The purpose of this study was to determine if UNCG study abroad students were being prepared for and participating in sustainable tourism practices. The literature review includes an examination of the current trends in study abroad and international education, and a brief history of sustainable tourism. Additionally, an overview of the theoretical base of the study is provided along with an assessment of the efficacy of code of ethics and visitor education programs. The researchers reviewed current pre-departure study abroad handbooks and programs designed to prepare students for their trip abroad and compared these tools to the current mission statements of higher education and international program centers.

This research is a catalyst for creating support for educational programming of sustainable tourism practices for study abroad students by identifying the lack of current studies in this research area and identifying the need for there to be more research. This study also emphasizes the need for the development of programming and establishes the theoretical foundation and framework for the development of educational programming tool that can be used to prepare study abroad students to participate in sustainable tourism practices.
THE UNIVERSITY OF NORTH CAROLINA AT GREENSBORO STUDY ABROAD
STUDENTS' PREPARATION FOR AND PARTICIPATION
IN SUSTAINABLE TOURISM PRACTICES

By

Lauren N. Duffy

A Thesis Submitted to
the Faculty of the Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements of the Degree
Master of Science

Greensboro

2009

Approved by

_________________________
Committee Chair
This thesis has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

Committee Chair _____________________________
Committee Members ______________________________

Date of Acceptance by Committee

Date of Final Oral Examination
ACKNOWLEDGEMENTS

Simply put, this study would not be complete without the help of many people. I would like to sincerely thank Dr. David Cardenas, my committee chair, for his direction, patience, and understanding. I would also like to thank my committee members, Dr. Erick Byrd and Dr. Nancy Gladwell for their guidance and support. I am thankful to the faculty members and staff in the Department of Recreation, Tourism, and Hospitality Management at the University of North Carolina at Greensboro for creating a supportive academic environment.

A special thanks to Carrie Banks for her around-the-clock edits, encouragement, and laughs. Lastly, but definitely not least, I would like to thank my family and the good friends I have made in Greensboro- Andi Hammond, Angie Sardina, Annie Strike, Jennene Lausier, and Walker Thompson- for making my graduate program such an enjoyable experience.
TABLE OF CONTENTS

Page

LIST OF TABLES ........................................................................................................... vii
LIST OF FIGURES .......................................................................................................... viii
CHAPTER

I. INTRODUCTION ........................................................................................................ 1

Key Terms ................................................................................................................. 6

II. REVIEW OF THE LITERATURE ........................................................................ 9

Study Abroad ................................................................. 9
Educational Tourism ............................................................. 13
Sustainable Tourism ................................................................. 14
  Defining Sustainable Tourism ......................................................... 17
Linking Study Abroad and Sustainable Tourism .............................................. 18
  Visitor Impacts ..................................................................................... 20
Theoretical Basis .................................................................................... 20
  Stakeholder Theory ........................................................................... 21
  Theory of Reasoned Action and Planned Behavior ............................... 22
Code of Ethics ............................................................................................... 26
  Purpose of Codes of Ethics ................................................................. 26
  Strengths and Weaknesses of Code of Ethics ........................................ 30
  Development of Codes of Ethics ......................................................... 31
Visitor Education Programs .......................................................................... 34
  Purpose of Visitor Education Programs .............................................. 34
  Examples of Visitor Education Programs .......................................... 35
  Development of Visitor Education Programs ....................................... 36
  Strengths and Weaknesses of Visitor Education Programs .................... 37
  Visitor Education Programs for Study Abroad Students ..................... 38
Integrating Sustainability into Higher Education .............................................. 39
  Mission Statements of Universities and Colleges ................................... 39
  Mission Statements of International Program Centers ......................... 40
  Organizations for Sustainability in Higher Education ............................ 40
  Review of Study Abroad Handbooks and Programs ............................. 42
Conclusion ..................................................................................................... 43

III. METHODOLOGY ............................................................................................... 45

Introduction ....................................................................................................... 45
Background of Population and Participants .................................................. 45
Materials .......................................................................................................... 46
IV. RESULTS ............................................................................................................ 54

