very high debt loads compared to their more advantaged counterparts (debt > $30,000) and are thus at greater risk of dropping out” (Houle, 2013, p. 67).

Clearly, a student’s socioeconomic status can moderate or complicate successful completion of college. And in referencing the research of Goldrick-Rab, Harris, and Trostel (2009), Lundy-Wagner (2012) affirmed that “financial aid alone is not sufficient to close attainment gaps” (p. 13). The amount, regularity, and types of activities students choose to participate in at university can also impact the likelihood of persistence and college completion (Tinto, 1993; Kuh, 2008).

**Socioeconomic status as it pertains to participation in study abroad**

The author of this study looked for research exploring the relationship of socioeconomic status with study abroad participation, academic performance, and graduation outcomes. However, literature (Salisbury et al., 2010) in this area is limited. The dearth of literature on this topic was unsurprising as in the *Recommendations for Further Research* section of Barclay Hamir’s (2011) doctoral dissertation she mentioned that she did not explore the variable of socioeconomic status in her study. Barclay Hamir (2011) then suggested socioeconomic status as an area for future research in study abroad. The author of this study took Barclay Hamir’s suggestion to heart and investigates the relationship between socioeconomic status and study abroad participation, academic performance, and graduation outcomes at four and six years in this study.
Summary

The chapter started with the history of study abroad followed by an overview of the demographics of study abroad participants. Research examining personal and academic outcomes derived from study abroad participation was then presented followed by elaboration on equity issues affecting study abroad. Next, the chapter explored and concentrated on socioeconomic status, including its influence on both college access and completion. The chapter concluded with confirmation that research on the relationship between socioeconomic status and study abroad participation, academic performance, and graduation outcomes is scarce.
CHAPTER 3

METHODOLOGY

Completion of an undergraduate degree is often perceived as a concrete means to gain entry into the U.S. middle class (Baum, Ma, & Payea, 2013). For low SES students, specifically, a “college education has been seen as a means of escape and a pathway of social mobility since colonial times,” (Walpole, 2003, p. 46) provides substantial individual, social, economic benefits as well as serves as “a critical element in the national quest for equality of opportunity” (Chen & DesJardins, 2010, p. 179). Within U.S. society, good physical health, strong social mobility, and various other quality of life measures are often linked to personal wealth (Baum, Ma, & Payea, 2013). Similarly, the relationship between completion of a U.S. higher education degree and higher personal income is well-established (Baum, Ma, & Payea, 2013). U.S. Census Bureau statistics for 2009 – the most recent year for which statistics are available – show that bachelor’s degree holders earn almost $40,000 more in salary annually than those with only a high school diploma and over $49,000 more in salary annually than persons who do not complete high school (U.S. Census Bureau, 2012). The average annual disparity between bachelor’s degree holders and associate’s degree holders is roughly $28,500 (U.S. Census Bureau, 2012). Over a 40 year working career, the earning power disparity between a bachelor’s degree holder and those who hold simply a high school diploma is almost $1,600,000 (U.S. Census Bureau, 2012). And the disparity over a 40 year career between a bachelor’s degree holder and a person who did not complete high school is over $1,900,000 (U.S. Census Bureau, 2012). For graduate, professional, and doctoral degree holders, their annual as well as career earning power in comparison to persons...
without a college education is even greater (U.S. Census Bureau, 2012). From a financial standpoint, the straightforward, clear conclusion is that U.S. higher education is financially valuable in both the short and long-term.

The value of higher education to individuals and U.S. society as a whole is not confined solely to personal earnings. Research has shown that in juxtaposition to non-college educated individuals, college educated U.S. citizens participate more actively in civic life, have lower incarceration rates, contribute generously to philanthropy, have greater trust of government, are more likely to be married, more often hold stable jobs, vote at higher rates, and pay a larger share of income taxes which undergird municipalities, schools, and public services at the local, state, and federal levels (Baum, Ma, & Payea, 2013; Blumenstyk, 2015; Goldstein, 2006; Selingo, 2013; The Educational Pipeline: Big Investment, Big Returns, 2004). In providing a tangible means for individuals to educate themselves and personally improve their lives, U.S. higher education provides a means for individuals to impact equity in U.S. society writ large (Baum, Ma, & Payea, 2013). In short, higher education provides a way for individuals to positively impact themselves, their families, and their community, and, by extension, inequality in the United States.

As mentioned in chapter 1, U.S. higher education institutions are seeking ways to retain and graduate greater numbers of their students (Wellman, 2001). For all 4-year institutions, the first-year full-time undergraduate student retention rate was 79% for the fall 2011 to fall 2012 period, the most recent year for which statistics are available (NCES, 2012a). ACU’s first-year full-time student retention rate of 80% in fall 2013 (NCES, n.d.d.) was slightly better than the national average of 79% for 4-year
institutions (NCES, 2012a). The average 4-year, 5-year, and 6-year public institution graduation rates for first-time in college, full-time bachelor’s degree-seeking students who started in 2006 were 33%, 52%, and 57%, respectively (NCES, 2012b). ACU’s 4-year, 5-year, and 6-year graduation rates in 2011 were 23%, 44%, and 50% (The Education Trust, 2014) significantly trailed the national averages.

Seventy-two percent of U.S. undergraduate college students in 2011 worked while attending college, and, of this population, 20 percent worked full-time, year-round (Davis, 2012). Seventy percent of ACU seniors in 2011-2012 self-reported that they worked while attending the university (Institutional Research and Assessment, 2012). Of the ACU population, 28% reported that they worked 30 or more hours weekly, 27% indicated that they worked 20-29 hours weekly, 20% responded that they worked 10-19 hours weekly, and 6% stated that they worked up to 10 hours weekly (Institutional Research and Assessment, 2012). Part-time students tend to have lower graduation rates than full-time students (Complete College America, 2011) and nearly one-third of ACU students attended part-time in fall 2012 (Atlantic Coast University, 2013f). The author contends that these items again underscore the significance of focusing on and applying high-impact educational practices to improve educational outcomes of university students.

Tinto (1993) asserted that merely 15 to 25 percent of students across U.S. higher education institutions depart due to academic failure (p.82). Thus, the remaining 75 to 85 percent of students who do not persist through graduation at a specific higher education institution leave for voluntary factors. “Factors of intention, commitment, adjustment, difficulty, congruence, isolation, obligations, finances, and learning all come
to affect student departures from institutions of higher education” (Tinto, 1993, p. 83).

In other words, students withdraw voluntarily from universities and colleges for numerous reasons. “The character of one’s integrative experiences after entry (into a higher education institution) is central to the process of voluntary withdrawal. Of particular importance are those experiences which arise from the daily interactions between students and faculty inside and outside the classroom. Other things being equal, the more frequent and the more rewarding those interactions are seen to be by the student, the more likely the student is to persist” (Tinto, 1993, p. 82). Kuh et al. (2005) identified study abroad as one of a select number of high-impact educational activities that contribute to increased student retention and graduation. This study sought to understand the relationship of Atlantic Coast University students’ socioeconomic status with their participation in study abroad programs, their academic performance one semester following study abroad participation and their degree completion rates at four and six years after matriculation. The period of the study was from 2000 to 2006.

Research Questions

In an effort to assess how student socioeconomic status impacts study abroad participation, academic performance, and graduation rates between 2000 and 2006 at Atlantic Coast University, the researcher of this study investigated the following questions:

1. a. To what extent is socioeconomic status related to the type of study abroad program students select?
1. b. To what extent is socioeconomic status related to the type of study abroad program students select after controlling for gender, race/ethnicity, SAT composite score, and domicile status?

2. a. To what extent does GPA change pre- and post-study abroad program participation for low socioeconomic status study abroad students in comparison to higher socioeconomic status study abroad students?

2. b. To what extent does GPA change pre- and post-study abroad program participation for low socioeconomic status study abroad students in comparison to higher socioeconomic status study abroad students after controlling for gender race/ethnicity, SAT composite score, and domicile status?

3. a. To what extent does graduation status at four years of low socioeconomic status study abroad students differ from higher socioeconomic status study abroad students?

3. b. To what extent does graduation status at four years of low socioeconomic status study abroad students differ from higher socioeconomic status study abroad students after controlling for gender, race/ethnicity, SAT composite score, and domicile status?

4. a. To what extent does graduation status at six years of low socioeconomic status study abroad students differ from higher socioeconomic status study abroad students?

4. b. To what extent does graduation status at six years of low socioeconomic status study abroad students differ from higher socioeconomic status
study abroad students after controlling for gender, race/ethnicity, SAT composite score, and domicile status?

**Research Hypotheses**

The hypotheses of this research study were: (a) that the participation rates of low socioeconomic status study abroad students would be statistically larger in semester-length study abroad programs than in faculty-led study abroad programs even after controlling for gender, race/ethnicity, SAT composite score, and domicile status; (b) that the academic performance (as measured by GPA) change of low SES study abroad students from pre- to post-study abroad would be statistically larger in comparison to higher SES study abroad students, even after controlling for gender, race/ethnicity, SAT composite score, and domicile status, and (c) that graduation rates at four and six years of low SES study abroad students would be statistically larger in comparison to higher SES study abroad students, even after controlling for gender, race/ethnicity, SAT composite score, and domicile status.

**Research Design**

Quantitative research methods were utilized to conduct this study. As the period being examined in this research study was 2000 to 2006, more than seven years prior to the onset of this study, it was “impossible to manipulate certain variables in order to investigate their potential influence of other variables” (Leedy and Ormrod, 2005, p. 232). Consequently, the researcher utilized an ex post facto research design to examine the type of program study abroad students select, changes in GPA pre- and post-program, and graduation outcomes at four and six years for low and higher SES study abroad students during the 2000 to 2006 period. When examining study abroad program
participation rates and changes in GPA of low and higher SES undergraduate study abroad students pre- and post-program the researcher controlled for gender, race/ethnicity, SAT composite score, and domicile status. The 2000 to 2006 study was selected for examination so that records of all study abroad students in the sample could be included. Said another way, concluding the period of study in the year 2006 allowed the researcher to examine both and four and six year graduation rates of low and higher SES study abroad students. Atlantic Coast University graduation data for the year 2013 and 2014 were not available at the time of this study.

Population and sample

Description of the Institution

The setting for the research study was Atlantic Coast University, a public, metropolitan, regional university in the mid-Atlantic region of the United States. Founded in 1930 as a campus of another university in the region, ACU transitioned from a two-year to four-year college over the next four decades, became independent in 1962, and then became a university in 1969 (Atlantic Coast University, 2013b). ACU is designated as a Carnegie Research University with high research activity (NCES, n.d.d.; Atlantic Coast University, 2013b). Atlantic Coast University is accredited by the Southern Association of Colleges and Schools/Commission on Colleges (SACS/COC) and has been continuously accredited by SACS/COC since 1961 (Atlantic Coast University, 2013e). ACU has seven colleges which offer a total of 70 bachelor’s degrees, 54 master’s degrees, 42 doctoral degrees, and 2 educational specialist degrees (Atlantic Coast University, 2013e). ACU promotes itself as a pioneer and national leader in distance learning and is among the largest providers of distance learning degree
programs in the country, and serves students, including those deployed in the U.S. Navy, around the world (Atlantic Coast University, 2014). Atlantic Coast University maintains a strong relationship with the military and approximately 25% of ACU students are military affiliated (Atlantic Coast University, 2013d). ACU maintains an Office of Military Activities and is the only civilian U.S. academic institution with a graduate program accredited by the North American Treaty Organization (Atlantic Coast University, 2013c).

ACU tuition and required fees were $8,190 for in-state and $22,230 for out-of-state full-time undergraduate students for the 2012-2013 academic year (NCES, n.d.d.). Typical graduate student tuition and required fees were $9,432 for in-state and $23,928 for out-of-state full-time students (NCES, n.d.d.). ACU enrollment comprised 24,670 students for the fall 2012 semester (NCES, n.d.d.). Nineteen-thousand, six-hundred and twelve students were undergraduates and 5,058 were graduates in fall 2012 (NCES, n.d.d.). Eleven-thousand, one-hundred and fifty-nine students were male and 13,511 were female in fall 2012, while 16,826 students were full-time and 7,844 attended part-time (NCES, n.d.d.). Of the full-time student population in fall 2012, 14,929 were undergraduates, and 1,877 were graduates (NCES, n.d.d.). Eighty-eight percent of first-time degree or certificate-seeking undergraduate students were in-state students, 11% were out-of-state students, and 1% were international students in fall 2012 (NCES, n.d.d.). Students came from across the U.S. and from 105 countries in fall 2012 (Atlantic Coast University, 2013e).

