SHORT-TERM SOLUTION:
APPLICATION OF AN INTEGRATED MODEL OF COLLEGE CHOICE
TO ENROLLMENT IN SHORT-TERM STUDY ABROAD

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DEDICATION

This accomplishment was only possible because of the love and support I have had from my husband Alan Dykens and our children Dixie and Bode.

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I dedicate this to you family. I love you all, no matter what.
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SHORT-TERM SOLUTION: APPLICATION OF AN INTEGRATED MODEL OF COLLEGE
CHOICE TO ENROLLMENT IN SHORT-TERM STUDY ABROAD

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ABSTRACT

The study examined student choice to participate in short-term study abroad at Graceland University. The institution has short-term study abroad participation rates higher than the national average and a 40 year history of engaging in this high-impact educational practice. The mixed methods research included statistical analysis of ten years of student level data and interviews with students actively engaged in the choice process. Descriptive statistics, t-test, and logistic regression were used to examine the relationship between demographic, academic, and financial characteristics and participation in the short-term study abroad program. Student interviews were analyzed to identify factors influential in the choice process and to better understand why those factors were influential. The conceptual model used to frame the study was Perna's integrated model of college choice. In this research the model is applied to a student choice after enrollment at a college or university. In the integrated regression models only academic characteristics were significantly related to the choice to participate in short-term study abroad. The qualitative results of the study indicated a complex choice process that was strongly influenced by a supportive institutional culture surrounding the program. Faculty mentoring and peer mentoring of students engaged in the choice process were also important in the decision to participate in a short-term study abroad trip. The findings are informative for study abroad practitioners and institutions seeking to increase participation in study abroad.
CHAPTER ONE: INTRODUCTION OF THE STUDY

Introduction

Colleges and universities are preparing students to operate in an increasingly
global society where almost all educational, professional, and consumer endeavors are
touched by an international interaction. This is the phenomenon that led journalist
Thomas L. Friedman to declare “The World is Flat” referring to the increasingly global
economy (2007) and the United States Senate to declare 2006 the Year of Study Abroad.
The Lincoln Commission established in 2004 was a bi-partisan commission appointed by
congress to understand the importance of study abroad education as a policy initiative, to
examine strategies for supporting study abroad, and to make recommendations for action.
The resulting resolutions reflect an effort to increase student participation in international
educational opportunities for political, social, environmental, and economic reasons
(Qiang, 2003; Salisbury, Umbach, Paulsen, & Pascarella, 2009).

The need to engage students in internationalized higher education forms the basis
for the proposed Senator Paul Simon Study Abroad Act 2011 (NAFSA: Association of
International Educators, 2011). The act would establish a foundation to promote study
abroad in higher education and includes recommended expansion of funding for the
federal Abraham Lincoln Study Abroad Fellowship Program established in response to
the Lincoln Commission work (2005). Economic reasons are the most often cited in
public policy statements regarding internationalization of higher education; as global
markets open and become more competitive under World Trade Organization agreements
the need for curriculum internationalization has increased in urgency (Qiang, 2003;
Stomquist, 2007). The resolutions also acknowledge the importance of study abroad as a
high impact educational experience affecting student learning in ways textbook and lecture model courses cannot (Lincoln Commission and Program, 2005).

Study abroad programs have historically required students to leave their home campuses and travel overseas to a host university for a minimum of one semester to a full year. These traditional programs are categorized as long-term study abroad. Most recent growth in study abroad participation has been concentrated in short-term study abroad experiences ranging in length from one week spring break trips to twelve week summer term experiences (Anderson, Lawton, Rexeisen, & Hubbard, 2006). More than half of the 300,000 students studying abroad in the 2010-2011 academic year were in programs eight weeks or less in duration and almost 70% of these students were in programs less than sixteen weeks long (Institute of International Education, 2011).

These shorter programs are categorized as “immersion field trips” in the experiential education practices literature (Rone, 2008; Scarce, 1997) and often incorporate a service learning component (Jones, Rowan-Kenyon, Ireland, Niehaus, & Skendall, 2012; Sachau, Brasher, & Fee, 2009). Initial research indicates short-term study abroad is effective in increasing intercultural sensitivity in American university student participants (Anderson, Lawton, Rexeisen, & Hubbard, 2006; Deardorff, 2006; Rone, 2008) even when they are based in English speaking countries (Anderson et al.). Short-term options are less costly and less disruptive to degree plans than traditional long term programs and create a viable alternative for a range of students who would not otherwise choose to study abroad.
Problem Statement

The overall rate of participation in study abroad programs is less than national goals. The Lincoln Commission set a goal of one-million U. S. students studying abroad by 2017 (Lincoln Commission and Program, 2005) but current growth rates are projecting a dismal shortfall of that goal (Salisbury et al., 2009). Within the story of the overall numbers, there is a very real concern that sub-populations including low SES students, ethnic minorities, and male students continue to be underrepresented in international education experiences (Dessoff, 2006; Salisbury et al., 2009; Salisbury, Paulsen, & Pascarella, 2011).

Recent research has focused on the amount of social and cultural capital a student brings to college as a predictor of participation in high impact learning experiences (Salisbury et al., 2009; Walpole, 2003). Study abroad and other high impact learning experiences are found to increase social and cultural capital, however the students choosing to participate are from high SES backgrounds and possess high social and cultural capital (Bourdieu, 1977; Salisbury et al., 2011). The students who will benefit the most from the related learning objectives of these experiences are least likely to participate. Financial constraints are often cited as a deciding factor in the choice process regarding study abroad (Brux & Fry, 2010; Dessoff, 2006) but research indicates the issue is likely much more complicated than simply helping a student pay the bill (Brux & Fry; Kasravi, 2009; Salisbury et al., 2009; Walpole).

At the national, local, and institutional levels financial aid policies and tuition policies are being established to encourage and support participation in study abroad. Financial aid policies have been instrumental in addressing concerns about access to
college but not successful in and of themselves (Long, 2007). New policies are intended to specifically address concerns about access to study abroad for underrepresented groups by providing financial support (Dessoff, 2006; Long B., 2007; National Survey of Student Engagement Annual Report, 2009; Pierce, 2004; Pike, Smart, Kuh, & Hayek, 2006). There are some indications that scholarships do increase participation by minority students (Institute of International Education, 2011) but the assumption that providing financial support is sufficient has not held true in college access strategies (Perna, 2006b) and is being challenged by the continued dismal study abroad participation rates of underrepresented groups (Salisbury, Paulsen, & Pascarella, 2011).

The models developed to better understand the college choice process and barriers encountered in the process have increased understanding of the complications of the college access issue (Hossler & Gallagher, 1987; Paulsen & St. John, 2002; Perna, 2007). The decision process barriers to participation in college experiences are similar to the barriers to initial college choice and later to graduate school choice. The same cultural and social influencers in the choice process have been shown to contribute to the inability of low SES students to secure jobs after college with equal income level to their high SES classmates (Walpole, 2003). Financial aid policies aimed at increasing access are important but not sufficient to solving the problem of underrepresented groups in college. The study abroad choice process of students needs to be examined in a similar light to increase understanding of the barriers to participation and to inform the decisions being made by study abroad administrators and faculty sponsors.
Purpose

The purpose of this research is to understand the choice process of students regarding participation in a short-term study abroad program at a small private Midwestern institution. The secondary purpose of this research is to understand how institutional efforts can influence the student choice process with special attention to underrepresented groups in study abroad.

The primary research questions are:

1. What demographic, academic, and financial characteristics are related to the choice to participate in short-term study abroad?
2. What do students perceive as influential in the decision to participate in short-term study abroad?

Conceptual Framework

Walpole found the decision process barriers to participation in college experiences are similar to the barriers to initial college choice and later to graduate school choice (Walpole, 2003). Access to high impact learning experiences including study abroad may be similarly understood by applying college choice models to the decision process of deciding to participate in or forgo an undergraduate study abroad experience. Perna (2006a) proposes an updated conceptual model of college choice incorporating cultural and sociological influences within contextual layers that contribute to the choices considered and eventually made. The model will be explored in detail in Chapter 2 but a short introduction here will frame the problem and proposed research.

The model has human capital considerations at the base and incorporates economic considerations including resource gathering and cost-benefit analysis. The
choice process is then situated within contextual layers of habitus (layer 1), school and community context (layer 2), higher education context (layer 3), and social, economic, and policy context (layer 4). Similarly, students considering participation in a study abroad experience are undertaking a complex choice process that may be better understood through a multi-layered approach (Hossler & Gallagher, 1987; Paulsen & St. John, 2002; Perna, 2006).

This line of college choice research focuses on the influence of cultural capital in making the decision to enroll in a college (Bourdieu, 1977; Perna, 2006b) and in more recent research this sociological arena has been expanded to include habitus and context as further decision process pieces (Perna, 2006a; St. John, 2006). Cultural capital is the unique knowledge imparted to a student by parents and community and includes language, customs, shared experience, and social norms. Habitus refers to the concept of individual cultural capital as expanded into the social construction of class. Context is the structural and environmental setting where a student is negotiating the college choice process such as an urban or rural school. The application of sociological choice influences to the decision to study abroad is especially relevant to this study because low SES and non-white students historically have less exposure to other cultures and fewer life experiences when they attend college. Research indicates students possessing low cultural capital benefit greatly from study abroad programs but are less likely to choose to participate (Salisbury et al., 2009; Walpole, 2003).

In practice, policies shaped to increase access to college are already being used as references to attempt to increase access for this group to high impact educational experiences such as study abroad. Universities are actively shifting tuition structures and
other supporting policies to encourage student participation in study abroad (National Survey of Student Engagement Annual Report, 2009; Pierce, 2004). Research applying Perna’s proposed model of college choice to study abroad choice serves to inform these policies intended to influence the student choice process regarding participation in this college experience.

Setting

The research focused on a short-term study abroad program at Graceland University. The university serves approximately 1000 traditional students on a residential campus in rural Iowa. When expanded to include an extended campus, online courses, and graduate students, the university is serving approximately 3000 students annually. Graceland University is affiliated with a Christian religious denomination and approximately 25% of the student population are members of the sponsoring church. The university maintains a non-denominational atmosphere on campus and students are not required to adhere to a faith statement or attend religious services. The enrollment is drawn largely from the surrounding geographic area.

Graceland University has a well-established short-term study abroad program with course offerings during a 3 week intersession term annually in January. The Winter Term program is administered from the residential campus. The short-term study abroad program is part of an overall intersession program or “Winter Term” that has existed at the university for 40 years. Students are required to participate in at least two Winter Term courses as an undergraduate graduation requirement and faculty teach a course twice in a three year cycle as a part of their course load. The courses offered are non-traditional elective courses and may be held on-campus, be domestic study tours, or a
short-term study abroad. Faculty members have latitude in developing their courses and the regular curriculum approval requirements are suspended and replaced by an abbreviated proposal process.

One or two offerings each year are able to provide supplementary funding to students based upon grant and endowment monies set aside for student travel experiences. Supplementary funding is divided between all students taking specific trips and students enrolled automatically receive the stipend. The program has a reputation of encouraging student participation and there are practical indications the program is successfully reaching underserved populations. This case study of the program provides evidence regarding the program and an opportunity for others to learn from this long standing program.

Design and Methods

The research questions will be approached using a pragmatic concurrent mixed methods design to undertake a case study of a well-established short-term study abroad program at a small private Midwestern university (Creswell, 2007; Mertens, 2005). A quantitative approach will be used to answer research question one regarding characteristics of participants in this short-term study abroad program. The qualitative phase will explore research question two through multiple interviews with students considering participation in a short-term study abroad. A mixed methods approach is useful to this case study, especially from the conceptual framework of Perna’s multi-layer, multi-phase college choice model because it will provide a “broader perspective and deeper understanding” of the complex interactions of factors affecting student participation in study abroad (Mertens, 2005, p. 294).
This concurrent mixed methods approach incorporates a quantitative analysis of data to measure the relationship between factors identified in college choice process research and the choice to study abroad. The qualitative phase will explore the choice process in depth by performing multiple interviews with students at key points over a semester long process of choosing to participate or not participate in the short-term study abroad program. The mixed methods approach to the research increased understanding of why and how those factors were significant in the choice process of students at the small private Midwestern University.

Significance

Short-term study abroad is the fastest growing sector of international education but research in this area is very limited and focuses on validating the learning experience and outcomes. This research will be focused to answer questions specifically related to understanding the choice process for participation in short-term study abroad programs. It will provide insight into strategies for facilitating participation and minimizing barriers, especially for traditionally underrepresented groups. Research regarding the significant factors influencing the choice to participate will make it possible for institutions to craft policy designed to address those factors. The focus on underrepresented groups and the influential factors they perceive will enhance efforts to increase participation by these sub-populations in a valuable high-impact educational practice.

Choosing a mixed methods approach for the case study provides quantitative data for decision making and a rich qualitative depth of understanding of the influences in the choice process. Most existing research on short-term study abroad is qualitative and is focused on student learning. Quantitative research in this area is generally focused on
long-term programs. The mixed methods approach has not been applied to a short-term or long term study abroad program and provides a more complete picture of the influences working throughout the choice process.

A case study of a well-established short-term study abroad program with a higher than average overall participation rate provided insights into useful program theory, implementation, and execution that have not been captured in studies of newer programs. The university has 40 years of experience in offering an educational experience thought of in many circles as an innovative new solution to increasing study abroad participation rates. Capturing the experience of students while actively engaged in the choice process regarding this particular program will provide understanding of their perception of the contextual influences working in this higher education setting to facilitate participation.

Summary

Historically all proper European educations were completed with a “Grand Tour” to view great works of art and experience other cultures first hand. This extended educational tour was accessible only to students from wealthy European families (Trease, 1967). Centuries later we are still struggling to provide this recognized transformational learning experience (Daloz, 2000; Kitchenham, 2008; Kuh, Pace, & Vesper, 1997) to a more diverse audience of students. I have chosen to focus on the underrepresented groups in study abroad because of the active policy assumptions regarding money as the limiting factor for these populations. College access research has taught us the hard lesson that money may be a limiting factor but is not the limiting factor. Recent strides in improving access to college for diverse populations may provide a ready resource of
information to also improve access to high-impact educational practices such as study-abroad.

Undertaking a case study of a well-established short-term study abroad program was informative regardless of their success or failure to increase participation by underrepresented groups. The insights gained into institutional strategies that may be used to influence the student choice process regarding short-term study abroad have strong implication for practice and can inform policy formation at multiple levels. The findings of this research will serve to inform future program decisions at the subject university as well as my own practice, but more importantly they may provide a stepping stone to study abroad for future students.
CHAPTER TWO: REVIEW OF RELATED LITERATURE

The political benefits of cultural exchange, the necessity of developing intercultural skills in an increasingly diverse society and the rapid globalization of the economy are driving the movement to internationalize higher education curriculums (Qiang, 2003; Stomquist, 2007). Study abroad programs have been shown to contribute significantly to the learning objectives of internationalized curriculums (Anderson et al., 2006) and are built on program logic intended to meet internationalization objectives (Knowlton & Phillips, 2009). Strides have been made to increase the number of US undergraduate students participating in study abroad programs but the ambitious goal set forth by the Lincoln Commission of reaching 1 million students by the year 2017 is still far out of reach with the number hitting a historical high of 300,000 in the 2010-2011 academic year (Institute of International Education, 2011).

Minorities, males, and low socio-economic status (SES) students continue to be underrepresented in study abroad participation (Institute of International Education, 2011). Financial constraints are often cited as a deciding factor in the decision process regarding study abroad (Salisbury et al., 2009; Walpole, 2003). Walpole found that the decision process barriers to participation in college experiences are similar to the barriers encountered during initial college choice and graduate school choice. The issues surrounding access to and participation in high impact learning experiences like study abroad may be similarly understood by applying a college choice model to the study abroad decision process.

For this case study the substantive literature reviewed will address study abroad as a high-impact educational practice, learning outcomes related to study abroad, and the
call to increase participation in study abroad. Concerns regarding low participation in study abroad will be addressed with a special focus on underrepresented groups. Short-term study abroad will be defined and reviewed as a viable alternative to meeting higher education’s internationalization goals.

The conceptual framework for the study, Perna’s (2006a) integrated model of college choice, will be introduced and examined as a tool for understanding student choice to enroll in study abroad. Alternative models of the study abroad choice process are presented with supporting evidence for the use of the Perna model.

Study Abroad Literature Review

Study abroad is an educational experience tied to a formal course of study taking place in a setting outside the home country of the student. Traditional long-term study abroad programs are sixteen weeks to a year in length and are most often related to the study of a foreign language. Study abroad has been historically recognized as instrumental in the formation of necessary linguistic skills but is increasingly utilized as an effective tool for building intercultural competence (Deardorff, 2006; Ingram, 2005) and global awareness (Martinsen, 2011; Qiang, 2003). Study abroad experiences are educational tools empowering students with the required social skills and confidence to pursue international career paths (Norris & Gillespie, 2008; Stomquist, 2007).

Short-term Study Abroad

In recent years a trend of shorter travel abroad programs has been identified with 56.3% of study abroad experiences falling into this category (Jones et al., 2012). Short-term programs are led by faculty and last for as much as twelve weeks to as little as a week (Jones et al.). Programs may be structured to intensely experience a single location
or to broadly experience several locations but all are tied to a specific course with formal learning objectives (Sachau, Brasher, & Fee, 2009). These programs are less likely to focus on language skills but have also been shown to effectively increase language skills and confidence while encouraging interest in further language study (Ingram, 2005). Short-term programs and immersion field-trips are less intimidating for students, less disruptive to degree plans, and at least perceived as more affordable than traditional long-term programs (Anderson et al., 2006; Institute of International Education, 2011) making them an increasingly popular option for students.

Student engagement research has classified study abroad, both long and short-term, as a high-impact educational experience having a positive impact on student learning and choices regarding other meaningful college experiences as well as after college plans (Astin, 1984; Chickering & Gameson, 1987; Kuh, 2006). The nature of the faculty led travel experiences create close relationships between students and faculty and results in a natural learning community for reflective discourse (Long, Akande, Purdy, & Nakano, 2010; Jones et al., 2012; Rone, 2008). The distinctive experience of traveling with faculty and peers to intentionally share in serving and interacting with an unfamiliar culture results in the disruptive event identified by Mezirow as a key factor for transformational learning to take place (Daloz, 2000; Kitchenham, 2008). Additionally the presence of a mentor encouraging exploration and identification of fundamental assumptions and frames of reference are designed to guide students in the process to desired outcomes. The presence of peers for engagement in reflective discourse about the experience both during and after a travel trip is essential for deep transformation and a lasting effect (Jones et al.; Kitchenham).
Students from low-SES and minority group backgrounds come to college with lower cultural and social capital than their higher-SES peers and less exposure to quality mentoring relationships (Ovink & Veazey, 2011; Walpole, 2003). Consequently high impact educational practices produce greater gains for these groups in identified study abroad learning objectives regarding intercultural competence and social consciousness (Kuh, 1997; Martinsen, 2011; Ovink & Veazey, 2011). In the role of transformational learning experiences, participation in high-impact educational practices produce a change in reference frame for students and positively affect future choices regarding participation in other meaningful college activities as well as after college choices regarding careers and graduate school attendance (Daloz, 2000; Norris & Gillespie, 2008; Rowan-Kenyon & Niehaus, 2011; Walpole, 2003).

Participation

The globalization of society and economies has driven a call to increase study abroad participation as a way to prepare students for interacting in a complex but shrinking multi-cultural world (Kreber, 2009; Qiang, 2003; Stomquist, 2007). Participation rates by U.S. students have increased substantially in number from 100,000 students annually in 1999 to 270,000 students in 2009 (Institute of International Education, 2011). There is some question of how much progress has been made in comparison to the overall increase in college attendance. While there has been a 200% increase in study abroad participants during the 10 year period from 2001 to 2011 there has only been a proportional increase of 1.3% of total enrollment (Institute of International Education, 2011). This progress has definitely not kept pace in historically underserved groups including men, ethnic minorities, and low-SES students. In the case
of minorities the gap is increasing in proportion to the overall numbers of ethnic minorities enrolled in higher education. In 2009 36% of students enrolled in higher education were minorities while only 21% of study abroad students fell into this classification. Ten years prior the proportions were 27% and 15% (Institute of International Education, 2011; Salisbury et al., 2011).

Low-SES students have been indicated as an underserved population (Dessoff, 2006; Salisbury et al., 2009) but very little study abroad research has isolated this population from minority students. The federally funded Gillman scholarship program is designed to encourage study abroad participation by low-SES students through qualification standards based on federal financial aid eligibility for the Pell Grant. The program provides extensive grant money for students to apply to study abroad tuition costs. The program has a 55% enrollment rate for minority students and the funding appears to be successfully increasing participation for this group but statistics regarding the overall impact on study abroad participation rates for low-SES students are not readily available (Institute of International Education, 2011). Minority students are overrepresented in low-SES student populations and success in serving minority groups may serve as a proxy for serving low-SES students (Walpole, 2003) but is not synonymous and the issues facing each group are not identical (Kasravi, 2009).

Barriers to participation by underrepresented groups have been identified with research focused around ethnic minority students and the gender gap. Barriers for minority groups include financial concerns, the absence of role models and mentors to provide support, and a lack of ethnically relevant programs of study (Brux & Fry, 2010). Financial concerns extend beyond paying for the program to accounting for the wages
lost if a study plan is lengthened by a study abroad. Most study abroad programs are based in locations interesting to white majority students and new programs focused on heritage sites interesting to ethnic minorities are successfully overcoming this barrier and attracting this underserved population (Kasravi, 2009). Intention to study abroad research has indicated that minority students intend to study abroad at the same rate as their majority peers early in college (Kasravi; Salisbury et al., 2011). The implications of this finding are concerning because it means minority students enter the higher education context with a desire to study abroad and indicates their barriers to participation are a part of the student’s experience at college. The minority gap may persist because this group is already immersed in a cross-cultural experience every day at their predominantly white colleges or because institutions continue to make assumptions regarding who will benefit from a study abroad experience (Ovink & Veazey, 2011; Perna, 2007; Salisbury et al., 2011).

There is also evidence that family support of both the desire to study abroad and the interpretation of the value of that experience by parents and mentors are playing a role in the decision process for all students (Brux & Fry, 2010; Kasravi, 2009; Ovink & Veazey, 2011). Overcoming safety concerns, financial concerns, and proving the value of a study abroad program to a student is only a part of the picture when you then consider the student has to also be equipped to defend the decision to peers and family members. Additionally these influential people may not be comfortable with a higher education setting domestically and are ill equipped to support a student who wants to extend that experience overseas (Bourdieu, 1977; Brux & Fry; Dessoff, 2006; Kasravi; Salisbury et al., 2011).
The findings on factors contributing to the low numbers of male students who participate in study abroad indicate a historical focus on humanities majors that are dominated by female students has contributed significantly to the disparity (Dessoff, 2006). However, as male dominated majors such as the sciences and business have made curricular changes to facilitate and encourage participation in international experiences there has been an increase in participation by these majors but not a corresponding increase by male students (Council on International Education Exchange, 2006; Salisbury, Paulsen, & Pascarella, 2010). This may be attributed to an increase in female students in these majors or other barriers similar to the minority gap barriers. Male students also experience a lack of peer role models participating in study abroad and have an increased sense of financial concern related to finishing college over their female counterparts (Fischer, 2012; Salisbury et al., 2010).

Summary of Research Related to Short-Term Study Abroad

Short-term study abroad is the fastest growing sector of study abroad and most gains in participation rates the past 10 years have been in this sector (Institute of International Education, 2011). Short programs are a gateway to longer term study abroad (Jones et al., 2012) and foreign language study (Ingram, 2005). The scaffolding of learning experiences is especially important to underrepresented groups in study abroad who may not consider longer programs or international career paths without a less intimidating option to bridge the gap in the decision process (Perna, 2007; Salisbury et al., 2009; Salisbury et al., 2010; Salisbury et al., 2011). The existing research on barriers to participation and the decision process to participate is focused on long term study abroad and intentions to participate. Research is strongly supporting a complex decision
process influenced by economic and sociological factors. Understanding the barriers and facilitators in the choice process to participate or not-participate in short-term study abroad will inform strategies being used to increase participation in study abroad overall and contribute to the internationalization of higher education.

Alternative Conceptual Frameworks of the Decision to Study Abroad

The student choice to study abroad has been considered in research resulting in the development of models to address the intent to study abroad. Multiple models will be presented to describe their strengths and weaknesses to address the choice process in this study. Perna’s integrated model of college choice ultimately guides the research conducted in this study and is presented in detail. The areas in need of more development in these models will be identified and the reasoning for my choice is described.

Booker Model

The Booker model (2001) identifies seven decision making stages including interest, search, evaluation, intent, program selection, and application. Booker’s model is of the decision making process for applying or not applying rather than the final outcome of participating or not participating. College choice process research indicates the process is still ongoing at the point of college application (Hossler & Gallagher, 1987) and I am most interested in the phase following the intent to study abroad. Applying this research to study abroad leads to the belief the choice process to participate in study abroad is not still ongoing at the point of application to a study abroad program. Research supports an application of college choice models to the three phases of college choice: predisposition, search, and choice (Hossler & Gallagher; Paulsen & St. John, 2002; Salisbury, Umbach, Paulsen, & Pascarella, 2009). The Booker model specifically
addresses predisposition and search but stops short of fully examining the choice to study abroad. The model identifies many factors as influential and merits recognition as successfully representing the complexity of the student choice process. The influence of personal factors and institutional factors is recognized by the model. However it fails to organize the complex factors into a highly focused choice process model that has the utility to serve as the framework for this research.

*Peterson Model*

Peterson (2003) identifies intent to study abroad as a critical point in the decision process immediately prior to application to study abroad and participation in study abroad. The scope of the model is not specifically identified but the research sample included study abroad participants and non-participants implying relevance to all three phases of the choice process. The model does specify intent and choice but does not separate search as a discrete phase. There are behavioral and normative beliefs as well as a benefit evaluation included in the model resulting that are informing the student intent to study abroad by the student.

The findings of the Peterson research are highly centered on information dissemination and communication strategies targeted to effectively reach underrepresented groups. These are important findings that fall into the search category that is not specified in the model resulting in a small disconnect between the model and the findings. The model is more focused than the Booker model and would be more easily applied as a framework but as a result it lacks fully developed representation of the complexity of the decision process.
**Kasravi Model**

Kasravi (2009) combines the Peterson and Booker model to arrive at a more complete model. Kasravi includes personal factors similar to the concept of habitus described in the presentation of the Perna model, social factors combining elements of habitus and school and community context with social and cultural capital, and institutional factors or the higher education context. This combined model is more complete but does not accomplish the layering effect of the Perna model I chose to apply to my research. The effect of international, national, and institutional layers pushing down to affect lower layers but does strive incorporate these context as influential in the choice process. The policy and environmental layer is not included for consideration in the model in any form. Human capital is discussed by all three researchers as important in the decision process but is not incorporated in any models directly. Human capital and economic reasoning are instead assumed to be absorbed into the personal elements and social elements of the models.

Kasravi’s combined Booker/Peterson model (Factors influencing the decision to study abroad for students of color: Moving beyond the barriers, 2009) was adjusted based on the findings of her research to indicate the sociological and institutional elements are working at the same time to influence the decision process of minority students. The personal factors in the adjusted model are also indicated as the key filter for the decision affecting perceptions of the social and institutional elements. The adjustment is applauded as an important recognition of the organic interaction of the institutional influences with the student’s personal lens and is encouraging for practitioners seeking to address the personal lens specifically.
The Kasravi study results also indicated SES and financial considerations are highly influential in the choice process but these human capital considerations are not fully represented in the adjusted Kasravi model. The research findings and adjusted model indicate multiple factors are working to influence the decision and that contextual setting is important and does provide a promising framework that was considered.
Figure 1. Kasravi (2009) Adapted model of decision to study abroad

PERSONAL FACTORS
- Perceived outcomes
- Perceived obstacles
- Personal characteristics

SOCIAL FACTORS
- Perceived social pressures
- Primary sources of information
- Experiences and recommendations of others

INSTITUTIONAL FACTORS
- Types of study abroad opportunities
- Requirements for study abroad
- Advising resources and support
- Heritage seeking programs available
- Funding sources
- Recruitment and marketing sources
Figure 2. Kasravi (2009) adapted model of the decision to study abroad for students of color.
Perna’s Integrated Model of College Choice Applied to the Choice to Study Abroad

Perna (2006a) has conceptualized an integrated model of college choice to frame understanding of the decision making process students undergo along the path to higher education; this research will shift the focus and apply the model to a decision along the path through higher education. The model was developed by drawing from years of research on college choice including the work of Hossler and Gallagher (1987) on a phased model of college choice, the work of Becker (1962) on the influence of human capital in the decision process, and the work of Paulsen and St. John (2002) on the importance of contextual influences on their student choice construct model. Perna’s integrated model is supported in the human capital integration arguments presented by St. John (2006) and by years of successful college access research that has been based on some isolation or combination of the contexts and reasoning models included in the integrated model (Perna, 2006a).