Introduction ................................................................................................... 54
Demographics ................................................................................................ 54
Length of Program and Trip Specifics .......................................................... 55
IP Analysis for Preparedness-Frequency Matrix ........................................... 57

V. CONCLUSIONS ................................................................................................. 63

Introduction ................................................................................................... 63
Implications and Applications ....................................................................... 63
Environmental Dimension ........................................................................... 64
Carbon Offsetting ......................................................................................... 65
Used Personal Motorized Transportation ................................................... 66
Leave No Trace Principles ........................................................................... 66
Purchased or Collected Natural Artifacts .................................................... 67
Utilized the Green Passport Program ......................................................... 68
Choose Lodging Based on Sustainable Principles ...................................... 69
Socio-Cultural Dimension .......................................................................... 70
Participated in a Volunteer or Conservation Program ................................ 70
Asked Permission to Take Pictures/ Videotape ......................................... 71
Economic Dimension ................................................................................... 72
Supported Global Businesses ....................................................................... 72
Donated Money in Support of Organized Charities ................................... 73
Bargained for Absolute Lowest Price in Local Markets ............................ 74
Sustainable Tourism Education and Enforcement Continuum ................. 74
Statements of Policy .................................................................................... 77
Codes of Ethics ........................................................................................... 77
Visitor Education Programs ......................................................................... 78
Incentives and Rewards ............................................................................... 78
Certification ................................................................................................ 78
Rules and Laws ......................................................................................... 79
Limitations and Constraints of the Study ..................................................... 80
Sampling ....................................................................................................... 80
Instrument Design ....................................................................................... 80
Recommendations for Future Research ....................................................... 81
Recommendations for Program Development .............................................. 81
Recommendations for UNCG ...................................................................... 82
Conclusions ................................................................................................. 84

REFERENCES ....................................................................................................... 85

APPENDIX A. INITIAL EMAIL SENT TO STUDY ABROAD STUDENTS .......... 96
LIST OF TABLES

Table 1. Key terms in tourism field that have similar meaning or characteristics of sustainable tourism .......................................................... 7

Table 2. Examples of organizations or other sources who have implemented a code of ethics, voluntary travel behavior initiatives, and other sustainable travel tips .......................................................... 29

Table 3. Demographics of Sample .......................................................................................................................... 55

Table 4. Program Type and Trip Specifics ............................................................................................................. 56

Table 5. Host Destinations Listed by Country ............................................................................................................ 57

Table 6. Preparedness- Frequency Mean Scores and Standard Deviation ................................................................. 59

Table 7. Attributes in quadrants A and/or C listed according to the sustainability dimension they reflected ......................................................... 62
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hypothesis matrix of possible results from study of students’ preparedness and frequency of sustainable tourism practices</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Conceptual design of the relationship between study abroad students and the host destination</td>
<td>22</td>
</tr>
<tr>
<td>3</td>
<td>A Theory of Planned Behavior</td>
<td>25</td>
</tr>
<tr>
<td>4</td>
<td>Example of an Importance-Performance Matrix</td>
<td>50</td>
</tr>
<tr>
<td>5</td>
<td>Preparedness-Frequency Matrix</td>
<td>53</td>
</tr>
<tr>
<td>6</td>
<td>Preparedness-Frequency Results and Legend</td>
<td>61</td>
</tr>
<tr>
<td>7</td>
<td>Sustainable Tourism Education &amp; Enforcement Continuum (STEEC)</td>
<td>76</td>
</tr>
</tbody>
</table>
CHAPTER I
INTRODUCTION

“As a study abroad student, you are not going to be just a tourist- you are embarking on something much richer, doing the kinds of things that most tourists can only dream about.” (Paige, Cohen, Kappler, Chi, & Lassegard, 2006, p. 1)

The 2008 Open Doors Report stated that U.S. students are "studying abroad in record numbers" and that there has been an average increase of 8% in students participating each year (Institute for International Education [IIE], 2008c, p.1). In addition, the report also indicated that in the past decade (since the 1996/97 academic year) the number of U.S. students abroad had increased almost 150% from 100,000 to 241,791 total students in 2006/07 (IIE, 2008c). As Paige et al. (2006) suggest in the quote above, studying abroad provides a unique experience that is only possible through international education. It is this ‘study abroad experience’ that can be partially credited with helping to explain why 2,341,765 students have studied abroad from the U.S. since 1985/86 (IIE, 2008b).