The fall 2012 ACU student population was 55% White or Caucasian, 22% Black or African American, 6% Hispanic/Latino, 4% two or more races, 4% Asian, 5%
unknown, less than 1% American Indian or Alaska Native, less than 1% Native Hawaiian or Pacific Islander, and 3% nonresident alien (NCES, n.d.d.). Eighty percent of full-time and 64% of part-time first-time, bachelor’s degree-seeking ACU fall 2012 undergraduates were retained from the first to second year (NCES, n.d.d.).

ACU admitted 74% of applicants and 35% of admitted students enrolled for fall 2012 (NCES, n.d.d.). SAT Critical Reading and Math scores for first-time degree or certificate-seeking undergraduate students at Atlantic Coast University were 460 for the 25th percentile and 560 for the 75th percentile in fall 2012 (NCES, n.d.d.). The average high school GPA of entering first-year students was 3.26 (The Education Trust, 2014).

For students who started in fall 2006 as full-time, first-time degree-seeking undergraduate students at public institutions, 4-year, 5-year, and 6-year graduation rates were 33%, 55%, and 57%, respectively (NCES, 2012b). Six-year graduation rates at public institutions for full-time, first-time degree-seeking undergraduates in the 2006 cohort were 57% overall, and 60% for White students, 40% for Black students, 50% for Hispanics, 57% for students of two or more races, 68% for Asians, 38% for American Indian or Alaska Native students, 49% for Pacific Islanders, and 58% for nonresident alien students (NCES, 2012b).

In the 2011-2012 academic year, 76% of full-time, first-time degree or certificate-seeking undergraduate students received financial aid in any form and the average amount of aid received was $6,759 (NCES, n.d.d.). Of the full-time, first-time degree or certificate-seeking undergraduate students in the 2011-2012 population, 32% received federal grants (average amount received - $4,490), 32% received Pell grants (average amount received - $4,336), 5% got other federal grants (average amount
received - $987), 39% received state or local grants and scholarships (average amount received - $6,995), 23% received institutional grants and scholarships (average amount received - $4,751), 63% received federal student loans (average amount received - $5,572), and 5% received other student loans (average amount received - $11,055) (NCES, n.d.d.).

Atlantic Coast University’s undergraduate student population has a significant transfer student population (Institutional Research and Assessment, 2012). Of ACU graduating seniors in 2011-2012, 53% self-reported themselves as transfer students (Institutional Research and Assessment, 2012). And of the transfer population graduating in 2011-2012, 55% indicated that they had transferred to ACU in their junior year (Institutional Research and Assessment, 2012). Forty-seven percent of 2011-2012 graduating seniors reported that neither of their parents had a 4-year degree while 24% indicated that both their parents had 4-year degrees (Institutional Research and Assessment, 2012). Within this same population, 17% reported that they had dependents for who they were responsible. An equal percentage of this population (17%) reported that they were married (Institutional Research and Assessment, 2012).

Seventy percent of ACU seniors in 2011-2012 self-reported that they worked while attending the university (Institutional Research and Assessment, 2012). Of this population, 28% reported that they worked 30 or more hours weekly, 27% indicated that they worked 20-29 hours weekly, 20% responded that they worked 10-19 hours weekly, and 6% stated that they worked up to 10 hours weekly (Institutional Research and Assessment, 2012).
Description of the Study Sample

In the 2000 to 2006 period of this research study, a total of 1,270 students participated in study abroad programs at Atlantic Coast University. Eight-hundred and twenty-three students (or 65%) were female and 447 (or 35%) were male. One-thousand and thirty-eight (or 82%) were undergraduate students, 183 (or 14%) were graduate students, and 49 (or 4%) were non-degree students. One-thousand and twenty-nine (or 89%) were undergraduate students and 141 (or 11%) were graduate students. Regarding the type of study abroad program that ACU students participated in during the period of the study, 343 students (or 27%) participated in affiliate programs and 245 students (or 19%) participated in exchange programs for a semester or academic year while 682 students (or 54%) participated in faculty-led study abroad experiences of less than eight weeks.

Identifiers, Protections, and Storage of the Data

This study utilized student records stripped of identifiers requested from the Atlantic Coast University Office of the Registrar following successful application to and approval by the Human Subjects Committee of the Darden College of Education. Data were provided to the researcher stripped of identifiers; no identifiable individual student records or data were requested, provided, accessed, or reviewed by the researcher. To ensure confidentiality, data were reported in aggregate form only, and cells with less than five data records were not reported. After receipt from the Office of the Registrar, only the researcher had access to the data. Data were kept stored in a locked facility accessible only by the researcher.
The researcher completed Collaborative Institutional Training Initiative (CITI) Human Subject Protection Social and Behavioral Research (SBR) Basic training course on January 31, 2013 as well as the SBR 101 Refresher training course on July 28, 2015. The researcher’s documentation related to Human Subjects Committee approval is available in the appendix of this study.

Measures and Analysis

To answer the study’s research questions, biographical data of Atlantic Coast University study abroad students from the period 2000 to 2006 were collected by the ACU Office of the Registrar and presented in Excel format to the researcher. Following receipt of the data, the variables of socioeconomic status, gender, race/ethnicity, SAT composite score, degree level, attendance status, domicile status, GPA pre-study abroad participation, GPA post-study abroad participation, graduation rate at 4-years, and graduation rate at 6-years were entered into Systematical Package for the Social Sciences Version 21 (SPSS).

Atlantic Coast University students who received a Pell grant during the period of their study abroad program were operationally defined as low socioeconomic status students for this study. Students who did not receive a Pell grant were operationally defined as higher (or not-low) socioeconomic status students. The Federal Pell grant program provides need-based grants to low-income undergraduate students to attend postsecondary education (U.S. Department of Education, 2012) and the family income eligibility threshold for the program is most often a maximum of $20,000 (Morse & Tolis, 2013). For 2011-2012, a student’s maximum Pell grant award was $5,550 (U.S. Department of Education, 2012). Pell grant program eligibility criteria went into the
decision to operationally define a Pell grant recipient as a low socioeconomic status study abroad student for this study.

Regarding the variable race/ethnicity, as mentioned in Chapter 1, this study used the NCES definition of race/ethnicity as “categories developed in 1997 by the Office of Management and Budget (OMB) that are used to describe groups to which individuals belong, identify with, or belong in the eyes of the community. The categories do not denote scientific definitions of anthropological origins. The designations are used to categorize U.S. citizens, resident aliens, and other eligible non-citizens. Individuals are asked to first designate ethnicity as: Hispanic or Latino, or Not Hispanic or Latino. Second, individuals are asked to indicate all races that apply among the following: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, or White” (NCES, n.d.b.).

For the variable of gender, the researcher used the 2014 Merriam-Webster Online Dictionary definition of “the state of being male or female.” The variable of Composite SAT score was operationally defined for this study as the sum of a student’s scores on the SAT verbal and SAT quantitative portions of the SAT test. The domicile status of students is defined in this study as either in-state or out-of-state. Resident students are in-state, all others are out-of-state students.

For this study, the researcher used NCES definitions of an undergraduate and graduate student. NCES (n.d.b.) defines an undergraduate student as “a student enrolled in a 4- or 5-year bachelor's degree program, an associate's degree program, or a vocational or technical program below the baccalaureate” and a graduate student as “a student who holds a bachelor's degree or above and is taking courses at the
postbaccalaureate level. These students may or may not be enrolled in graduate programs”.

In SPSS, the dichotomous variables of socioeconomic status were coded as 1 for low socioeconomic status and 0 for higher (or not-low) socioeconomic status.

The dichotomous variables of gender were coded as 1 for male and 0 for female. For the categorical variables of differing races/ethnicities, data were dummy coded as 1 for White and 0 for non-White, 1 for Black or African American and 0 for non-Black or African American, 1 for Hispanic and 0 for non-Hispanic, 1 for Multi-race or non-Multi-race, 1 for Asian/Pacific Islander and 0 for non-Asian/Pacific Islander, 1 for Unknown/Unreported, 0 for non-Unknown/Unreported, 1 for American Indian/Native American or 0 for non-American Indian/Native American, and 1 for Foreign/International students and 0 for non-Foreign/International students.

Data for the variable of SAT composite score are ratio continuous. Minimum and maximum scores for each section of the SAT test were on a scale between 200 and 800, respectively (The College Board, 2014). During the 2000 to 2004 period of this study the SAT test comprised two sections, reading/verbal and mathematics. For the 2000 to 2004 period, SAT composite scores ranged from a minimum of 400 points to a maximum of 1600. Starting in 2005, a writing section (with the same minimum and maximum scores scale) was added to the SAT test (Jaschik, 2014). This addition resulted in SAT composite scores for the 2005 and 2006 period of this study ranging from a minimum of 600 points to a maximum of 2400.

Data for the dichotomous variable of student domicile status were coded as 1 for in-state students and 0 for out-of-state students.
**Dependent and Independent Variables**

The independent variables for all research questions were low SES status and higher SES status. The dependent variable differed by research question. For research questions 1.a. and 1.b., the dependent variable was study abroad program type. For research questions 2.a. and 2.b., the dependent variable was GPA change. For research questions 3.a. and 3.b., the dependent variable was graduation status at four years. For research questions 4.a. and 4.b., the dependent variable was graduation status at six years. No controls were utilized for research questions 1.a., 2.a., 3.a., and 4.a. Controls for gender, race/ethnicity, SAT composite score, and domicile status were utilized for research questions 1.b., 2.b., 3.b., and 4.b. Independent and dependent variables and controls for research question appear in Table 4.

**Statistical Techniques**

Chi-square tests were conducted to analyze research questions 1.a., 3.a., and 4.a. Logistic regressions were conducted to analyze research questions 1.b., 3.b., and 4.b. An Independent samples t-test was conducted to analyze research question 2.a., and an ANCOVA was conducted to analyze research question 2.b. (Cohen, 1992; Creswell, 2003; Field, 2013; Leedy, 2005; Salkind, 2004). The statistical techniques conducted for each research question in this study appear in Table 4.
<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Independent Variables</th>
<th>Dependent Variables</th>
<th>Controls</th>
<th>Statistical Analysis Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ1.a.</td>
<td>Low SES status</td>
<td>Study abroad</td>
<td>None</td>
<td>Chi-Square</td>
</tr>
<tr>
<td></td>
<td>Higher SES status</td>
<td>program type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RQ1.b.</td>
<td>Low SES status</td>
<td>Study abroad</td>
<td>Gender</td>
<td>Logistic Regression</td>
</tr>
<tr>
<td></td>
<td>Higher SES status</td>
<td>program type</td>
<td>Race/Ethnicity</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SAT</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Score</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Domicile</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Status</td>
<td></td>
</tr>
<tr>
<td>RQ2.a.</td>
<td>Low SES status</td>
<td>GPA change</td>
<td>None</td>
<td>Independent Samples t-Test</td>
</tr>
<tr>
<td></td>
<td>Higher SES status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RQ2.b.</td>
<td>Low SES status</td>
<td>GPA change</td>
<td>Gender</td>
<td>ANCOVA</td>
</tr>
<tr>
<td></td>
<td>Higher SES status</td>
<td></td>
<td>Race/Ethnicity</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SAT</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Score</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Domicile</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Status</td>
<td></td>
</tr>
<tr>
<td>RQ3.a.</td>
<td>Low SES status</td>
<td>Graduation status</td>
<td>None</td>
<td>Chi-Square</td>
</tr>
<tr>
<td></td>
<td>Higher SES status</td>
<td>at four years</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 4 Continued

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Independent Variables</th>
<th>Dependent Variables</th>
<th>Controls</th>
<th>Statistical Analysis Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ3.b.</td>
<td>Low SES status</td>
<td>Graduation status at four years</td>
<td>Gender, Race/Ethnicity, SAT Composite Score, Domicile Status</td>
<td>Logistic Regression</td>
</tr>
<tr>
<td></td>
<td>Higher SES status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RQ4.a.</td>
<td>Low SES status</td>
<td>Graduation status at six years</td>
<td>None</td>
<td>Chi-Square</td>
</tr>
<tr>
<td></td>
<td>Higher SES status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RQ4.b.</td>
<td>Low SES status</td>
<td>Graduation status at six years</td>
<td>Gender, Race/Ethnicity, SAT Composite Score, Domicile Status</td>
<td>Logistic Regression</td>
</tr>
<tr>
<td></td>
<td>Higher SES status</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Limitations

This study examined socioeconomic status and its relationship to study abroad program participation, academic performance, and graduation rates at one university, Atlantic Coast University – a public, research-intensive metropolitan institution in the mid-Atlantic region of the United States. There is great diversity in higher education institutions across the U.S., from research-focused universities to liberal arts colleges to community colleges to military academies and so on. There are institutions that are publicly funded, privately funded, religiously affiliated, and tribally affiliated. There are schools that primarily enroll residential students and others that serve strictly
commuters; there are post-secondary institutions that offer degrees in several different academic disciplines at the bachelor, masters and doctoral level, and others that provide only a few degree offerings at only one level. There are large universities comprised of several thousand students and small colleges with a just a few hundred students. Due to the one-institution focus of this research study, it is difficult to generalize findings from this study to a wide spectrum of tertiary institutions across the United States. The threat of limited generalizability of findings was an external validity threat of this research study.