In 2006 the Council on International Education in concert with study abroad professionals outlined a study abroad research agenda and indicated a need to focus on the complexities of the student choice process and the decision to study abroad. The agenda indicates “the influences in preference selection are so complex that isolating them is challenging – yet it is precisely the complexity of variables and process that makes the need for data so important” (Council on International Education Exchange, 2006, p. 3). My research is guided by Perna’s integrated model of college choice specifically because this model was developed to address the interplay of complex variables in the college choice decision and has increased understanding of that process. Applying the model to this study will facilitate understanding of how students decide to
participate in an experience such as study abroad with specific attention on participation in a short-term study abroad program. The integrated approach of the model will provide a suitable framework for data analysis and is especially relevant because of the inclusion of cultural, social, and financial capital in the model. Previous research has indicated each of these three areas are involve in the barriers to participation in study abroad (Booker, 2001; Dessoff, 2006; Kasravi, 2009) and are strong areas for outcomes from participation (Anderson et al., 2006; Rone, 2008).

The model has previously been applied by Salisbury, Paulsen, and Pascarella (2010) to the intent to study abroad by freshmen undergraduate students and to exploration of sex and race differences in the intent to study abroad (2011). The final decision to utilize Perna’s integrated model of college choice to the study abroad choice process (Perna, 2006a) was partially based on the Kasravi adjusted model’s lack of Human Capital considerations and the lack of layering affect found in Perna’s integrated model. It was also influenced by my interest in continuing the line of conversation in the Salisbury et al. series of research that utilized the Perna model to better understand the intent to study abroad. The application of the integrated model of college choice as a conceptual framework is supported by their research as a useful model for understanding choices after matriculation. The implications of the research include a call to build knowledge in this area with a focus on understanding important after matriculation college choices through the lens of Perna’s model. This study will apply the model to students actively engaged in the choice process regarding a specific short-term study abroad program.
Model Overview

In proposing the integrated model and in subsequent explanations, Perna (2006a) conceptualizes college choice as a process based in the economic human capital realm but highly influenced by social capital, cultural capital and demographics. Further the individual possessing these various attributes is being influenced during the process by the contextual layers of the model. Context is the structural and environmental setting framing the student’s college choice process. The community and education context may be an urban or rural high school and the national context may be a financial aid friendly policy era. The specific context is defined by depending upon the layer being considered (Paulsen & St. John, 2002; Perna 2006a). The four contextual layers of Perna’s model are habitus, school and community, higher education setting, and social, economic, and policy environment.

The integrated model incorporates human capital choice models and sociological choice models and situates the decision process within contextual layers. The integrated model helps us understand the student choice process regarding higher education as influenced by economic reasoning and sociological reasoning concurrently. Additionally, student perceptions regarding human capital elements in the decision process are influenced by the sociological reasoning elements of the model. For example, when a student is considering cost, loans, and future earnings potential during the decision making process the way these elements are considered is influenced by values and beliefs personally held regarding money. Furthermore, the choice process is taking place within specific contextual layers of habitus, school and community, higher education setting, and the larger social, economic, and policy environment. The inclusion
of contextual layers helps us understand the external environmental influencers playing an additional role in the student choice process (Perna, 2006a). The incorporation of a model drawing on economic and sociological reasoning situated with a larger contextual setting addresses limitations in understanding the influence of multiple concurrent elements by considering them simultaneously rather than in isolation (Perna, 2006b; St. John, 2006).

*Human Capital*

Human capital research focuses on the influence of economic reasoning or cost-benefit analysis during the decision making process regarding “activities that influence future real income through the imbedding of resources in people” (Becker, 1962, p. 9). The cost of attending and cost of lost wages are weighed against the anticipated benefit of attending college. College degree attainment is a human capital investment and is expected to increase future earnings potential by students choosing to attend in an amount exceeding the costs associated with attending. Access to accurate information regarding expected costs and expected earnings are influenced by student contextual situations.

The rational decision models of human capital acknowledge the limitations of information seeking and assume students make the best decision possible based on the imperfect information available. The accuracy of the information utilized in the decision process highly influences the quality of the decision eventually made regarding the choice to enroll in college (Paulsen & St. John, 2002; Perna, 2006a; Perna, 2006b). Research has consistently indicated financial considerations are a key influence in the decision process and often financial limitations restrict participation in valuable but non-required college experiences (Dessoff, 2006; Kasravi, 2009; Peterson, 2003; Walpole,
Minority students were found to be especially sensitive to the availability of financial and more specifically to the availability of grant money to pay for study abroad. Increased loan amounts and the possible extension of the length of time to degree appeared to deter Hispanic students who otherwise intended to study abroad at a higher rate than other minorities and whites (Salisbury et al., 2011). White students from a low SES background were not found to be as sensitive to financial considerations indicating other cultural and habitus influences need to be considered (Salisbury et al., 2009; Salisbury et al., 2011).
Figure 3. Perna (2006a) integrated model of student college choice
Layer 1: Habitus

Sociological college choice research focuses on the influence of social and cultural capital in making the decision to enroll in a college (Bourdieu, 1977; Paulsen & St. John, 2002; Perna L. , 2006a). Social capital is related to the networks of individuals and communities a student is able to access during the choice process. Cultural capital is the unique knowledge imparted to a student by parents and community and includes language, customs, shared experience, and social norms. In recent research this sociological arena has been expanded to include habitus and provide understanding of the context of the decision process (Perna, 2006a; Perna, 2007; St. John, 2006). Habitus is layer 1 in Perna’s model and refers to the concept of an individual’s cultural and social capital and when expanded to a group with similar capital levels habitus is the social construction of class. On an individualized level habitus is manifested as values and beliefs and affects how information is processed and knowledge is constructed (Perna, 2006b).

This very personalized view of the decision process more accurately reflects the nature of information processing and interpretation taking place during the decision making process by taking all of the differing types of capital into consideration. In the Perna model all human capital decisions are taking place within the context of habitus. “Habitus is the internalized set of dispositions and preferences that are derived from one’s surroundings and that subconsciously define what is a ‘reasonable’ action” to take (Perna, 2006, p. 113). Habitus or individual perspective is the base layer of context for the college choice being made and then each respective layer influences the layer below it. Each subsequent layer pushes down and becomes incorporated into habitus thereby
influencing the final decision in a fully integrated model (Perna, 2006a; Perna, 2006b; Perna, 2007). Habitus influences not only the choices a student makes but also serves to constrain the options a student considers. Relating habitus to study abroad choices, a student may never seek information on available programs or reach a stage in the decision process where economic elements become relevant because their habitus results in never even considering study abroad as an option (Salisbury et al., 2009). Habitus would also be expected to influence the value students place on a study abroad experience when a cost-benefit analysis stage is reached. The importance of habitus in the decision making process is elevated when applied to underserved groups historically choosing not to participate in a specific student engagement opportunity such as short-term study abroad (Dessoff, 2006; Paulsen & St. John, 2002; Perna, 2006b; Salisbury et al., 2010; Salisbury et al., 2011; Walpole, 2003).

Perna’s proposed conceptual model of student college choice provides a framework to understand the complicated issue of increasing enrollment in study abroad programs and more specifically in understanding the enrollment choices process of underrepresented groups by taking habitus into consideration. These groups bring less exposure to other cultures and fewer life experiences with them when they attend college, or low cultural capital. Research indicates students with low cultural capital will benefit most from study abroad programs and are excellent candidates for short-term study abroad opportunities but are less likely to choose to enroll in one (Dessoff, 2006; Salisbury et al., 2009; Walpole, 2003). The alignment of study abroad learning objectives and benefits with the sociological choice influencers in Perna’s integrated model increases the utility of applying the model to this research.
Student engagement in college and specifically in high impact education practices has been better understood by applying social and cultural capital models. Walpole successfully studied socioeconomic status in relationship to participation in non-required college experiences using these frameworks and found that high faculty interaction outside the classroom increased the likelihood of low SES students raising aspirations to graduate school and securing higher income jobs (2003). The implication of the research is one of positively influencing habitus through interaction with faculty possessing higher cultural and social capital than students from low SES backgrounds. The subsequent decisions made by students are filtered through a new perspective and are less reflective of previous social class habitus.

Ovink and Veazey (2011) studied an enrichment program for minority engineering students intended to increase cultural and social capital and intentionally influence habitus during college to increase graduate school options and career opportunities explored. The cultural capital framework with a focus on habitus was successfully applied during the research project and is additionally utilized as the espoused program theory (McLaughlin & Jordon, 2004) of the mentoring program under investigation. This qualitative research study included elements of the human capital model in findings related to career and graduated school aspirations (Ovink & Veazey). Findings by Salisbury et al. (2009, 2010, 2011) and Walpole (2003) also indicated social and cultural capital could be raised during college to influence choices made about participation in high impact educational activities. Mentors and faculty are playing an important role in increasing human, cultural, and social capital and changing student habitus. This is consistent with the Mezirow (Kitchenham, 2008) literature
regarding transformational learning experiences and Daloz’s application and discussion of the role of mentors in facilitating fundamental changes in knowledge and perspective (2000).

*Layer 2 and 3: School and Community and Higher Education Context*

For the college choice model Perna (2006a) separates school and community context, layer 2, from the higher education context, layer 3, appropriately based on the assumption the model is applied to high school age students considering a transition from their local community to a higher education organization. The proposed research will apply the model to a college choice taking place after matriculation to a college and will lead to a collapse of these two layers into a single higher education organization context layer. The community and school context are the higher education community and school in this case. The prior high school and community have been incorporated into habitus and can be considered as influential but are no longer an active contextual layer standing alone. The existing intent to study abroad research utilizing Perna’s model is based on data collected at the start of the freshman academic year and the end of the academic year. The study identified pre-college influences based on the beginning survey elements of high school involvement and attitudes regarding diversity and literacy. During college influences were identified using the end of the academic year survey regarding gains in proxy’s for cultural capital and social capital such as college involvement, interactions with diverse populations, and student faculty engagement questions (Salisbury et al., 2009; Salisbury et al., 2011).

The integrated model of college choice proposed by Perna was utilized as the conceptual framework in this recent research on the choice process of the intent to study
abroad by a population of freshmen undergraduates enrolled at multiple universities over a three year period (Salisbury et al., 2009). Two similar studies utilized the model in research exploring differences in intent to study abroad by underrepresented groups based on gender and ethnicity population designations (Salisbury et al., 2010; Salisbury et al., 2011). The intent to study abroad is framed for the studies as a phase in the deciding process affected by the multiple influencers and layers of Perna’s model. Proxy’s for elements of each layer of Perna’s model were identified within the data fields of the Wabash National Study of Liberal Arts Education (WNS) and the National Survey of Student Engagement (NSSE) administered to the student populations of the study. The NSSE included a direct question regarding student intention to study abroad and allowed the subsequent quantitative analysis applying the integrated college choice model to the choice process of the intent to study abroad. Salisbury, Paulsen, and Pascarella (2009) concluded,

Our application of Perna’s (2006a) integrated model of student choice to a student’s propensity to study abroad suggest that this construct can be applied to the decision to study abroad – one of the many of decisions students make regarding the possibility of participation in educationally important activities during a college experience. This suggests that the integrated model of student choice could plausibly be applied to examine the factors that encourage or hinder student participation in service learning opportunities, living/learning communities, first-year transition courses, and the many campus
involvement programs that have been shown to positively influence the postsecondary educational experience (p. 139).

This research will apply the integrated choice model to another high impact education practice, short-term study abroad (Astin, 1984; Daloz, 2000; Kuh, 2006). The high school and community layer was found to significantly affect student intentions to study abroad. Students entering college with higher social and cultural capital consistently intended to study abroad at higher rates than their low social and cultural capital classmates even after controlling for human capital via ACT scores (Salisbury et al., 2009). Low SES students and first generation students were found to have a significantly lower intention of studying abroad. High SES students with high cultural capital were found to consistently expect to study abroad. Obstacles to participation were also found for students in STEM fields and business due to curricular constraints. Students from different demographic groups such as gender and diverse racial backgrounds were found to be highly influenced by differing contextual layers. After matriculation influencers of the higher education context acted more positively on female student intention to study abroad. The influencers of involvement on campus and integrated learning experiences where found to affect female students positively and male students negatively (Salisbury et al., 2009; Salisbury et al., 2010; Salisbury et al., 2011). This difference may be an indication of male students who are engaged in the campus community being reluctant to leave the community and seek learning experiences overseas when they are already satisfied with the quality of the experience at their local institution (Fischer, 2012; Sax, 2005; Salisbury, Paulsen, & Pascarella, 2010).
An interesting and important finding regarding racial differences was the similarity of intention to study abroad for white and minority students. In the higher education context this indicates the social and cultural environment of universities is influencing minority students deciding not to participate (Kasravi, 2009). Salisbury et al. posit “Maybe it isn’t fear of racism abroad that limits minority participation; maybe it’s an enduring effect of bias at home” (2011, p. 145). Ultimately the importance of understanding the unique choice process of multiple groups of individuals within situated contexts both before and after matriculation is made very clear by the three Wabash survey based studies (Salisbury et al., 2009; Salisbury et al., 2010; Salisbury et al., 2011). Study abroad choice process research overwhelmingly indicates strategies designed to increase participation need to address financial and human capital concerns, but also address social and cultural barriers to intending to study abroad. Implications for study abroad included the necessity of adjusting information and information delivery for specific target audiences and especially males (Salisbury et al., 2010). More importantly for the application of this research to the proposed research, it is suggested that the most effective efforts for increasing participation by underrepresented groups will be efforts to build cultural capital in low SES and minority students before and during college. Using scaffolding experiences such as immersion field trips to domestic destinations and short-term study abroad are indicated as possible programmatic solutions (Salisbury et al., 2011). The studies are limited in that the choice process of the intent to study abroad in the freshman subjects cannot be followed through to a completed choice process to participate or not participate in a study abroad program. Research regarding the critical
first step in the decision process of predisposition is important, but not sufficient to the final goal of successful completion of a study abroad experience.

**Layer 4: Social, Economic, & Policy Context**

The final layer of the integrated model of college choice is the larger policy and economic environment surrounding the choice (Perna, 2006a; Perna, 2006b). Federal, state, and institutional policies are working to frame the decision being considered and provide incentives to make desired choices (Smith & Larimer, 2009) such as choosing to study abroad. Currently there is a policy focus at the federal level on internationalization of higher education curriculum as evidenced by recent legislative actions. Legislative resolutions reflect an effort to increase student participation in international educational opportunities for political, social, environmental, and economic reasons (Qiang, 2003; Salisbury et al., 2009) and are an example of the policy environment influencing student study abroad choices. The Gillman Scholarship Program is a federal program designed to increase participation by low SES students through grant money and is an additional example of the policy layer influencing student choices (Institute of International Education, 2011). The economic downturn of recent years represents a strong contextual influence especially on programs perceived as expensive or unnecessary to a college education.

Federal and state attention regarding the need for internationalization of the college curriculum and specifically the imperative for business and science students to participate in study abroad has also pushed down to influence the higher education context (Stomquist, 2007). University programs in business and engineering are implementing strong strategies to increase participation rates in these majors. Recent
results indicate Science Technology, Engineering, and Math STEM students as well as Business major students have had the greatest gains overall in proportion to the number of students who major in these disciplines (Council on International Education Exchange, 2006). As the expectations in these majors change and curriculums adjust to accommodate study abroad experiences the corresponding higher education context is changing and pushing down to influence student habitus. These changes are positively influencing the decision making process regarding study abroad for students in these majors (Pierce, 2004; Salisbury et al., 2009).
Figure 4.Collapsed Perna (2006a) integrated model of student choice regarding study abroad

Social, economic, & policy context (Layer 4)
- National and International Context
- Economic characteristics
- Public policy characteristics

School community and higher education context (Layer 2/3)
- Information
- Programs
- Institutional characteristics
- Availability of Resources
- Types of Resources
- Structural Support and Barriers

Habitus (Layer 1)
- Demographic
  - Sex
  - Race
- Cultural Capital
  - Cultural Knowledge
  - Value of study abroad
- Social Capital
  - Information about study abroad
  - Assistance with study abroad processes

Demand for Higher Education
- Academic Prep
- Academic Achievement

Supply of Resources
- Family Income
- Financial Aid

Expected Benefits
- Monetary
- Non-Monetary

Expected Costs
- Study Abroad Costs
- Foregone Earnings

Study Abroad Choice
Conclusion

College access research has shifted to a focus on student choice process in an attempt to better understand how to influence the choice process using policy at the federal, state, and institutional level. In practice, policies shaped to increase access to college for diversity, first-generation, and low SES college students are already being used as references to attempt to increase access for this group to high impact educational experiences such as study abroad. For example, some colleges and universities have recently begun shifting tuition structures and other supporting policies to encourage student participation in study abroad (Pierce, 2004; National Survey of Student Engagement Annual Report, 2009). Research applying Perna’s integrated model of college choice to study abroad choice is a similarly appropriate shift and will serve to inform the study abroad policy applications already being observed. Further, this research is focused on choice to participate in a short-term study abroad program, the largest growing segment of study abroad and a choice generally considered more accessible to a wider audience of students for human and cultural capital reasons.
CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

The majority of research on student choice to enroll in study abroad has focused on long term programs and student intention to participate. The questions surrounding the choice process have been approached from a large scale quantitative approach and from a trip specific qualitative approach, but there has not been a mixed methods approach undertaken nor has a case study been produced on a program with a strong reputation for success in encouraging student participation.

This chapter details the steps I used for examining the choice process of students considering short-term study abroad (STSA) in a program with multiple STSA courses offered annually over the past forty years. The research purpose is presented and the mixed methods approach is broken down into a quantitative and qualitative phase. The data collection, sample, and analysis process for each phase is explained and tied back to the lens of Perna’s model. A summary table mapping each data source to the layers of Perna’s model is presented at the end of the chapter to further clarify the focus of the collection and analysis.

Research Purpose

The Winter Term at Graceland University has a uniquely long history in a field of study abroad that is only recently gaining attention by a wider audience. The program however has never been examined to determine who is participating or why the program has been successful in encouraging participation in short-term study abroad over the forty year history. The purpose of this research was to understand the choice process of students regarding participation in short-term study abroad and inform strategies designed to increase participation at the university being researched and in similar programs at
other institutions. Identifying factors facilitating or hindering participation was a focus with interest in specifically understanding the choice process of underrepresented groups in study abroad.

The primary research questions were:

1. What demographic, academic, and financial characteristics are related to the choice to participate in short-term study abroad?
2. What do students perceive as influential in the decision to participate in short-term study abroad?

Research Design

The complex decision process of students choosing to participate was studied using a concurrent mixed methods data collection approach to undertake a case study of a well-established short-term study abroad program at a small private Midwestern institution, Graceland University (Creswell, 2007; Howard, 2007; Mertens, 2005). A concurrent mixed methods approach was useful to this case study, especially from the conceptual framework of Perna’s multi-layer college choice model because it provided a “broader perspective and deeper understanding” of the complex interactions of factors within specific contexts that were affecting student participation in study abroad (Mertens, 2005, p. 294). The nature of the model is both broad in scope and highly individualized for students and lends itself to understanding an issue through both quantitative and qualitative research tools. The state and national policy context as well as the specific higher education context for the research provides an opportunity to use quantitative tools to understand the broad picture of the case study through Perna’s model. The social, cultural, and human capital influences affecting an individual
student’s decision process are best understood through a quantitative approach (St. John, 2006). The concurrent analysis of the quantitative with the qualitative data informed the findings but the real value of the mixed methods approach was found when the qualitative findings informed the interpretation of quantitative findings and vice-versa (Johnson & Onwuegbuzle, 2004).

I am also a short-term study abroad practitioner and approached the research from a pragmatist viewpoint and therefore a willingness to use what was most helpful to understanding the student choice process on multiple levels and then applying the findings to inform future actions (Johnson & Onwuegbuzle, 2004). A pragmatic approach fit the research well and allowed for an overall historical profile of a unique short-term study abroad program that may serve as a model in other settings and a concurrent deep examination of a few individual students while they were immersed in the choice process regarding the program.

The quantitative phase addressed research question one regarding student characteristics related to the choice to participate in short-term study abroad. Student participation rates and participant characteristics were determined from historical administrative student level data including demographic data, financial data, and academic data that were mapped to each characteristic area and to the layers of Perna’s integrated model. Characteristics of students participating in the short-term study abroad courses were identified through the use of chi-square test of significant relationships, t-test of difference in means, and logistic regression models. The dependent outcome variable was categorical and designated as participation in a STSA course versus non-participation in a STSA course. The mapped data fields were the independent variables in
each statistical analysis technique. The full quantitative data collection and analysis are
detailed in subsequent sections of this chapter.

A qualitative approach was used to answer research question two regarding what
factors are influencing students during the choice process and why those factors are
influential. Individual interviews were completed with students at key points during and
immediately following the choice process. Interview participants were followed in a
longitudinal research design by identifying students considering participation in a STSA
course early in the Fall 2012 semester. Research participants were followed during the
choice process to a point of participation or non-participation in a short-term travel
program during the January 2013 Winter Term.

Case Study Overview

The case study is a unique model (Creswell, 2007) of a short-term study abroad
program with a long history and strong reputation for student participation. The case
setting was described in full detail in chapter one but key elements are that the program
has an unusually long history and provides multiple STSA course choices annually in
January over a month long intersession. Students are required to participate in two
intersession courses as an undergraduate degree requirement with some students choosing
to remain on campus and some students choosing a trip option to fulfill some portion of
the requirement. The program administrator and the study abroad coordinator expressed
interest on behalf of the institution in understanding student choice to participate in the
short-term study abroad program. They provided broad access to the program data and
facilitated recruitment of study participants. The research purpose was to better
understand the choice process of students participating in the STSA program at this
university. The conceptual framework guided the intention to collect and analyze longitudinal demographic, financial, and academic data about the sample of students historically participating and the selection of potential student participants for individual interviews regarding factors influencing their personal choice process.

Approval by the Institutional Review Board (IRB) was undertaken at the University of Missouri and Graceland University. An informed consent document was developed for use with all participants (Appendix D and E). Interviews were strictly voluntary and risk related to the subject matter was minimal. Participant confidentiality was maintained to further protect the student and faculty volunteers taking part in the research. The institution was consulted to determine their desire to reveal the setting of the case study and permission was granted to identify Graceland University in this and any future writings or presentations on the topic of this research. The research was conducted on subjects at a different institution from my own and therefore served to minimize any coercive pressure on the volunteers (Creswell, 2007; Krueger & Casey, 2009).

**Quantitative Data Phase**

I gained support from Graceland University where the research took place during multiple conversations with the Winter Term Program Director over the two years preceding the study. The director facilitated the generation of the necessary student level data reports from the existing administrative database by working with me, the Office of the Registrar, the Financial Aid Office, and the campus database administrator. Ten years of data regarding student participation in the short-term study abroad program
along with relevant demographic, financial, and academic information was obtained from existing data sources at the university.

Quantitative Data Collection

Two reports were generated using Cognos Impromptu data mining software to extract student level records including the necessary fields from Jenzabar the university data management system. Report one included demographic and academic data fields for all students participating in a Winter Term intersession course over the 10 year period from January 2002 to January 2011. All intersession travel programs at the university are designated with a WTT (winter-term travel) on transcripts which enabled identification of the STSA participation dependent variable for each unique student included in the sample file. The second data file report was extracted from the Financial Aid module of the Jenzebar database for the same sample of students enrolled in a Winter Term course over the designated 10 year period. The two files were merged using the unique student identifier codes assigned by the institution to create a single data file with all data fields.

The original intention of the study was to obtain the entire population of the university but this proved problematic and the decision was made to utilize the sample students who had enrolled in a Winter Term course and address the representativeness of this sample during analysis.

Independent variables mapped to academic information included high school GPA, ACT and SAT score, cumulative university GPA and academic classification were included for each student participant as were financial aid data indicating Federal Pell Grant and the Estimated Family Contribution (EFC) as calculated from the Free Application for Federal Student Aid (FAFSA). Demographic data fields for sex, race,
and state of residence were also included in the final file for analysis. The data fields requested in the original file are included in Appendix A but not all were used in the subsequent analysis after data cleaning took place and a full analysis strategy was formalized.

The resulting data exported from Jenzabar as a CSV file to enable compatibility with Excel and SPSS during data analysis. The CSV file was imported into Excel for subsequent data cleaning and coding and then into SPSS for full statistical analysis. A description of the dependent and independent variables is presented later in this chapter. No identifying student information was contained in the report to protect the anonymity of the student participants. Approval by the Institutional Review Board (IRB) was pursued and granted at the University of Missouri and at Graceland University. All quantitative data were initially collected for other purposes and this phase of the research project and was exempt research as a result.

*Quantitative Data Sample*

The sample included all students enrolled in a Winter Term intersession course during the 10 year period from January 2002 to January 2011. The university was confident the data were reliable for this 10 year period for the fields requested. International students were included in the sample but analyses were subsequently limited to domestic students only.

*Separation of Data Files by Classification*

To examine the student choice process across academic classifications, the original 10 year sample data file was separated by academic classification to result in four files designated as freshmen, sophomore, junior, and senior. The designation of
academic classification was accomplished based on earned credit hours. The designations from the university catalog were used to determine academic classification as follows: freshman 0-23 earned hours, sophomore 24-55 earned hours, junior 56-87 earned hours, and senior 88 and above earned hours. These classifications will be used in the remainder of the discussion to distinguish student academic status.

Within each of the resulting sub-files some duplications of unique student identifier were identified. These duplications resulted when a student enrolled in more than one Winter Term course during the period of the academic classification. This would occur if a student did not earn sufficient hours during the semesters between two intersession years and therefore remained in the same classification. To eliminate duplications in the freshmen, sophomore, and junior classification files the earliest record was retained with the expectation that these students would be represented in later classification files and the earliest record most consistently represented the duplicated students along with their peers in the same classification. In the senior year file the latest record was retained in the case of duplication to capture every opportunity the student may have had to participate in a Winter Term course.

**Dependent Variable**

The dependent variable for the study was participation in the STSA program. This was determined by working with the program director to identify all STSA courses by course number and title. Students were default coded in the data field STSA Status with 0 for non-participation. The file was then filtered for each STSA course and the records coded in the new STSA field as 1 for participation. Using the previously described identification of STSA courses this code was changed to 1 for each unique student code
in the academic period of participation and for all subsequent academic periods. This resulted in the appropriate designation of a student as having participation in a STSA by the time of or during the academic classification period and carried the correct STSA status designation into the by classification sub-files described in a later section.

**Independent Demographic Variables**

The independent demographic variables identified were sex, race, and state of residence. All three demographic variables were mapped to Layer 1 as representative of habitus. Sex and race were included to better understand the underrepresented groups in study abroad of males student and non-white students (Dessoff, 2006; Fischer, 2012; Salisbury, Paulsen, & Pascarella, 2010; Salisbury, Paulsen, & Pascarella, 2011). Sex of male was coded as the reference group 1 and female as 0. Race was treated as categorical with white as the reference group and the other races collapsed into non-white.

The variable for state of residence was chosen based on the literature surrounding the importance of proximity of family (Johnson, Elder, & Stern, 2005; Turley, 2009) and previous community to influencing the student choice process (Perna, 2006a). It was reasonable to expect students who had already overcome the barrier of proximity during college choice would be more likely to overcome similar barriers to participation in travel to unfamiliar places. The states of residence were collapsed into three categories of: Iowa, border state (Missouri, Kansas, Nebraska, Minnesota, Illinois), and other states.

**Independent Academic Variables**

The examination of academic characteristics was executed by mapping to the fields High School GPA, ACT Score, Cumulative GPA, and Academic Major. High School GPA and ACT Score were mapped to Layer 1 as pre-college variables that were
representative of both the human capital of a student (Salisbury, Umbach, Paulsen, & Pascarella, 2009) and the previous school and community academic context of a student. Cumulative GPA and Academic Major were mapped as Layer 2/3 variables that would shed light on the university community and higher education context. Academic major has also been identified in the previous literature as influential in the student choice to study abroad (Lincoln Commission and Program, 2005; Norris & Gillespie, 2008; Salisbury, Umbach, Paulsen, & Pascarella, 2009).

**Independent Financial Variables**

The independent variables determined for representation of financial characteristics were status as a recipient of Federal Grant Aid and the amount of Estimated Family Contribution (EFC). Federal Grant Aid was coded as a categorical variable of 1 if received and 0 if not received for the academic year of the Winter Term course taken. The EFC was a continuous variable that was divided by 1000 to examine the differences based on a $1000 change in EFC rather than a $1 change. The financial variables were mapped to the Human Capital Layer of Perna’s model as a proxy for influences surrounding resource gathering and cost-benefit analysis. There is certainly an argument based on the literature that these financial variables also bleed into Layer 1 and the conceptualization of habitus (Perna, 2006b) as influential especially in the ways low SES students perceive and process information (Walpole, 2003) and this is taken into consideration in the discussion of findings. The strong emphasis on financial solutions in study abroad policies aimed at increasing participation (Institute of International Education, 2011; Lincoln Commission and Program, 2005) made the financial variables
especially relevant to the examination of findings through the lens of an integrated model rather than in isolation.