In addition, the dramatic increase in participation of study abroad programs over the past decade is in part a result of people recognizing the benefits of study abroad as a personal advantage in a global society, and as an advantage for national security (Association of International Educators [NAFSA], 2006; Baker, 1983; Commission of the Abraham Lincoln Study Abroad Fellowship Program [CALSAFP], 2005; Cushner, 2004; Danzig & Jing, 2007; IIE, 2008c; McMurtrie & Wheeler, 2008; Obst, Bhandari, & Witherell, 2007). There has also been an increase in the number of students studying abroad because of the changing dynamics of the programs offered, which include more destinations and more flexible lengths of stay (Hoffa, 2007; IIE, 2008c; Obst et al., 2007). This augmentation is unlikely to be reduced or stopped in the
near future. It is the vision of the Commission of Abraham Lincoln Study Abroad Fellowship Program (CALSAFP) to send one million U.S. students on study abroad programs each year by 2016/17 (CALSAFP, 2005).

With the growth in the study abroad travel market, it is necessary to consider the impact of study abroad programs in a global context since one of the main tourism issues today is sustainability. Study abroad can be described as a form of tourism and more specifically, it can be described as educational tourism. Educational tourism is defined as “tourist activity undertaken by those who are undertaking an overnight vacation and those who are undertaking an excursion for whom education and learning is a primary or secondary part of their trip” (Ritchie, Cooper, & Carr, 2003, p. 18). Furthermore, it has been suggested that educational tourism could offer a model for responsible tourism, tourism that has the potential to avoid the problems inherent in traditional or unplanned tourism by providing benefits to both the host community as well as to the participants in the program (Sumka, 2007). Additionally, responsible tourism can be seen as having similar meaning and characteristics to sustainable tourism and for the purpose of this research, sustainable tourism is seen as the all-encompassing form of low-impact tourism.

The idea of sustainable development came into light in 1987 with the publication of Our Common Future, which firmly established sustainable development as a critical component of international development (Sneddon, Howarth, & Norgaard, 2006). The concept of sustainability evolved through the 1992 Earth Summit and the 2002 World Summit and was expanded to include more importance of all the three dimensions: economic, socio-cultural, and environmental. The integration of sustainability into the tourism industry as a guiding philosophy resulted in the concept of sustainable tourism (Hunter, 1997; Swarbrooke, 1999; United Nations Environmental Program [UNEP] & World Tourism Organization [WTO], 2005).
Sustainable tourism is the “management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support system” (WTO, 1998, p.21). Furthermore, proper sustainable tourism planning requires stakeholder involvement (Sofield, 2003; Warburton, 1998), in which study abroad students can be identified as stakeholders in the community.

Due to the increase in participation and trends that show upwards of one million U.S. students studying abroad per year by 2016/17 (CALSAFP, 2005), it is important to address the relationship between study abroad and sustainable tourism. Additionally, the 2008 Open Doors Report stated that the number of students who are traveling to untraditional locations such as China, Argentina, South Africa, Ecuador and India, increased 20% over the 2005/06 academic year (IIE, 2008b). Many of these destinations are not as developed and established with regard to tourism as some of the traditional locations such as those in Europe and Australia. Because they may lack proper tourism understanding, planning and development, a visitor’s actions may be more impactful to the fragile destination.

Tourism is typically welcomed by communities who see it as a way to enhance their economic base. Thus, many of these communities are willing to risk being exposed to the possible negative impacts of tourism because the perceived benefits outweigh the perceived costs (Reid, 2003). These communities may also lack the understanding and knowledge for proper policy and planning needed to reduce or prevent the negative impacts caused by tourism. Therefore, sustainable tourism education is needed for the stakeholders in the community so that they can make informed decisions in order for sustainable tourism to be successful.