ACU student participation in short-term study abroad programs at a higher percentage than the national average is another external threat which limited generalizability of this study. In chapter 1, it was mentioned that in 2009-2010 nearly 57% of study abroad participants nationally enrolled in short-term programs (IIE, 2011). At ACU, from 2000-2001 to 2005-2006, participation in short-term faculty-led programs totaled 54% of overall study abroad enrollment. In the six-year period from 2006-2007 to 2011-2012, 74% of ACU study abroad program enrollments have been on short-term programs (Office of Study Abroad, Atlantic Coast University, 2013). Short-term programs usually offer solely one course (and three academic credits) for participants whereas semester study abroad programs often offer a variety of academic courses from which students enroll in four courses (and receive 12 academic credits). Disparity in the number of credits earned while studying abroad can affect the amount that a student’s GPA may be impacted by a study abroad experience. With ACU study abroad participants enrolling in short-term programs at a higher percentage than the national
average, the potential effect of study abroad participation on the GPA of ACU students may be lessened.

The author intended to investigate enrollment status as a variable in the study in order to assess its relationship to study abroad participation, academic performance, and graduation. Yet, due to the manner in which course registration records for students participating in exchange and affiliate study abroad programs are handled at ACU, it was not possible to investigate enrollment status as a variable in this study. For this reason, enrollment status was removed as a variable and the lack of investigation into enrollment status’ relationship to study abroad participation, academic performance, and graduation is a limitation of this study.

Another limitation of this study was that the data analyzed in this study were originally collected and maintained by the Office of Study Abroad at Atlantic Coast University. Until spring 2013, ACU did not have a means to centrally-track and analyze study abroad participation for the institution. Starting in spring 2013, the Office of Study Abroad worked with the Office of the Registrar to develop a means to utilize the Banner® software program to centrally-track and record study abroad participation. Prior to summer 2012, all study abroad applications were paper-based. Office of Study Abroad staff would review the hard-copy, paper applications for possible admission to a study abroad program, and then individually enter admitted student names, University ID Number (UIN), semester of study, and study abroad program into a Microsoft Works® database. Starting in 2007, ACU discontinued administrative support for the Microsoft Works® software program prompting the Office of Study Abroad to begin keeping records in Microsoft Excel®. As Microsoft Works® was incompatible with
Banner® utilized by the ACU Office of the Registrar, 2000-2006 study abroad program participation records were printed out and then re-keyed by Office of Study Abroad staff into Microsoft Excel®. In summer and fall 2013, the ACU Office of the Registrar utilized the UIN field of the 2000-2006 enrollment data to create an attribute in Banner® indicating study abroad participation. It is impossible to independently verify the accuracy of Office of Study Abroad records. Additionally, it is difficult to confidently state the reliability of data initially recorded on paper, then entered into an outdated and incompatible database (Microsoft Works®), and then re-entered into another computer database (Microsoft Excel®). For this reason, there may be internal validity questions regarding the quality, validity, and accuracy of the data analyzed in this study.

Another potential threat to internal validity in this study was presence of a confounding variable. The research questions that were examined in the study were correlational, which preclude causal inference. There are several possible explanations for low socioeconomic status and higher socioeconomic status students to participate in study abroad programs, for changes in low socioeconomic status and higher socioeconomic status study abroad students GPAs from semester to semester, and for low socioeconomic status and higher socioeconomic status study abroad students graduation rates at four and six years. The potentially confounding variables of changes in students’ personal maturation, intellectual development, modified and/or improved study habits, increased hours of study, exposure to different teaching methodologies, improved physical, mental, and emotional health, changes in family financial and emotional support, or other variables may all impact study abroad students’ participation, GPA performance, and ability to complete their undergraduate degrees in
four and six years. Thus, although a student may participate in a study abroad program, it is incorrect to causally attribute GPA changes and/or graduation outcomes to participation in the study abroad program. This study’s data may show correlational support for the relationship between low socioeconomic status students participation in study abroad and GPA and/or graduation outcomes at four or six years, but is unable to demonstrate cause and effect.

As alluded to above, student personal maturation and identity development during college (Chickering, 1969; Chickering & Reisser, 1993) were potential internal validity threats to this study. The internal threats of repeated testing, history, instrument change, selection bias, regression toward the mean, experimental mortality, statistical regression, selection-maturation interaction, diffusion between groups, compensatory equalization, rivalry, resentful demoralization and experimenter bias (Campbell and Stanley, 1966; Cook and Campbell, 1979) were not present in this study.

Summary

This chapter started by providing background on the importance of undertaking research into the relationship between study abroad participation and GPA performance one semester post sojourn, and between study abroad participation and graduation outcomes at four and six years. The research questions and design of the study were then presented. A description of the postsecondary institution at which the research study was undertaken was provided as well as explanation of the population of the research study. The chapter concluded with presentation of possible limitations of the study.
CHAPTER 4

RESULTS

Introduction

The purpose of this study was to determine the relationship of socioeconomic status with study abroad program participation, academic performance, and graduation status. Specifically, the study examined: (a) to what extent socioeconomic status is related to the type of study abroad program students select; (b) to what extent GPA changes pre- and post-study abroad program for low socioeconomic status study abroad students in comparison to higher socioeconomic status study abroad students; (c) to what extent graduation statuses of low SES study abroad students differ from those of higher SES study abroad students at four years; and, (d) to what extent graduation statuses of low SES study abroad students differ from those of higher SES study abroad students at six years. This chapter presents findings and analysis of this research study which examined the relationship of socioeconomic status with study abroad program participation, academic performance, and graduation status at Atlantic Coast University.

As mentioned in Chapter 3, biographical data of ACU study abroad students from the period 2000 to 2006 were collected by the ACU Office of the Registrar and presented in Excel format to the researcher. Following receipt of the data, the variables of socioeconomic status, gender, race/ethnicity, SAT composite score, degree level, domicile status, GPA pre-study abroad participation, GPA post-study abroad participation, graduation status at 4-years, and graduation status at 6-years were entered into Systematical Package for the Social Sciences Version 21 (SPSS).
In this study students who had a Pell grant during the period of their study abroad program were operationally defined as low SES students, while students who did not have a Pell grant during the period of their study abroad program were operationally defined as higher SES students. The Federal Pell grant program provides need-based grants to low-income undergraduate students to attend postsecondary education (U.S. Department of Education, 2012). Pell grant program eligibility criteria went into the decision to operationally define a Pell grant recipient as a low socioeconomic status study abroad student for this study. Additionally, Pell grant eligibility rules influenced the decision to restrict reporting and analysis in this study to undergraduate students only. Ex post facto quantitative research methods were utilized to conduct the research study. To ensure confidentiality, cells with less than five data records were not reported.

**Description of the Study Sample**

One-thousand, two-hundred and seventy students participated in study abroad programs through Atlantic Coast University from 2000 to 2006. Eleven-hundred and twenty-nine (or 89%) were undergraduates and 141 (or 11%) were graduate students.

Consistent with the research of McKeown (2009) on the intellectual development U.S. students’ gain through studying abroad for the first time, what McKeown referred to as “the first time effect,” study abroad records of ACU students’ second and/or additional study abroad experiences (n = 196) were filtered out from the population leaving record solely of ACU students’ first study abroad experience.

The study examined the graduation status at four- and six-years of ACU students who entered the university between 2000 and 2006. Consistent with this, records for study abroad participants admitted to ACU prior to the fall 2000 semester (n = 327)
were filtered out of the study sample. Additionally, records for study abroad program participants who were non-degree students (n = 17), were pursuing second-degrees (n = 9), or were registered in certificate /life learner programs (n = 1) were filtered out of the population.

As mentioned earlier, Pell grant eligibility rules influenced the decision to restrict reporting and analysis in this study to undergraduate students only. After removal of study abroad records of graduate students (n = 141) from the data, the study sample consisted of 579 undergraduate students who had been admitted as freshmen students (n = 291), as transfer students (n = 247) or as continuing students (n = 41).

Atlantic Coast University distance learning students admitted as freshmen were included in the study with the regularly admitted student freshmen grouping. Consistently, distance learning transfer students were counted with the regularly admitted transfer students grouping, and distance learning continuing students were included with the regularly admitted continuing student grouping.

**Study Abroad Program Typology**

As mentioned in Chapter 1, Atlantic Coast University students can study abroad through faculty-led, exchange, and affiliate programs. Faculty-led programs are the most popular type of study abroad programs among ACU students (Office of Study Abroad, Atlantic Coast University, 2013) as well as nationally (IIE 2014b). From 2000 to 2006, 579 ACU undergraduate students studied abroad with 344 (or 60%) participating in faculty-led programs, 83 (or 14%) participating in exchange programs, and 152 (or 26%) participating in affiliate programs. Study abroad program enrollments by typology for each academic year of the research study appear in Table 5.
Table 5

*Study Abroad Program Student Enrollment Counts by Academic Year and Typology*

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Faculty-led Program Student Enrollment Count</th>
<th>Exchange Program Student Enrollment Count</th>
<th>Affiliate Program Student Enrollment Count</th>
<th>Total Student Enrollment Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-2001</td>
<td>10</td>
<td>1</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>2001-2002</td>
<td>18</td>
<td>8</td>
<td>11</td>
<td>37</td>
</tr>
<tr>
<td>2002-2003</td>
<td>33</td>
<td>10</td>
<td>27</td>
<td>70</td>
</tr>
<tr>
<td>2003-2004</td>
<td>91</td>
<td>17</td>
<td>41</td>
<td>149</td>
</tr>
<tr>
<td>2004-2005</td>
<td>94</td>
<td>28</td>
<td>29</td>
<td>151</td>
</tr>
<tr>
<td>2005-2006</td>
<td>98</td>
<td>19</td>
<td>41</td>
<td>158</td>
</tr>
</tbody>
</table>

**Biographical Variables of the Study Sample**

Of the 579 undergraduate ACU study abroad students, 402 (or 70%) were female, 175 (or 30%) were male, and two (or less than 1%) did not provide gender information. Overrepresentation of female participation in ACU study abroad programs is consistent with national study abroad trends (IIE 2013).

Regarding the race/ethnicity of students in the sample, 403 (or 70%) were White or Caucasian-American, 79 (or 14%) were Black or African-American, 21 (or 4%) were Hispanic, 12 (or 2%) were Other, 35 (or 6%) were Asian/Pacific Islander, 26 (or 4%) were Unknown/Unreported, and three (or 1%) were American Indian/Alaskan Native.

Atlantic Coast University study abroad participants comprised 291 students (or 50%) who were admitted as freshmen, 247 (or 43%) who were admitted as transfer students, and 41 (or 7%) who were admitted as continuing students. Five hundred and forty-three students (or 94%) were Virginia residents, 36 (or 6%) were out-of-state students. Two-hundred and twenty-seven (or 39%) low SES status students and 352 (or
61%) higher SES status students participated in ACU study abroad programs between 2000 and 2006. Table 6 provides demographic characteristics on the sample in the study.