Quantitative Data Analysis

To address research question one multiple statistical analyses were conducted to determine the demographic, academic, and financial characteristics of students choosing to participate in this short-term study abroad program. Descriptive statistics were first produced for the overall Winter Term program to provide context and the sample file was compared to the overall institutional population to determine representativeness.

Participation rates in short-term study abroad courses were calculated for each academic classification and the overall data sample. From this point forward the analysis I will present was applied to each academic classification sub-file independently and the results of these independent analyses are presented in Chapter 4 divided into freshmen, sophomore, junior, and senior results.

The participation rate of students by the time of the academic classification was calculated. Descriptive statistics were calculated using the dependent variable of short-term study abroad participation and included mean, standard deviation, minimum, maximum, count (n), and missing cases. A chi-square test of independence was calculated to test the significance of the distribution frequencies of the sex, race, state of residence, major, and federal grant recipient status variables for STSA participants and non-participants. An independent t-test was used to test if there were significant differences in the mean High School GPA, ACT Score, Cumulative GPA, and EFC of participants when compared to non-participants.
Finally for each academic classification a demographic, an academic and a financial regression model with the independent variables already described were tested individually to determine significant factors predicting STSA participation. The three models were then combined to create an integrated model in alignment with the conceptual framework of Perna’s integrated model of college choice (Perna, 2006a). Because the dependent variable was categorical and the independent variables were both categorical and continuous, logistic regression was utilized (Field, 2009).

Qualitative Data Phase

It was informative to speak to students who were engaged in the choice process regarding participation in a short-term study abroad program. The qualitative data collected was used to understand what factors facilitated or created barriers during the student choice process and why those factors were influential in the decision to participate (Creswell, 2007; Krueger & Casey, 2009; Mertens, 2005). This created a more complete picture of what is occurring within the program of the case study and enriched analysis using the various layers and contexts of Perna’s model. Influential factors identified by using quantitative analysis were further understood during interviews with students actively engaged in the choice process. Interviews were semi-structured and questions focused on conceptually interesting influencers as informed by Perna’s model and the study abroad literature reviewed. Barriers and institutional as well as individual strategies utilized to overcome those barriers were discovered by speaking directly with students actively engaged in the decision process. The complex interaction of influencing factors was explored and contextualized for me during the qualitative phase of the research.
Data Source

The data sources for the qualitative phase of the research were identified from the same short-term study abroad program case study researched in the quantitative phase. The primary data sources were sequential interviews with students actively engaged in the choice process regarding participation in a short-term study abroad course. Secondary data sources were observations of information and orientation sessions, document review, and interviews with faculty sponsors.

Student Interview Data Collection

Interviews were conducted with students considering participation in a short-term study abroad trip. The first round of interviews were completed soon after the detailed information sessions were held. The sample for this round of interviews is detailed in the next section. A second round of interviews were completed with students from round one after the last day to register for a short-term trip had passed. The second round of interview questions were shaped by the quantitative analysis performed during the time between the two interviews. Appendix F details the data collection and analysis timeline. Two students indicated in their first interview that they had decided not to participate in the STSA course they were considering and a second interview was not scheduled.

Interviews were semi-structured with primary questions (see Appendix B and Appendix C) to guide the session while allowing additional questions to emerge during the discussion. The proposed interview questions were shaped by the conceptual framework of Perna’s model to better understand the choice process of students considering short-term study abroad. The interviews focused on the choice process of deciding to participate in the short-term study abroad trip and factors influencing the
decision as both barriers and facilitators. All participants read an informed consent document before an interview began. Signatures were not required to protect the confidentiality of participants. The first interviews were approximately an hour in duration and the second interviews were approximately half an hour. The interviews were audio recorded with a digital recorder and I transcribed the interviews from the first round as soon as possible following the sessions. The second round of interviews were transcribed by a transcriptionist and checked for accuracy by me. Field notes were handwritten during and immediately following the sessions (Krueger & Casey, 2009).

Participant confidentiality was protected by holding interviews in a private meeting room in an administrative building that did not house students, faculty, or staff associated with the Winter Term program. The building is frequented by students and faculty individually on a regular basis. The audio recordings do not include identifying information beyond demographic questions answered in the interview. The recordings will be kept securely in my password protected computer and on a password protected backup drive for seven years after the research has concluded and will then be deleted permanently. Transcription files will be kept securely in my password protected computer, in my password protected Dedoose analysis software, and on a password protected backup drive indefinitely. The transcriptions do not have personally identifiable information and will not be linked to the audio recordings. Field notes will be stored in a locked office at a location off campus. Stipends were be paid in cash to minimize the ability to track payment back to the student participant.
Student Sampling

The focus of the qualitative research was on domestic students age 18-24 considering participation in short-term study abroad during the current academic year of the research. College student participants were selected based on demographic characteristics to "represent variety" (Mertens, 2005, p.329) and their expressed interest in a short-term study abroad trip. The students selected for interviews were a purposeful sample of students considering participation in a short or long-term study abroad with attention to recruiting students from the underrepresented groups in study abroad, males, ethnic minorities, and low socioeconomic status students. Seven students were interviewed until patterns begin to emerge and saturation of the evidence regarding this case study was achieved. According to Mertens (2005) the suggested minimum is six participants for a case study. It is also recommended that after representative interviews have been completed additional interviews may serve to confirm findings. After a point only new veins of research will be discovered that do not contribute to the focus of the current research and a maximum will be reached that is usually not more than 20 representatives of a particular group in a single site case study (Creswell, 2007; Mertens, 2005).

For my research one student was recruited for voluntary participation through contact with another participant who spoke about previous plans to participate together. The newly recruited student was non-white and expanded the representativeness of the participant pool while also contributing to my inquiry regarding the emerging themes of peer mentoring and peer group travel.
Student Recruiting

Participants for the first round of interviews were recruited after the Winter Term convocation was completed. I recruited students through the trip specific orientation sessions held during the Winter Term convocation. The program director and the faculty sponsors served as gatekeepers and assisted with recruitment of student participants by making announcements at the detailed information sessions and providing a paper copy of the letter of invitation to every student attending a session. The relationships of these local experts with students who are considering participation facilitated recruitment and helped build trust with me. The students meeting the parameters of the study were instructed by faculty sponsors and in the letter to contact the program director by email to express interest in participation. The program director provided me with contact information for students who indicated they were willing to be interviewed for the research. I then contacted students to schedule interview sessions. The only exception to this process was the one described in the previous section. In this case the new volunteer student contacted me directly after being given my contact information by the other student participant.

Participants were provided with a small monetary stipend after each interview to provide incentive to participate and compensate for the time invested. Students participating in interview one were paid $10 in cash at the start of the interview session after brief screening questions to determine they met the parameters of the study. Students participating in follow-up interview two were paid $20 in cash at the start of the interview session.
Observation Data Collection

The data will be collected through three methods. The first is observation of the informational and orientation sessions utilized to inform students about the opportunity to study abroad and the expectations and logistics of the short-term study abroad trips.

Three observation opportunities were identified as follows:

1. Winter Term Convocation: This information session is a fair format used to promote the Winter Term offerings and tables are set up and staffed to disseminate information regarding course offerings which include short-term trips and on campus intersession classes. Tables for trips include information on the benefits of participating, payment options and due dates and campus contacts for individual steps in the process of preparing for the trip. (This observation did not take place as intended because the format had been changed to combine with the Trip Information Sessions).

2. Trip Information Sessions: The students are asked to provide contact information during the Convocation session on a sign-up sheet which is used to notify them regarding a trip specific information session held a few weeks later. A majority of students considering participation will attend but this session is not required. Students may seek information directly from a faculty sponsor.

3. Final Orientation Session: This is held in December just prior to the semester break. Students who have completed all necessary registration steps for a short-term study abroad in January are required to participate. (Observed in Fall 2010 – no information gathered that was not repeated in Trip Information Sessions so this data source was eliminated as redundant.)
I attended the Trip Information Session for two courses and recorded field notes and collected materials. I maintained a passive participant role (Krueger & Casey, 2009; Mertens, 2005). Student questions and staff responses were carefully noted and categorized based on the factors mapped to the layers of Perna’s model. Handwritten field notes were recorded during and immediately following the event. The observations were recorded using a grid format organized according to the layers of Perna’s model.

**Sponsor Sampling**

The sample is a purposeful sample of sponsors of short-term study abroad trips during the academic year of the research. Sponsor participants were solicited from the pool of faculty sponsoring a trip during the academic year of the research and emphasis was placed on recruiting sponsors of trips identified during interviews with students as under consideration in the choice process. The pool of sponsors is typically less than 10 a year and an interview with three different sponsors is adequate for confirming evidence from student interviews and adding some additional evidence regarding the institutional context of the student decision process.

**Faculty Sponsor and Staff Recruiting**

The trip sponsors meeting the parameters of the study were sent an email invitation directly by the researcher. The program director was not involved in this recruitment process to enhance confidentiality for participants employed by the university.

**Faculty Sponsor Interviews Data Collection**

The literature leads to an expectation of the trip sponsors being influential in the choice process for students. I therefore planned to conduct individual interviews with at
least two sponsors involved in the program. The interviews with these professionals at the university provided an opportunity to further understand the higher education context of the student decision process being studied and confirm findings from the student interviews. The interviews focused on the institutional strategies used to influence the student choice process regarding short-term study abroad trips. Factors influencing the decision as both barriers and facilitators identified in student interviews were a special focus of the interviews.

The interviews were semi-structured and questions were developed to complement the planned student interview questions (Appendix C). The interviews were about half an hour in length and I offered access to research findings during the debriefing at the end of the interview. All sponsor participants read and signed an informed consent document before an interview began. The interviews were audio recorded with a digital recorder for transcription by a transcriptionist as possible following the session and checked for accuracy by me. Field notes were recorded immediately following the interviews (Krueger & Casey, 2009).

Participant confidentiality was protected by holding interviews in private meeting spaces chosen by the faculty at their request. The audio recordings do not include identifying information beyond demographic questions answered in the interview. The recordings will be kept securely in my password protected computer and on a password protected backup drive for seven years after the research has concluded and will then be deleted permanently. Transcription files will be kept securely in my password protected computer, in my password protected Dedoose account, and on a password protected backup drive indefinitely but will not have personally identifiable information and will
not be linked to the audio recordings. Field notes will be stored in a locked office at a location off campus.

Faculty sponsor participants may be identified by their roles in a small population at a small university and this was explained in the informed consent form for faculty participants. These participants were asked to sign the consent form indicating they agree to the identification of their role as a faculty trip sponsor during the research. The faculty sponsors are referred to only by numbers in the findings and discussion.

*Document Review Data Collection*

Document review is the third method of data collection and serves as a source of triangulation of evidence for the research findings. Document review consisted of course catalog descriptions, marketing materials, program documents, and the website for the Winter Term program. The materials were collected during the orientation session and discovered in the Winter Term office, office of the registrar, and the office of financial aid. Study abroad literature led to an expectation that information dissemination and interpretation would be influential in the choice process and would provide key contextual clues for interpretation of the Layer 2/3 elements of Perna’s model.
**Data Collection Map**

Table 1 maps each data collection strategy to specific layers of Perna’s model.

Table 1 Data Collection Map and Focus Strategies

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Methodology</th>
<th>Human Capital Considerations</th>
<th>Perna Layer 1 (Habitus)</th>
<th>Perna Layer 2/3 (School and Higher Education Context)</th>
<th>Perna Layer 4 (Social, Economic, Policy Context)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Primary Focus</td>
<td></td>
</tr>
<tr>
<td>Database Report</td>
<td>Quantitative Data Collection</td>
<td>Secondary Focus</td>
<td>Secondary Focus</td>
<td>Primary Focus</td>
<td></td>
</tr>
<tr>
<td>Orientation Observation</td>
<td>Qualitative Data Collection</td>
<td>Secondary Focus</td>
<td></td>
<td>Primary Focus</td>
<td></td>
</tr>
<tr>
<td>Trip Specific Session Observation</td>
<td>Qualitative Data Collection</td>
<td>Secondary focus</td>
<td></td>
<td>Primary Focus</td>
<td></td>
</tr>
<tr>
<td>Student Interviews Round One</td>
<td>Qualitative Data Collection</td>
<td>Secondary Focus</td>
<td>Primary Focus</td>
<td>Tertiary Focus</td>
<td></td>
</tr>
<tr>
<td>Student Interviews Round Two</td>
<td>Qualitative Data Collection</td>
<td>Secondary Focus</td>
<td>Primary Focus</td>
<td>Secondary Focus and Tertiary Focus</td>
<td></td>
</tr>
<tr>
<td>Trip Sponsor Interviews</td>
<td>Qualitative Data Collection</td>
<td>Primary Focus</td>
<td>Secondary Focus and Tertiary Focus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Document Review</td>
<td>Qualitative Data Collection</td>
<td>Tertiary Focus</td>
<td>Secondary Focus</td>
<td>Primary Focus</td>
<td></td>
</tr>
</tbody>
</table>
Qualitative Analysis

The data were deductively coded using themes emerging during the quantitative and qualitative data collection and analysis. The codes represent conceptually interesting themes through the lens of Perna’s model (2006a). Themes were coded and excerpts tagged using the online software tool Dedoose to organize a database of codes, examples, and data sources.

The four layers of the model and human capital considerations were pre-configured as deductive themes but inductive codes within those layers were allowed to emerge and were added as appropriate to the analysis (Creswell, 2007). The deductive and inductive themes were identified to inform the question of student choice process regarding participation in the short-term study abroad and were interpreted for understanding of what factors were influential and why they were influential in the student choice process.

I uploaded transcribed interviews into the Dedoose application as soon as possible following transcription for initial coding. Themes were coded and examples excerpted using the Dedoose functions to organize a database of codes, examples, and data sources. A second round of reading through all transcripts for coding confirmation and emerging code additions was accomplished after an appropriate break from the process. A final round of cleaning codes and collapsing highly related codes was undertaken after the full quantitative analysis was complete and just prior to writing the results of the study. During this final round the source and demographic characteristics of participants were entered as descriptive tags in the Dedoose application to enable analysis by source of evidence and demographic characteristics.
Document analysis included categorizing materials as academic, financial or administrative in nature. They were then coded for the deductive themes based on the layers of Perna’s model and themes emerging during the observations and interviews (Howard, 2007; Mertens, 2005). The field notes from the observation sessions were reviewed and coded during each round of transcript coding.

Each data source collected was reflectively analyzed and overall themes were identified. These themes were then utilized to more completely understand the complex student choice process regarding short-term study abroad and the factors influencing the choice to participate by framing the analysis through the lens of Perna’s model. This deductive process was facilitated and recorded using the Dedoose software tools to categorize and visualize the evidence entered into the database. This analysis was undertaken throughout the research process with “findings generated and systematically built as successive pieces of data were gathered” (Mertens, 2005, p. 420).

**Role of Researcher**

I am qualified to conduct research on short-term study abroad as an experienced faculty sponsor of these courses. I am positioned outside of the organization and program that is the subject of the research currently but participated in the program as a student and a faculty sponsor in the past. This previous relationship is a tool to gain access, build trust and to enhance my analysis. My familiarity is also acknowledged as a source of bias in collection, interpretation and analysis. I am a first generation college student from a low SES background. This background provides unique perspectives on the issues related to college access for underrepresented groups and forms the basis of interest in research regarding access to high-impact learning opportunities for these populations. It
is also recognized that this background influences the details I notice during data
collection as well as the meaning I attach to my observations (Creswell, 2007; Krueger &
Casey, 2009; Mertens, 2005).

Trustworthiness

Multiple collection methods were utilized for triangulation of data to check
consistency of the evidence from multiple sources. Member checks were informally
executed at the end of interviews to ensure accuracy of interpretation. Peer debriefing
with the intersession program staff and study abroad faculty sponsors was also
undertaken for confirmation (Creswell, 2007; Mertens, 2005).

Limitations

This research is a case study of a short-term study abroad program at a specific
private Midwestern university. As such, the findings may not be applicable in other
higher education sectors and settings. The research is focused to answer questions
regarding demographic, academic and financial considerations during the choice process
and is attentive specifically to low SES students and the choice process of other
underrepresented groups in study abroad. The special attention to specific demographic,
academic, and financial factors will limit the attention paid to other potentially influential
factors. Students will be identified as non-participants because they do not have a STSA
participation designation in their Winter Term coursework record but this does not
address students who may have participated in a long term study abroad.

I chose to sample students indicating they are entering the choice process and will
concentrate questions on factors influential in the decision to participate. This will
naturally limit the information learned about barriers to participation and factors
influential in a student not considering participation and thus also making a default choice not to participate. A focus on a single high impact educational practice, study abroad, and more specifically short-term study abroad, may not answer questions about improving access to other high impact educational practices.

Researcher bias is a limitation of this study introduced in the previous section. As a former faculty sponsor of short-term travel abroad at the institution being studied I have my own experiences, which impacts the information I notice and how I interpreted the data collected. I acknowledge this influences my understanding of the student choice process I studied especially considering the lens of Perna’s model and the effect of my own habitus influencing my analysis. Acknowledging these limitations is important; it is equally important to recognize the access I was granted and the increased ability for participants to build trust with a researcher from a similar background with a shared experience. It is also notable that a rich depth of understanding of a choice process that is influenced strongly by sociological factors may be best achieved by a member of an underserved group such as myself (Creswell, 2007; Emerson, Fretz, & Shaw, 1995).

Summary

A concurrent mixed methods approach was undertaken to more fully understand the complex choice process of students regarding participation in a short-term study abroad program at Graceland University. The conceptual framework of Perna’s integrated college choice process lends itself to a mixed methods case study approach in which the complex process is understood through quantitative and qualitative data analysis. The collection and analysis of quantitative data will be undertaken to understand the nature of the program and to identify possible factors influencing student
choice to participate in the broader context of the institution. The qualitative phase will allow an in depth understanding of why and how factors are facilitating participation or creating barriers as students interpret and make meaning of information and advance through the choice process.
CHAPTER FOUR: RESULTS OF THE STUDY

The purpose of this study was to understand the choice process of students regarding participation in a short-term study abroad program at a small private Midwestern university. The mixed methods study examined 10 years of quantitative data regarding participation in Winter Term courses and qualitative data collected during the 2012-2013 academic year. The quantitative data were obtained from the university student management system regarding student participation for the 2002 to 2012 academic years. The quantitative data included demographic, academic, and financial data elements aligned to the layers of Perna’s (2006a) model. The qualitative data included sequential interviews with students considering participation in a short-term study abroad program, interviews with faculty sponsors of trips, review of program artifacts and observation of orientation sessions. This chapter presents an analysis of the quantitative data findings followed by analysis of the qualitative data findings. The chapter closes with a short summary of the study results.

Descriptive Statistics

To provide context for the analysis presented in this chapter I first produced descriptive statistics for the data sample. The data sample was compared to the institutional population to determine the representativeness of the sample. A profile of the Winter Term program itself is also presented.

Overview of the Student Population

The population of interest is all students participating in a Winter Term course during academic years 2002-2012. The institution demographics during fall 2011 and 2001 semesters provide a snapshot of the overall institution demographics during the
semester just previous to the analytical sample of students participating in the 2002 and 2012 Winter Term courses. The results of this demographic analysis are shown in tables 2 and 3. The overall institution in Fall 2011 included 1366 undergraduate students enrolled full and part-time with a sex representation of 43% male and 57% female. The sample of 575 Winter Term participants in 2012 includes 42% of the overall undergraduate population and was 53% male and 47% female. This may be explained by a lower retention rate for male students who are then replaced by male transfer students. The overall population distribution remains about 50/50 while the number of unique ID male students in the Winter Term participation file is increasing.

Table 2 Demographic Snapshot of Institution Fall 2011 and WT Sample 2012

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Institution Fall 2011</th>
<th>%</th>
<th>Sample WT 2012</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Male</td>
<td>592</td>
<td>43%</td>
<td>303</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>774</td>
<td>57%</td>
<td>272</td>
</tr>
<tr>
<td>Race</td>
<td>White</td>
<td>862</td>
<td>63%</td>
<td>371</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>504</td>
<td>37%</td>
<td>204</td>
</tr>
<tr>
<td>Race and Sex</td>
<td>White Male</td>
<td>304</td>
<td>22%</td>
<td>165</td>
</tr>
<tr>
<td></td>
<td>White Female</td>
<td>558</td>
<td>41%</td>
<td>206</td>
</tr>
<tr>
<td></td>
<td>Other Male</td>
<td>288</td>
<td>21%</td>
<td>138</td>
</tr>
<tr>
<td></td>
<td>Other Female</td>
<td>216</td>
<td>16%</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1366</td>
<td></td>
<td>575</td>
</tr>
</tbody>
</table>

Note: Institution –IPEDS; Sample - Author Calculations from Administrative Data

This increased representation of male students in the Winter Term courses was replicated in the 2002 snapshot. The representation by race in the sample closely mirrors the overall institution at the snapshot time for both 2012 and 2002. The breakdown to combined sex/race shows the increased male representation in Winter Term courses.
carried through in white males at a slightly higher rate than in ethnicities designated to
the ‘other’ group (7% difference vs. 3% for 2012). The proportionally larger number of
female students in the Fall 2001 institutional snapshot when compared to Fall 2011 is due
to a majority female online program for nursing majors that was discontinued by Fall
2004.

Table 3 Demographic Snapshot of Institution Fall 2001 and WT Sample 2002

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Institution Fall 2001</th>
<th>%</th>
<th>Sample WT 2002</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>701</td>
<td>31%</td>
<td>329</td>
<td>46%</td>
</tr>
<tr>
<td>Female</td>
<td>1582</td>
<td>69%</td>
<td>379</td>
<td>54%</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>1719</td>
<td>75%</td>
<td>532</td>
<td>75%</td>
</tr>
<tr>
<td>Other</td>
<td>564</td>
<td>25%</td>
<td>176</td>
<td>25%</td>
</tr>
<tr>
<td>Race and sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White Male</td>
<td>434</td>
<td>19%</td>
<td>220</td>
<td>31%</td>
</tr>
<tr>
<td>White Female</td>
<td>1285</td>
<td>56%</td>
<td>312</td>
<td>44%</td>
</tr>
<tr>
<td>Other Male</td>
<td>267</td>
<td>12%</td>
<td>109</td>
<td>15%</td>
</tr>
<tr>
<td>Other Female</td>
<td>297</td>
<td>13%</td>
<td>67</td>
<td>9%</td>
</tr>
<tr>
<td>Total</td>
<td>2283</td>
<td>31%</td>
<td>708</td>
<td>31%</td>
</tr>
</tbody>
</table>

Note: Institution –IPEDS; Sample - Author Calculations from Administrative Data

Short-term Study Abroad Overview

Over the 10 year span from the January 2002 to the January 2012 Winter Term, 3,715 unique students participated in 7,012 Winter Term classes by choosing from 331 different course title offerings. The courses can be categorized as campus based courses, non-travel off-campus experiential learning opportunities (e.g. internships and practicums), domestic travel trips, and short-term study abroad. Figure 5 is a graphical representation of the breakdown in Winter Term course participation by these categories. Within the Winter Term program, 70% of the courses are designated as high impact
educational practices (HIEP) as defined in the research by Kuh (High Impact Educational Practices, 2008). The courses in the Winter Term program designated as HIEP were academic in nature and fall into one of the following categories: undergraduate research, global learning, service learning, and internships or practicums. All off-campus offerings met the criteria and 2% of the on-campus courses met the criteria.

*Figure 5.* 2002-2012 Winter Term Student Participation by Course Category

![Winter Term Participation 2002-2012](image)

Of the total 3,248 unique students participating in a Winter Term class over the 10 year period, 477 unduplicated students participated in a short-term study abroad resulting in a 15% overall sample population participation rate. The duplicated numbers are an aggregation of all 10 years with duplication occurring when the same student participates in a Winter Term course in a subsequent year with a total of 6,262 Winter Term course participants and 859 STSA participants. The participation in STSA as a proportion of Winter Term course participation is shown in Figure 6.
Quantitative Data Analysis

The Winter Term participants were coded based on the dependent variable of participation in short-term study abroad as STSA participants (1) or STSA non-participants (0) based on participation during that academic year or having participated during a previous academic year. The overall 10 year sample was then separated into standalone sample files for each of the four academic classifications, freshmen, sophomore, junior, and senior. The dependent variable of STSA participation status in the standalone files was at this point based on their participation in a short-term study abroad course during or before the academic year of the classification designation.
The subsequent classification specific files with participation status designations were analyzed to address research question 1:

What demographic, academic, and financial characteristics are related to student choice to participate in short-term study abroad?

Over the 10 year period the participation rate in short-term study abroad by the time a student reached an academic classification was 4.6% of freshmen classification students, 10.4% of sophomore classification students, 13.3% of junior classification students, and 20% of senior classification students as shown in Table 4 with raw counts including international students. Nationally study abroad participation rates for bachelor degree seeking students are at an all-time high of 14% and 8% for the sub-set of students choosing a short-term study abroad (Institute of International Education, 2011). By the sophomore period this institution has surpassed the national rate for STSA and by the senior year participation is more than twice the national rate.

Table 4 Short-term Study Abroad Participation Rate by Period of Academic Classification

<table>
<thead>
<tr>
<th>Academic Classifications</th>
<th>Unduplicated Students (n)</th>
<th>Participated in Short-term Study Abroad</th>
<th>Participation Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>1622</td>
<td>76</td>
<td>4.6%</td>
</tr>
<tr>
<td>Sophomore</td>
<td>1582</td>
<td>165</td>
<td>10.4%</td>
</tr>
<tr>
<td>Junior</td>
<td>1343</td>
<td>179</td>
<td>13.3%</td>
</tr>
<tr>
<td>Senior</td>
<td>2030</td>
<td>404</td>
<td>20.0%</td>
</tr>
<tr>
<td>Overall Data Sample</td>
<td>3715</td>
<td>526</td>
<td>14.0%</td>
</tr>
</tbody>
</table>
**Freshmen**

**Sample Overview**

The freshmen file included 1390 unique Winter Term course participants after exclusion of international students. Of the 1390 domestic students with less than 30 academic semester hour credits, 76 (4.6%) participated in a STSA course. Table 5 provides descriptive statistics of the demographic, academic, and financial characteristics of the freshman students.