Also it is important to note that students visiting less developed countries are usually exposed to a greater difference in value systems which may lead to conflict (Cole, 2005; Shaw &
Williams, 1994). Tourists from westernized cultures have values, attitudes, beliefs, and behaviors that have been determined by their cultural identity and their way of life that may have been significantly different from those in developing nations (Cole, 2005; Thyne, Lawson, & Todd, 2006; Weaver, 2006). This disparity in cultural values can result in miscommunications, suspicions, shortcomings, misunderstandings, and conflict (Cole, 2005; Turner, Reisinger, & McQuilken, 2001). In addition to the social differences, there are also distinctions in values towards the environment and economic system. When visitors are insensitive to a destination’s culture, it is not unusual for incidents to occur. Such incidents may have occurred because the visitor was unaware of how their behavior may be viewed by the locals, as well as the adverse impacts their insensitivity may cause (Cole, 2005; Edgell, 2006; Marion & Reid, 2007; Shackley, 1996).

Educating study abroad students on sustainable tourism practices could potentially be used as a tool to reduce their negative impacts that are caused by careless, unskilled, and uninformed actions (Hendee & Dawson, 2007). This study focused on two main methods of sustainable tourism education which included utilizing a code of ethics and visitor education programs. Through visitor education programs, study abroad students can be exposed to the concepts of sustainable tourism, why they are important, and why they should practice sustainable tourism principles.

Therefore, this study will address the question, “Are the University of North Carolina at Greensboro (UNCG) study abroad students prepared to and actively participate in sustainable tourism practices?” The study will include a survey of students who studied abroad during the 2007/08 academic year and during the 2008 fall semester at UNCG. Two aspects will be measured: 1) Whether students felt they were prepared (given resources and/or knowledge) to
participate in sustainable tourism practices and 2) Whether they actively participated in sustainable tourism practices while studying abroad. Figure 1 shows a possible outcome matrix.

![Hypothesis matrix of possible results from study of students’ preparedness and frequency of sustainable tourism practices.](image)

The substantive hypothesis states that students were not prepared and did not participate in sustainable tourism practices. Tests include descriptive statistics and a modified importance-performance analysis.

The literature review includes an examination of the current trends in study abroad and international education, sustainable tourism practices, and pre-departure programming for study abroad students. This study discusses why it is important for students who study abroad to understand these practices. Additionally, this research is intended to be a catalyst for creating
support for the need of pre-trip educational programming for all study abroad students in the U.S. The final product of this study is to provide the theoretical foundation and framework for the development of a code of ethics and/or visitor education program that can be used to prepare study abroad students to understand and be aware of sustainable tourism practices prior to embarking on their travel abroad experience.