Table 6

Demographic Characteristics of the Sample in the Study

<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>175</td>
<td>30%</td>
</tr>
<tr>
<td>Female</td>
<td>402</td>
<td>70%</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White or Caucasian-American</td>
<td>403</td>
<td>70%</td>
</tr>
<tr>
<td>Black or African-American</td>
<td>79</td>
<td>14%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>21</td>
<td>4%</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>2%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>35</td>
<td>6%</td>
</tr>
<tr>
<td>Unknown/Unreported</td>
<td>26</td>
<td>5%</td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>3</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Admission Type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshmen</td>
<td>291</td>
<td>50%</td>
</tr>
<tr>
<td>Transfer</td>
<td>247</td>
<td>48%</td>
</tr>
<tr>
<td>Continuing</td>
<td>41</td>
<td>7%</td>
</tr>
<tr>
<td><strong>Domicile Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-state</td>
<td>543</td>
<td>94%</td>
</tr>
<tr>
<td>Out-of-State</td>
<td>36</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Socioeconomic Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low SES</td>
<td>227</td>
<td>39%</td>
</tr>
<tr>
<td>Higher SES</td>
<td>352</td>
<td>61%</td>
</tr>
</tbody>
</table>

*Note.* The study’s total population is 579. N = number of persons in each demographic data variable. % = percentage of persons in each demographic data variable.

**SAT Composite Score**

SAT composite scores upon admission to Atlantic Coast University ranged from 610 to 1400 for participants in the research study. The mean, median, and mode SAT
composite scores for the population were 1088, 1080, and 1040, respectively. The mean score for the low SES students was 1066 compared to 1097 for the higher SES group.

**Research Questions**

The following section provides information on the research questions that were investigated in this study. Results for each research question are presented separately.

1. a. To what extent is socioeconomic status related to the type of study abroad program students select?

   Research question 1.a. was posed so the researcher may understand the relationship between type of study abroad program and socioeconomic status. Atlantic Coast University students can study abroad through faculty-led, exchange, and affiliate programs. As mentioned in Chapter 1, faculty-led study abroad programs are led by faculty members of the home university and are typically short-term in duration. The duration of exchange and affiliate study abroad programs are for an academic semester or longer. Type of study abroad program (0 – affiliate programs and exchange programs, 1 – faculty-led programs) was the dependent variable for research question 1.a.

   Study abroad students who received a Pell grant were classified as low socioeconomic status while those who did not receive a Pell grant were classified as higher socioeconomic status in this research study. The independent (or predictor) variable for research question 1.a. was socioeconomic status (0 – low socioeconomic status, 1 – higher socioeconomic status). There were 579 cases included in the analysis.
Table 7 provides descriptive statistics for the type of study abroad program by socioeconomic status.

Table 7

Descriptive Statistics: Type of Study Abroad Program by Socioeconomic Status

<table>
<thead>
<tr>
<th>Type of Study Abroad Program</th>
<th>Socioeconomic Status</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Higher</td>
<td>137</td>
<td>98</td>
<td>235</td>
</tr>
<tr>
<td>Affiliate &amp; Exchange</td>
<td>Low</td>
<td>98</td>
<td>129</td>
<td>227</td>
</tr>
<tr>
<td>Faculty-led</td>
<td>Total</td>
<td>235</td>
<td>344</td>
<td>579</td>
</tr>
</tbody>
</table>

Note: Faculty-led program percentages do not total 100% due to rounding.

For research question 1.a., a chi-square test was performed to examine the relationship between socioeconomic status and study abroad program selection. Results showed that there is no relationship between socioeconomic status and study abroad program selection, $\chi^2(1) = 1.03, p > .05$. In other words, the chi-square analysis did not indicate a statistically significant association between a study abroad student’s socioeconomic status and the type of program in which students participated.

1. b. To what extent is socioeconomic status related to the type of study abroad program students select after controlling for gender, race/ethnicity, SAT composite score, and domicile status?

Research question 1.b. was posed so the researcher may understand the relationship between type of study abroad program and socioeconomic status after
controlling for gender, race/ethnicity, SAT composite score, and domicile status. For this question a logistic regression was performed to determine the relationship between socioeconomic status and study abroad program selection after controlling gender, race/ethnicity, SAT composite score, domicile status, the interaction between socioeconomic status and SAT composite score, and the interaction between socioeconomic status and GPA change.

For research question 1.b, type of study abroad program (0 – affiliate programs and exchange programs, 1 – faculty-led programs) was the dependent (or outcome) variable while socioeconomic status (0 – low SES status, 1 – higher SES status) was the independent variable. The following independent predictor variables were entered into the equation simultaneously: gender, race/ethnicity (White [non-Hispanic], African American or Black [non-Hispanic], Hispanic, Asian or Pacific Islander, American Indian or Alaska Native, and Other), SAT composite score, domicile status, the interaction between socioeconomic status and SAT composite score, and the interaction between socioeconomic status and GPA change. White (non-Hispanic) was the reference category. There were 287 cases included in the analysis which represented all cases that did not have missing data on the examined variables.

Logistic regression results for research question 1.b. showed that socioeconomic status as a model was a significant predictor for the type of study abroad program selected by students, $X^2(12) = 21.55, p = .04$. The goodness of fit of the logistic regression model was statistically significant. However, the individual variables of gender, race/ethnicity, SAT composite score, domicile status, the interaction between socioeconomic status and SAT composite score, the interaction between GPA change
and SAT composite score were not accurate predictors of the relationship. Thus, after controlling for the variables, SES is not a significant predictor indicating that the earlier logistic regression test of the model (with no control variables) was spurious. Table 8 shows the relationship of socioeconomic status and type of study abroad program by study abroad participants.

Table 8

*Logistic Regression: Relationship of Socioeconomic Status and Type of Study Abroad Program*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
<th>95% C.I. for EXP(B)</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES Status</td>
<td>2.79</td>
<td>2.10</td>
<td>1.76</td>
<td>1.00</td>
<td>.18</td>
<td>16.30</td>
<td>.26</td>
<td>1006.06</td>
<td></td>
</tr>
<tr>
<td>SAT Composite</td>
<td>.00</td>
<td>.00</td>
<td>.17</td>
<td>1.00</td>
<td>.68</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-.14</td>
<td>.27</td>
<td>.27</td>
<td>1.00</td>
<td>.61</td>
<td>.87</td>
<td>.51</td>
<td>1.48</td>
<td></td>
</tr>
<tr>
<td>Domicile Status</td>
<td>-.36</td>
<td>.55</td>
<td>.42</td>
<td>1.00</td>
<td>.52</td>
<td>.70</td>
<td>.24</td>
<td>2.05</td>
<td></td>
</tr>
<tr>
<td>African American or Black (non-Hispanic)</td>
<td>.19</td>
<td>.38</td>
<td>.26</td>
<td>1.00</td>
<td>.61</td>
<td>1.21</td>
<td>.58</td>
<td>2.56</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>1.39</td>
<td>.84</td>
<td>2.76</td>
<td>1.00</td>
<td>.10</td>
<td>4.01</td>
<td>.78</td>
<td>20.64</td>
<td></td>
</tr>
<tr>
<td>Asian American or Pacific Islander</td>
<td>-.04</td>
<td>.53</td>
<td>.01</td>
<td>1.00</td>
<td>.94</td>
<td>.96</td>
<td>.34</td>
<td>2.71</td>
<td></td>
</tr>
<tr>
<td>Native American or Alaska Native</td>
<td>21.39</td>
<td>28418.29</td>
<td>.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1945501000.67</td>
<td>.00</td>
<td>.</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>1.09</td>
<td>1.19</td>
<td>.84</td>
<td>1.00</td>
<td>.36</td>
<td>2.98</td>
<td>.29</td>
<td>30.71</td>
<td></td>
</tr>
<tr>
<td>GPA Change</td>
<td>17.59</td>
<td>9.45</td>
<td>3.46</td>
<td>1.00</td>
<td>.06</td>
<td>43394894.42</td>
<td>.39</td>
<td>193555</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-23.05</td>
<td>28418.29</td>
<td>.00</td>
<td>1.00</td>
<td>1.00</td>
<td>.00</td>
<td>5517.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Variable interactions for (1) socioeconomic status and SAT composite score, and for (2) GPA change and SAT composite score were tried. The variable interactions were not statistically significant.
2. a. To what extent does GPA change pre- and post-study abroad program participation for low socioeconomic status study abroad students in comparison to higher socioeconomic status study abroad students?

Research question 2.a. was posed so the researcher may understand the relationship between GPA change pre- and post-study abroad program participation and socioeconomic status. Study abroad participants who received a Pell grant were categorized as low SES students and those who did not receive a Pell grant were categorized as higher SES students for this study. Ratio continuous data of study abroad students GPAs for the semester prior to study abroad program participation (i.e. pre-study abroad program) and for the semester following study abroad program participation (i.e. post-study abroad program) were entered into SPSS. GPA change (from the semester prior to study abroad participation to the semester following study abroad participation) was the dependent variable and socioeconomic status was the independent variable for this research question. There were 523 cases included in the analysis which represented all cases that did not have missing data on the examined variables. Table 9 provides descriptive statistics pertaining to the mean GPA change pre- and post-study abroad program participation by socioeconomic status.

Table 9

Descriptive Statistics: Mean GPA Change pre- and post-Study Abroad Program Participation by Socioeconomic Status

<table>
<thead>
<tr>
<th>Socioeconomic Status</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low SES</td>
<td>210</td>
<td>.01</td>
<td>.14</td>
</tr>
<tr>
<td>Higher SES</td>
<td>313</td>
<td>-.01</td>
<td>.15</td>
</tr>
</tbody>
</table>
For research question 2.a., a Levene’s test was performed to determine whether the homogeneity of variance assumption was met. The variances were found to be equal by socioeconomic status, $F(1, 521) = .001, p = .981$, as shown in Table 10. An Independent Samples $t$-test was performed to determine the relationship between GPA change pre- and post-study abroad program participation and socioeconomic status. The results showed that there is no relationship between GPA change and socioeconomic status for study abroad program participants, $t(521) = 1.31, p > .05$.

Table 10

*Independent Samples $t$-test: GPA Change by Socioeconomic Status*

<table>
<thead>
<tr>
<th>GPA Change</th>
<th>Levene's Test</th>
<th>$t$-test</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Equal variances assumed</td>
<td>.001 .98</td>
<td>1.31 521.00 .19</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>1.32 455.96 .19</td>
<td>.02 .01 -.01 .04</td>
</tr>
</tbody>
</table>

2. b. To what extent does GPA change pre- and post-study abroad program participation for low socioeconomic status study abroad students in comparison to higher socioeconomic status study abroad students after controlling for gender, race/ethnicity, SAT composite score, and domicile status?

Research question 2.b. was posed so the researcher may understand the relationship between GPA change pre- and post-study abroad program participation and
socioeconomic status after controlling for gender, race/ethnicity, SAT composite score, and domicile status. Study abroad participants who received a Pell grant were categorized as low SES students and those who did not receive a Pell grant were categorized as higher SES students for this study. Ratio continuous data of study abroad students GPAs for the semester prior to study abroad program participation (i.e. pre-study abroad program) and for the semester following study abroad program participation (i.e. post-study abroad program) were entered into SPSS. GPA change (from the semester prior to study abroad participation to the semester following study abroad participation) was the dependent variable and socioeconomic status was the independent variable for this research question. An ANCOVA test was conducted to investigate research question 2.b. There were 287 cases included in the analysis which represented all cases that did not have missing data on the examined variables. Table 11 provides descriptive statistics pertaining to GPA change pre- and post-study abroad program participation and socioeconomic status after controlling for gender, race/ethnicity, SAT composite score, and domicile status.