Table 5 Description of Variables Included in Freshmen Analysis (n=1390)

<table>
<thead>
<tr>
<th>Description of variables included in freshman analysis (n=1390)</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>N</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic Characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Gender (1=Male, 0-Female)</td>
<td>0.49</td>
<td>0.5</td>
<td>0</td>
<td>1</td>
<td>1390</td>
<td>0</td>
</tr>
<tr>
<td>White Race (1=White)</td>
<td>0.81</td>
<td>0.396</td>
<td>0</td>
<td>1</td>
<td>1364</td>
<td>26</td>
</tr>
<tr>
<td>Black Race (1=Black)</td>
<td>0.09</td>
<td>0.284</td>
<td>0</td>
<td>1</td>
<td>1364</td>
<td>26</td>
</tr>
<tr>
<td>Hispanic Race (1=Hispanic)</td>
<td>0.05</td>
<td>0.219</td>
<td>0</td>
<td>1</td>
<td>1364</td>
<td>26</td>
</tr>
<tr>
<td>Other Race Race (1=Other non-White Race)</td>
<td>0.05</td>
<td>0.228</td>
<td>0</td>
<td>1</td>
<td>1364</td>
<td>26</td>
</tr>
<tr>
<td>Iowa Residence (1=Iowa)</td>
<td>0.26</td>
<td>0.437</td>
<td>0</td>
<td>1</td>
<td>1390</td>
<td>0</td>
</tr>
<tr>
<td>Missouri Residence (1=Missouri)</td>
<td>0.28</td>
<td>0.447</td>
<td>0</td>
<td>1</td>
<td>1390</td>
<td>0</td>
</tr>
<tr>
<td>BorderState Residence (1=State Bordering Iowa + Kansas)</td>
<td>0.11</td>
<td>0.316</td>
<td>0</td>
<td>1</td>
<td>1390</td>
<td>0</td>
</tr>
<tr>
<td>Other State Residence (1=Other states)</td>
<td>0.36</td>
<td>0.479</td>
<td>0</td>
<td>1</td>
<td>1390</td>
<td>0</td>
</tr>
<tr>
<td>Academic Characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HSGPA High School GPA</td>
<td>3.20</td>
<td>0.595</td>
<td>1.1</td>
<td>4.9</td>
<td>1368</td>
<td>22</td>
</tr>
<tr>
<td>ACT ACT and SAT Exam scores converted</td>
<td>20.91</td>
<td>4.27</td>
<td>11</td>
<td>35</td>
<td>1295</td>
<td>95</td>
</tr>
<tr>
<td>Business Major CIP Code Category (Business =1)</td>
<td>0.13</td>
<td>0.334</td>
<td>0</td>
<td>1</td>
<td>1390</td>
<td>0</td>
</tr>
<tr>
<td>Education Major CIP Code Category (Education =1)</td>
<td>0.15</td>
<td>0.354</td>
<td>0</td>
<td>1</td>
<td>1390</td>
<td>0</td>
</tr>
<tr>
<td>HealthProf Major CIP Code Category (Health Professions =1)</td>
<td>0.12</td>
<td>0.323</td>
<td>0</td>
<td>1</td>
<td>1390</td>
<td>0</td>
</tr>
<tr>
<td>Humanities Major CIP Code Category Humanities =1</td>
<td>0.06</td>
<td>0.238</td>
<td>0</td>
<td>1</td>
<td>1390</td>
<td>0</td>
</tr>
<tr>
<td>SocialScience Major CIP Code Category (Social Science =1)</td>
<td>0.06</td>
<td>0.23</td>
<td>0</td>
<td>1</td>
<td>1390</td>
<td>0</td>
</tr>
<tr>
<td>STEM Major CIP Code Category (STEM =1)</td>
<td>0.20</td>
<td>0.4</td>
<td>0</td>
<td>1</td>
<td>1390</td>
<td>0</td>
</tr>
<tr>
<td>OtherMajor Major CIP Code Category (Other Majors =1)</td>
<td>0.29</td>
<td>0.455</td>
<td>0</td>
<td>1</td>
<td>1390</td>
<td>0</td>
</tr>
<tr>
<td>Financial Characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EFC Estimated Family Contribution in Dollars Divided by 1000</td>
<td>11.10</td>
<td>15.47</td>
<td>0</td>
<td>99.99</td>
<td>1310</td>
<td>80</td>
</tr>
<tr>
<td>FedGrant Federal Grant Aid (1= Recipient)</td>
<td>0.48</td>
<td>0.5</td>
<td>0</td>
<td>1</td>
<td>1386</td>
<td>4</td>
</tr>
</tbody>
</table>

**Sex of STSA Participants by Freshman Period**

The STSA participants as freshmen were a majority female as expected from the literature review. A chi-square test of independence was calculated to test the significance of the distribution frequencies of the sex variable for STSA participants and STSA non-participants. There was a significant association between sex and STSA
participation (chi-square(1) = 5.650, p < 0.05). Female freshmen were more likely to participate than male freshmen; 65% of freshmen STSA participants were female. Table 6 shows participation and non-participation break-down by sex.

Table 6 STSA participation by Sex for Freshmen Sample

<table>
<thead>
<tr>
<th>Sex</th>
<th>Participated in STSA</th>
<th>Did not Participate in STSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>6.9%</td>
<td>93.1%</td>
</tr>
<tr>
<td>Male</td>
<td>4.0%</td>
<td>96.0%</td>
</tr>
<tr>
<td>Total</td>
<td>5.5%</td>
<td>94.5%</td>
</tr>
</tbody>
</table>

Race STSA Participants by Freshmen Period

The race variables were aggregated to two categorical variables of white and other because several non-white race categories had low cell sizes. Table 7 shows participation and non-participation by race. A chi-square test of independence was calculated to test the significance of the distribution frequencies of the race variable for STSA participants and STSA non-participants. There was a significant association between race and STSA participation (chi-square(1) = 10.316, p < 0.005). White students are more likely to participate than other race freshman and made up 94.7% of freshmen participants.

Table 7 STSA Participation by Race for Freshmen Sample

<table>
<thead>
<tr>
<th>Race</th>
<th>Participated in STSA</th>
<th>Did not Participate in STSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>6.6%</td>
<td>93.4%</td>
</tr>
<tr>
<td>Black</td>
<td>0.8%</td>
<td>99.2%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1.4%</td>
<td>98.6%</td>
</tr>
<tr>
<td>Other</td>
<td>2.7%</td>
<td>97.3%</td>
</tr>
<tr>
<td>Unknown</td>
<td>0.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>5.5%</td>
<td>94.5%</td>
</tr>
</tbody>
</table>
State of Residence STSA Participants by Freshmen Period

The chi-square test of independence calculated to test the significance of the distribution frequencies of the state of residence variable found no significant relationship (chi-square(3) = 3.234, p > .05). The variables were then aggregated to Iowa/Missouri and other state and the chi-square test of independence still found no significant relationship (chi-square(1) = .119, p > .05). Table 8 shows participation and non-participation by state categories.

Table 8 STSA participation by State Category for Freshmen Sample

<table>
<thead>
<tr>
<th>State Category</th>
<th>Participated in STSA</th>
<th>Did not Participate in STSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iowa</td>
<td>4.8%</td>
<td>95.2%</td>
</tr>
<tr>
<td>Missouri</td>
<td>5.7%</td>
<td>94.3%</td>
</tr>
<tr>
<td>Border</td>
<td>8.3%</td>
<td>91.7%</td>
</tr>
<tr>
<td>Other</td>
<td>4.9%</td>
<td>95.1%</td>
</tr>
<tr>
<td>Total</td>
<td>5.5%</td>
<td>94.5%</td>
</tr>
</tbody>
</table>

High School GPA STSA Participants by Freshmen Period

The mean high school GPA for STSA participants and non-participants was compared using an independent t-test. Levene’s test for equality of variances was not significant therefore the assumption of homogeneity of variance is valid. Freshmen students choosing to participate in an STSA had a higher high school GPA (M = 3.46, SE = 0.07) than students who did not participate (M = 3.18, SE = 0.02). The difference in means was significant t(1366) = 3.88, p < .001.
**ACT Score STSA Participants by Freshmen Period**

The mean ACT score for STSA participants and non-participants was compared using an independent t-test. Levene’s test for equality of variances was not significant therefore the assumption of homogeneity of variance is valid. Freshmen students choosing to participate in an STSA had a higher ACT score (M = 23.7, SE = 0.53) than students who did not participate (M = 20.1, SE = 0.12). The difference in means was significant t(1293) = 5.71, p < .001.

**Major CIP Code STSA Participants by Freshmen Period**

The largest representation of freshmen STSA participants by major was STEM majors with 26.3% which is in direct contrast to historical study abroad trends. The 17.1% representation by Health Professions majors is the second highest group and because the well-developed nursing STSA is not open to freshmen this result was also surprising. Table 9 shows the STSA participation and non-participation broken down within the majors. The chi-square test of independence calculated to examine the significance of the distribution frequencies of the Major CIP Code variables did not find a significant relationship (chi-square(6) = 11.787, p > .05).

**Table 9 STSA Participation by Major CIP Code for Freshmen Sample**

<table>
<thead>
<tr>
<th>Majors CIP Code</th>
<th>Participated in STSA</th>
<th>Did not Participate in STSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>5.1%</td>
<td>94.9%</td>
</tr>
<tr>
<td>Education</td>
<td>5.1%</td>
<td>95.6%</td>
</tr>
<tr>
<td>Health Professions</td>
<td>7.9%</td>
<td>92.1%</td>
</tr>
<tr>
<td>Humanities</td>
<td>9.5%</td>
<td>90.5%</td>
</tr>
<tr>
<td>STEM</td>
<td>7.2%</td>
<td>92.8%</td>
</tr>
<tr>
<td>Social Science</td>
<td>6.4%</td>
<td>93.6%</td>
</tr>
<tr>
<td>Other (Undecided, Interdisciplinary)</td>
<td>3.0%</td>
<td>97.0%</td>
</tr>
<tr>
<td>Total</td>
<td>5.5%</td>
<td>94.5%</td>
</tr>
</tbody>
</table>
Estimated Family Contribution Freshmen

The mean estimated family contribution (EFC) for STSA participants and non-participants was compared using an independent t-test. Levene’s test for equality of variances was significant (p > .05) therefore the assumption of homogeneity of variance is not valid. Freshmen students choosing to participate in an STSA had a higher mean EFC divided by 1000 (M = 13.17, SE = 2.1) than students who did not participate (M = 10.30, SE = 0.42). The difference in means was not significant t(81) = -1.342, p > .05).

Federal Grant Recipient Status STSA Participants by Freshmen Period

The majority of STSA participants as freshmen did not receive federal grant aid as expected from the literature review. A chi-square test of independence was calculated to test the significance of the distribution frequencies of the Federal Grant Aid variable for STSA participants and STSA non-participants. There was a significant association between being a recipient of federal grant aid and STSA participation (chi-square(1) = 5.570, p < 0.05). Recipient freshmen were less likely to participate than non-recipient freshmen with 4% of recipients participating and 7% of non-recipients. The breakdown of participation within each status is shown in Table 10.

Table 10 STSA participation by Federal Grant Aid status for Freshmen Sample

<table>
<thead>
<tr>
<th>Federal Grant Status</th>
<th>Participated in STSA</th>
<th>Did not Participate in STSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recipient</td>
<td>3.9%</td>
<td>96.1%</td>
</tr>
<tr>
<td>Non-recipient</td>
<td>6.8%</td>
<td>93.2%</td>
</tr>
<tr>
<td>Total</td>
<td>5.5%</td>
<td>94.5%</td>
</tr>
</tbody>
</table>

Logistic Regression Calculations Freshmen

The odds of participating in a short-term study abroad (outcome variable) were calculated with three models composed of predictor variables from demographic, academic, and financial data. The non-white race categories had very small sample...
sizes and were subsequently collapsed into a single predictor variable of non-white. The state of residence category of Missouri was moving with the Border state variable and was subsequently collapsed into the Border state variable for the logistic regression calculations. Cumulative GPA is not included for the freshmen sample analysis because many of the students in the sample file had only completed a single semester of coursework. The results of the three models are presented individually and then combined to produce an integrated model. Table 11 contains the beta values, their standard errors, and the odds ratio for each variable across the models.

Table 11 Results of Freshmen Logistic Regression Models of Student Choice to Participate in Short-term Study Abroad (N=1390)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Demographics Model</th>
<th>Academic Model</th>
<th>Financial Model</th>
<th>Integrated Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender: Male</td>
<td>-.473 (.248) .623</td>
<td></td>
<td></td>
<td>-.485 (.281) .616</td>
</tr>
<tr>
<td>Race: Non-White</td>
<td>-1.466 (.526) .231**</td>
<td>-.061 (.620) .346</td>
<td>-.1061 (.620) .346</td>
<td></td>
</tr>
<tr>
<td>Border State Resident</td>
<td>.420 (.306) 1.522</td>
<td></td>
<td></td>
<td>.049 (.327) 1.050</td>
</tr>
<tr>
<td>Other State Resident</td>
<td>.274 (.329) 1.315</td>
<td></td>
<td></td>
<td>-.059 (.354) .943</td>
</tr>
<tr>
<td>HS GPA</td>
<td>.497 (.276) 1.643</td>
<td>.271 (.288) 1.311</td>
<td>.271 (.288) 1.311</td>
<td></td>
</tr>
<tr>
<td>ACT Score</td>
<td>.127 (.035) 1.136**</td>
<td>.124 (.037) 1.132**</td>
<td>.124 (.037) 1.132**</td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>.824 (.467) 2.280</td>
<td>.975 (.474) 2.650</td>
<td>.975 (.474) 2.650</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>.570 (.466) 1.769</td>
<td>.483 (.469) 1.621</td>
<td>.483 (.469) 1.621</td>
<td></td>
</tr>
<tr>
<td>Health Professions</td>
<td>1.216 (.431) 3.373**</td>
<td>1.176 (.435) 3.240**</td>
<td>1.176 (.435) 3.240**</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>.882 (.535) 2.416</td>
<td>.980 (.541) 2.665</td>
<td>.980 (.541) 2.665</td>
<td></td>
</tr>
<tr>
<td>Social Science</td>
<td>.400 (.673) 1.491</td>
<td>.310 (.680) 1.363</td>
<td>.310 (.680) 1.363</td>
<td></td>
</tr>
<tr>
<td>STEM</td>
<td>.733 (.395) 2.082</td>
<td>.831 (.400) 2.295*</td>
<td>.831 (.400) 2.295*</td>
<td></td>
</tr>
<tr>
<td>Federal Grant</td>
<td>-.517 .276 .597</td>
<td>-.070 (.300) .932</td>
<td>-.070 (.300) .932</td>
<td></td>
</tr>
<tr>
<td>EFC Divided by 1000</td>
<td>.004 .008 1.004</td>
<td>.002 (.008) 1.002</td>
<td>.002 (.008) 1.002</td>
<td></td>
</tr>
</tbody>
</table>

Statistical Significance indicated * p < .05, ** p < .01

**Demographic Model Freshmen**

Sex was significant alone as a predictor of participation but not in model which controlled for race and state of residence. The aggregation of non-white race categories resulted in a statistically significant race predictor variable with decreased odds of participation in short-term study abroad for non-white students. State of residence was not a significant predictor variable in the freshman period.
**Academic Model Freshmen**

The academic model resulted in ACT and Health Professions major as significant predictor variables. This is the only academic classification with a major variable that was significantly predicting participation. The Health Professions major could correlate with having a higher ACT, especially for freshmen students who have not sufficiently explored other majors and are biased to familiar pre-health choices.

**Financial Model Freshmen**

The financial model was not a significant predictive model for the freshmen sample. The reduced odds of participation for federal grant recipients become more pronounced in future academic classifications. The lack of EFC significant as a predictor is surprising but EFC varies from a minimum value of 0 up to a maximum value of $99,999 and therefore a $1000 incremental change in EFC is not a very large change.

**Integrated Model Freshmen**

The integrated model results in all demographic predictors dropping out of the statistically significant range after controlling for the other variables in the model. ACT, Health Professions and STEM majors are the significant predictors of STSA participation in the integrated model for freshmen students. Similar to the health professions majors the STEM majors traditionally attract high academic performers in the freshman year and may have a high correlation with the ACT score.

**Sophomores**

**Sample Overview**

The sophomore file included 1367 unique Winter Term course participants after exclusion of international students. Of the 1367 domestic students with 30 to 59 academic
semester hour credits, 145 had participated in a STSA course before or during this classification period. Table 12 provides a description of the sample variables included in the analysis of demographic, academic, and financial characteristics.

Table 12 Description of Variables Included in Sophomore Analysis (n=1367)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Notes</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>n</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>STSA</td>
<td>Short-term Study Abroad Status this Period</td>
<td></td>
<td>0.11</td>
<td>0.308</td>
<td>0</td>
<td>1</td>
<td>1367</td>
<td>0</td>
</tr>
<tr>
<td><strong>Demographic Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>Gender (1=Male, 0-Female)</td>
<td></td>
<td>0.48</td>
<td>0.50</td>
<td>0</td>
<td>1</td>
<td>1367</td>
<td>0</td>
</tr>
<tr>
<td>White</td>
<td>Race (1=White)</td>
<td></td>
<td>0.81</td>
<td>0.39</td>
<td>0</td>
<td>1</td>
<td>1335</td>
<td>32</td>
</tr>
<tr>
<td>Black</td>
<td>Race (1=Black)</td>
<td></td>
<td>0.07</td>
<td>0.26</td>
<td>0</td>
<td>1</td>
<td>1335</td>
<td>32</td>
</tr>
<tr>
<td>Hispanic</td>
<td>Race (1=Hispanic)</td>
<td></td>
<td>0.06</td>
<td>0.23</td>
<td>0</td>
<td>1</td>
<td>1335</td>
<td>32</td>
</tr>
<tr>
<td>Other Race</td>
<td>Race (1=Other non-White Race)</td>
<td></td>
<td>0.06</td>
<td>0.23</td>
<td>0</td>
<td>1</td>
<td>1335</td>
<td>32</td>
</tr>
<tr>
<td>Iowa</td>
<td>Residence (1=Iowa)</td>
<td></td>
<td>0.26</td>
<td>0.44</td>
<td>0</td>
<td>1</td>
<td>1367</td>
<td>0</td>
</tr>
<tr>
<td>Missouri</td>
<td>Residence (1=Missouri)</td>
<td></td>
<td>0.29</td>
<td>0.45</td>
<td>0</td>
<td>1</td>
<td>1367</td>
<td>0</td>
</tr>
<tr>
<td>BorderState</td>
<td>Residence (1= State Bordering Iowa + Kansas)</td>
<td></td>
<td>0.11</td>
<td>0.31</td>
<td>0</td>
<td>1</td>
<td>1367</td>
<td>0</td>
</tr>
<tr>
<td>Other State</td>
<td>Residence (1=Other states)</td>
<td></td>
<td>0.34</td>
<td>0.48</td>
<td>0</td>
<td>1</td>
<td>1367</td>
<td>0</td>
</tr>
<tr>
<td><strong>Academic Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUM GPA</td>
<td>CMU GPA</td>
<td></td>
<td>3.03</td>
<td>0.65</td>
<td>1.20</td>
<td>4.00</td>
<td>1367</td>
<td>0</td>
</tr>
<tr>
<td>ACT</td>
<td>ACT and SAT Exam scores converted</td>
<td></td>
<td>21.74</td>
<td>4.30</td>
<td>34</td>
<td>11</td>
<td>1206</td>
<td>161</td>
</tr>
<tr>
<td>Business</td>
<td>Major CIP Code Category (Business=1)</td>
<td></td>
<td>0.14</td>
<td>0.34</td>
<td>0</td>
<td>1</td>
<td>1367</td>
<td>0</td>
</tr>
<tr>
<td>Education</td>
<td>Major CIP Code Category (Education=1)</td>
<td></td>
<td>0.18</td>
<td>0.38</td>
<td>0</td>
<td>1</td>
<td>1367</td>
<td>0</td>
</tr>
<tr>
<td>HealthProf</td>
<td>Major CIP Code Category (Health Professions=1)</td>
<td></td>
<td>0.10</td>
<td>0.30</td>
<td>0</td>
<td>1</td>
<td>1367</td>
<td>0</td>
</tr>
<tr>
<td>Humanities</td>
<td>Major CIP Code Category (Humanities=1)</td>
<td></td>
<td>0.16</td>
<td>0.36</td>
<td>0</td>
<td>1</td>
<td>1367</td>
<td>0</td>
</tr>
<tr>
<td>SocialScience</td>
<td>Major CIP Code Category (Social Science=1)</td>
<td></td>
<td>0.15</td>
<td>0.36</td>
<td>0</td>
<td>1</td>
<td>1367</td>
<td>0</td>
</tr>
<tr>
<td>STEM</td>
<td>Major CIP Code Category (STEM=1)</td>
<td></td>
<td>0.16</td>
<td>0.36</td>
<td>0</td>
<td>1</td>
<td>1367</td>
<td>0</td>
</tr>
<tr>
<td>OtherMajor</td>
<td>Major CIP Code Category (Other Majors=1)</td>
<td></td>
<td>0.12</td>
<td>0.33</td>
<td>0</td>
<td>1</td>
<td>1367</td>
<td>0</td>
</tr>
<tr>
<td><strong>Financial Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FedGrant</td>
<td>Federal Grant Aid (1=Recipient)</td>
<td></td>
<td>0.48</td>
<td>0.50</td>
<td>0</td>
<td>1</td>
<td>1344</td>
<td>23</td>
</tr>
<tr>
<td>EFC</td>
<td>Estimated Family Contribution in Dollars Divided by 1000</td>
<td></td>
<td>11.65</td>
<td>16.15</td>
<td>0</td>
<td>99.99</td>
<td>1219</td>
<td>148</td>
</tr>
</tbody>
</table>

Sex STSA Participants by Sophomore Period

The STSA participants as sophomores were a majority female as expected from the literature review. A chi-square test of independence was calculated to test the significance of the distribution frequencies of the sex variable for STSA participants and STSA non-participants. There was a significant association between sex and STSA participation (chi-square(1) = 9.048, p < 0.01). Female sophomores were more likely to participate than male sophomores. Table 13 shows participation and non-participation break-down by sex.
Table 13 STSA Participation by Sex for Sophomore Sample

<table>
<thead>
<tr>
<th>Sex</th>
<th>Participated in STSA</th>
<th>Did not Participate in STSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>13.0%</td>
<td>87.0%</td>
</tr>
<tr>
<td>Male</td>
<td>8.0%</td>
<td>92.0%</td>
</tr>
<tr>
<td>Total</td>
<td>10.6%</td>
<td>89.4%</td>
</tr>
</tbody>
</table>

Race STSA Participants by Sophomore Period

White students were more likely to participate than other race students as expected from the institutional make-up and the literature review. Table 14 shows participation and non-participation by race. A chi-square test of independence was calculated to test the significance of the distribution frequencies of the race variable for STSA participants and STSA non-participants. There was a significant association between race and STSA participation (chi-square(4) = 13.611, p < 0.01). White sophomores were more likely to participate than all other race sophomores combined.

Aggregation to white and non-white results in a chi-square(1) = 12.271, p < 0.001, indicating a stronger relationship between race and STSA participation.

Table 14 STSA Participation by Race for Sophomore Sample

<table>
<thead>
<tr>
<th>Race</th>
<th>Participated in STSA</th>
<th>Did not Participate in STSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>11.9%</td>
<td>88.1%</td>
</tr>
<tr>
<td>Black</td>
<td>3.0%</td>
<td>97.0%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>6.6%</td>
<td>93.4%</td>
</tr>
<tr>
<td>Other</td>
<td>3.9%</td>
<td>96.1%</td>
</tr>
<tr>
<td>Unknown</td>
<td>15.6%</td>
<td>84.4%</td>
</tr>
<tr>
<td>Total</td>
<td>10.6%</td>
<td>89.4%</td>
</tr>
</tbody>
</table>
State of Residence STSA Participants by Sophomore Period

The chi-square test of independence calculated to test the significance of the distribution frequencies of the state of residence variable found a significant relationship (chi-square(3) = 10.0, p < .05). A greater proportion than expected of students from Missouri and from border states participated in STSA while fewer students from Iowa and other states participated. Table 15 shows participation and non-participation by state categories.

Table 15 STSA participation by State Category for Sophomore Sample

<table>
<thead>
<tr>
<th>State Category</th>
<th>Participated in STSA</th>
<th>Did not Participate in STSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iowa</td>
<td>7.4%</td>
<td>92.6%</td>
</tr>
<tr>
<td>Missouri</td>
<td>13.8%</td>
<td>86.2%</td>
</tr>
<tr>
<td>Border</td>
<td>13.6%</td>
<td>86.4%</td>
</tr>
<tr>
<td>Other</td>
<td>9.5%</td>
<td>90.5%</td>
</tr>
<tr>
<td>Total</td>
<td>10.6%</td>
<td>89.4%</td>
</tr>
</tbody>
</table>

Cumulative GPA STSA Participants by Sophomore Period

The mean cumulative GPA for STSA participants and non-participants was compared using an independent t-test. Levene’s test for equality of variances was not significant therefore the assumption of homogeneity of variance is valid. Sophomore students choosing to participate in an STSA had a higher cumulative GPA (M = 3.33, SE = 0.04) than students who did not participate (M = 2.99, SE = 0.02). The difference in means was significant t(1365) = 6.077, p < .001).

ACT Score STSA Participants by Sophomore Period

The mean ACT score for STSA participants and non-participants was compared using an independent t-test. Levene’s test for equality of variances was non-significant therefore the assumption of homogeneity of variance is valid. Sophomore students choosing to participate in an STSA had a higher ACT score (M = 23.4, SE = 0.34) than
students who did not participate (M = 21.5, SE = 0.13). The difference in means was significant t(1204) = -4.68, p < .001).

**Major CIP Code STSA Participants by Sophomore Period**

The largest representation of sophomore STSA participants by major was still STEM majors with a 14% participation rate which is in direct contrast to historical study abroad trends. The representation by other majors became more even and representation by humanities majors rose to 18% in a more expected pattern. Table 16 shows the STSA participation and non-participation broken down by major. The chi-square test of independence calculated to examine the significance of the distribution frequencies of the Major CIP Code variables did not find a significant relationship (chi-square(6) = 7.704, p > .05).

Table 16 STSA participation by Major CIP Code for Sophomore Sample

<table>
<thead>
<tr>
<th>Majors CIP Code</th>
<th>Participated in STSA</th>
<th>Did not Participate in STSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>10.1%</td>
<td>89.9%</td>
</tr>
<tr>
<td>Education</td>
<td>7.8%</td>
<td>92.2%</td>
</tr>
<tr>
<td>Health Professions</td>
<td>13.6%</td>
<td>86.4%</td>
</tr>
<tr>
<td>Humanities</td>
<td>12.0%</td>
<td>88.0%</td>
</tr>
<tr>
<td>STEM</td>
<td>14.0%</td>
<td>86.0%</td>
</tr>
<tr>
<td>Social Science</td>
<td>8.9%</td>
<td>91.1%</td>
</tr>
<tr>
<td>Other (Undecided, Interdisciplinary)</td>
<td>8.9%</td>
<td>91.1%</td>
</tr>
<tr>
<td>Total</td>
<td>10.6%</td>
<td>89.4%</td>
</tr>
</tbody>
</table>

**Estimated Family Contribution STSA Participants by Sophomore Period**

The mean EFC for STSA participants and non-participants was compared using an independent t-test. Levene’s test for equality of variances was significant (p < .05) therefore the assumption of homogeneity of variance is not valid. Sophomore students choosing to participate in an STSA had a higher mean EFC divided by 1000 (M = 18.63,
SE = 1.9) than students who did not participate (M = 10.9, SE = 0.46). The difference in means was significant \( t(130) = -3.944, p < .001 \).

**Federal Grant Recipient Status STSA Participants by Sophomore Period**

The majority of STSA participants as sophomores did not receive federal grant aid as expected from the literature review. A chi-square test of independence was calculated to test the significance of the distribution frequencies of the Federal Grant Aid variable for STSA participants and STSA non-participants. There was a significant association between being a recipient of federal grant aid and STSA participation (chi-square(1) = 39.938, \( p < 0.001 \)). Recipient sophomores were less likely to participate than non-recipient sophomores. Table 17 shows participation rates by federal grant aid status.

**Table 17 STSA Participation by Federal Grant Aid Status for Sophomore Sample**

<table>
<thead>
<tr>
<th>Federal Grant Status</th>
<th>Participated in STSA</th>
<th>Did not Participate in STSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recipient</td>
<td>5.2%</td>
<td>94.8%</td>
</tr>
<tr>
<td>Non-recipient</td>
<td>15.9%</td>
<td>84.1%</td>
</tr>
<tr>
<td>Total</td>
<td>10.6%</td>
<td>89.4%</td>
</tr>
</tbody>
</table>

**Logistic Regression Calculations Sophomores**

The odds of participating in a short-term study abroad (outcome variable) were calculated with three models composed of predictor variables from demographic, academic, and financial data. The non-white race categories had very small sample sizes and were subsequently collapsed into a single predictor variable of non-white. The state of residence category of Missouri was moving with the Border state variable and was subsequently collapsed into the Border state variable for the logistic regression calculations. The results of the three models are presented individually and then
combined to produce an integrated model. Table 18 contains the beta values, their standard errors, and the odds ratio for each variable across the models.

**Table 18: Results of Sophomore Logistic Regression Models of Student Choice to Participate in Short-term Study Abroad (N=1367)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Demographics Model</th>
<th>Academic Model</th>
<th>Financial Model</th>
<th>Integrated Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender: Male</td>
<td>-.368 (.186)</td>
<td>.692*</td>
<td>-.375 (.240)</td>
<td>.688</td>
</tr>
<tr>
<td>Race: Non-White</td>
<td>-1.032 (.330)</td>
<td>.356**</td>
<td>-.571 (.428)</td>
<td>.565</td>
</tr>
<tr>
<td>Border State Resident</td>
<td>.658 (.242)</td>
<td>1.931**</td>
<td>.431 (.284)</td>
<td>1.59</td>
</tr>
<tr>
<td>Other State Resident</td>
<td>.425 (.264)</td>
<td>1.530</td>
<td>.153 (.311)</td>
<td>1.165</td>
</tr>
<tr>
<td>HS GPA</td>
<td>-.098 (.257)</td>
<td>.907</td>
<td>-.286 (.299)</td>
<td>.751</td>
</tr>
<tr>
<td>CUM GPA</td>
<td>.034 (.248)</td>
<td>1.035**</td>
<td>.685 (.271)</td>
<td>1.983*</td>
</tr>
<tr>
<td>ACT Score</td>
<td>.815 (.235)</td>
<td>2.258</td>
<td>.016 (.033)</td>
<td>1.016</td>
</tr>
<tr>
<td>Business</td>
<td>.000 (.377)</td>
<td>1.00</td>
<td>-.318 (.457)</td>
<td>.727</td>
</tr>
<tr>
<td>Health Professions</td>
<td>-.370 (.449)</td>
<td>.691</td>
<td>-.365 (.493)</td>
<td>.694</td>
</tr>
<tr>
<td>Humanities</td>
<td>-.002 (.358)</td>
<td>.998</td>
<td>-.011 (.411)</td>
<td>.989</td>
</tr>
<tr>
<td>Social Science</td>
<td>-.081 (.375)</td>
<td>.922</td>
<td>-.205 (.433)</td>
<td>.815</td>
</tr>
<tr>
<td>STEM</td>
<td>.094 (.352)</td>
<td>1.099</td>
<td>.068 (.406)</td>
<td>1.070</td>
</tr>
<tr>
<td>Federal Grant</td>
<td>-.924 (.239)</td>
<td>.397**</td>
<td>-.400 (.258)</td>
<td>.670</td>
</tr>
<tr>
<td>EFC Divided by 1000</td>
<td>.010 (.005)</td>
<td>1.011</td>
<td>.009 (.006)</td>
<td>1.009</td>
</tr>
</tbody>
</table>

**Statistical Significance indicated: * p < .05, **p < .01**

**Demographic Model Sophomores**

In the sophomore sample the demographic model indicated sex, race, and Border state of residence were all statistically significant predictors of student choice to participate in short-term study abroad. Male students have reduced odds of participating as do non-white students while students from border states have increased odds of participation over students from Iowa.