Table 11

*Descriptive Statistics: Mean GPA Change by Socioeconomic Status after controlling for Gender, Race/Ethnicity, SAT Composite Score, and Domicile Status*

<table>
<thead>
<tr>
<th>Socioeconomic Status</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low SES</td>
<td>97</td>
<td>.001</td>
<td>.10</td>
</tr>
<tr>
<td>Higher SES</td>
<td>190</td>
<td>.001</td>
<td>.14</td>
</tr>
<tr>
<td>Total</td>
<td>287</td>
<td>.001</td>
<td>.13</td>
</tr>
</tbody>
</table>
For research question 2.b., student GPAs for the semester prior to study abroad participation and for the semester following study abroad participation for low SES students were compared to higher SES students to analyze the GPA change from pre- and post-study abroad program participation after controlling for gender, race/ethnicity, SAT composite score, and domicile status. The researcher decided to run an ANCOVA to analyze the influence of the covariates gender, race/ethnicity, SAT composite score, and domicile status on the relationship between socioeconomic status and GPA change. Prior to conducting the ANCOVA, the researcher checked the ANCOVA assumptions of (a) independence of the covariates and treatment effects, and (b) the homogeneity of regression slopes (Field, 2013). Neither assumption had been violated. ANCOVA results showed that SAT composite score had a statistically significant relationship with GPA change, $F(1, 281) = 6.91, p < .05$, partial $\eta^2 = .02$. Table 12 presents findings on GPA changes pre- and post-study abroad program for low socioeconomic status participants in comparison to higher socioeconomic status students after controlling for gender, race/ethnicity, SAT composite score, and domicile status.
Table 12

**ANCOVA: GPA Change by Socioeconomic Status**

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig. Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES</td>
<td>.001</td>
<td>1.00</td>
<td>.001</td>
<td>.15</td>
<td>.70</td>
</tr>
<tr>
<td>Gender</td>
<td>.001</td>
<td>1.00</td>
<td>.001</td>
<td>.01</td>
<td>.92</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>.001</td>
<td>1.00</td>
<td>.001</td>
<td>.16</td>
<td>.69</td>
</tr>
<tr>
<td>SAT Composite</td>
<td>.11</td>
<td>1.00</td>
<td>.11</td>
<td>6.91</td>
<td>.01</td>
</tr>
<tr>
<td>Domicile Status</td>
<td>.001</td>
<td>1.00</td>
<td>.001</td>
<td>.06</td>
<td>.80</td>
</tr>
<tr>
<td>Error</td>
<td>4.49</td>
<td>281.00</td>
<td>.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4.61</td>
<td>287.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>4.61</td>
<td>286.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. R Squared = .03 (Adjusted R Squared = .01)

3. a. To what extent does graduation status at four years of low socioeconomic status study abroad students differ from higher socioeconomic status study abroad students?

Research question 3.a. was posed so the researcher may understand the relationship of graduation status at four years of low socioeconomic status study abroad students from that of higher socioeconomic status study abroad students. Graduation status at four years (0 = graduated, 1 = not graduated) was the dependent variable and socioeconomic status (0 = low SES status, 1 = higher SES status) was the independent variable for this research question. There were 291 cases included in the analysis which represented all cases that did not have missing data on the examined variables. For this research question, a chi-square test was performed. The results showed that there is a significant relationship between socioeconomic status and study abroad student graduation status at four years, $X^2(1) = 6.14, p < .05$. Said another way, chi-square test
results indicated that low socioeconomic status study abroad students have a statistically significant greater likelihood of graduating in four years than higher socioeconomic study abroad students. Table 13 shows the breakdown of study abroad program participants by socioeconomic status and graduation status at four years.

Table 13

*Descriptive Statistics: Socioeconomic Status and Graduation Status at Four Years*

<table>
<thead>
<tr>
<th>Graduation status at 4 years</th>
<th>Socioeconomic Status</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Higher</td>
<td>Low</td>
</tr>
<tr>
<td>Not Graduated</td>
<td>40 (57%)</td>
<td>30 (43%)</td>
</tr>
<tr>
<td>Graduated</td>
<td>161 (73%)</td>
<td>60 (27%)</td>
</tr>
<tr>
<td>Total</td>
<td>201 (69%)</td>
<td>90 (31%)</td>
</tr>
</tbody>
</table>

3. b. To what extent does graduation status at four years of low socioeconomic status study abroad students differ from higher socioeconomic status study abroad students after controlling for gender, race/ethnicity, SAT composite score, and domicile status?

Research question 3.b. was posed so the researcher may understand the graduation status at four years of low SES students who studied abroad in comparison to higher SES study abroad students after controlling for gender, race/ethnicity, SAT composite score, and domicile status. Logistic regressions were performed to examine this research question. Study abroad student graduation status at four years (0 = no, 1 = yes) was the dependent (or outcome) variable while socioeconomic status (0 = low SES, 1 = higher SES) was the independent variable. The following independent predictor
variables were entered into the equation simultaneously: gender, race/ethnicity (White [non-Hispanic], African American or Black [non-Hispanic], Hispanic, Asian or Pacific Islander, American Indian or Alaska Native, and Other), SAT composite score, and domicile status. White (non-Hispanic) was the reference category. There were 313 cases included in the analysis which represented all cases that did not have missing data on the examined variables.

Logistic regression results showed that socioeconomic status and GPA change were positive, significant predictors for the likelihood for study abroad program participants to graduate in four years, $\chi^2(10) = 21.02, p < .05$. The following variables did not have a significant effect on study abroad student graduation status at four years: gender, race/ethnicity, SAT composite score, and domicile status. The test results indicated that low socioeconomic status study abroad students have a statistically significant greater likelihood of graduating in four years than higher socioeconomic status study abroad students, and that there was a significant change in the GPAs of low socioeconomic study abroad students.

The odds that a low SES study abroad student will graduate in four years are 2.38 times greater than that of a higher SES study abroad student. When the logits were converted to predicted probabilities, the probability a low SES study abroad student will graduate in four years was .27 and the likelihood a higher SES study abroad student will graduate in four years was .13. This analysis shows that when other factors were held constant, low SES study abroad students were more than twice as likely to graduate in four years as higher SES study abroad students. Table 14 shows the relationship of socioeconomic status and graduation status at four years of study abroad program
participants as well as the parameter estimates of (a) predicted graduation at four years, and (b) predicted GPA change of study abroad program participants.

Table 14

Logistic Regression: Relationship of Socioeconomic Status and Graduation Status at Four Years

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
<th>95% C.I. for EXP(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES Status</td>
<td></td>
<td>.87</td>
<td>.30</td>
<td>8.17</td>
<td>1.00</td>
<td>.00</td>
<td>2.38</td>
</tr>
<tr>
<td>GPA Change</td>
<td></td>
<td>3.63</td>
<td>1.24</td>
<td>8.55</td>
<td>1.00</td>
<td>.00</td>
<td>37.64</td>
</tr>
<tr>
<td>Domicile Status</td>
<td></td>
<td>1.30</td>
<td>1.06</td>
<td>1.52</td>
<td>1.00</td>
<td>.22</td>
<td>3.68</td>
</tr>
<tr>
<td>SAT Composite Score</td>
<td></td>
<td>.00</td>
<td>.00</td>
<td>.50</td>
<td>1.00</td>
<td>.48</td>
<td>1.00</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td>-.12</td>
<td>.32</td>
<td>.13</td>
<td>1.00</td>
<td>.72</td>
<td>.89</td>
</tr>
<tr>
<td>African American or Black (non-Hispanic)</td>
<td></td>
<td>-.23</td>
<td>.44</td>
<td>.26</td>
<td>1.00</td>
<td>.61</td>
<td>.80</td>
</tr>
<tr>
<td>Hispanic</td>
<td></td>
<td>-.13</td>
<td>.87</td>
<td>.02</td>
<td>1.00</td>
<td>.88</td>
<td>.16</td>
</tr>
<tr>
<td>Asian American or Pacific Islander</td>
<td></td>
<td>-.24</td>
<td>.61</td>
<td>.16</td>
<td>1.00</td>
<td>.69</td>
<td>.78</td>
</tr>
<tr>
<td>Native American or Alaska Native</td>
<td></td>
<td>.86</td>
<td>1.45</td>
<td>.35</td>
<td>1.00</td>
<td>.55</td>
<td>2.36</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>.57</td>
<td>1.19</td>
<td>.23</td>
<td>1.00</td>
<td>.63</td>
<td>1.76</td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>-1.00</td>
<td>2.59</td>
<td>.15</td>
<td>1.00</td>
<td>.70</td>
<td>.37</td>
</tr>
</tbody>
</table>

Note: Variable interactions for (1) socioeconomic status and SAT composite score, and for (2) socioeconomic status and GPA change were tried. The variable interactions were not statistically significant, and thus, the interaction terms were removed.

4. a. To what extent does graduation status at six years of low socioeconomic status study abroad students differ from higher socioeconomic status study abroad students?
Research question 4.a. was posed so the researcher may understand the relationship of graduation status at six years of low socioeconomic status study abroad students from that of higher socioeconomic status study abroad students. Graduation status at six years (0 = graduated, 1 = not graduated) was the dependent variable and socioeconomic status (0 = low SES status, 1 = higher SES status) was the independent variable for this research question. There were 291 cases included in the analysis which represented all cases that did not have missing data on the examined variables. A chi-square test was performed to investigate this research question. The results showed that there is a significant relationship between socioeconomic status and study abroad student graduation status at six years, $\chi^2(1) = 5.74, p < .05$. Said another way, chi-square test results indicated that low socioeconomic status study abroad students have a statistically significant greater likelihood of graduating in six years than higher socioeconomic study abroad students. Table 15 shows the breakdown of study abroad program participants by socioeconomic status and graduation status at six years.

Table 15

*Descriptive Statistics: Socioeconomic Status and Graduation Status at Six Years*

<table>
<thead>
<tr>
<th>Socioeconomic Status at Six Years</th>
<th>Socioeconomic Status</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Higher</td>
<td>Low</td>
</tr>
<tr>
<td>Not Graduated</td>
<td>23</td>
<td>20</td>
</tr>
<tr>
<td>Graduated</td>
<td>178</td>
<td>70</td>
</tr>
<tr>
<td>Graduation status at six years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>201</td>
<td>90</td>
</tr>
</tbody>
</table>
4. **b.** To what extent does graduation status at six years of low socioeconomic status study abroad students differ from higher socioeconomic status study abroad students after controlling for gender, race/ethnicity, SAT composite score, and domicile status?

Research question 4.b. was posed so the researcher may understand the relationship of graduation status at six years of low socioeconomic status study abroad students from that of higher socioeconomic status study abroad students. Study abroad student graduation status at six years (0 = graduated, 1 = not graduated) was the dependent variable and socioeconomic status (0 = low SES status, 1 = higher SES status) was the independent variable for this research question. The following independent predictor variables were entered into the equation simultaneously: gender, race/ethnicity (White [non-Hispanic], African American or Black [non-Hispanic], Hispanic, Asian-American or Pacific Islander, American Indian or Alaska Native, and Other), SAT composite score, domicile status, the interaction between socioeconomic status and SAT composite score, and the interaction between socioeconomic status and GPA change. White (non-Hispanic) was the reference category. There were 313 cases included in the analysis which represented all cases that did not have missing data on the examined variables.

Logistic regression results showed a positive, statistically significant interaction between socioeconomic status and GPA change in terms of study abroad student graduation status at six years, \( X^2(12) = 36.21, p < .05 \). The following variables did not have a significant effect on study abroad student graduation status at six years: gender,
race/ethnicity, SAT composite score, domicile status, and the interaction between socioeconomic status and SAT composite score.

The main effect of the SES variable was not statistically significant, meaning that low SES and higher SES study abroad students were equally likely to graduate in six years independent of other variables. Additionally, the main effect of GPA change was not statistically significant, meaning that study abroad students who did not experience a positive change in their GPAs were just as likely to graduate in six years as study abroad students who did experience GPA change. Table 16 shows the relationship of socioeconomic status and graduation status at six years of study abroad program participants.

However, the interaction between SES and GPA change was statistically significant. The odds that a low SES study abroad student with positive GPA change will graduate in six years were 1.93 that of a higher SES study abroad student with positive GPA change. When the logits were converted to predicted probabilities, the probability a low SES study abroad student with positive GPA change will graduate in six years was .11. This analysis shows that when other factors were held constant low SES study abroad students with positive GPA change were 7% more likely to graduate in six years than higher SES study abroad students.

Figure 1 displays the interaction between SES and GPA change of study abroad program participants at it pertains to graduation at six years. Figure 1 illustrates that, as it pertains to graduation at six years, the interaction between study abroad students SES and how their GPAs change from the semester prior to study abroad participation to the semester following study abroad participation is dramatically different. Low SES study
abroad students experience strong positive change when comparing their GPAs for the semester prior to study abroad to the semester following study abroad. In comparison, GPAs for the semester prior to study abroad to the semester following study abroad for higher SES study abroad students were flat.
### Table 16

*Logistic Regression: Relationship of Socioeconomic Status and Graduation Status at Six Years*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
<th>95% C.I. for EXP(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Upper</td>
</tr>
<tr>
<td>SES Status</td>
<td>.66</td>
<td>2.93</td>
<td>.05</td>
<td>1.00</td>
<td>.82</td>
<td>1.93</td>
<td>.01</td>
</tr>
<tr>
<td>GPA Change</td>
<td>1.64</td>
<td>2.57</td>
<td>.41</td>
<td>1.00</td>
<td>.52</td>
<td>5.17</td>
<td>.03</td>
</tr>
<tr>
<td>Domicile Status</td>
<td>.48</td>
<td>1.09</td>
<td>.19</td>
<td>1.00</td>
<td>.66</td>
<td>1.61</td>
<td>.19</td>
</tr>
<tr>
<td>SAT Composite Score</td>
<td>.00</td>
<td>.00</td>
<td>.03</td>
<td>1.00</td>
<td>.86</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Gender</td>
<td>.22</td>
<td>.39</td>
<td>.31</td>
<td>1.00</td>
<td>.58</td>
<td>1.24</td>
<td>.58</td>
</tr>
<tr>
<td>African American or Black (non-Hispanic)</td>
<td>-.04</td>
<td>.55</td>
<td>.00</td>
<td>1.00</td>
<td>.95</td>
<td>.96</td>
<td>.33</td>
</tr>
<tr>
<td>Hispanic</td>
<td>-.14</td>
<td>1.15</td>
<td>.02</td>
<td>1.00</td>
<td>.90</td>
<td>.87</td>
<td>.09</td>
</tr>
<tr>
<td>Asian American or Pacific Islander</td>
<td>.40</td>
<td>.64</td>
<td>.39</td>
<td>1.00</td>
<td>.53</td>
<td>1.49</td>
<td>.43</td>
</tr>
<tr>
<td>Native American or Alaska Native</td>
<td>1.69</td>
<td>1.47</td>
<td>1.33</td>
<td>1.00</td>
<td>.25</td>
<td>5.41</td>
<td>.31</td>
</tr>
<tr>
<td>Other</td>
<td>1.63</td>
<td>1.27</td>
<td>1.65</td>
<td>1.00</td>
<td>.20</td>
<td>5.10</td>
<td>.42</td>
</tr>
<tr>
<td>SES x GPA Change</td>
<td>7.50</td>
<td>3.39</td>
<td>4.89</td>
<td>1.00</td>
<td>.03</td>
<td>1812.60</td>
<td>2.351397981.19</td>
</tr>
<tr>
<td>Constant</td>
<td>-.212</td>
<td>3.05</td>
<td>.48</td>
<td>1.00</td>
<td>.49</td>
<td>.12</td>
<td></td>
</tr>
</tbody>
</table>

Note: A variable interaction for socioeconomic status and SAT composite score was tried. The variable interaction was not statistically significant and thus the interaction term was removed.
Figure 1. Interaction between SES and GPA change of study abroad program participants at it pertains to graduation at six years. Figure 1 illustrates that, as it pertains to graduation at six years, the interaction between study abroad students SES and how their GPAs change from the semester prior to study abroad participation to the semester following study abroad participation is dramatically different. For low SES study abroad students, Figure 1 displays a strong positive change when comparing their GPAs for the semester prior to study abroad to the semester following study abroad. In comparison, GPAs for the semester prior to study abroad to the semester following study abroad for higher SES study abroad students were flat.

Summary of Results

This chapter presented analysis of the research questions investigated in this study on the relationship of socioeconomic status to study abroad program participation, academic performance, and graduation. ANCOVA results showed that SAT composite
score had a significant relationship with GPA change in regards to the relationship of study abroad program participation on academic performance for low SES students. In addition, chi-square tests showed that there is a significant relationship between socioeconomic status and study abroad student graduation status at both four years and six years. Logistic regression results showed that (a) GPA change was a significant predictor for the likelihood for student abroad program participants to graduate in four years, and (b) the interaction between the variables of socioeconomic status and GPA change was a significant predictor for the likelihood that study abroad program participants would graduate at six years. In other words, the study found that there is a positive relationship between GPA change and the likelihood of graduating in both four and six years. In addition, logistic regression results found SES to be a statistically significant predictor for the likelihood of study abroad program participants to graduate in four years.
CHAPTER 5
CONCLUSIONS AND DISCUSSION

Introduction

This chapter presents a summary and findings from this research study into the relationship of socioeconomic status with study abroad program participation, academic performance, and graduation status at Atlantic Coast University. This chapter will also provide implications from the study as well as limitations. The chapter will conclude with recommendations for future research. The purpose of the study was to examine the relationship of SES to study abroad participation, academic performance, and graduation at ACU in the six-year period from 2000 to 2006.

In the first decade of the twenty-first century, higher education enrollment grew by 37% (NCES, n.d.a.) and literature (NCES, 2012b; Swail, Redd, & Perna, 2003; Tinto, 1993) illuminated the need for postsecondary institutions to graduate a higher percentage of their students. Nearly 20 million undergraduate students were enrolled in U.S. postsecondary institutions in 2010 (Snyder & Dillow, 2012) and roughly 73% of college students attend public institutions (Blumenstyk, 2015; U.S. Department of the Treasury, 2012). Snyder and Dillow (2012) found that less than 38% of undergraduates across all forms of postsecondary institutions complete their degrees in four-years. And among public postsecondary institutions specifically, 4-year and 6-year graduation rates for first-time-in-college, full-time bachelor’s degree-seeking students in 2005, the most recent period for which statistics are available, were 32% and 57% (NCES, 2012b). The statistics above illuminate that less than a one-third of public university students complete their undergraduate degrees in four years and just over one-half of this
population graduate in six years. Against this backdrop of mediocrity, researchers (Carey & Dillon, 2011; Swail et al., 2003; Wellman, 2001) have identified that there is a need for continued research into activities that enhance retention, academic performance, and graduation outcomes.

Study abroad program enrollments have increased by over 300% the past two decades and grew to a record high of 289,408 students studying abroad for academic credit in 2012-2013 (IIE, 2014b). These programs are often connected to the central mission of postsecondary institutions, to educate and graduate students. Kuh, Kinzie, Schuh, Whitt, and Associates (2005) asserted that studying abroad is one of a select number of high-impact educational activities that contribute to student retention and graduation. Nevertheless, with less than 10 percent of all undergraduates at U.S. higher education institutions studying abroad during their academic careers (IIE, 2013), it would behoove higher education to investigate more closely and substantively the relationship between study abroad and college success, as it may be a productive lever for lifting and strengthening graduation outcomes. It is the hope of the researcher of this study that others will undertake studies into various facets of this association in the future.

This study investigated the relationship of socioeconomic status of U.S. university students with study abroad program participation, academic performance, and graduation status. Specifically, the study examined to what extent participation, academic performance, and graduation status at four and six years for study abroad students differ by socioeconomic status.

The research questions that were examined in the study follow.
1. a. To what extent is socioeconomic status related to the type of study abroad program students select?

1. b. To what extent is socioeconomic status related to the type of study abroad program students select after controlling for gender, race/ethnicity, SAT composite score, and domicile status?

2. a. To what extent does GPA change pre- and post-study abroad program participation for low socioeconomic status study abroad students in comparison to higher socioeconomic status study abroad students?

2. b. To what extent does GPA change pre- and post-study abroad program participation for low socioeconomic status study abroad students in comparison to higher socioeconomic status study abroad students after controlling for gender race/ethnicity, SAT composite score, and domicile status?

3. a. To what extent does graduation status at four years of low socioeconomic status study abroad students differ from higher socioeconomic status study abroad students?

3. b. To what extent does graduation status at four years of low socioeconomic status study abroad students differ from higher socioeconomic status study abroad students after controlling for gender, race/ethnicity, SAT composite score, and domicile status?

4. a. To what extent does graduation status at six years of low socioeconomic status study abroad students differ from higher socioeconomic status study abroad students?
4. b. To what extent does graduation status at six years of low socioeconomic status study abroad students differ from higher socioeconomic status study abroad students after controlling for gender, race/ethnicity, SAT composite score, and domicile status?

Biographical data of Atlantic Coastal University study abroad students from the period 2000 to 2006 were collected by the ACU Office of the Registrar and presented in Excel format to the researcher. Following receipt of the data, the variables of socioeconomic status, gender, race/ethnicity, SAT composite score, degree level, domicile status, GPA pre-study abroad participation, GPA post-study abroad participation, graduation status at 4-years, and graduation status at 6-years were entered into Systematical Package for the Social Sciences Version 21 (SPSS). In this study students who had a Pell grant during the period of their study abroad program were operationally defined as low SES students, while students who did not have a Pell grant during the period of their study abroad program were operationally defined as higher SES (not-low) students.

Ex post facto quantitative research methods were utilized to conduct the study. Chi-square tests were conducted to analyze research questions 1.a., 3.a., and 4.a. Logistic regressions were conducted to analyze research questions 1.b., 3.b., and 4.b. An Independent samples $t$-test was conducted to analyze research question 2.a., and an ANCOVA was conducted to analyze research question 2.b. (Cohen, 1992; Creswell, 2003; Field, 2013; Leedy, 2005; Salkind, 2004). A significance level of $p = .05$ was established to determine whether significant differences existed between tested groups for all research questions.
Discussion of Major Findings

Study findings related to Socioeconomic Status and Type of Study Abroad Program

The initial area that the researcher of this study investigated was the relationship between study abroad students socioeconomic status and the type of study abroad program in which they participated. The typology of study abroad programs that were examined were faculty-led, exchange, and affiliate study abroad programs. Analyses investigating the relationship between socioeconomic status and study abroad program selection were performed involving both a chi-square and a logistic regression. A chi-square analysis investigating the relationship between socioeconomic status and study abroad program selection yielded no significant findings. In contrast, a logistic regression test of the model found that socioeconomic status was a significant predictor for the type of study abroad program students participated in when gender, race/ethnicity, SAT composite score, domicile status, the interaction between socioeconomic status and SAT composite score, and the interaction between GPA change and SAT composite score were entered into the equation. This significant finding indicated merely that there was a goodness of fit with the logistic regression model. Nevertheless, the logistic regression test results also indicated that the predictor variables of gender, race/ethnicity, SAT composite score, domicile status, the interaction between socioeconomic status and SAT composite score, and the interaction between GPA change and SAT composite score were not accurate predictors of the relationship. And thus, the earlier finding of significance for the logistic regression model was spurious. In the end, the logistic regression test with control variables indicated that
students’ socioeconomic status did not significantly affect the type of study abroad program in which they participated. Said another way, the socioeconomic status of study abroad students did not affect the type of program in which they participated. Low SES and higher SES study abroad students were just as likely to participate in faculty-led and semester study abroad programs.

The author of this study is unaware of previous research conducted which examined the relationship between a study abroad student’s socioeconomic status and the type of study abroad program in which student participated. Using Perna’s integrated model of college choice (2006), Salisbury, Paulsen, and Pascarella (2011) found that a student’s intent to study abroad was related to, and influenced by, that student’s socioeconomic status, among other factors such as the student’s social and cultural capital prior to and throughout that student’s academic experience. Yet, the research of Salisbury et al. (2011) focused on the factors that may influence a student’s intent to study abroad, and not on the actual participation of students in study abroad.