**Academic Model Sophomores**

The academic model applied to the sophomore sample resulted in cumulative grade point average as the only significant predictor of participation in STSA. After controlling for cumulative grade point average, an after matriculation variable, high school grade point average and ACT score are no longer significantly predicting participation. Major is not as influential as it was in previous academic classifications and
is not a statistically significant influence in the model. The distribution of students in the STEM major for the overall sample has dropped and the percentage in other majors has increased and may be resulting in the decreased influence of majors previously correlated with high ACT scores.

**Financial Model Sophomores**

In the sophomore period the financial model is a statistically significant predictor of participation in short-term study. The odds of participation are decreased if the student is a federal grant recipient and the variable is a significant predictor. The EFC variable was not significant in this academic classification period.

**Integrated Model Sophomores**

The integrated model controls for demographic, academic, and financial variables and in the sophomore sample resulted in ACT scores as the only significant predictor variable. The influence of major seen in the freshman integrated model does not carry through to this period and the expected influence of demographic and financial variables is not strongly apparent.

**Juniors**

**Sample Overview**

The junior file included unique Winter Term course participants after exclusion of international students. Of the 1391 domestic students with 30 to 59 academic semester hour credits, 141 had participated in a STSA course before or during this classification period. Table 19 provides a description of the sample variables included in the analysis of demographic, academic, and financial characteristics.
Table 19 Description of Variables Included in Junior Analysis (n=1222)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description Notes</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>n</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>STSA</td>
<td>Short-term Study Abroad Status this Period</td>
<td>0.14</td>
<td>0.35</td>
<td>0</td>
<td>1</td>
<td>1222</td>
<td>0</td>
</tr>
<tr>
<td>Male</td>
<td>Gender (1=Male, 0-Female)</td>
<td>0.50</td>
<td>0.5</td>
<td>0</td>
<td>1</td>
<td>1222</td>
<td>0</td>
</tr>
<tr>
<td>White</td>
<td>Race (1=White)</td>
<td>0.81</td>
<td>0.39</td>
<td>0</td>
<td>1</td>
<td>1191</td>
<td>31</td>
</tr>
<tr>
<td>Black</td>
<td>Race (1=Black)</td>
<td>0.09</td>
<td>0.28</td>
<td>0</td>
<td>1</td>
<td>1191</td>
<td>31</td>
</tr>
<tr>
<td>Hispanic</td>
<td>Race (1=Hispanic)</td>
<td>0.60</td>
<td>0.23</td>
<td>0</td>
<td>1</td>
<td>1191</td>
<td>31</td>
</tr>
<tr>
<td>Other Race</td>
<td>Race (1=Other non-White Race)</td>
<td>0.50</td>
<td>0.21</td>
<td>0</td>
<td>1</td>
<td>1191</td>
<td>31</td>
</tr>
<tr>
<td>Iowa</td>
<td>Residence (1=iowa)</td>
<td>0.25</td>
<td>0.43</td>
<td>0</td>
<td>1</td>
<td>1144</td>
<td>78</td>
</tr>
<tr>
<td>Missouri</td>
<td>Residence (1=Missouri)</td>
<td>0.27</td>
<td>0.45</td>
<td>0</td>
<td>1</td>
<td>1144</td>
<td>78</td>
</tr>
<tr>
<td>Border State</td>
<td>Residence (1= State Bordering Iowa + Kansas)</td>
<td>0.12</td>
<td>0.33</td>
<td>0</td>
<td>1</td>
<td>1144</td>
<td>78</td>
</tr>
<tr>
<td>Other State</td>
<td>Residence (1=Other states)</td>
<td>0.36</td>
<td>0.48</td>
<td>0</td>
<td>1</td>
<td>1144</td>
<td>78</td>
</tr>
<tr>
<td>CUM GPA</td>
<td>Cumulative GPA</td>
<td>3.05</td>
<td>0.59</td>
<td>1.59</td>
<td>4</td>
<td>1222</td>
<td>0</td>
</tr>
<tr>
<td>ACT</td>
<td>ACT and SAT Exam scores converted</td>
<td>22.05</td>
<td>4.4</td>
<td>11</td>
<td>35</td>
<td>991</td>
<td>231</td>
</tr>
<tr>
<td>Business</td>
<td>Major CIP Code Category (Business =1)</td>
<td>0.16</td>
<td>0.36</td>
<td>0</td>
<td>1</td>
<td>1222</td>
<td>0</td>
</tr>
<tr>
<td>Education</td>
<td>Major CIP Code Category (Education =1)</td>
<td>0.17</td>
<td>0.38</td>
<td>0</td>
<td>1</td>
<td>1222</td>
<td>0</td>
</tr>
<tr>
<td>HealthProf</td>
<td>Major CIP Code Category (Health Professions =1)</td>
<td>0.10</td>
<td>0.3</td>
<td>0</td>
<td>1</td>
<td>1222</td>
<td>0</td>
</tr>
<tr>
<td>Humanities</td>
<td>Major CIP Code Category (Humanities =1)</td>
<td>0.20</td>
<td>0.4</td>
<td>0</td>
<td>1</td>
<td>1222</td>
<td>0</td>
</tr>
<tr>
<td>SocialScience</td>
<td>Major CIP Code Category (Social Science =1)</td>
<td>0.08</td>
<td>0.27</td>
<td>0</td>
<td>1</td>
<td>1222</td>
<td>0</td>
</tr>
<tr>
<td>STEM</td>
<td>Major CIP Code Category (STEM =1)</td>
<td>0.15</td>
<td>0.36</td>
<td>0</td>
<td>1</td>
<td>1222</td>
<td>0</td>
</tr>
<tr>
<td>OtherMajor</td>
<td>Major CIP Code Category (Other Majors =1)</td>
<td>0.14</td>
<td>0.35</td>
<td>0</td>
<td>1</td>
<td>1222</td>
<td>0</td>
</tr>
<tr>
<td>FedGrant</td>
<td>Federal Grant Aid (1= Recipient)</td>
<td>0.52</td>
<td>0.5</td>
<td>0</td>
<td>1</td>
<td>1218</td>
<td>4</td>
</tr>
<tr>
<td>EFC</td>
<td>Estimated Family Contribution in Dollars Divided by 1000</td>
<td>10.28</td>
<td>13.55</td>
<td>0</td>
<td>99.99</td>
<td>1088</td>
<td>134</td>
</tr>
</tbody>
</table>

Sex of STSA Participants by Junior Period

The STSA participants as juniors were a majority female as expected from the literature review. A chi-square test of independence was calculated to test the significance of the distribution frequencies of the sex variable for STSA participants and STSA non-participants. There was a significant association between sex and STSA participation (chi-square(1) = 10.040, p < 0.01). Female juniors were more likely to participate than male juniors; 62% of junior STSA participants were female. Table 20 shows participation and non-participation break-down by sex.
Table 20 STSA Participation by Sex for Junior Sample

<table>
<thead>
<tr>
<th>Sex</th>
<th>Participated in STSA</th>
<th>Did not Participate in STSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>17.0%</td>
<td>83.0%</td>
</tr>
<tr>
<td>Male</td>
<td>10.7%</td>
<td>89.3%</td>
</tr>
<tr>
<td>Total</td>
<td>13.9%</td>
<td>86.1%</td>
</tr>
</tbody>
</table>

Race STSA Participants by Junior Period

As expected from the institutional make-up and the literature review, white students were more likely to participate with a 16% of white students participating. Table 21 shows participation and non-participation by race. A chi-square test of independence was calculated to test the significance of the distribution frequencies of the race variable for STSA participants and STSA non-participants. There was a significant association between race and STSA participation (chi-square(4) = 28.327, p < 0.01). White juniors were more likely to have participated than all other race juniors combined. Aggregation to white and non-white results a stronger relationship between race and STSA participation (chi-square(1) = 26.474, p < 0.001).

Table 21 STSA Participation by Race for Junior Sample

<table>
<thead>
<tr>
<th>Race</th>
<th>Participated in STSA</th>
<th>Did not Participate in STSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>16.2%</td>
<td>83.8%</td>
</tr>
<tr>
<td>Black</td>
<td>2.0%</td>
<td>98.0%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>4.4%</td>
<td>95.6%</td>
</tr>
<tr>
<td>Other</td>
<td>3.6%</td>
<td>96.4%</td>
</tr>
<tr>
<td>Unknown</td>
<td>22.6%</td>
<td>77.4%</td>
</tr>
<tr>
<td>Total</td>
<td>13.9%</td>
<td>86.1%</td>
</tr>
</tbody>
</table>

The increased proportion of unknown race students is interesting but the raw data underlying are very small with a total of 31 students, 7 of them participants with an expected count of only 4. One supposition may be STSA participants decreasingly
associate with a designated race and do not self-report this demographic field, but further research on this topic would be necessary to draw conclusions.

*State of Residence STSA Participants by Junior Period*

The chi-square test of independence calculated to test the significance of the distribution frequencies of the state of residence variable found a significant relationship (chi-square(4) = 9.691, p < .05). A greater number than expected of students from Missouri and from border states participated in STSA while fewer students than expected from Iowa and other states participated. The gap between Iowa and other categories was not as pronounced in this academic period. Table 22 shows participation and non-participation by state categories.

Table 22 STSA Participation by State Category for Junior Sample

<table>
<thead>
<tr>
<th>State Category</th>
<th>Participated in STSA</th>
<th>Did not Participate in STSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iowa</td>
<td>12.9%</td>
<td>87.1%</td>
</tr>
<tr>
<td>Missouri</td>
<td>15.8%</td>
<td>84.2%</td>
</tr>
<tr>
<td>Border</td>
<td>20.7%</td>
<td>79.3%</td>
</tr>
<tr>
<td>Other</td>
<td>10.9%</td>
<td>89.1%</td>
</tr>
<tr>
<td>Total</td>
<td>13.9%</td>
<td>86.1%</td>
</tr>
</tbody>
</table>

*Cumulative GPA STSA Participants by Junior Period*

The mean cumulative GPA for STSA participants and non-participants was compared using an independent t-test. Levene’s test for equality of variances was significant therefore the assumption of homogeneity of variance is not valid and equal variances are not assumed. Junior students who had participated in an STSA had a higher cumulative GPA (M = 3.32, SE = 0.38) than students who did not participate (M = 3.00, SE = 0.02). The difference in means was significant t(254) = -6.699, p < .001.)
ACT Score STSA Participants by Junior Period

The mean ACT score for STSA participants and non-participants was compared using an independent t-test. Levene’s test for equality of variances was significant therefore the assumption of homogeneity of variance is not valid and equal variances are not assumed. Junior students who had participated in an STSA had a higher ACT score (M = 23.2, SE = 0.31) than students who did not participate (M = 21.8, SE = 0.15). The difference in means was significant t(231) = -4.03, p < .001).

Major CIP Code STSA Participants by Junior Period

The largest representation of junior STSA participants by major was in humanities majors with 22.4% followed by business majors with 17.6%. Table 23 shows the STSA participation and non-participation broken down by major. The chi-square test of independence calculated to examine the significance of the distribution frequencies of the Major CIP Code variables did not find a significant relationship (chi-square(6) = 5.552, p > .05).

Table 23 STSA Participation by Major CIP Code for Junior Sample

<table>
<thead>
<tr>
<th>Majors CIP Code</th>
<th>Participated in STSA</th>
<th>Did not Participate in STSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>15.7%</td>
<td>84.3%</td>
</tr>
<tr>
<td>Education</td>
<td>11.5%</td>
<td>88.5%</td>
</tr>
<tr>
<td>Health Professions</td>
<td>17.6%</td>
<td>82.4%</td>
</tr>
<tr>
<td>Humanities</td>
<td>15.4%</td>
<td>84.6%</td>
</tr>
<tr>
<td>STEM</td>
<td>14.9%</td>
<td>85.1%</td>
</tr>
<tr>
<td>Social Science</td>
<td>11.2%</td>
<td>88.8%</td>
</tr>
<tr>
<td>Other (Undecided, Interdisciplinary)</td>
<td>10.6%</td>
<td>89.4%</td>
</tr>
<tr>
<td>Total</td>
<td>13.9%</td>
<td>86.1%</td>
</tr>
</tbody>
</table>

Estimated Family Contribution STSA Participants by Junior Period

The mean EFC for STSA participants and non-participants was compared using an independent t-test. Levene’s test for equality of variances was significant (p < .05)
therefore the assumption of homogeneity of variance is not valid. Junior students who had participated in a STSA had a higher mean EFC divided by 1000 (M = 15.70, SE = 1.3) than students who did not participate (M = 9.53, SE = 0.42). The difference in means was significant t(160) = -4.958, p < .001).

*Federal Grant Recipient Status STSA Participants by Junior Period*

The majority of STSA participants by the junior period did not receive federal grant aid as expected from the literature review. A chi-square test of independence was calculated to test the significance of the distribution frequencies of the Federal Grant Aid variable for STSA participants and STSA non-participants. There was a significant association between being a recipient of federal grant aid and STSA participation (chi-square(1) = 32.584, p < 0.001). Recipient juniors were less likely to participate than non-recipient juniors.

Table 24 STSA Participation by Federal Grant Aid Status for Junior Sample

<table>
<thead>
<tr>
<th>Federal Grant Status</th>
<th>Participated in STSA</th>
<th>Did not Participated in STSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recipient</td>
<td>8.5%</td>
<td>91.5%</td>
</tr>
<tr>
<td>Non-recipient</td>
<td>19.9%</td>
<td>80.1%</td>
</tr>
<tr>
<td>Total</td>
<td>13.9%</td>
<td>86.1%</td>
</tr>
</tbody>
</table>

*Logistic Regression Calculations Juniors*

The odds of participating in a short-term study abroad (outcome variable) were calculated with three models composed of predictor variables from demographic, academic, and financial data. The non-white race categories had very small sample sizes and were subsequently collapsed into a single predictor variable of non-white. The state of residence category of Missouri was moving with the Border state variable and was subsequently collapsed into the Border state variable for the logistic regression.
calculations. The results of the three models are presented individually and then combined to produce an integrated model. Table 25 contains the beta values, their standard errors, and the odds ratio for each variable across the models.

Table 25 Results of Junior Logistic Regression Models of Student Choice to Participate in Short-term Study Abroad (N=1222)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Demographics Model</th>
<th>Academic Model</th>
<th>Financial Model</th>
<th>Integrated Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender: Male</td>
<td>-.396 (.179)</td>
<td>.673*</td>
<td>-.332 (.233)</td>
<td>.717</td>
</tr>
<tr>
<td>Race: Non-White</td>
<td>-1.597 (.402)</td>
<td>.203**</td>
<td>-1.075 (.497)</td>
<td>.341*</td>
</tr>
<tr>
<td>Border State Resident</td>
<td>.446 (.222)</td>
<td>1.563*</td>
<td>.298 (.259)</td>
<td>1.347</td>
</tr>
<tr>
<td>Other State Resident</td>
<td>.154 (.245)</td>
<td>1.166</td>
<td>-.037 (.286)</td>
<td>.964</td>
</tr>
<tr>
<td>HS GPA</td>
<td>-.197 (.259)</td>
<td>.821</td>
<td>-.313 (.306)</td>
<td>.731</td>
</tr>
<tr>
<td>CUM GPA</td>
<td>.923 (.242)</td>
<td>2.516**</td>
<td>.843 (.282)</td>
<td>2.323**</td>
</tr>
<tr>
<td>ACT Score</td>
<td>.031 (.027)</td>
<td>1.031</td>
<td>-.018 (.033)</td>
<td>.982</td>
</tr>
<tr>
<td>Business</td>
<td>.334 (.313)</td>
<td>1.396</td>
<td>.298 (.371)</td>
<td>1.347</td>
</tr>
<tr>
<td>Education</td>
<td>.029 (.329)</td>
<td>1.029</td>
<td>-.142 (.390)</td>
<td>.867</td>
</tr>
<tr>
<td>Health Professions</td>
<td>-.178 (.429)</td>
<td>.837</td>
<td>-.121 (.490)</td>
<td>.886</td>
</tr>
<tr>
<td>Humanities</td>
<td>.176 (.298)</td>
<td>1.193</td>
<td>.257 (.350)</td>
<td>1.293</td>
</tr>
<tr>
<td>Social Science</td>
<td>-.088 (.449)</td>
<td>.916</td>
<td>-.434 (.557)</td>
<td>.648</td>
</tr>
<tr>
<td>STEM</td>
<td>.064 (.334)</td>
<td>1.067</td>
<td>.121 (.382)</td>
<td>1.129</td>
</tr>
<tr>
<td>Federal Grant</td>
<td>-.582 (.225)</td>
<td>.559**</td>
<td>-.306 (.251)</td>
<td>.736</td>
</tr>
<tr>
<td>EFC Divided by 1000</td>
<td>.016 (.007)</td>
<td>.015*</td>
<td>.010 (.007)</td>
<td>1.010</td>
</tr>
</tbody>
</table>

Statistical Significance indicated * p < .05, **p < .01

**Demographic Model Juniors**

In the junior sample the demographic model indicated sex, race, and border state of residence were all statistically significant predictors of student choice to participate in short-term study abroad. Male students have reduced odds of participating as do non-white students while students from border states have increased odds of participation.

**Academic Model Juniors**

The academic model applied to the junior sample resulted in cumulative grade point average as the only significant predictor of participation in STSA after controlling for the other academic variables. The Humanities major is represented in the overall sample at a more expected distribution in the junior sample and should strongly predict
participation based on the literature review and historical study abroad trends but was still not a significant variable.

**Financial Model Juniors**

In the junior period the financial model is a statistically significant predictor model of participation in short-term study. The odds of participation are decreased if the student is a federal grant recipient and very slightly increased for each $1000 incremental increase in estimated family contribution.

**Integrated Model Juniors**

The integrated model results in sex and financial characteristics losing their significance in predicting participation in short-term study abroad after controlling for the other variables in the model. Non-white race continued to predict decreased odds of participation at a slightly increased level and cumulative grade point average remained the most influential predictor.

**Seniors**

**Sample Overview**

The senior file included unique Winter Term course participants after exclusion of international students. Of the 1788 domestic students with 90 and more academic semester hour credits, 368 had participated in a STSA course before or during this classification period. Table 26 provides a description of the sample variables included in the analysis of demographic, academic, and financial characteristics.
Table 26 Description of Variables Included in Senior Analysis (n=1788)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description Notes</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>n</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>STSA</td>
<td>Short-term Study Abroad Status this Period</td>
<td>0.21</td>
<td>0.4</td>
<td>0</td>
<td>1</td>
<td>1788</td>
<td>0</td>
</tr>
<tr>
<td>Demographic Characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>Gender (1=Male, 0-Female)</td>
<td>0.41</td>
<td>0.49</td>
<td>0</td>
<td>1</td>
<td>1788</td>
<td>0</td>
</tr>
<tr>
<td>White</td>
<td>Race (1=White)</td>
<td>0.85</td>
<td>0.36</td>
<td>0</td>
<td>1</td>
<td>1704</td>
<td>84</td>
</tr>
<tr>
<td>Black</td>
<td>Race (1=Black)</td>
<td>0.06</td>
<td>0.24</td>
<td>0</td>
<td>1</td>
<td>1704</td>
<td>84</td>
</tr>
<tr>
<td>Hispanic</td>
<td>Race (1=Hispanic)</td>
<td>0.05</td>
<td>0.21</td>
<td>0</td>
<td>1</td>
<td>1704</td>
<td>84</td>
</tr>
<tr>
<td>Other Race</td>
<td>Race (1=Other non-White Race)</td>
<td>0.04</td>
<td>0.21</td>
<td>0</td>
<td>1</td>
<td>1704</td>
<td>84</td>
</tr>
<tr>
<td>Iowa</td>
<td>Residence (1=Iowa)</td>
<td>0.28</td>
<td>0.45</td>
<td>0</td>
<td>1</td>
<td>1769</td>
<td>19</td>
</tr>
<tr>
<td>Missouri</td>
<td>Residence (1=Missouri)</td>
<td>0.36</td>
<td>0.48</td>
<td>0</td>
<td>1</td>
<td>1769</td>
<td>19</td>
</tr>
<tr>
<td>BorderState</td>
<td>Residence (1= State Bordering Iowa + Kansas)</td>
<td>0.08</td>
<td>0.27</td>
<td>0</td>
<td>1</td>
<td>1769</td>
<td>19</td>
</tr>
<tr>
<td>Other State</td>
<td>Residence (1=Other states)</td>
<td>0.28</td>
<td>0.45</td>
<td>0</td>
<td>1</td>
<td>1769</td>
<td>19</td>
</tr>
<tr>
<td>Academic Characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUM GPA</td>
<td>Cumulative GPA</td>
<td>3.17</td>
<td>0.52</td>
<td>1.68</td>
<td>4</td>
<td>1788</td>
<td>0</td>
</tr>
<tr>
<td>ACT</td>
<td>ACT and SAT Exam scores converted</td>
<td>22.15</td>
<td>4.38</td>
<td>11</td>
<td>35</td>
<td>1281</td>
<td>507</td>
</tr>
<tr>
<td>Business</td>
<td>Major CIP Code Category (Business =1)</td>
<td>0.15</td>
<td>0.35</td>
<td>0</td>
<td>1</td>
<td>1788</td>
<td>0</td>
</tr>
<tr>
<td>Education</td>
<td>Major CIP Code Category (Education =1)</td>
<td>0.22</td>
<td>0.41</td>
<td>0</td>
<td>1</td>
<td>1788</td>
<td>0</td>
</tr>
<tr>
<td>HealthProf</td>
<td>Major CIP Code Category (Health Professions =1)</td>
<td>0.19</td>
<td>0.39</td>
<td>0</td>
<td>1</td>
<td>1788</td>
<td>0</td>
</tr>
<tr>
<td>Humanities</td>
<td>Major CIP Code Category Humanities =1)</td>
<td>0.15</td>
<td>0.36</td>
<td>0</td>
<td>1</td>
<td>1788</td>
<td>0</td>
</tr>
<tr>
<td>SocialScience</td>
<td>Major CIP Code Category Social Science =1)</td>
<td>0.13</td>
<td>0.34</td>
<td>0</td>
<td>1</td>
<td>1788</td>
<td>0</td>
</tr>
<tr>
<td>STEM</td>
<td>Major CIP Code Category (STEM =1)</td>
<td>0.11</td>
<td>0.31</td>
<td>0</td>
<td>1</td>
<td>1788</td>
<td>0</td>
</tr>
<tr>
<td>OtherMajor</td>
<td>Major CIP Code Category (Other Majors =1)</td>
<td>0.06</td>
<td>0.23</td>
<td>0</td>
<td>1</td>
<td>1788</td>
<td>0</td>
</tr>
<tr>
<td>Financial Characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FedGrant</td>
<td>Federal Grant Aid (1= Recipient)</td>
<td>0.56</td>
<td>0.50</td>
<td>0</td>
<td>1</td>
<td>1587</td>
<td>201</td>
</tr>
<tr>
<td>EFC</td>
<td>Estimated Family Contribution in Dollars Divided by 1000</td>
<td>10.05</td>
<td>14.05</td>
<td>0</td>
<td>99.99</td>
<td>1587</td>
<td>201</td>
</tr>
</tbody>
</table>

Sex of STSA Participants by Senior Period

The STSA participants as seniors were a majority female as expected from the literature review. A chi-square test of independence was calculated to test the significance of the distribution frequencies of the sex variable for STSA participants and STSA non-participants. There was a significant association between sex and STSA participation (chi-square(1) = 20.504, p < 0.001). Female seniors were more likely to have participated than male seniors; 70% of senior STSA participants were female. Table 27 shows participation and non-participation break-down by sex.
Table 27 STSA Participation by Sex for Senior Sample

<table>
<thead>
<tr>
<th>Sex</th>
<th>Participated in STSA</th>
<th>Did not Participate in STSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>24.2%</td>
<td>75.8%</td>
</tr>
<tr>
<td>Male</td>
<td>15.4%</td>
<td>84.6%</td>
</tr>
<tr>
<td>Total</td>
<td>20.6%</td>
<td>79.4%</td>
</tr>
</tbody>
</table>

Race STSA Participants by Senior Period

White seniors were more likely to participate and participants represented 88% of students choosing to participate in a STSA. Table 28 shows participation and non-participation by race. A chi-square test of independence was calculated to test the significance of the distribution frequencies of the race variables for STSA participants and STSA non-participants. There was a significant association between race and STSA participation (chi-square(4) = 23.847, p < 0.001). White seniors were more likely to have participated than all other race seniors combined.

Table 28 STSA Participation by Race for Senior Sample

<table>
<thead>
<tr>
<th>Race</th>
<th>Participated in STSA</th>
<th>Did not Participate in STSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>22.3%</td>
<td>77.7%</td>
</tr>
<tr>
<td>Black</td>
<td>8.9%</td>
<td>91.1%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>11.3%</td>
<td>88.8%</td>
</tr>
<tr>
<td>Other</td>
<td>7.9%</td>
<td>92.1%</td>
</tr>
<tr>
<td>Unknown</td>
<td>25.0%</td>
<td>75.0%</td>
</tr>
<tr>
<td>Total</td>
<td>20.6%</td>
<td>79.4%</td>
</tr>
</tbody>
</table>

State of Residence STSA Participants by Senior Period

The chi-square test of independence calculated to test the significance of the distribution frequencies of the state of residence variable found a significant relationship (chi-square(4) = 37.48, p < .001). A greater proportion than expected of students from Missouri and from border states participated in STSA while significantly fewer students
from Iowa participated than expected. Table 29 shows participation and non-participation by state categories.

Table 29 STSA Participation by Category for Senior Sample

<table>
<thead>
<tr>
<th>State Category</th>
<th>Participated in STSA</th>
<th>Did not Participate in STSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iowa</td>
<td>12.0%</td>
<td>88.0%</td>
</tr>
<tr>
<td>Missouri</td>
<td>26.4%</td>
<td>73.6%</td>
</tr>
<tr>
<td>Border</td>
<td>25.0%</td>
<td>75.0%</td>
</tr>
<tr>
<td>Other</td>
<td>20.4%</td>
<td>79.6%</td>
</tr>
<tr>
<td>Total</td>
<td>20.6%</td>
<td>79.4%</td>
</tr>
</tbody>
</table>

*Cumulative GPA STSA Participants by Senior Period*

The mean cumulative GPA for STSA participants and non-participants was compared using an independent t-test. Levene’s test for equality of variances was significant therefore the assumption of homogeneity of variance is not valid and equal variances are not assumed. Senior students choosing to participate in an STSA had a higher cumulative GPA (M = 3.40, SE = 0.02) than students who did not participate (M = 3.11, SE = 0.01). The difference in means was significant t(654) = -10.626, p < .001.

*ACT Score STSA Participants by Senior Period*

The mean ACT score for STSA participants and non-participants was compared using an independent t-test. Levene’s test for equality of variances was non-significant therefore the assumption of homogeneity of variance is valid. Senior students choosing to participate in an STSA had a higher ACT score (M = 23.5, SE = 0.24) than students who did not participate (M = 21.8, SE = 0.14). The difference in means was significant t(1279) = -5.921, p < .001.
Major CIP Code STSA Participants by Senior Period

The largest representation of senior STSA participants by major was Health Professions majors with 24.5% which may be attributed to a very popular nursing focused trip open only to juniors and seniors. The representation by other majors became more even and representation by humanities majors rose to 19% in a more expected pattern. The rise of business majors to 16% was unexpected based on the literature review but may be attributed to a set of business focused course offerings. Table 30 shows the STSA participation and non-participation broken down by major. The chi-square test of independence calculated to examine the significance of the distribution frequencies of the Major CIP Code variables found a significant relationship (chi-square(6) = 37.064, p < .001). This is the first academic period to show a significant relationship between major and STSA participation.

Table 30 STSA Participation by Major CIP Code for Senior Sample

<table>
<thead>
<tr>
<th>Majors CIP Code</th>
<th>Participated in STSA</th>
<th>Did not Participate in STSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>22.3%</td>
<td>77.7%</td>
</tr>
<tr>
<td>Education</td>
<td>12.8%</td>
<td>87.2%</td>
</tr>
<tr>
<td>Health Professions</td>
<td>26.9%</td>
<td>73.1%</td>
</tr>
<tr>
<td>Humanities</td>
<td>26.4%</td>
<td>73.6%</td>
</tr>
<tr>
<td>STEM</td>
<td>24.6%</td>
<td>75.4%</td>
</tr>
<tr>
<td>Social Science</td>
<td>15.8%</td>
<td>84.2%</td>
</tr>
<tr>
<td>Other (Undecided, Interdisciplinary)</td>
<td>13.5%</td>
<td>86.5%</td>
</tr>
<tr>
<td>Total</td>
<td>20.6%</td>
<td>79.4%</td>
</tr>
</tbody>
</table>

Education, Social Science, and Other majors are underrepresented in STSA by the senior period. The finding in Social Science and Other majors is not surprising based on the literature review but the education major falling below all others proportionally is unusual considering the emphasis in this discipline on understanding diversity and recent
strides in study abroad regarding participation by students in the education major nationally.

*Estimated Family Contribution STSA Participants by Senior Period*

The mean EFC for STSA participants and non-participants was compared using an independent t-test. Levene’s test for equality of variances was significant (p > .05) therefore the assumption of homogeneity of variance is not valid. Senior students choosing to participate in an STSA had a higher mean EFC divided by 1000 (M = 14.26, SE = .97) than students who did not participate (M = 9.08, SE = 0.37). The difference in means was significant t(386) = -4.995, p < .001).

*Federal Grant Recipient Status STSA Participants by Senior Period*

The majority of STSA participants as seniors did not receive federal grant aid as expected from the literature review. A chi-square test of independence was calculated to test the significance of the distribution frequencies of the Federal Grant Aid variable for STSA participants and STSA non-participants. There was a significant association between being a recipient of federal grant aid and STSA participation (chi-square(1) = 32.121, p < 0.001). Recipient seniors were less likely to participate than non-recipient seniors. The proportion of federal grant aid recipients who were participants did however increase noticeably. Table 31 shows participation rates by federal grant aid status.

Table 31 STSA Participation by Federal Grant Status for Senior Sample

<table>
<thead>
<tr>
<th>Federal Grant Status</th>
<th>Participated in STSA</th>
<th>Did not Participate in STSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recipient</td>
<td>13.8%</td>
<td>86.2%</td>
</tr>
<tr>
<td>Non-recipient</td>
<td>25.0%</td>
<td>75.0%</td>
</tr>
<tr>
<td>Total</td>
<td>20.6%</td>
<td>79.4%</td>
</tr>
</tbody>
</table>
Logistic Regression Calculations Seniors

The odds of participating in a short-term study abroad (outcome variable) were calculated with three models composed of predictor variables from demographic, academic, and financial data. The non-white race categories had very small sample sizes and were subsequently collapsed into a single predictor variable of non-white. The state of residence category of Missouri was moving with the Border state variable and was subsequently collapsed into the Border state variable for the logistic regression calculations. The results of the three models are presented individually and then combined to produce an integrated model. Table 32 contains the beta values, their standard errors, and the odds ratio for each variable across the models.

Table 32 Results of Senior Logistic Regression Models of Student Choice to Participate in Short-term Study Abroad (N=1788)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Demographics Model</th>
<th>Academic Model</th>
<th>Financial Model</th>
<th>Integrated Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender: Male</td>
<td>-.433 (.132)</td>
<td>1.649**</td>
<td>-.285 (.180)</td>
<td>.752</td>
</tr>
<tr>
<td>Race: Non-White</td>
<td>-1.135 (.235)</td>
<td>3.211**</td>
<td>-.915 (.361)</td>
<td>.401*</td>
</tr>
<tr>
<td>Border State Resident</td>
<td>.971 (.166)</td>
<td>2.640**</td>
<td>.662 (.210)</td>
<td>1.939**</td>
</tr>
<tr>
<td>Other State Resident</td>
<td>.924 (.185)</td>
<td>2.520**</td>
<td>.672 (.225)</td>
<td>1.959**</td>
</tr>
<tr>
<td>HS GPA</td>
<td>-.188 (.200)</td>
<td>.889</td>
<td>-.335 (.233)</td>
<td>.715</td>
</tr>
<tr>
<td>CUM GPA</td>
<td>1.055 (.200)</td>
<td>2.871**</td>
<td>.028 (.026)</td>
<td>1.028**</td>
</tr>
<tr>
<td>ACT Score</td>
<td>.034 (.022)</td>
<td>1.034</td>
<td>1.033 (.238)</td>
<td>2.808</td>
</tr>
<tr>
<td>Business</td>
<td>.224 (.359)</td>
<td>1.251</td>
<td>.395 (.401)</td>
<td>1.484</td>
</tr>
<tr>
<td>Education</td>
<td>-.458 (.360)</td>
<td>.633</td>
<td>-.452 (.396)</td>
<td>.637</td>
</tr>
<tr>
<td>Health Professions</td>
<td>.383 (.389)</td>
<td>1.67</td>
<td>.165 (.437)</td>
<td>1.179</td>
</tr>
<tr>
<td>Humanities</td>
<td>.288 (.355)</td>
<td>1.334</td>
<td>.296 (.391)</td>
<td>1.344</td>
</tr>
<tr>
<td>Social Science</td>
<td>-.064 (.375)</td>
<td>.938</td>
<td>-.127 (.412)</td>
<td>.881</td>
</tr>
<tr>
<td>STEM</td>
<td>-.015 (.375)</td>
<td>.985</td>
<td>-.276 (.426)</td>
<td>.759</td>
</tr>
<tr>
<td>Federal Grant</td>
<td>-.514 (.153)</td>
<td>.598**</td>
<td>-.265 (.190)</td>
<td>.767</td>
</tr>
<tr>
<td>EFC Divided by 1000</td>
<td>.013 (.005)</td>
<td>1.013**</td>
<td>.006 (.006)</td>
<td>1.006</td>
</tr>
</tbody>
</table>

Statistical Significance indicated * p < .05, **p < .01

Demographic Model Seniors

In the senior sample the demographic model indicated sex, race, and state of residence were all statistically significant predictors of student choice to participate in short-term study abroad. Male students have reduced odds of participating as do non-
white students while students from border states and other states have increased odds of participation over students from Iowa.

*Academic Model Seniors*

The academic model applied to the senior sample resulted in cumulative grade point average as the only significant predictor for seniors of participation in STSA. After controlling for this after matriculation variable HS GPA and ACT are no longer significantly predicting participation. Major is not as influential as it was in previous academic classifications and is not a statistically significant influence in the model. All students are required to complete two Winter Term courses (on campus or off campus) as a graduation requirement and it could be the required nature of the intersession courses is overcoming the major bias historically seen in study abroad programs but further research would be required to fully address this possibility.

*Financial Model Seniors*

By the time of the senior period the financial model is a statistically significant predictor of participation in short-term study. The odds of participation are slightly decreased if the student is a federal grant recipient and slightly increased for each $1000 incremental increase in estimated family contribution.

*Integrated Model Seniors*

The integrated model results in sex and financial characteristics losing their significance in predicting participation in short-term study abroad after controlling for the other variables in the model. Non-white race continued to predict decreased odds while being from a border state or other state now significantly predict increased odds of participation as did cumulative grade point average but at a smaller level of influence.
Comparisons Across Academic Classifications

The analysis conducted was organized by STSA participation status at the time of the academic classification period. This section will summarize the findings for each variable across the academic classifications to begin organizing for consideration of the meaning of these findings in the final chapter.

Sex

Females were consistently found to have a higher STSA participation in the bivariate models and in the demographic regression models for sophomore, junior, and senior (See Figure 7). Sex was never significant in the integrated regression model.

Figure 7. Participation Rates by Sex by Time of Academic Classification Period

Race

Race was consistently found to have a significant relationship to STSA participation and was a significant predictor in the demographic regression model over all academic classification periods (See Figure 8). White students were more likely to
participate than non-white students. However, race was not a significant predictor in the integrated regression model and it is likely race was related to other factors controlled for in the integrated model. Unknown race STSA participation rates rose over periods but no significant relationship was found to exist and the raw number of unknown race students in the sample was small.

*Figure 8. Participation Rates by Race by Time of Academic Classification Period*

![Graph showing participation rates by race and academic period]

**State of Residence**

State of residence was consistently found to have a significant relationship to STSA participation after the freshman period (See Figure 9). Students from Iowa were less likely to participate while border state and other state students were more likely to participate. State of residence of border state was a significant predictor in the demographic regression model over academic classification periods after the freshmen period and other state was significant in the senior period. State of residence of Border and Other state were both significant predictors in the integrated regression model for the senior period. The drop in Iowa participation rate in the senior period is a reflection of
students not retained in the sample from junior to senior period. This would occur if a student had completed the required Winter Term courses in the junior period or if they were not retained at the institution to the next period.

Figure 9. Participation Rates by State of Residence Academic Classification Period

Cumulative GPA

Cumulative GPA was found to have a significant difference in means for STSA participants, who had higher mean GPA, and non-participants across academic classification periods (See Figure 10). Cumulative GPA was a significant predictor in the academic regression model for sophomores, juniors, and seniors. Cumulative GPA was the strongest predictor of STSA participation in the integrated model for the junior and senior periods.
ACT Score

ACT score was found to have a significant difference in means for STSA participants, who had a higher mean ACT score, and non-participants across academic classification periods (See Figure 11). ACT Score was a significant predictor in the academic regression model for freshmen but after controlling for cumulative GPA in other periods ACT was no longer a significant predictor. The drop in mean ACT score of non-participants from freshman to sophomore period may be due to overall institutional non-retention of students in the freshman sample with the lowest ACT scores. It is also interesting to note the decrease the difference of the mean ACT for participants and non-participants by the senior classification period.
Figure 11. Mean ACT Score STSA Participants and Non-participants Academic Classification Period

Major

Major was not found to have a significant relationship to STSA participation until the senior period. Major was not a significant predictor in the academic regression model over academic classification periods when controlling for other academic factors or in the integrated model. The participation rates by major while not statistically significant were interesting because of the unexpected distribution of participation across majors. Health Professions and STEM major participation was consistently higher than expected from the literature review and education major participation was lower than the institutional average across all periods (See Figure 12).
Federal Grant Aid Recipient Status

Federal grant status was consistently found to have a significant negative relationship to STSA participation and was a significant predictor in the financial regression model over academic classification periods of sophomore, junior, and senior (See Figure 13). Federal grant status was not however significant in the integrated regression model.
Figure 13. Participation Rates by Federal Grant Status by Academic Classification Period

Estimated Family Contribution

EFC was found to have a significant difference in means for STSA participants and non-participants after the freshman academic classification period (See Figure 14). EFC was a significant predictor in the financial regression model for juniors and seniors but not in the integrated model.
Analysis of Qualitative Data

Analysis of qualitative data through the lens of Perna’s model was employed to address research question 2: What do students perceive as influential in the decision to participate in short-term study abroad? The layers of Perna’s model and representative sub-codes were used as inductive codes for the analysis while a limited number of sub-codes were emergent during the analysis. The student participants were labeled with descriptors for the variables from the quantitative phase to allow code analysis by descriptor in support of the mixed methods approach to understanding the student choice to participate in STSA.

Setting of the Research

It is appropriate to summarize the setting again here as a reference for the findings of the qualitative analysis. A detailed description of the setting and the program being
studied was presented in Chapter 1 to frame the context of the research and will not be fully repeated here. The setting is a small private institution that is affiliated with a Christian denomination with a traditional residential campus in a rural setting. The residential enrollment is approximately 1000 students and the inclusion of extended campuses and online students increases the enrollment to approximately 3000 students (U.S. Department of Education. Institute of Education Sciences, National Center for Education Statistics, 2011). The Winter Term intersession program studied is focused on undergraduate students and is coordinated by the residential campus.

Sources of Evidence

I am interested in what students perceive as influential in the choice process and used the student interviews to determine all emergent codes. Three faculty interviews, an observation, and a limited document analysis were completed for triangulation purposes (Creswell, 2007; Mertens, 2005). Codes found in student interviews but not confirmed elsewhere were not eliminated from the findings because of their importance in understanding the student choice specifically from the perspective of the student (Creswell, 2007). Figure 15 is a visual representation of the sub-codes produced using the Dedoose application after multiple coding sessions to confirm the coding scheme developed during analysis of student interviews. Additionally a code by source graphic was generated to ensure no single source was over utilized. The three lengthiest interviews contained the highest frequency of codes and excerpts as expected but not in a disproportionate representation of any specific codes. The graphic generated in Dedoose included participant names and is not included here to protect the confidentiality of the participants.
The role of faculty as institutional staff naturally makes them more aware of related administrative work and the overall organizational context. It was not surprising to see faculty interviews focused on Layer 2/3. The faculty excerpts coded Faculty Mentoring are samples I identified as the result of faculty sharing a story that indicated
they were mentoring a student rather than the faculty identifying themselves as a mentor directly.

The observation I conducted was similarly focused on Layer 2/3 as the internal Layer 1 codes were not outwardly observable. The document review was limited and as expected provided little evidence about the student choice process. The documents did provide an opportunity for me to confirm reports about institutional policy.

Student Participants

The five initial voluntary student participants were all white but represented four majors and all three SES status levels. Two non-white students considering participation in a short-term study abroad were recruited to the study through a referral from a faculty member and from one of the initial participants. Table 33 describes the student participants and indicates their final STSA choice. The five initial volunteers made the choice to participate while the two follow-up recruits eventually made the choice not to participate this academic year. Both of the non-participants indicated openness to considering participation again in the future. I felt the volunteers adequately represented different groups of students and achieved the goal of including the historically underrepresented groups in study abroad of males, low-SES, and non-white.
Table 33  Student Participant Descriptions

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Sex</th>
<th>Race</th>
<th>State</th>
<th>Academic Classification</th>
<th>Major</th>
<th>SES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kari</td>
<td>Female</td>
<td>White</td>
<td>Other</td>
<td>Junior</td>
<td>Health Science</td>
<td>Low</td>
</tr>
<tr>
<td>Tim</td>
<td>Male</td>
<td>White</td>
<td>Iowa</td>
<td>Junior</td>
<td>Health Science</td>
<td>Moderate</td>
</tr>
<tr>
<td>Bryan</td>
<td>Male</td>
<td>White</td>
<td>Other</td>
<td>Junior</td>
<td>Education</td>
<td>Moderate</td>
</tr>
<tr>
<td>Lydia</td>
<td>Female</td>
<td>White</td>
<td>Boarder</td>
<td>Junior</td>
<td>STEM</td>
<td>Moderate</td>
</tr>
<tr>
<td>Rachel</td>
<td>Female</td>
<td>White</td>
<td>Missouri</td>
<td>Junior</td>
<td>Humanities</td>
<td>High</td>
</tr>
<tr>
<td>Damon*</td>
<td>Male</td>
<td>Non-white</td>
<td>Other</td>
<td>Sophomore</td>
<td>Business</td>
<td>Low</td>
</tr>
<tr>
<td>Gracie*</td>
<td>Female</td>
<td>Non-white</td>
<td>Missouri</td>
<td>Senior</td>
<td>Education</td>
<td>Low</td>
</tr>
</tbody>
</table>

*Denotes final STSA participation status was non-participant

Faculty Sponsor Participants

The three faculty sponsors recruited for participation in the study represented three different disciplines and each had multiple year experience leading short-term study abroad courses to different locations. To protect participant confidentiality their detailed descriptions will not be provided and they will be referred to as Faculty Sponsor 1, Faculty Sponsor 2, and Faculty Sponsor 3. I felt they adequately represented different perspectives on the student choice process and sufficiently serve to confirm student interview findings.

Human Capital Findings

Human capital considerations had a total of 70 uniquely coded excerpts. My observation of an orientation session included 16 of the excerpts and the remaining distributed evenly between students and faculty. The ability to pay for participation in a STSA as an addition to the standard tuition is influential in the choice process as is the cost-benefit analysis undertaken by students and by their parents.
Every student interviewed indicated the financial considerations were influential but the one high SES student, Rachel, focused on it very briefly only when directly asked about financial considerations. Other students volunteered considerations such as:

Tim (participant): “just trying to pay for it to go down there and stuff, um, that was kind of a biggie to figure out, if I was going to go or not, to figure out if I could come up with the money”

Lydia (participant): “you kind of have to make it happen, you have to find money”

Kari (participant): “before that just didn’t work out because of the money” and “Money was a big part and I’m excited to be able to afford it this year” (with workshop)

Bryan (participant): “everybody thinks oh it’s too much, I can’t do it, too much money”

Damon* (non-participant): “it interested me, if I could save the right amount of money and stuff, I would definitely do it”

Gracie* (non-participant): “with everything going on, there’s no way I could save for that”

The two students who ultimately chose not to participate both used the phrase save in relationship to the money needed while the participatory students were actively pursuing other strategies such as fund raising, using previously planned savings, and borrowing. These two students are indicating recognition of the need to plan ahead financially but have not yet taken the necessary steps. Financial aid and loans are not seen as an option. The ability to gather resources to pay for a short-term study abroad was identified by students as influential in the choice process but was a barrier students were able to identify and plan around.
Scholarships Emergent Code

All five students who chose to participate and all three faculty noted the institution has a donor who provides approximately $300 in scholarship money to each student participating to offset the cost of the travel courses. The two students who chose not to participate did not mention the scholarships even when asked directly what the university does to help students who want to participate. More discussion of the scholarships will take place in Layer 2/3 analysis but it is important to note here that scholarships for participation were influential when students considered their financial options.

Cost-Benefit Analysis

Underlying the human capital considerations is the cost-benefit analysis taking place that is beyond the basic need to gather resources. There was recognition by three students that the opportunity to travel at a lower cost is positively influencing the decision to participate as demonstrated by “it’s that much for just a plane ticket” (Rachel), “a total of $1500 to go and that’s all inclusive, everything” (Tim enthusiastically) and “to spend that much time over there for that price is pretty efficient to me” (Damon*). Faculty sponsors are aware of this thinking by students and noted for example “it’s probably the most affordable way to travel abroad because of the group impact” (Faculty Sponsor 3).

There was little recognition of the future financial benefit that may be gained by a student participating and surprisingly this was the case with both students and faculty. This was true even when the question was framed as “Why are you interested in going?” The exception was the one high SES student, Rachel, who noted “it’s exciting and something cool to talk about” in an interview.
One of the benefits considered that was identified by students who chose to was the benefit to self of the service learning component by “really investing in the people it feels great” (Lydia) and “helping…it inspires you” (Kari). The other was the intercultural competence benefits identified with comments such as “exposure to diverse cultures” (Gracie*) and “seeing a place where some of the things I thought were resolved in the world are still issues” (Tim). Rachel identified “just to be a well cultured person, to show that you have a basic understanding of people not like you is good for anybody I think” as highly motivational in her decision process. Faculty sponsors were all aware of the benefit of exposure to diverse cultures for their students from the perspective of operating in a global society. All three faculty members said something along the lines of encouraging students to think about developing “the skills of being comfortable with people who are different than you” (Faculty Sponsor 1).

The benefits of participating to develop cultural competence skills and for the personal satisfaction of helping are influencing the student decision. The opportunity to travel relatively inexpensively is being also being taking into consideration. Each of these are components of the human capital layer; however, the potential for building human capital and increasing future potential earnings does not appear to be communicated directly by faculty or to be influencing students as a cohesive concept. The additional leap from these intrinsic rewards to influence of the extrinsic benefit of cultural awareness positively influencing a global economy and global society was not expressed in the interviews but may be somewhat inferred from the combination of wanting to help others and wanting to understand others.
*Parents and Money Emergent Sub-Code*

Bryan indicated his parent was very concerned about the finances and stated his dad asks “Why are you doing that? You should be saving your money so you can take out less loans,” but he saw enough value in the experience to increase his debt load to take advantage of the opportunity because “I’m not going to get to travel ever again and actually get to spend time not being a tourist.” Gracie* stated “it’s not that they didn’t think it would be a good experience or anything like that, but it’s mostly my mother that’s all kind of, but that costs a lot of money and we don’t have a thousand dollars to just throw at you”. Damon* did not ask his parent for the money because he was aware it was not available and offered “it’s like, financially, anything, she’ll go out of her way and try her hardest to make it happen” and he did not want to burden her further.

The parents’ attitude toward money and their own cost-benefit analysis was playing a role in the decision process for students. In the case of Bryan, his own personal cost-benefit analysis superseded the one his father was conducting but he was very aware his decision was made without parental support. In the case of Gracie* the parental influence was taken strongly into consideration and was certainly taken into account when she decided not to participate. Finally, for Damon*, it seems his own cost-benefit analysis, resulting in a decision not to participate, was overriding the one he implied his mother would undertake resulting in her making financial sacrifices to help him participate. The incorporation of parental attitudes about money and the benefits of participating were identified in the human capital layer but those attitudes also bleed over into the realm of the internalized frame of reference or habitus that is the basis of Layer 1 discussed next.
Layer 1 Habitus

The analysis resulted in 90 excerpts tagged with Layer 1 code and sub-codes. Most of these are from student interviews with only 30 tagged in the faculty interviews. This is expected because the topic of Habitus is intrinsically personal and by its nature not discoverable through observation by the researcher or faculty sponsors. Planned Previous Travel sub-code and Previous Community sub-code were difficult to distinguish during analysis and were collapsed into a single Previous Experience sub-code that was not treated as emergent.

Family Support

The influence of family members was evident in student interviews and consistently when they spoke about these supportive relations there was an attitude of gratitude for the encouragement and of shared excitement:

Tim: “My parents really influenced my decision on that and I’m glad they did because at the time wasn’t too sure, but now I’m getting excited as we’re getting closer.”

Lydia: “The Jamaica trip is definitely in consideration and my grandma really wants me to go on it”

Bryan: “I know my aunt is really supportive”

Kari: “My sister, she went first and her first Winter Term was going to Nicaragua. She went for three years and so every year for Christmas she would be home getting ready not to go back to school but to go to Nicaragua. That was the coolest thing that she got to do that for school. That was my first introduction to it.”

Damon* (non-participant): “My mom likes stuff like that”

The other student, Gracie*, who chose not to participate did not mention a supportive family member during the interview or a previous non-related mentor who
was influential. Without a trusted advisor at home to encourage her desire to participate
Gracie* exited the choice process and expressed the hope that next year “my parents
might be more supportive of it.”

*Family as a Barrier*

Financial concerns by parents were a strong barrier and were discussed in the
previous section. Three students who chose to participate briefly mentioned overcoming
some family concerns with information provided by faculty sponsors. Faculty sponsors
also indicated most family concerns are mitigated by providing students with as much
detailed information as possible early in the decision process. Faculty Sponsor 1
additionally spoke about family concerns about risks that will be addressed in a later in
the emergent code Risk Management.

*Previous Experiences*

Previous Experiences is a sub-code developed to collapse Previous Travel and
Previous Community into a single code. There were no faculty excerpts coded for
Previous Experiences. All students except Tim self-identified previous experiences as
influential in their decision process and each of them seemed to enjoy the process of
explaining how their past was helping them to navigate the current choice process.

Kylie told detailed stories about a domestic mission trip in high school and a
church member who spoke about experiences he had on a short-term study abroad trip in
college. Bryan enthusiastically talked about a time when he traveled overseas in high
school with a language teacher and Lydia became very animated and said “I had an uncle,
a great uncle actually, and he was my big inspiring story for traveling.” Gracie* shared a
previous experience at a conference she attended domestically where many other cultures
were represented and Damon* became very emotional speaking about an opportunity he had to attend the first inauguration of President Obama.

It was obvious in each case that the students were deeply impacted by these previous experiences and were applying them to the current after matriculation choice. Interestingly, the most energetic point in the interview with Tim was when he shared a story about the pre-class he was taking to prepare for his trip. While I did not identify this as a Previous Experience, the STSA course was already having a similar effect on Tim that the Previous Experiences had on the other students.

Layer 1 Emergent Sub-Codes

During analysis I identified two emergent sub-codes related to student habitus. Openness to new experiences and a sense of adventure was clearly identified in my student interviews and was sub-coded as Adventurous Spirit. The work by Salisbury, Umbach, Paulsen, and Pascarella (2009) utilized an Openness to Diversity variable that did not emerge in this research but could be considered related to elements of Adventurous Spirit. The service learning focus of many short-term study abroad programs including the one at this institution had ramifications in the decision process for students and was sub-coded as Desire to Serve.

Adventurous spirit. All but one of the students interviewed who chose to participate in the academic year of the research eluded to having an adventurous spirit and indicated this was influential in the decision to pursue participation in a short-term study abroad course.
The emergent code of Adventurous spirit was identified in these types of phrases:

Bryan: “I like doing new things.”

Kari: “I have always wanted to travel... so that was a huge part of it and I feel confident I can do it.”

Rachel: “I kind of liked that I was just going to go and do what you do”

Lydia: “It’s really exciting to know, like wow, I’m going to meet new people and it’s going to be so much fun” and “I’ve always been one of those that I’m pretty okay with being in a new group of people”

The two students interviewed who did not choose to participate also indicated their openness to an unknown experience was influential during the decision process:

Damon*: “I’m the type of person, I definitely want to go abroad, I’m that kind of person. I don’t mind taking risks maybe, is that the word I’m looking for, chances maybe.”

Gracie*: “We were the type of family, we never were the type that went on the tour groups, we just kind of winged it, which is probably dangerous and not a good idea [laughing].”

The students were interested in participating because they saw the travel course as an adventure outside of their normal student lives.

The single student who did not indicate an adventurous spirit was the student who most strongly emphasized choosing to participate in a highly structured course with a very experienced faculty leader. The ways the institutional setting influenced the choice by this less adventurous student will be examined further in the later discussion of Layer 2/3 findings.
Desire to serve. The short-term study abroad courses offered in the program are generally service learning experiences structured around a service project in the host country. Each of the students who chose to participate expressed a strong desire to serve others in a meaningful way through this experience and in the future and indicated this was influential in their choice.

Bryan: “It made me feel like what I was doing and the good relationships I had were really making a small impact. It wasn’t just a vacation trip for me, it was something that not only meant a lot to me, but a lot to them, the local people. I am really open to the idea of going and maybe teaching English or doing another program like that.”

Rachel: “I don’t want it to ever look like some rich white person came in and is just going to solve the problems. It comes off like that I think and I worry about that, so I hope we are very busy there with real work.”

Tim: “So, like, they’re desperate for care. Just kind of makes you want to do it, I guess.”

Lydia: “What I really want to do with my life is to open a clinic or a hospital abroad.”

Kari: “The whole point... is that you’re helping people...I see it more as me going, it inspires you and it makes you long term committed. Not that I wasn’t long term committed but I see it as an investment for the long term.”

All three faculty members shared stories about students who demonstrated a desire to serve and were drawn to participating in the trips for this reason. Faculty Sponsor 1 summed up the idea by saying “it’s a different kind of student; it’s somebody that has a philosophy that says I’m going to help. Maybe we are blessed to have the kind of people who really wanted to be a part of something that would benefit other people as well as themselves.”

The service learning component of the trips in this program are a compelling influence in the student choice to participate. College age students are in a
developmental stage of life that corresponds to a growing awareness of the needs of others (Astin, 1984; Daloz, 2000; Jones, Rowan-Kenyon, Ireland, Niehaus, & Skendall, 2012) and it makes sense that the service component would be highly attractive to many students.

It is interesting to note the two students who were considering participation and chose not to go did not express this desire to serve during their interviews. Both of the non-participants focused on the benefit to themselves of participating in a trip and neither mentioned the service component of the trips they were considering.

Layer 2/3 Higher Education Setting/University Community

There were 378 unique codes for Layer2/3 applied overall in the analysis. The sub-codes of Policy and Process and Culture are highly related and excerpts were often given both of these sub-codes resulting in duplicate count for these excerpts. The student excerpts regarding Institutional Culture were as often related to peer mentoring as they were to policy. The faculty excerpts were more often related to policy. The co-movement of these codes for these two sources of evidence is demonstrated in Figure 16 and Figure 17.

Institutional culture surrounding short-term study abroad was demonstrated for me by students when they shared information about policies and processes and about peers influencing and supporting each other in the decision process but also in stories about faculty becoming personally involved in their decision process. As a result, Faculty Mentoring also falls in the institutional culture category and had similar covariance for interviews as shown in Figure 18. The evidence of faculty mentoring was more heavily
concentrated in faculty interviews because they shared stories about shepherding many students while the students interviewed generally shared their own personal stories.