**Study findings related to Socioeconomic Status and Academic Performance**

This researcher also investigated the relationship between a study abroad student’s socioeconomic status and GPA change pre- and post-study abroad program participation. An independent samples t-test was run to determine the relationship between socioeconomic status and GPA change pre- and post-study abroad program participation, while an ANCOVA was performed to analyze the influence of the covariates of gender, race/ethnicity, SAT composite score, and domicile status on the association between socioeconomic status and GPA change pre- and post-study abroad program participation. ANCOVA results indicated that a study abroad student’s SAT
composite score had a statistically significant relationship with change in the student’s GPA from the semester prior to the study abroad program participation to the semester following program participation. This finding supports the contention that study abroad should be encouraged for low SES students with high SAT scores in order to increase the likelihood of academic success in college for these students. Also, the finding of an association between low SES students with the high SAT composite score and significant change in their GPAs following study abroad participation supports the recommendation of Xu, de Silva, Neufeldt, and Dané (2013) that study abroad programs specifically-designed for freshmen and sophomore students should be further developed as a possible means to increase graduation outcomes at four-years. While there are some underclassmen-focused study abroad programs, this type of program is uncommon and comprises only a very small percentage of the total portfolio of education abroad opportunities available to university students (IIE, 2014a). This study seems to indicate that designing and offering underclassmen-focused study abroad programs is not sufficient to attract low SES students. Due to the SES of these students, it is the contention of this researcher that full or highly subsidized financial support for these students is necessary as well. With program underwriting in place, participation in study abroad by high-achieving low SES students is conceivable. And the likelihood of greater academic success for these students and, ultimately, graduation may ensue. The relationship between study abroad student socioeconomic success and graduation status at both four- and six-years will be presented later in this chapter.

Research of Kuh et al. (2005), Young (2007), and Xu et al. (2013) advocates study abroad as a means to improve student retention. Like the present study, Young’s
research on study abroad program participation was conducted at a single U.S. university. In contrast to the present study, Young (2007) investigated student participation in a particular study abroad program (e.g. the Rome Program) of the University of Dallas, not participation on any type of study abroad program participation offered to students. Young (2007) found that “there was a statistically and practically significant positive association between participation in the Rome Program and persistence at the University of Dallas” (p. 107).

Xu et al. (2013) also investigated the relationship between study abroad participation and student success at a single institution, Old Dominion University. They found that students who studied abroad had higher average GPAs than students who did not study abroad, and also took more credit hours. The research of Xu et al. also found that study abroad participants “achieved higher high school GPAs, SAT scores, and first-year GPAs than their domestic peers” (p. 93) but could not determine in their study whether the higher academic achievement of study abroad students was attributable specifically to studying abroad, or to other factors. As alluded to earlier, Xu et al. called for the “design[ing] study abroad programs appropriate for sophomore and first year students” (p. 96). This suggestion seems to align well with the finding in this study regarding the relationship of socioeconomic status to GPA change among study abroad students with strong SAT composite scores. If study abroad professionals can boost the numbers of these students studying abroad - and specifically early in their university careers - then student academic performance may be positively affected. In college communities with a higher than average number of low SES students, this may be a
worthwhile strategic investment as a greater likelihood of student retention and
graduation may occur.

Research at the University of Texas at Austin (Barclay Hamir, 2011) and in the
10-year Georgia Learning Outcomes of Students Studying Abroad Research Initiative
(GLOSSARI) study of the 35-member University System of Georgia (O’Rear, Sutton, &
Rubin, 2011; Rubin & Sutton, 2001; Sutton & Rubin, 2004, 2010), also investigated the
relationship of study abroad with academic performance. Through chi-square analyses,
Barclay Hamir found that the effect of study abroad on academic performance was
particularly pronounced among students with lower first-year GPAs. The present
research study did not categorize its population by class standing, thus precluding
academic performance comparison between the studies in this area.

The research studies of Xu et al. (2013), Barclay Hamir (2011) and the
GLOSSARI study (O’Rear, Sutton, & Rubin, 2011; Rubin & Sutton, 2001; Sutton &
Rubin, 2004, 2010) all compared students who studied abroad to students who did not.
In contrast, all students in this research study were study abroad participants.
Additionally, none of the comparative studies mentioned above included socioeconomic
status as a variable in their research. Differences in research design between the present
study and the studies of Xu et al., Barclay Hamir, and the GLOSSARI project make
drawing meaningful comparisons and generalizations of the effect of studying abroad on
academic performance difficult.

**Study findings related to Socioeconomic Status and Graduation Status**

The final two areas of this study pertained to the relationship between a study
abroad student’s socioeconomic status and graduation status at four years and at six
years. Chi-square tests were performed to examine study abroad students socioeconomic status and graduation status at four years and at six years in a general sense. Logistic regressions were run to examine the independent predictor variables of gender, race/ethnicity, SAT composite score, and domicile status in terms of their relationship with study abroad student socioeconomic status and graduation status at four and six years. Logistic regression results showed that there is a significant association between socioeconomic status and study abroad student graduation status at both four years and six years. Results also indicated that socioeconomic status and GPA change were significant predictors for the likelihood of study abroad program participants to graduate in four years. Moreover, socioeconomic status interacted significantly with GPA change in terms of study abroad student graduation status in six years.

The studies of Xu et al. (2013), Barclay Hamir (2011), the GLOSSARI study (O’Rear, Sutton, & Rubin, 2011; Rubin & Sutton, 2001; Sutton & Rubin, 2004, 2010) and a study by Malmgren and Galvin (2008) at the University of Minnesota investigated the relationship between study abroad and graduation status using comparative means. Earlier it was mentioned that Xu et al. found that study abroad had a significant effect on graduation at five- and six-years, but not four-years. Barclay Hamir’s (2011) research also indicated a significant relationship between study abroad and graduation over four- and five-year timeframes. In contrast, the GLOSSARI project researchers found significant relationships between study abroad and graduation at four- and five-years but not six-years.

National higher education graduation statistics for study abroad students are not available. Thus, it is not possible to compare study abroad student graduation outcomes
at four and six years from the present study to national averages. Similarly, national statistics on university student graduation outcomes by socioeconomic status are also not available. For this reason, it is not possible to compare the graduation outcomes of low SES students who studied abroad to national statistics. Nevertheless, the significant association between a study abroad participant’s socioeconomic status study abroad and graduation status at four years and also at six years are noteworthy. Qualitative research of Kuh et al. (2005) asserted that study abroad is a high-impact educational activity. This study’s findings of significant relationships between low SES status study abroad students and graduation outcomes at four- and six-years, not only support the research of Kuh et al, but, due to the more rigorous statistical techniques utilized to conduct this study, strengthen the veracity that study abroad is a high-impact educational activity. And one that is statistically significant in terms of graduation outcomes for low SES students.

National 4- and 6-year graduation statistics of public university students were provided in the opening chapter of this study. There, the researcher mentioned that in 2006, the most recent year for which statistics are available, the average 4-year and 6-year graduation rates for public 4-year institutions were 33% and 57%, respectively (NCES, 2012b), while institutions continue to seek ways to retain and graduate greater numbers of their students (Wellman, 2001). It is against the backdrop of middling U.S. university 4-year and 6-year graduation outcomes that this study’s findings become noteworthy and of benefit to study abroad professionals, university administrators, and higher education, in general.
Limitations

Some limitations should be considered when interpreting the findings of this study. At the outset of the study, the researcher intended to investigate enrollment status as a variable in order to assess its relationship to study abroad participation, academic performance, and graduation. Yet, due to the manner in which course registration records for students participating in exchange and affiliate study abroad programs are handled at Atlantic Coast University, this was not possible to do. Consequently, enrollment status was removed as a variable in this study. To avoid this problem, it is advised that future researchers investigate how the enrollment statuses of exchange and affiliate study abroad students are maintained before commencing their study. Secondly, as mentioned earlier, this study was conducted at one university in the mid-Atlantic region of the United States. There is a wide variety within higher education institutions across the U.S. From history to size, to organizational charter, to funding, to administrative structure, to affiliation, to students served, to degrees, programs and levels offered, and so on, there is much diversity in U.S. higher education. Due to the one-institution focus of the study as well as the great diversity within U.S. higher education, there is limited generalizability of findings from this study to a wide spectrum of tertiary institutions.

Recommendations for Future Research

This research study provides an initial exploration into the relationship between socioeconomic status and study abroad program participation, academic performance, and graduation. The study focused on a single, public, urban, U.S. research university in the mid-Atlantic coastal region. Yet, there is a great diversity in higher education
institutions across the United States. Future research on the subject could be conducted at other types of U.S. higher education institutions - such as liberal arts colleges, community colleges, religiously-affiliated institutions, private institutions, military academies, historically black colleges and universities, tribally-affiliated institutions, etc. In addition, studies into SES and study abroad could also be conducted at universities in other parts of the country. Studies comparing if/how the relationship of socioeconomic status and study abroad programming differs (a) between or among higher education institutions, (b) between or among types of institutions, (c) by geographic setting (i.e. urban, suburban or rural) of institutions, (d) by geographic location of institutions, and (e) by size of institutions, and so on.

This study did not examine the effect, if any, that program location, type(s) of course(s) offered, number of course(s) offered, scheduling of program, activities offered on the program, and other variables may have on the relationship between student socioeconomic status and study abroad program typology. Those questions and others may be areas for future research.

In examining the relationship between socioeconomic status and type of study abroad program in which students participate, it was a surprise to the researcher that none of the predictor variables entered into the equation had a significant effect on the association between the variables. The assumption of the researcher was that race/ethnicity may have a significant effect, due to the overlap between socioeconomic status and race/ethnicity mentioned in the literature (Lundy-Wagner, 2012; Perna, 2006). Yet, that was not the case and spurs the researcher to suggest that further research into
the relationship of a study abroad student’s socioeconomic status and study abroad program choice may be constructive.

The population of this research study was limited to study abroad students only, in contrast to other study abroad-related research mentioned in this study. Future research could be initiated to examine how low socioeconomic students who study abroad differ from low socioeconomic status students who do not study abroad in terms of academic performance, graduation status at four years, graduation status at six years, and other factors.

Xu et al. (2013) called for further development of study abroad programs designed specifically for first- and second-year students as both a means to increase participation of underclassmen in education abroad as well as impact student academic success, including graduation. The *Open Doors 2012 Report on International Educational Exchange* reveals that in the ten-year period from 2002-2003 through 2011-2012, 65% of undergraduates who studied abroad were juniors and seniors (IIE, 2013). The present study did not examine at which point in their academic careers undergraduate students studied abroad. Consequently, it is not possible to analyze whether the significant relationship between study abroad participation and 4-year graduation for low SES students found in this study may be associated with the period in which participants studied abroad. Nevertheless, the finding of significant graduation at 4-years of study abroad students contrasts with other research (Barclay Hamir, 2011; Xu et al., 2013) on 4-year graduation outcomes of study abroad participants. This discrepancy in findings may be related to differences in the study samples, institutions where the studies were conducted, time period being examined, methodologies
employed in the research, or other variables. Overall, there are few studies that investigate student graduation outcomes in association with study abroad participation. And in terms of research that explores graduation outcomes of study abroad participants in association with socioeconomic status, there are even fewer. Both of these are areas for future research.

The predictor variables of gender, race/ethnicity, SAT composite score, and domicile status were included in this research study. The original design of the study intended to also include student enrollment status as a predictor variable. In the process of setting up data for analysis, it became clear that including student enrollment status as a predictor variable in the study was not practicable. Future research on socioeconomic status and study abroad may want to explore if/how a student’s enrollment status (i.e. full-time vs. part-time), level of study (undergraduate vs. graduate), field of study, and other factors affect the relationship.

The study limited the typology of education abroad programs investigated to faculty-led, affiliate, and exchange programs, which are all study abroad programs. Yet, in the last few years, there has been an increased student interest in other areas of education abroad programming, namely, internship programs, work abroad programs, research abroad programs, international service learning programs, and international volunteer programs. Future research could explore the relationship of socioeconomic status to participation in these types of education abroad programs.

This study included limited exploration to the 2000 to 2006 period so that the 6-year graduation status of study abroad participants could be investigated. Future research could explore the period prior to 2000, the period following 2006 or another period
altogether. In addition, modifying the timeline from a 6-year period to another time duration is possible.

This study utilized quantitative methods to explore the relationship between socioeconomic status and study abroad. The study’s quantitative design precluded in-depth exploration into the different variables that may factor into a study abroad student’s decision to participate in a certain type of program. This study’s design also precluded investigation of study abroad students’ perception of how participating in a study abroad program may have affected the following: (a) their academic performance, if at all; (b) their graduation status; and (c) other aspects, such as foreign language abilities, intercultural skills, and professional and/or personal goals. Qualitative research into these and numerous other lines of enquiry may gather data from study abroad students of different socioeconomic statuses to learn if/how their participation affected them from a qualitative standpoint.

Another possible area of research is student participation in study away programs in relationship to socioeconomic status. Overall, the pedagogical design of study away programs is similar to study abroad programs in that both are often experientially-based, and emphasize cross-cultural and foreign language interactions. Additionally, Sobania and Braskamp (2009) have shown that study away and study abroad programs provide many similar global learning benefits for students. The distinct difference between the two is that study away programs occur within the U.S. while study abroad programs occur outside the United States. Future research could be undertaken into the relationship between socioeconomic status and study away programs.
Implications for Practice and Recommendations

For study abroad professionals, the findings illustrate and affirm the academic benefits of studying abroad for low SES students. Study abroad professionals can point to the significant association between the socioeconomic status of study abroad students and (a) GPA change, (b) 4-year graduation, and (c) 6-year graduation when promoting programs, advising students, and talking to faculty, colleges and academic departments, administrators, and parents about the academic benefits of study abroad. When working with low SES students, study abroad professionals can utilize the finding on the significant association of type of study abroad program with socioeconomic status to advise them on program selection. Professionals in study abroad can also share with low SES students the enhanced academic success that other low SES students have derived from studying abroad.

In regards to the relationship between socioeconomic status and study abroad program selection, the statistically significant logistic regression findings for the relationship as a whole were not unexpected to this researcher. In advising students about the financial costs associated with studying abroad, it is common for study abroad advisors to emphasize to students that semester-long programs tend to be more affordable than faculty-led and/or short-term programs on a cost-per-day basis (due to design considerations commonly associated with accommodation, meals, transportation, etc. for semester-long programs). Financial considerations in relation to the affordability of study abroad are most prevalent among low SES students. And, as a general rule, the longer the duration of a study abroad experience, the lower the price is on a daily basis to the student, a point that study abroad advisors emphasis most strongly to low SES
students as. For this reason, the researcher was heartened to find that the association between socioeconomic status and study abroad program typology was significant. And this finding underscores the importance of informing and advising students of the financial implications associated with participating in different kinds of programs. This researcher’s career experiences as a study abroad professional concur with this study’s finding on the significant relationship between socioeconomic status and study abroad program selection.

Like study abroad professionals, the academic benefits of study abroad for low SES students are also relevant for university administrators. Administrators at the academic department, college, and university-wide level can use the results of this study to advocate to faculty regarding the academic benefits of study abroad, particularly for low SES students. Administrators often are asked to give remarks to students at conferences, receptions, student organization functions, and other events. It has been my experience that administrators often use their remarks to encourage students to engage in a variety of campus activities, devote increased time to their studies, persist at the university, and complete their educations. In their remarks administrators can use this study’s findings to inform students of the academic performance and graduation benefits of studying abroad, especially for low SES students.

The findings also have practical implications for university administrators in terms of funding priorities and decision-making. Administrators at the department, college, and university-wide level can prioritize support for study abroad initiatives in terms of (a) permitting, encouraging, and (possibly even) funding faculty to design, participate in, and lead study abroad programs; (b) providing scholarships for students
who study abroad; (c) allocating funds within college and/or academic department budgets to establish, support, and/or increase study abroad programs for particular disciplines or areas; (d) maintaining and enhancing study abroad office staffing levels, and (e) related considerations. The findings also have implications for university development offices in terms of reaching out to potential donors to support study abroad initiatives. Donors are motivated to give when they understand the tangible impact of their gifts on student success. University development offices can point to the academic performance and graduation benefits that study abroad participation had on low SES students, a population that is underrepresented at postsecondary institutions (Astin & Oseguera, 2004; Lundy-Wagner, 2012; Perna, 2006; Titus, 2006) and less likely to persist and complete their educations (Baum & Ma, 2007; Baum, Ma, & Payea, 2013; Chen & DesJardins, 2008; Engle & Tinto, 2008; Houle, 2013; Lundy-Wagner, 2012; Terenzini, Cabrera, & Bernal, 2001; Titus, 2006; Walpole, 2003), and encourage these potential donors to consider financially support study abroad scholarships for low SES students.

For higher education in the United States, there is much of which to be proud; there are also areas for concern. The United States tertiary education system commonly is regarded as the best in the world, the U.S. is home to an impressive and highly disproportionate percentage of the world’s finest universities, U.S. institutions host the largest number of international students worldwide (IIE, 2013), nine of the top 10 universities with the most Nobel Prize laureates are U.S. institutions (Boucher, 2013), and U.S. higher education enrollment across all sectors totaled over 19 million in fall 2013 (Blumenstyk, 2015) and is expected to grow by 15% between fall 2010 and fall
2020 (NCES, n.d.b.). Yet, authors (Blumenstyk, 2014; Selingo, 2013) caution that the U.S. higher education system may be in crisis. Over half of postsecondary students leave their original institution prior to degree completion (Tinto, 1993), the most recent statistics (those for students entering university in 2007) illustrate that the 6-year graduation rate for first-time, full-time undergraduate remains a modest 59% (NCES, 2015) while the 4-year graduation rate for undergraduates is much lower, and graduation rates have not noticeably improved in 100 years (Swail, Redd, & Perna, 2003).

College affordability for most American families has declined (NCPPHE, 2002) so that in 2012, the cost of public higher education requires more than 16 percent of a median household income up from 10 percent in 2002 and 5 percent in the early 1980s. The status of the affordability of a private college education over these same time frames was even worse as the average advertised prices soared to 55 percent of the median household income from 40 percent and 20 percent (Blumenstyk, 2015). Comparing college costs to the Consumer Price Index in the period since 1985, we find that higher education tuition and fees have skyrocketed (Baum & Ma, 2007; Baum, Ma, & Payea, 2013; Houle, 2013) by 538%, to more than four times the increase of the Consumer Price Index (Jasrisko & Kolet, 2013). Moreover, State government financial support for higher education – in both per-student terms and as a share of total revenue – has declined measurably (Blumenstyk, 2015; Hicken, 2013; NCPPHE, 2002; Slotkin, 2013; State higher education finance FY 2012, 2013; U.S. Department of the Treasury, 2012), Federal and State financial aid packages for students have not kept pace with college tuition increases (NCPPHE, 2002), and student loan debt has rapidly increased (Ellis, 2013; Chronicle of Higher Education, 2009) to its highest rates in history (Blumenstyk,
2015; Carey & Dillon, 2011). In sum, the financial landscape of U.S. tertiary education today is precarious in several ways – from rapidly escalating tuition and fees that have outpaced median family incomes to dwindling public financing which has effectively shifted higher education from a shared and public societal good to a personal good which the vast majority of students and their families pay for with financial aid in the form of loans and part-time jobs. Blumenstyk (2015) summarizes the crippling impact U.S. higher education finances are having on students and their families in stating, “the simple fact is that cost structures – and prices – of colleges have grown much faster than the public’s ability to pay for them”.

Underrepresented student enrollments increased at U.S. colleges and universities in 1960s and 1970s in response to intensified accessibility and equity efforts initiated by various institutions (Astin & Oseguera, 2004; Baum & Ma, 2007). Fast forward to the present, and today we see that the link between accessibility and equity for underrepresented populations at postsecondary institutions has been broken (Astin & Oseguera, 2004; Lundy-Wagner, 2012) resulting in the preponderance of low SES students being enrolled in lower-financed, less selective colleges that tend to be tuition-dependent for overall revenues (Titus, 2006). Shifting from a focus on the quality and financial-strength of the post-secondary institution to the actual student, various authors (Baum & Ma, 2007; Baum, Ma, & Payea, 2013; Chen & DesJardins, 2008; Engle & Tinto, 2008; Houle, 2013; Lundy-Wagner, 2012; Terenzini, Cabrera, & Bernal, 2001; Titus, 2006; Walpole, 2003) have reported that there is strong association between poor degree completion rates and lower student socioeconomic status. In addition, Boushey (2003) has found that lower SES students tend to carry the most student debt.
Four-year public institution enrollments comprised nearly 40% of U.S. higher education in fall 2013 while two-year public enrollment accounted for 33% more (Blumenstyk, 2015). Taken together, almost three of every four college students in the U.S. attend public institutions. Within the student bodies of four-year public institutions, in 2011-2012, Pell grant recipients encompassed 35% of four-year public institutions and 32% of two-year public university enrollments. Hence, roughly seven of every 10 public university students received a Pell grant in 2011-2012, and would be classified as low socioeconomic status for this research study.

To increase student success for all higher education students, financial, academic, and personnel resources should be invested in educational activities that have been shown to positively impact student learning across several dimensions, stimulate academic success and degree completion, and prepare students for success in the global contexts and settings. The research conducted for this study indicates that study abroad program participation by low socioeconomic status students has a significant relationship with student academic improvement as well as graduation outcomes at four and six years. And so, perhaps, increased emphasis and investment in study abroad, particularly to encourage and maximize the participation for low socioeconomic students, may be worthwhile to foster academic success within U.S. higher education.

**Conclusion**

This research into the relationship between socioeconomic status and study abroad program participation, academic performance, and graduation is exploratory in nature and is meant to add to the limited literature in this area. The results from the research study indicate that study abroad participation by low socioeconomic students
has academic benefits in terms of GPA change as well as graduation outcomes at 4-years and at 6-years. This is good news as the principal mission of a university is to educate and graduate its’ students. And the results of this study illustrate that participating in study abroad programs can help effectuate these outcomes.
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Dr. Dennis Gregory  
Department of Educational Foundations and Leadership

Dear Dr. Gregory:

Your Application for Exempt Research with Steven Bell entitled “Socioeconomic Status and Study Abroad: Participation, Academic Performance, and Graduation” has been found to be EXEMPT under Category 6.4 from IRB review by the Human Subjects Review Committee of the Darden College of Education.

The determination that this study is EXEMPT from IRB review is for an indefinite period of time provided no significant changes are made to your study. If any significant changes occur, notify me or the chair of this committee at that time and provide complete information regarding such changes. In the future, if this research project is funded externally, you must submit an application to the University IRB for approval to continue the study.

Best wishes in completing your study. Sincerely,

Robert J. Spina, Ph.D., FACSM  
Associate Dean for Undergraduate Education and College Assessment Darden College of Education  
Old Dominion University  
rspina@odu.edu

Interim Chair  
Darden College of Education Human Subjects Review Committee Old Dominion University
VITA

Steven Douglas Bell

EDUCATION

Master in International and Intercultural Administration
School for International Training, Brattleboro, VT 1993
Concentrations: International Education and Intercultural Training

Bachelor of Arts in Political Science and English
St. Olaf College, Northfield, MN 1986
Concentrations: International Relations and Middle Eastern Studies

SELECT PUBLICATIONS

“Study Abroad and Experiential Learning.” Old Dominion University
Undergraduate Research Journal, Issue #2: Special Edition: Memory &
Reflection, 2014.

SELECT PRESENTATIONS (FROM 2013 TO PRESENT)

“Implementing First Year Experience Abroad Programs” Conference
presentation delivered at NAFSA: Association of International Educators
Regional Conference, Alexandria, VA, USA, October 2013.

“‘Study Abroad Makeover: From “Traditional” and Toward “Exotic.”’”
Conference presentation delivered at The Forum on Education Abroad
International Conference, Barcelona, Spain, October 2014.

“Socioeconomic Status and Study Abroad: Participation, Academic
Performance, and Graduation.” Conference presentation delivered at NAFSA:
Association of International Educators Regional Conference, Williamsburg, VA,
USA, November 2014.

“Factors Influencing Science and Education Majors’ Intent to Study Abroad.”
Conference presentation delivered at NAFSA: Association of International
Educators Regional Conference, Williamsburg, VA, USA, November 2014.

“Socioeconomic Status and Study Abroad: Participation, Academic
Performance, and Graduation.” Poster presentation delivered at NAFSA:
Association of International Educators Annual Conference, Boston, MA, USA,
May 2015.