*Figure 16. Institutional Policy Co-Variation with Institutional Culture*
Figure 17. Peer Mentoring Co-Variation with Institutional Culture

Figure 18. Faculty Mentoring Co-Variation with Institutional Culture
Institutional Policy and Process

The influence of institutional policies designed to encourage participation was evident in interviews. Well established processes that have been developed over many years of executing short-term study abroad courses facilitate participation by simplifying the student experience when possible and addressing identified barriers before they occur. Students appreciated the simplified processes and the ready availability of support in the advising center.

Payment policies. The institution has enough experience with offering short-term study abroad courses to have developed flexible payment plan options. Official deadlines are set to help students stay on track and a modest $200 non-refundable deposit is required before airfare is booked but individual needs are taken into consideration and there is tremendous latitude given to the faculty sponsor in making payment timing decisions. When asked directly what the university has done to help students who want to participate in a STSA these payment policies were mentioned:

Rachel: “The first half was due in November but I haven’t paid anything yet and it’s okay”

Tim: “We did a payment plan thing, the payments were like three hundred dollars, three hundred dollar increments once a month until it was paid off.”

All three faculty members indicated a willingness by the institution to work with a student to pay for the course on a flexible schedule and in my observation session the faculty sponsor announced the official dates for payments and then assured students that “as long as they have communicated a plan” it will be acceptable if they have not officially completed all payments by the deadline. Bryan commented “Yeah, you
reminded me I need to go and check on the money” because he had not made any payments and it was already past several deadlines.

There is also awareness by all three of the faculty sponsors of the option to use financial aid for the cost of the trip, “Students can use financial aid for their trip” (Faculty Sponsor 2), “It’s a legitimate educational expense and financial aid may be used for that” (Faculty Sponsor 3), and they spoke about coaching students to visit the financial aid office for help with the process. Bryan is however the only student who mentioned this as a strategy he used to finance the course.

*Scholarships.* All three faculty members noted a donor has subsidized travel for students by approximately $300 each for many years and expressed their appreciation for this assistance. The scholarship is not however guaranteed to be available every year and faculty sponsors do not announce the amount of subsidy until students are fully committed to participation. Therefore, unless a student has heard from a peer previously, the scholarship is not very influential in the decision process. Only two students mentioned the scholarships as influential in the decision process and both were moderate SES males:

Tim: “Even if it’s a couple hundred dollars it still helps out”

Bryan: “I think the biggest thing with (the university) is the donors who give money…through them they have deferred the cost”

One of the low-SES students mentioned the availability of a scholarship would be helpful while one of the other low-SES students was already taking advantage of a workshop awarded to her by an outside organization affiliated with the trip service project. The structure of the scholarship administration is such that it is awarded to all students who choose to participate but the amount is not guaranteed until late in the
decision process. The scholarships are assisting students who commit to participation but are not being used as a vehicle to encourage participation during the decision process. There was no mention of the Gillman Scholarship program or any other outside scholarship by any of the students.

*Process support.* The process of information gathering, registering, paying, and finally preparing for an overseas trip is complex and has been identified in research as filled with barriers. The institution and the faculty sponsors have adopted processes designed to reduce barriers. For example, in my observation session an announcement was made that all immunizations that may be needed by a student had been ordered by the campus health center and would be given at cost for all participants. The students identified other process supports such as:

Gracie*: “When I need that kind of information I go to the (Advising) center.”

Rachel: “I guess you can look online and register but I just always know I can go to the (Advising) center and get help with all that.”

Kari: “The plane ticket is (faculty sponsor) so I assume I have a plane ticket” and more directly “They make it easy” They do a lot of work for you, if you want to go there are a lot of resources for you.”

Two of the three faculty interviewed had developed checklists for students and one offered “I give them all the paperwork and I give them a date to return it to me, but I check it all and send it in” (Faculty Sponsor 2). The institution is working to make it easier for students to participate and the students appreciate those efforts.
Risk management. Four students mentioned the steps taken by the university to manage the risk to students when traveling abroad. Three mentioned the risk management session and Tim said early in the decision process “there was a couple of concerns on our safety I guess, but that was kind of dismissed once they asked the questions, how we’re going to take care of it” (safety). Faculty Sponsor 3 addressed it as very important to students and their families’ decision processes saying “It’s also that safety net that’s built into it. Everything from the travel abroad insurance that would get us out if we really needed it, to the confidence of who we are dealing with along the way”. There is a feeling of comfort and safety that is influencing the student choice to participate in a positive way because the program has taken many steps to reduce the risk of traveling to an unknown place.

Information as a facilitator. Both low-SES students choosing to participate noted the information for trips was readily available. Tim, the student who did not speak of himself as an adventurous spirit, offered that “they really answered all of our questions before they came up just providing the information, which was really nice” and “it’s really nice to have everything laid out, you know what you’re doing this day and that and everything…kind of makes you feel more comfortable I guess, so that’s nice.”

The students heard about the travel courses in a variety of ways and at a variety of times:

Lydia: “I mean, there’s a whole class dedicated to talking about the trip, showing pictures of trips and handing out applications” and “I saw a poster”

Damon*: “As soon as I got here everybody knew about it (STSA)”

Kari: “It was brought up in the spring nursing meeting”

Tim: “It was like talked about in the spring”
Gracie*: “They put up posters” and “There is the convocation”

The institution and the faculty sponsors have been intentional in their efforts to market their courses to students:

Faculty Sponsor 1: “Schedules are out early, before the Convocation” and “I’ve put up posters”

Faculty Sponsor 3: “The (newspaper) has been good about running the article” and “I am considering putting the applications out in the spring just so students think about saving money over the summer” and “we always talk about it in (meetings).”

Faculty Sponsor 2: “I take any opportunity to plug my (travel) program”

The work of faculty sponsors to support their courses is above and beyond the normal faculty role and will be examined further in the emergent sub-code Faculty Mentoring. It is important to note that faculty really become advocates for their trips and make efforts to ensure the information is available to students in variety of settings. As noted in the process support discussion it is also helpful for students that there is an office on campus they can visit to gather information and the advisor is noted as knowledgeable about the program.

Information as a barrier. When asked what the university did to deter students from participating Tim responded “the short amount of time we had to decide…we had a pretty short time to decide once we had the details and the cost and all that.” He was aware of the trip for more than two semesters but detailed information for a final choice was not yet available. Lydia noted she applied the day an application was due because a peer told her about the deadline and referenced another trip she was considering saying “No one knows about it” but she had been informed by a family member who knows the faculty sponsor. Gracie* also said “I know they have some posters up but they’re putting
a poster up next to 500 other posters”. The barrier Gracie* is identifying here is information overload rather than information unavailability but it is still information as a barrier and is an interesting difference in perspective.

Peer Group Travel Emergent Code

The influence of wanting a familiar peer to travel with was evident in both students who chose not participate. Gracie* was considering participation in a trip with another student but decided against participation when he chose a different trip saying “(student name) didn’t want to go anymore, it’s kind of intimidating to go on something like that” without the other student. Damon* was considering a trip with a friend offering “I heard about it because (student name) was telling me how interested she was in it, but then her mom made her choose between the trip and plans for spring break and she chose spring break.”

Lydia commented on another trip, not her own, that “there’s a ton of people that are from the same (dorm) hall that are going” and Tim said of his own trip “that there’s 19 people going… and I think there are 5 guys” all in his major program. Bryan specifically commented “I don’t see it so much for me, but I see it for other students, that they sign up together.”

Faculty Sponsor 2 noted the trip was partially designed to build rapport with and between students a major discipline and Faculty Sponsor 3 said that behind finances the next biggest concern from students is “are my friends going.” All of this is indicating the influence of peers goes beyond encouraging participation to a strong desire to travel together (Fischer, 2012; Salisbury, Paulsen, & Pascarella, 2010).
In the previous discussion the faculty role in the institutional policies and processes was emphasized but a sub-code of Faculty Mentoring was also identified and is represented by the following statements:

Kari: “(Faculty Sponsor 3) had talked to me a lot about going” and “(Faculty Sponsor 3) kind of hounded me about it to make sure I would go, like when (Faculty Sponsor 3) didn’t get my application the day they were due (Faculty Sponsor 3) called me” and “(Faculty Sponsor 3) was really determined to make sure I went because (Faculty Sponsor 3) knew I wanted to”.

Lydia: “(Faculty Sponsor 3) does such a good job with follow-up” and “(Faculty Sponsor 3) has it down to a tee, like how everything works and if there are any questions they are answered on the spot”

Bryan: “(Faculty Other) caught me in (a store) about a month ago and asked me what I was going to do for Winter Term….he said there might be an opportunity for me to travel to (trip destination).”

Tim: “I’m just comfortable because (Faculty Sponsor 2) has been doing this with students and has all the answers”

Notably, the two non-participants, Gracie* and Damon*, did not mention a faculty mentor in their interviews.

The faculty interviews included multiple stories demonstrating mentoring (Daloz, 2000) of students but none of the faculty self-identified mentoring as a strategy they employed. All three faculty spoke passionately about the desire to engage students in a transformational learning experience “it’s just so fun to see that transformation happen” (Faculty Sponsor 2). Faculty Sponsor 1 alluded to mentoring more directly when speaking of a personal connection with students.
Peer Mentoring Emergent Code

Formal and informal peer mentoring was identified as an emergent code in the analysis. During the session I observed the faculty sponsor frequently asked students who were taking a trip for the second time to contribute to the session. When asked the question “How do students find out about Winter Term?” all three faculty immediately answered “their friends.” There were 23 unique student excerpts tagged that included statements such as “my friend told me” (Damon*), “literally day one of me being a student there was this big group just back from (trip destination) all talking and laughing” (Kari), and “the people who have gone on it and who have encouraged me, and just given me positive feedback” (Rachel). Other students at the institution who have already participated or who intend to participate are actively engaging other students in the choice process. This is contributing strongly to the supportive culture surrounding the travel program and is bringing students into the choice process who may not consider participation in another setting.

Institutional Culture

In studying an institution, the many pieces discussed previously in Layer 2/3 are synthesized into a single phenomenon we refer to as culture (Bolman, 2008; Schein, 2005) and the sub-codes of Layer2/3 are all realistically also sub-codes of Institutional Culture. This discussion is focused on only the larger concept and will not address the individual parts again.

Tim referenced the health professions major specific program he chose to participate in and said “when you come to visit” and tell someone your intended major “they say oh you’ll get to go to Jamaica they just pull you in like that.” Damon*, Rachel,
Bryan, and Gracie* each noted they could not remember being told about the program formally rather “I’ve known about them for about as long as I can remember” (Gracie*) and “when you get here everybody just knows” (Damon*) and Kari said “they really do a good job of promoting trying out new things and experiences” and summarized the influence of the culture surrounding the short-term study abroad program at this institution by saying “Maybe it’s just the atmosphere of the community that’s at Graceland (University) that is like, ‘Oh Wow’ because people have gone on them (trips) and they talk about it.”

Faculty Sponsor 1 offered “there is a recognition here of diversity” and “in the freshman course one of the goals is to increase their understanding of diversity” as examples of the institutional culture supporting the STSA program in general. Faculty Sponsor 2 and 3 spoke about the university intentionally preparing students for encounters with diversity especially in light of the majority white student population.

The culture at the institutional level is strong in regards to exploring diversity and serving others. Within this institutional culture the short-term study abroad program is a well-established symbol (Schein, 2005) of not just those elements but also of the distinctive student experience Graceland University has intentionally fostered surrounding “human dignity, mutual respect, and social responsibility” (Graceland University, 2013).

Layer 4 National and International Context

The national context did not emerge as important in the student decision process and no excerpts were coded with National Context. Other than Rachel’s reference to wanting to understand other cultures and some inferred references by other students in
their Desire to Serve quotes, the international context was largely absent from our discussions of the decision to participate in these international short-term travel abroad courses.

International Context was assigned to all excerpts also labeled with the institutional policy and process emergent sub-code of Risk Management. Faculty sponsors spoke about institutional policies designed to keep students safe such as a mandatory travel safety session, travel insurance including evacuation coverage that is purchased for every student as a part of their cost, and decisions made to cancel two trips in 10 years for international security concerns. The student perspective on the International Context as it related to safety was summarized by Rachel as “we know the university won’t let us go anywhere that isn’t safe, they are always so worried about us, so I don’t worry about it.” Kari echoed the same sentiment. Essentially the decision influence of the International Context may have been collapsed down into Layer 2/3 for students and the university’s risk management policies could be acting as a proxy for this decision layer.
STSA Participation Status Summary

In considering the student choice to participate it is interesting to review the findings in summary format. Figure 19 is a visual comparison of codes by final participation status. There are informative findings for practice that result from a comparison between students who did and did not choose to ultimately participate.

*Figure 19. Codes by Participation Choice*
Descriptor Variables

Sex

There were three male student participants and five female student participants. The codes by sex indicate a slight bias by females to be more influenced by Layer 1 variables and a slight bias by males to be more influenced by Human Capital and the institutional setting Layer 2/3 variables including policy, peer mentoring and peer group travel. This is in line with other recent research findings regarding male participation in study abroad as highly influenced by peer group participation. The notable exceptions in Layer 2/3 were female participant’s indication of institutional culture as important in the decision process as well as the highly related influence of faculty mentoring. Figure 20 is a representation of these code distributions by sex.
Race

Of the seven students interviewed, the only two non-white students were the also the two students who eventually chose not to participate in a short-term study abroad course. Neither of these two students spoke about a faculty mentor in the decision process and both indicated the importance of peers in getting them this far along in the decision process. The non-white students also indicated human capital concerns were
highly influential in the ultimate decision to not participate and cited the need to remain on campus for participatory scholarship activities as a barrier.

State of Residence

The single student from Iowa strongly indicated the influence of a structured experience with an experienced faculty member and peers. This student also noted the importance of information as a facilitator to participation. There did not appear to be any notable influence between order state or other state students interviewed.

Major

The two health professions majors, one male and one female, indicated the major was influential in their decision. Both students chose to participate in a short-term study abroad course and both students indicated the trip was highly related to future professional plans. Asked what influence major had played in the decision process one student stated “We’re going down on a medical mission trip, so I think that has a huge influence.” A STEM major and an Education major indicated they chose to participate in a short-term study abroad because their curriculum prevented participation in a long term program and that their senior year curriculums would discourage participation in the short-term programs. This supports previous research findings regarding curricula (Dessoff, 2006; Lincoln Commission and Program, 2005) in general and more specifically STEM programs as barriers to participation in study abroad.
Socio-Economic Status

The two moderate-SES students were coded with the most human capital influences at 28 excerpts. The two low-SES students who did not chose to participate in STSA were the same two non-white students who did not participate. All of the eventual participants mentioned the institutional scholarship from a donor that would help with costs while neither of the two non-participants mentioned it even when talking about financial considerations. The single low-SES student who did choose to participate was influenced by a workshop awarded for participation in the STSA that was above the general institutional scholarship offered to offset costs. In contrast, the high-SES student, Rachel, spoke about the affordability of the trip and commented “I have looked at a lot of other programs and you just can’t travel for this cheap.”

Conclusion

The quantitative and qualitative data have been analyzed in this chapter using tools appropriate to each methodology and guided by the conceptual framework of Perna’s integrated model of college choice (Perna, 2006a). I now discuss the meaning of these findings and more specifically draw them together using a mixed methods approach to understanding the results of the research. In the second half of Chapter 5, the discussion of the findings will be used to suggest ways this research can inform practice for study abroad professionals and the institutions they serve and I identify areas for future research.
CHAPTER 5: DISCUSSION

The purpose of this study was to understand the choice process of students regarding participation in short-term study abroad and to inform strategies designed to increase participation at the university being research and in other similar programs. This chapter will be a discussion of the findings of this research organized by the conceptual framework of Perna’s integrated model of college choice. Meaning will be attached to the findings presented in the previous chapter by considering the quantitative and qualitative results separately and in combination for each of the individual layers of the model. This approach will harness the breadth of information gained in the quantitative analysis and the depth of understanding provided in the qualitative analysis that was desired when a mixed methods approach was chosen. In preparation for the discussion it is helpful to restate the research questions here:

1. What demographic, academic, and financial characteristics are related to the choice to participate in short-term study abroad?
2. What do students perceive as influential in the decision to participate in short-term study abroad?

The discussion of the findings will be followed by an acknowledgement of the limitations of this research, the implications of these findings for informed practice, the areas for future research I have identified during the process of my study. The chapter concludes with my reflection on the utility of using Perna’s model to work on my problem of practice and the greater purpose of understanding student choices.
Discussion of the Student Choice to Participate

Each layer of Perna’s model was mapped to quantitative data variables within the demographic, academic, and financial components of research question one to determine which characteristics were related to the choice to participate in STSA. Deductive codes related to the layers of Perna’s model were pre-determined before analysis of the qualitative data and deductive codes within the layers emerged during analysis. This discussion will synthesis the findings of both research questions and situates the results within the larger scholarly conversation surrounding study abroad.

**Human Capital**

In considering the student choice process regarding participation in a short-term study abroad course through the lens of Perna’s model, the initial layer of Human Capital was found to be influential. The ways human capital considerations were influential in this study are discussed and related to the existing research on study abroad. The topics of gathering resources and cost-benefit analysis are specifically addressed.

*Gathering resources.* The qualitative findings indicate money is influential in the student choice process regarding study abroad but students are successful at identifying actions they can take to overcome this very apparent barrier to participation. The students of interest are all students who have already overcome financial barriers to college attendance and have already learned to navigate the financial aid system and are therefore already naturally better equipped to address financial concerns. For low-SES students it may not be possible to gather the needed resources if all sources have been used for college attendance but in some cases they are still finding ways to participate such as fund raising and special scholarships like the Gillman Scholarship or other
private scholarships. The quantitative data support the qualitative findings in that there is consistently a reduced chance of participating in STSA as a federal grant aid recipient and significantly different mean EFC’s for participants and non-participants. But after controlling for other factors in the integrated model, federal grant status and EFC were no longer predictive. This indicates there are other factors influencing the student choice to participate, not just money. The factors mapped to subsequent layers of Perna’s integrated model, along with the qualitative findings coded to subsequent layers, increase understanding of the other influencers in the student choice process.

*Cost-benefit analysis.* The quantitative variables mapped to human capital in this study were Federal Grant Aid status and EFC and only address the cost portion of a cost-benefit analysis. In the setting of this program there is a complex cost-benefit analysis taking place by students that includes benefits of traveling for enjoyment, of enlightened self-interest, and the educational benefit of encountering diverse cultures. There is some recognition of the benefit of intercultural competence as it relates to the global society but the dynamic goal of preparing to participate in a global economy or as an active member of a global society was not evident in the choice process.

Surprisingly the potential for increased future earnings as a result of participation was almost completely absent as was a complete conceptualization of the building of human capital for future leverage (Becker, 1962). It was expected that future earnings would play a stronger role in the choice process (Paulsen & St. John, 2002). The desire to encounter diverse cultures to prepare for future interactions is related to human capital, but students and faculty did not take the next step and tie this to careers or financial gain. Rather this was framed as important for building relationships for a better world. This
lack of focus on financial gain and unawareness of national strategic goals for study abroad participation are both areas of opportunity for the program to positively influence the student choice process.

The two students who made the choice not to participate were more focused on the benefit of travel for enjoyment over enlightened self-interest or cultural experience. They did not fully discriminate during their cost-benefit analysis between a vacation trip and the opportunity to participate in a structured STSA with a faculty sponsor. The students choosing to participate saw the opportunity as distinctive and time limited to during college. This has important implications for practice that will be discussed later in this chapter and is an interesting idea in light of the misconception by students, faculty, administrators, and the public at times that a vacation and a STSA course are the same.

Finally, the influence of the parental cost-benefit analysis was very strong for one female student who chose not to participate (Salisbury, Paulsen, & Pascarella, 2010). The other students who identified parental concerns about money as negatively influential overcame those concerns with their own cost-benefit analysis. There may be many students who do not enter the choice process for financial concerns of their own or those expressed by their parents and some students like Damon* will enter the process but conduct their own cost-benefit analysis and decide the costs outweigh the benefits. This also has important implications for practice as well as further supporting the importance of habitus in the decision process as discussed next; each student approached their own cost-benefit analysis as well as reacted to the parental one from a different perspective and incorporated it into their individual choice process.
Layer 1 – Habitus

Habitus as a whole was influential in the choice process for students considering short-term study abroad. The ways habitus influenced the overall choice process as well as how it differed for the underrepresented groups in study abroad of males and non-whites will also be addressed in this discussion.

Sex and race. Based on the previous literature it was expected that the habitus mapped variables of sex and race would be correlated with participation and that the relationship would be positively correlated for female students and white students. It was not however expected that after controlling for other factors, sex and race would no longer be predictive of participation. This finding is supportive of the Salisbury et al. (Salisbury, Paulsen, & Pascarella, 2010; Salisbury, Paulsen, & Pascarella, 2011) findings indicating non-white students and male students intend to study abroad at the same level of white students and female students. A possible explanation offered is that the school context is influencing the choice these groups make to not participate in study abroad. The Layer 2/3 discussion will examine this idea in further detail but the qualitative evidence certainly supports the impression that male students and minority students were very interested in participating.

In the end, the students interviewed who chose to participate were all white students and there were more female students than male students who volunteered to participate. The qualitative data also showed a difference for female students who drew more strongly on Layer 1 factors as demonstrated in Figure 20 when making their decision while male students were more focused on the more immediate factors of Layer
Again, this is highly interesting given the Salisbury et al. research (Salisbury, Paulsen, & Pascarella, 2010) and has implications for practice that will be explored later.

**Family influence.** The importance of encouragement from family and for someone close to you to share in the excitement about the opportunity to study abroad is evident in this research. Additionally, family is not a barrier in the sense that they are actively opposed to the experience; rather they are concerned about finances and are not always well equipped to make an appropriate cost-benefit analysis. This is in agreement with what we know about the role of family in the initial college choice process (Bourdieu, 1977; Perna, 2007; Turley, 2009). In a fashion similar to the college choice process, this has important implications for first generation college students in general, but more specifically for the topic of short-term study abroad it has implications for first generation study abroad students who are considering participation as well as for students who never do even consider it as an option.

**Previous experience.** Previous experience was highly influential in the qualitative evidence. Previous experiences did not need to be international in nature to influence the choice process; they just needed to be very distinctive educational experiences with a travel component to a destination perceived as “away from home.” Awareness of the strong importance of the experiences students are exposed to in high school as highly influential in the choices they will make in the future can be discouraging for practitioners at the college level. However, previous experience is equally important in the college choice process (Perna, 2006a) and the strategies employed to increase high school student experiences and awareness of college may be applied to the short-term study abroad field (Salisbury et al., 2009).
The student who did not identify a previous experience was most interested in the program because of the short-term length and highly structured setting including a pre-trip class. This has important implications for practice I will discuss further later and may be helpful in attracting underrepresented students to programs in the future. It is difficult to capture previous experience in quantitative data and it was therefore not mapped to any of my variables from the institutional database.

**Previous academics.** The variables ACT score and high school grade point average (GPA) were mapped to Layer 1 in the quantitative data. It is not surprising that students who performed better academically in the past were more likely to participate as freshmen. These variables are indicative of their motivation and level of interest in college experiences and their level of preparation for college success (Perna, 2006a; Salisbury et al., 2009). Cumulative GPA in college was mapped to Layer 2 and after controlling for ACT score and the high school GPA this after matriculation indicator was more significant. I will discuss this further in Layer 2 but it is important to note the highest achieving academic students are participating in this program. Three of the seven students interviewed indicated they were honors program students. The previous experiences of academic success and positive school experiences (Perna, 2006a) are highly influential in the college choice process and this influence is mirrored in this after matriculation choice process.

**Adventurous spirit.** It was theorized that students who attended the university from border states and Other states would be more likely to participate than students from the home state because they had already made a choice to attend college in an unfamiliar setting (Johnson, Elder, & Stern, 2005; Turley, 2009). This was true and the emergent
code of Adventurous Spirit is equally supportive of the idea that students who choose to participate in a short-term study abroad have an innate openness to new experiences. This is another example of the highly individual nature of habitus and of the choice process that is undertaken by each student. One of the benefits of participating that students are considering is the thrill of adventure and the fun of doing something you have not done before and this needs to be taken into consideration by study abroad professionals.

The one student who was from Iowa was also the one less adventurous student. The development of an adventurous spirit may be partially achieved in the framework of educational experiences like a structured short-term study abroad program and the unknown of a new experience may be controlled somewhat through information and orientation programs.

Desire to serve. The service nature of the trips in this program may by their structure be attracting students with an already developed desire to serve others for the common good. It is equally likely that the service focus is facilitating the decision to participate because it shifts the cost-benefit analysis from a purely selfish perspective to perspective of benefitting others too. It is easier to overcome internal as well as external objections if participation is partially motivated by helping someone else (Astin, 1984; Smith-Pariola & Goke-Pariola, 2006).

Layer 2/3 – School and Higher Education Context

Given the relative lack of control by study abroad professionals over Layer 1 influences, it is encouraging to discover the school and higher education context of Layer 2/3 is highly influential in the student choice process. As discussed in Chapter 4, many
of the elements of Layer 2/3 are related to the phenomenon I have labeled as institutional culture (Schein, 2005). I will first discuss the inductive and deductive elements identified during analysis of the qualitative sources and the quantitative data variables that are contributing directly during the choice process. Then I will address the more comprehensive concept of institutional culture and how it influences the student choice to participate in short-term study abroad. Faculty mentor, peer mentors, and student friendly policies are contributing to an institutional culture that is supportive of the student choice to participate in a short-term study abroad course and each of these elements will be explored in this discussion.

**Mentors.** Through the lens of Perna (2006a) the faculty sponsors are a vehicle through which Layer 2/3 is actively influencing the student choice process. The faculty sponsors are also playing the role of the mentor and the short-term study abroad is functioning as the disruptive event in a transformation learning experience as defined by Mezirow (Daloz, 2000; Jones, Rowan-Kenyon, Ireland, Niehaus, & Skendall, 2012; Kitchenham, 2008). The importance of the faculty mentor in the choice process is further illuminated by the fact that all of the students interviewed who chose participation spoke about personal experiences with the faculty sponsor during the choice process. In contrast, the two students who chose not to participate navigated the choice process without the engagement of a faculty member. This is a hallmark of the student/faculty engagement research in general (Kuh, 2006; 2008) and the impact of faculty involvement was supported strongly in this study.

The students who did not mention a faculty mentor both identified another student who had encouraged them to consider participation. All students also indicated
interaction with peers who had already participated was influential in the decision process. Peer mentoring has been identified as an effective strategy for encouraging academic success in some of the least prepared populations (Astin, 1984; Hall & Jaugietis, 2011) and in this research it is a translatable strategy to be applied to short-term study abroad participation. The findings regarding faculty and peer mentoring have strong implications for practice at the institutional level as well as implications for culture building on a campus surrounding any program initiatives.

*Peer group travel.* Recent literature has pointed to the influence of peer group participation in a trip as a strategy to address the underrepresentation of males (Fischer, 2012) in study abroad and this is supported in my findings. This research also indicates the influence crosses other demographics including race and socio-economic status and may denote a method to address underrepresentation in these other groups as well. This finding is important to the field of long term study abroad because the students participating in these programs are often in individualized programs or in programs populated by students from several different universities. In contrast, short-term study abroad lends itself well to being organized around a specific peer group and this strategy may be more easily applied in this structure.

*Policy and procedure.* The policies and procedures in place to support this short-term study abroad are designed to make it easier for students to participate. At times this creates additional burdens on faculty and administrators but there is a concerted effort to eliminate institutional barriers regardless of the extra work it may create for staff. The availability to students of a designated Winter Term staff person is also removing the information barriers cited in much of the previous research (Dessoff, 2006; Kasravi,
2009; Perna L. W., 2007; Peterson, 2003). This in turn contributes to the overall environment where students feel encouraged and supported in their desire to participate in a short-term study abroad.

**Risk management.** The risk management practices of the institution surrounding the travel program are strong and are communicated to student and their parents several different ways. The institution also has strong social regulations and safety practices that are translated to the program. This is mitigating much of the concern about safety that is often cited in the literature as a barrier to participation (Dessoff, 2006; Kasravi, 2009; Salisbury, Paulsen, & Pascarella, 2011). It is important the trips be perceived by potential participants and their families as relatively safe with a plan in place for dealing with unexpected concerns.

**Scholarships.** The availability of scholarships is creating a positive feeling about the program and the institution and contributing to the overall culture of support for the program. The need based outside scholarship awarded to one student was more effective in influencing the decision process. The outside scholarship was facilitated by a faculty member and therefore contributed to the cultural philosophy of helping students participate (Bolman, 2008).

**Academic factors.** The strong influence of the humanities majors has been identified in previous research (Dessoff, 2006; Lincoln Commission and Program, 2005; Salisbury, Paulsen, & Pascarella, 2010) but neither the quantitative nor the qualitative data found this to be true in this program. In the quantitative analysis, major was influential for the Health Professions, which has a major specific service learning trip and participation by STEM majors was higher than expected based on the literature reviewed.
With the exception of the Health Professions, students did not identify major as influential in the choice process. A combination of institutional culture and the unique short-term study abroad offerings has overcome the historical barriers related to major.

Academic performance was not addressed directly in the qualitative interviews but the quantitative data found cumulative GPA to be the strongest predictor of participation after controlling for other demographic, financial, and academic factors. The highest performing academic students are participating in the short-term study abroad program. This study does not address why they are drawn to the program but motivation, drive, and educational engagement are all related to academic performance and are likely also playing a role in these students’ interest in participating in a travel course. The higher academic performers are also more likely to be higher-SES and come to college with higher cultural capital to apply to the decision process.

In the Health Professions major the influence of peer group travel, peer mentoring, and a readily available faculty sponsor is combining in a program that has high academic requirements. This combination of elements is resulting in a higher than expected participation rate for the major and has implications for practice. Other trips are generally open to many majors and have successfully overcome the major bias without the addition of an academic requirement and it would be interesting to investigate the differences between trips in future research.

*Institutional culture*. For this research two layers of Perna’s integrated model were collapsed into a single Layer 2/3 encompassing school community and higher education context. The discussion of the combined Layer 2/3 to this point has been about different components of the overall concept of institutional culture. The synthesis of the
findings in each of the component areas including faculty mentoring, peer mentoring, policy, procedure, information dissemination, process support, risk management, and academics provide understanding of a force at work within the institution at all times in support of students during the choice process regarding short-term study abroad; this force is institutional culture (Bolman, 2008; Schein, 2005) and it is a powerful influence that transcends any single strategy or element.

The evidence regarding institutional culture was largely collected in the qualitative analysis, but the quantitative data regarding participation by students in non-traditional study abroad majors was also indicative of a strong culture surrounding this program that crosses the lines of disciplines. There is almost no focus on language skills and instead the focus is on experiencing diverse cultures, a cross disciplinary goal for the institution. This is supportive of the research by Ingram (2005) encouraging the development of bridge programs like short-term study abroad to increase interest outside the language disciplines and address institutional goals surrounding intercultural competence. Additionally, the strong ties established between institutional mission and the learning outcomes of the short-term study abroad program add reinforcement when strategic decisions are made at the institutional level that may affect the program (Baldridge, 1971; Bolman, 2008).

Students are immersed in an institutional culture that is supportive of participation in a short-term travel abroad course. Their introduction to this culture begins for many of them before they matriculate through interactions with siblings and other alumni who have participated. Even students without this prior connection are introduced to the short-term study abroad program by friends and faculty so early in their campus
experience and in so many different ways that they do not recall a formal introduction, they just know it is available and that it has perceived importance. This has strong implications for practice that are both encouraging because of the direct institutional control over Layer 2/3, but may also be overwhelming for practitioners without widespread support from faculty and administration. Culture building takes time and effort from every level of an institution but the results are compelling regarding the influence exerted over students’ after matriculation choices.

Layer 4 – National and International Context

The final layer of Perna’s model is the national and international context of the choice process. The interest in study abroad at the national level is related to building intercultural competence in students to prepare them for a global economy and society and some federal policies such as the Gillman scholarship program have been developed to address participation by underrepresented groups. The Gillman program is however limited to study abroad lasting at least 4 weeks and therefore students considering this program are not eligible and the national context was not found to be influential.

Considering the importance of previous experience shown in this study it would be advisable for national policies aimed at increasing study abroad to expand to support short-term scaffolding experiences that may then lead to long term study abroad and engagement in cross-cultural and language studies (Ingram, 2005; Long, Akande, Purdy, & Nakano, 2010; Martinsen, 2011; Rowan-Kenyon & Niehaus, 2011).

The national and international context was not mapped to quantitative data in this research and the qualitative analysis revealed very little influence even when students were directly asked if there were any national or international influences they could
identify in their choice process. This is very surprising considering a short-term study abroad program, by its nature, has international context attached. The student and faculty comments regarding diversity and exposure to other cultures were not coded as national or international context because the influence cited in these comments was about interaction with other people not about interaction with other countries or for larger global society reasons. However, it would be reasonable to infer that the desire for these personal interactions with people from other cultures is also related to the international context and therefore was somewhat influential.

A related concept found in this study was the use of institutional risk management practices as a proxy for Layer 4 student decisions regarding safety of an international destination and appropriate strategies to reduce the risk of traveling. The inclusion of travel insurance and a travel safety orientation, along with a general institution reputation for conservative policies regarding student safety mitigated the influence of safety concerns found in other study abroad research (Dessoff, 2006; Kasravi, 2009; Salisbury, Umbach, Paulsen, & Pascarella, 2009).

*Integrated Model*

Perna’s integrated model of college choice proved to be very useful in understanding the choice process of students regarding this short-term study abroad program and lent itself well to using a mixed methods approach. The complexity of the decision making process is a highly individual one, but the model assisted me in identifying factors and elements in each layer that were influencing the student choice process; the mixed methods approach allowed me to better understand how and why these aspects of the choice process were influential in considering participation in a short-
term study abroad course. I am in agreement with Johnson and Onwuegbuzle (2004) that a mixed methods approach to higher education research is necessary to fully understand the complexity of the issues we are attempting to tackle. I also agree strongly with Salibury, Umbach, Paulsen, and Pascarella (2009) that other after matriculation participation choices could be better understood by applying Perna’s (2006a) model using qualitative, quantitative or mixed methods approaches. The student choice process is an integrated one and understanding that integrated process will allow practitioners to design integrated solutions.

Limitations

This research resulted in useful findings with strong implications for practice that will be discussed but it is important to acknowledge limitations to frame those recommendations first. The limitations of this research were discussed in Chapter 3 in detail and any generalization of the findings of this research to other institutional settings should consider those limitations in the methodology as well as the limitations noted here regarding the findings.

The quantitative data sample was limited to include only students who completed a Winter Term intersession course during the 10 year period of the study not the entire population of the university. The sample was compared to the institutional IPEDS data and was judged to be representative of the overall student population. There was an explainable difference with males being slightly overrepresented in the Winter Term file but this explanation was supposition on the part of the program director and was not controlled for in the analysis. Students are required to participate in at least two Winter Term courses as a graduation requirement thereby increasing confidence in the sample as
representative of the overall institution but groups with very small numbers in the overall population may be underrepresented in the Winter Term file. The small raw numbers of non-white students necessitated aggregation of these categories and did not allow the discovery of differences between the non-white groups. The data analysis was approached by isolating each academic classification into individual files and each file was cleaned to contain a single unique record for each student in an academic classification but students who appeared in one classification may or may not have appeared in another classification file if they did not take a course that year. It was not possible to determine if changes in the raw number of participants in STSA during each academic period were due to students not taking a Winter Term course of any kind in a subsequent year or if the students were not retained at the institution. No findings were developed around students taking multiple STSA courses or around student engagement and subsequent retention for this reason.

All data for this research is post 9/11 and the latter years of quantitative data were collected during an economic recession. Both of these historical events contextually influence the findings regarding this short-term study abroad program. International travel is different now and the change in the economy may have had an impact on this long term program that is not necessarily captured by focusing on the most recent 10 years in the quantitative data and the current academic year in qualitative collection.

I will reiterate here from Chapter 3 that it is also important to recognize I have biases as an alumna and former employee of Graceland University. I am also a first generation college student from a low SES background. My habitus influences my decision process as a researcher just as it influences the decision process of the students.
and short-term study abroad colleagues I interviewed. This is both a limitation of the findings I have presented and a uniquely crafted lens through which I am able to analyze data and synthesize richly informed findings.

Implications for Practice

The purpose of this study was to understand the student choice process regarding participation in short-term study abroad to inform practice and policy formation aimed at increasing participation. This examination of the short-term study abroad program at Graceland University has resulted in several key findings to inform short-term study abroad practice in higher education settings as well as policy strategies at institutional, state, and national levels. The implications are presented here in narrative and then in a condensed chart format for summary purposes.

*Human Capital Layer Implications for Practice*

The importance of financial considerations persists in the findings of this research but the results are encouraging in many ways because barriers related directly to money were being overcome successfully and when other factors were controlled for the financial variables were no longer significant. It was however important for students to have information early enough in their academic careers to plan and execute resource gathering strategies such as using excess financial aid, savings from work, and fundraising for participation. Encouragement and support from university employees who were knowledgeable enough to suggest these strategies and from friends and family members who were willing to contribute to the effort were very important to student success in paying for participation.
The stronger implications for practice in the human capital layer are related to the cost-benefit analysis being conducted by students and by their parents. The institution overall, but more specifically the short-term study abroad professionals directly involved with students, can assist students in making a more informed cost-benefit analysis by helping them better understand the long term benefits of participation. This research more specifically indicated we need to help students and their parents understand the future financial return from participation and the resulting increase in human capital in the form of intercultural competence and global awareness (Deardorff, 2006; Kreber, 2009; Lincoln Commission and Program, 2005; Norris & Gillespie, 2008; Stomquist, 2007).

Layer 1 – Habitus Implications for Practice

The findings from Layer 1 revolve around the internal lens students use to consider participation and include the influence of parents and other trusted advisors external to the institution. Habitus also includes the previous experiences students draw from to give context to the decision process regarding short-term study abroad. These previous experiences were found to strongly influence the decision process and by drawing from tools used in college access strategies there are some strong strategies that may be used to influence this highly individual layer of Perna’s model. For example, the summer bridge programs aimed at providing first generation college students with a structured opportunity to experience a university campus prior to making a college choice may also be a model for influencing the student choice regarding specific after matriculation choices like short-term study abroad. STSA practitioners on campuses can strive to develop relationships with high school colleagues and work together to increase
STSA participation by creating previous travel experiences for students at the high school level as a scaffolding step before college.

Once students have matriculated at a college it is possible to craft strategies aimed at mitigating the influence of not having a previous experience to draw from or other Layer 1 influencers. One opportunity to do this is to embed domestic travel experiences for students in the freshman year to create a previous experience early in their academic career that will become the influential previous experience supporting the choice to participate in a STSA before graduation. Ideally a student could progress through scaffolding experiences: local service project (freshmen), short-term domestic travel (sophomores), short-term study abroad (juniors), to long-term study abroad (seniors).

The emergent findings of Adventurous Spirit and Desire to Serve in this short-term study abroad program demonstrate the power of planning destinations and itineraries that are both intentionally educational and personally meaningful. This implication is supported in the previous literature suggesting non-white students are most interested in non-traditional study abroad destinations that are culturally important for them (Kasravi, 2009). The African American student I interviewed was considering a majority black population destination and the Hispanic student was considering a Latin American destination. Programing to specifically attract non-white students will require travel to destinations a majority white faculty will not necessarily think of initially.

To appeal to the adventurous nature of students it would be advisable to rotate destinations of a short-term study abroad each academic year and to use a balanced approach to marketing the experience on campus. The information disseminated (Peterson, 2003) should be designed to include the academic and service components as
well as the stimulating and fun facets of participation. The service components of this STSA program were compelling in the influence exerted over the student choice process. This research indicates service learning planned to engage the host community in appropriate ways (Smith-Pariola & Goke-Pariola, 2006) along with facilitated reflection (Jones, Rowan-Kenyon, Ireland, Niehaus, & Skendall, 2012; Long, Akande, Purdy, & Nakano, 2010) can become a strong facilitator for participation and should be considered for inclusion when planning a trip.

Layer 2/3 - Community and School Context Implications for Practice

At the basic institutional layer, the research indicates institutions can begin to address low participation rates by developing student friendly policies and procedures that extend past payments and paperwork to a comprehensive process for moving students through the decision process to the travel destination. Areas for inclusion include travel booking, insurance purchase, arranging immunizations, and developing course manuals and then designating someone on the campus to direct students to if they need assistance or information.

The study strongly indicates the cultivation of faculty mentors who make an intentional effort to engage with students in the decision process is a powerfully influential strategy to pursue. The challenge for practitioners is identification and training of faculty and more specifically faculty who can successfully engage with underrepresented groups. In this setting the faculty mentors made a difference for white low SES students in the choice process but the non-white students did not benefit from a similar relationship with a faculty member. Intentionally reaching out to these sub-populations would likely increase their participation rates. The job of the faculty sponsor
in planning and executing a travel course represents a significant dedication of time and effort and asking them to further extend themselves adds additional responsibility. For this strategy to be successful it will have to be supported with load designations or other compensation and with recognition in the tenure and promotion process. The role of faculty in the success of short-term study abroad programs is an area I will also address in the suggestions for future research.

The study also supported the use of peer mentors, both formal and informal, to influence the student choice process. Students can act as advocates in settings where faculty are not available and with guidance the peer mentors can be successfully active participants in organizing the trip and orienting other students. The student participatory model was supported in the research (Long, Akande, Purdy, & Nakano, 2010) and peer leadership is a natural progression from there that this research indicates would facilitate participation by underrepresented groups specifically.

Pursing each of the strategies discussed in Layer 2/3 will contribute to developing a culture of support around a STSA program at the institutional level. The body of organizational culture research has informed the development of Perna’s model as well as my interpretation of the findings and it is therefore fitting to suggest a final implication for practice is to apply culture building strategies found in that body of knowledge to your own short-term study abroad programs.

Layer 4 – National and International Context Implications for Practice

There were few findings in this research regarding the influence of the national and international context on the student choice process. The one recommendation for practice directly from this layer is to clearly and honestly communicate the risk
management practices the institution has developed to protect students while traveling. The acknowledgment of realistic risks along with communication of plans for reducing those risks virtually eliminated the influence of safety concerns in this research. Of course there is also the related necessity of developing appropriate risk management plans for travel courses and embedding those into the policies and processes discussed in Layer 2/3.

While there were few direct findings in this layer, there are implications from the findings in other layers that merit elevation to the national policy level. The current national policies and related funding opportunities are tied heavily to long-term study abroad programs. There is tremendous potential for broadly increasing participation rates in study abroad by crafting policies in support of short-term study abroad initiatives and by structuring funding opportunities to allow for short-term participation. Recognition of the benefits of short-term study abroad is increasing and an elevation of this strategy to the national level would contribute to the ambitious goals set forth in the Lincoln Commission’s call to action (2005). Promising policy strategies supported by this research would be to target the cultivation of faculty mentors nationwide and to incentivize peer mentoring within study abroad programs.

**Integrated Model Implications for Practice**

The implications presented in each layer will influence the student choice process in small ways individually but when used to craft a truly integrated approach to influencing the student choice process the results will exceed the sum of the parts. Recognition of the complexity of the choice process paints a daunting picture when attempting to craft practical strategies to address an issue. The effectiveness of applying
Perna’s model to this after matriculation choice is that it provided structure to first identify influential barriers and facilitators and then to organize thinking about how to leverage the facilitators and eliminate the barriers to participation. The application of this model to other student choices would provide a similar level of understanding regarding other high-impact educational practices as well as other important student choices such as career choice, retention and persistence, or graduate and professional school attendance.

Summary of Implications for Practice

As a short-term study abroad practitioner, I am interested in taking the findings of this and other related research and applying it in practical ways to increase participation in this high impact educational practice. To this end I have crafted a summary chart of practitioner strategies presented in Table 34 for use in planning ways to address study abroad shortfalls going forward. As indicated in the preceding narrative this chart may also serve as a model to facilitate thinking about the student choice process regarding participation in other activities at the college level.
<table>
<thead>
<tr>
<th>Perna's Integrated Model Layer</th>
<th>Implications for Short-term Study Abroad Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Capital</td>
<td>Clearly communicate the future financial benefits of participation for students and parents</td>
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<td></td>
<td>Promote and support resource gathering efforts by students</td>
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<tr>
<td>Layer 1</td>
<td>Build relationships with high school educators to create relevant previous experiences</td>
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<td></td>
<td>Plan trips to new places and market to the adventurous spirit of college students</td>
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<td></td>
<td>Plan destinations with cultural interest for non-white students</td>
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<td></td>
<td>Plan domestic travel experiences in freshman programs to scaffold to STSA</td>
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<tr>
<td></td>
<td>Plan and market the service learning components of the STSA</td>
</tr>
<tr>
<td>Layer 2/3</td>
<td>Create student friendly policies and procedures including process support</td>
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<tr>
<td></td>
<td>Cultivate Faculty Mentors (intentional efforts by faculty directed to underrepresented groups)</td>
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<tr>
<td></td>
<td>Plan peer group specific STSA experiences</td>
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<td></td>
<td>Develop pre-STSA courses and orientation sessions</td>
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<td></td>
<td>Assign Academic Credit tied to Graduation Requirements</td>
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<td></td>
<td>Develop Peer Mentors for STSA program</td>
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<td></td>
<td>Tie STSA student learning outcomes to Institutional Mission</td>
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<td></td>
<td>Direct concerted efforts to build institutional culture in support of STSA</td>
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<td>Layer 4</td>
<td>Communicate Risk Management Strategies of STSA program to students and parents</td>
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<td></td>
<td>Develop policy and funding support for STSA programs</td>
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<td></td>
<td>Incentivize peer mentoring within study abroad programs</td>
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<td></td>
<td>Develop policy and funding support for study abroad faculty development</td>
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<tr>
<td>Integrated Model</td>
<td>Use the model to systematically identify and address barriers to participation at all levels</td>
</tr>
<tr>
<td></td>
<td>Examine student choices regarding participation in other after matriculation activities</td>
</tr>
</tbody>
</table>
Recommendations for Future Research

The proceeding discussion of the utility of Perna’s integrated model to understanding other student choices is a broadly recommended area for future research. Other categories of high-impact education practice would benefit if the model were applied to the choice to participate in an internship or co-op for example. Considering the findings regarding the importance of faculty mentoring it would be especially interesting to apply the model to the choice to participate in student/faculty research. More specifically for the topic of study abroad it would be interesting to replicate the study and apply the model to the student choice to participate in a long-term study abroad program. The ability to compare and contrast the two choice processes would be very informative for study abroad professionals in both lines of practice.

In considering the findings and implications surrounding the human capital layer there were indications the future financial impact on earnings and job obtainment were not being fully considered in the choice process or communicated by the faculty directly to students. There is supporting research that could be used to better inform the student cost-benefit analysis but much of it is centered on long-term study abroad not short-term study abroad. Given the foundational nature of the cost-benefit analysis in the decision process, it would be highly advisable for short-term study abroad professionals to conduct more direct research regarding the future financial impact on earnings and job obtainment to better inform the decision process during the cost-benefit analysis phase. Do students who participate in short-term study abroad make gains in human capital that translate into financial gains later? Do students who participate have more success in job obtainment or in securing higher starting salaries? The research completed by Grover-
Bisker (2011) regarding starting salary and co-op participation by engineering students is supportive of this vein of inquiry and a similar study applied to short-term study abroad would be informative. This research would also serve to inform policy decisions regarding support for long versus short-term study abroad.

The influence of previous experience was strong but each student interviewed shared very different stories about previous experiences. Research focused on better understanding the perceptions of previous experiences and the similar influence of very different experiences on the same decision would be very interesting. In the decision process regarding study abroad what previous experiences were influential versus which previous experiences were not? Is it possible to identify substitutes for previous experience both at the high school and college level? There was also some indication a structured pre-travel course or freshman experience may create simulated previous experience but this avenue was not pursued further in this research.

There has been recent research on the effectiveness of peer mentoring in academic settings (Hall & Jaugietis, 2011) and the application this research to short-term study abroad programing would be very interesting. The findings regarding the positive influence of formal and informal peer mentors in the setting of this research were strong and represent an important extension of the concept of student participatory planning. Exploration of the role of peer mentors, specifically in the area of study abroad choice would be informative to practice and policy efforts. There is also a related body of recent research indicating peer group travel (Fischer, 2012; Salisbury, Paulsen, & Pascarella, 2010) is a strategy that may effectively engage male students and this research indicated this may be a possible strategy to address participation by other underrepresented groups.
The final and most pressing recommendation for future research is the area of faculty mentors and faculty sponsors. The importance of the faculty mentor in the choice process and the depth of information to learn from sponsors with many years of experience traveling with students is missing from previous research. All three faculty interviewed made statements about the hard but intrinsically rewarding nature of their work as short-term study abroad sponsors. All three also expressed a need for developing the next generation of sponsors to continue the work they have been contributing to for so many years. Additionally it was noted in several interviews that the faculty who enjoy this work are different than many of the more traditional faculty. What makes them different and how are they the same as traditional faculty? Certainly they are practicing a style of teaching that is different and deserves attention but they are also providing campus leadership and a study of the leadership traits of faculty sponsors would be extremely informative.

Conclusion

There is an often repeated adage on campuses that says “students don’t always know what is good for them” and an implied follow-up “but we do.” I believe this is actually often true but that there is also responsibility on our part as faculty and administrators and researchers to remedy that situation. It is expected that a student does not have a pre-existing understanding of defined student learning outcomes, but that does not mean students do not want our help discovering what is beneficial for them to learn and subsequently how to pursue the desired knowledge with proven strategies and intentional experiences. By increasing our understanding of the student choice process
we can better focus our efforts on helping students discover what we already know is good for them.

In the case of this research, I have worked to understand the student choice process regarding participation in a short-term study abroad program in order to focus efforts directed toward helping students discover the value of this specific experience and making an informed choice to participate. The findings and implications are informative and have the potential to improve practices at the institutional level as well as policy at the national level. The areas suggested for future research will contribute to a continuation of the conversation surrounding study abroad as well as other high-impact educational practices. Ultimately, our understanding of student choices through an integrated approach will facilitate development of integrated teaching and most importantly, meaningful integrated learning by students.
## Appendix A

### Cognos Data Fields

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Appendix B

Student Interview Round One Possible Questions

Background and Habitus
Where are you from originally?
How many students were in your high school graduation class?
Was it a rural, suburban, or inner-city high school?
Did either of your parents graduate from a college?
What are your experiences traveling previously and how have they influenced your consideration of a Winter Term trip?
In considering a Winter Term trip, what do you feel has influenced you so far?

Prompts: People, Academics, Finances
What are your plans for paying for the trip if you go and are there financial considerations you can share?

University/School Setting Focus
When did you first hear about Winter Term trips and how?
Can you tell me when you first started to consider a trip and why?
Why are you considering a Winter Term trip now, have your reasons changed?
What trips are you considering and why have you focused on them?
What has the university done to help you or deter you while you are considering a trip?
What is your major and how is your major influencing your approach to this decision?
Have you considered long-term study abroad and what are your reasons?
Is there anything I haven't asked you that you would like to share regarding your consideration of participating in a Winter Term trip?

National Focus
Has anything played a role in your decision outside of school and family influences that you can share? Prompts: Economy, Politics, Academics

1. Student Interview Round Two Possible Questions

Are you participating in a Winter Term Course this January? Why or why not?
Are you participating in a Winter Term Trip this January? Why or Why not?
What influenced you during the decision process?

Prompts: People, Academics, Finances
What has the university done to help you or deter you while you are considering a Winter Term trip?
How does your family feel about your decision?
Is there anything I haven’t asked you that you would like to share regarding your consideration of participating in a Winter Term trip?
Appendix C

Faculty Interview Possible Questions

Background and Habitus

What is your experience with Winter Term Trips?
Can you share with me the types of questions or concerns you hear from students who are considering a Winter Term trip and how do you typically address those questions?
  Prompts: People, Academics, Finances, Travel

University/School Setting Focus

When do students first hear about Winter Term trips and how?
In your experience why do students consider a Winter Term trip? Why do they decide to participate or not participate?
What does the university do to help or deter students while they are considering a trip?
What do you do to help or deter students while they are considering a trip?
How does a student’s major influence their approach to this decision?
Is there anything I haven’t asked you that you would like to share regarding student consideration of participation in a Winter Term trip?

National Focus

Does anything play a role in the student decision outside of school and family influences that you can share? Prompts: Economy, Politics, Academics, Career
Appendix D

Student Invitation to Participate

Dear Participant:

Thank you for considering participation in a study related to choosing to enroll in a short-term study abroad trip. This study is being conducted in partial fulfillment of the requirements for the Doctor of Education degree in Educational Leadership and Policy Analysis at the University of Missouri-Columbia.

The purpose of this study is to examine the student choice process when considering enrollment in a short-term study abroad program. This information will benefit study abroad professionals in identifying strategies to increase participation in study abroad.

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

- Participation in the study is completely voluntary. You may stop participating at any point without penalty.
- You may not answer all of the interview questions.
- Your answers will be kept confidential. Results will be presented to others without names or other identifying information.
- Your participation will take approximately two hours. During this time you will complete two interviews of one hour interview. One now and one at the end of the semester.
- Your interview will be audio taped.

This project has been reviewed and approved by the Graceland University and University of Missouri-Columbia Human Subjects Review Committee. The committee believes that the research procedures adequately safeguard the subject’s privacy, welfare, civil liberties, and rights, and may be contacted at 573-882-9585. The project is being supervised by Dr. Brad Curs, Associate Professor, Educational Leadership and Policy Analysis, University of Missouri-Columbia (573-882-2759).

If at this point you are still interested in participating and assisting with this important research project please date the consent form below. Keep your copy of this letter for future reference. You can contact me at 660-537-6383 if you have questions or concerns about your participation. Thank you very much for your time.

Sincerely,

Amy Dykens
University of Missouri-Columbia

I, agree to participate in the “APPLICATION OF AN INTEGRATED MODEL OF COLLEGE CHOICE TO ENROLLMENT IN SHORT-TERM STUDY ABROAD” research conducted by Amy Dykens. I understand that:

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

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

Date:__________________
Appendix E

Faculty and Staff Invitation to Participate

Dear Participant:

Thank you for considering participation in a study related to choosing to enroll in a short-term study abroad trip. This study is being conducted in partial fulfillment of the requirements for the Doctor of Education degree in Educational Leadership and Policy Analysis at the University of Missouri-Columbia.

The purpose of this study is to examine the student choice process when considering enrollment in a short-term study abroad program. This information will benefit study abroad professionals in identifying strategies to increase participation in study abroad.

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

- Participation in the study is completely voluntary.
- You may stop participating at any point without penalty.
- You need not answer all of the interview questions.
- Your answers will be kept confidential. Results will be presented to others without names or other identifying information but your role at the university may make it possible to identify you as a participant in the research.
- Your participation will take approximately half an hour. During this time you will complete one half hour interview.
- Your interview will be audio taped.

This project has been reviewed and approved by the Graceland University and University of Missouri-Columbia Human Subjects Review Committee. The committee believes that the research procedures adequately safeguard the subject’s privacy, welfare, civil liberties, and rights, and may be contacted at 573-882-9585. The project is being supervised by Dr. Brad Curs, Associate Professor, Educational Leadership and Policy Analysis, University of Missouri-Columbia (573-882-2759).

If at this point you are still interested in participating and assisting with this important research project please sign and date the consent form below. Keep your copy of this letter for future reference. You can contact me at 660-537-6383 if you have questions or concerns about your participation. Thank you very much for your time.

Sincerely,

Amy Dykens
University of Missouri-Columbia

___________________________________
Date:__________________

I, agree to participate in the “APPLICATION OF AN INTEGRATED MODEL OF COLLEGE CHOICE TO ENROLLMENT IN SHORT-TERM STUDY ABROAD” research conducted by Amy Dykens. I understand that:

- My answers will be used for educational research.
- My participation is voluntary.
- I may stop participation at any time without penalty.
- I need not answer all of the questions.
- My answers and identity will be kept confidential.
- My role at the university may make it possible to identify me as a participant.

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

Signed___________________________________  Date:__________________
Appendix F

Data Collection and Analysis Timeline

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<tr>
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<td>2013</td>
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References


http://www.nafsa.org/public_policy.sec/commission_on_the_abraham/


Amy Dykens is currently the Executive Director of Client Services at Weave, a higher education consulting company specializing in institutional effectiveness, student learning, and accreditation processes. Previous to joining Weave Amy was an Assistant Dean for Institutional Research and Assessment.

Amy earned an MBA in Finance at the University of Colorado, Colorado Springs and her Ed.D in Educational Leadership and Policy Analysis at the University of Missouri. Amy has been active at the state level in policy formation surrounding student learning assessment, key performance indicators, and high impact educational practices. She has served as a reviewer for the Missouri Department of Education and is a member of the American Evaluation Association (AEA).

Amy contributed to the academic community as a member of the business faculty and as Associate Director of the nationally recognized Sandage Center for the Study of Free Enterprise and Entrepreneurship at Graceland University. She has led short term study abroad courses in Belize and Mexico and sponsored student led economic development efforts in Thailand and Zambia.

Amy cycles with her husband Alan, but only when the weather is nice. She is a big college football fan in the fall and in the spring she cheers for the St. Louis Cardinals baseball team with her family. The beach holds a very special place in Amy’s heart and she is happy to attend any conference held near the water.