Key Terms

Table 1 provides a compilation of key terminology that may have subtle differences that may be used within this study or within sustainable tourism research.
<table>
<thead>
<tr>
<th>Key Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adventure Tourism</td>
<td>Typically involves travel to unspoiled areas but also requires physical activity, endurance, and a perceived level of risk (Honey, 2008).</td>
</tr>
<tr>
<td>Agritourism/ Farm-based</td>
<td>Rural enterprises which incorporate both a working farm environment and a commercial tourism component (Weaver &amp; Fennell, 1997). Examples include farm tours, farm bed &amp; breakfasts, wineries, petting zoos, fee hunting, fee fishing, farm vacations, horseback riding, and camping (Edgell, 2006 as cited from Fogarty &amp; Renkow, 1998).</td>
</tr>
<tr>
<td>Alternative Tourism</td>
<td>Small-scale tourism which is thought to be more appropriate than conventional mass tourism (Weaver, 2006).</td>
</tr>
<tr>
<td>Community-Based Tourism</td>
<td>Community-based tourism is a holistic approach to tourism that incorporates the environmental, social, cultural, and economic impacts of tourism (Schwarz, 2006).</td>
</tr>
<tr>
<td>Cultural Tourism</td>
<td>Travel that is motivated entirely, or in part, by artistic, heritage, or historical offerings (Edgell, 2006).</td>
</tr>
<tr>
<td>Ecotourism</td>
<td>Responsible travel to natural areas that conserve the environment and improve the well being of local people (The International Ecotourism Society [TIES], 1990).</td>
</tr>
<tr>
<td></td>
<td>Traveling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations found in the area (Ceballos-Lascurain, 1987).</td>
</tr>
<tr>
<td>Educational Tourism</td>
<td>“A tourist activity undertaken by those who are undertaking an overnight vacation and those who are undertaking an excursion for whom education and learning is a primary or secondary part of their trip” (Ritchie et al., 2003, p. 18).</td>
</tr>
<tr>
<td>Geotourism</td>
<td>“Tourism that sustains or enhances the geographical character of a place—its environment, culture, aesthetics, heritage, and the well-being of its residents” (National Geographic Society, 2003, p. 1).</td>
</tr>
<tr>
<td>Key Term</td>
<td>Definition</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Green Tourism</td>
<td>Tourism that involves individuals’ minimizing their impact on the environment while traveling (Schwarz, 2006).</td>
</tr>
<tr>
<td>Heritage Tourism</td>
<td>Type of tourism that involves visiting and experiencing places and participating or observing activities that authentically representing the stories of individuals from the past (Edgell, 2006).</td>
</tr>
<tr>
<td>Nature Tourism</td>
<td>Type of tourism that goes to unspoiled places to experience and enjoy nature (Honey, 2008).</td>
</tr>
<tr>
<td>Responsible Tourism</td>
<td>Travel with a purpose that generates greater economic benefits for local people while providing enjoyable experiences for the tourist (TIES, 1990).</td>
</tr>
<tr>
<td>Rural Tourism</td>
<td>Any type of tourism activity that takes place in a rural area ranging from mass to small scale tourism (Roberts &amp; Hall, 2001).</td>
</tr>
<tr>
<td>Sustainable Tourism</td>
<td>“Management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems” (WTO, 1998, p. 21).</td>
</tr>
<tr>
<td></td>
<td>Six main principles of the WTO’s sustainable tourism development:</td>
</tr>
<tr>
<td></td>
<td>1.   A high level of tourist satisfaction</td>
</tr>
<tr>
<td></td>
<td>2.   Optimal use of environmental resources</td>
</tr>
<tr>
<td></td>
<td>3.   Respecting the socio-cultural authenticity of host communities</td>
</tr>
<tr>
<td></td>
<td>4.   Providing socio-economic benefits to all stakeholders</td>
</tr>
<tr>
<td></td>
<td>5.   Constant monitoring of impacts</td>
</tr>
<tr>
<td></td>
<td>6.   Informed participation of all relevant stakeholders</td>
</tr>
<tr>
<td></td>
<td>(Byrd, Cárdenas, &amp; Greenwood, 2008; WTO, 2004)</td>
</tr>
<tr>
<td>Voluntourism/ Volunteer Tourism</td>
<td>The idea of traveling to a destination to interact with the community and its residents with the objective of improving their quality of life through socio-cultural development or environmental conservation by providing volunteer assistance and/or goods (Sustainable Travel International [STI], 2008).</td>
</tr>
<tr>
<td>Wildlife Tourism</td>
<td>Tourism that has the primary purpose of observing animals, birds, and fish in native habitats (Honey, 2008).</td>
</tr>
</tbody>
</table>
CHAPTER II
REVIEW OF LITERATURE

Study Abroad

The Institute for International Education (IIE) defines study abroad students as those who received academic credit from an accredited U.S. institution of higher education after they returned from their study abroad experience (IIE, 2008a). Furthermore, the term ‘international education’ is often used interchangeably with study abroad and has been defined to include studies in the area of international relations and global studies (Burn, 1980). This study is drawing from limited formal definitions of ‘study abroad’ and describes the term from a compilation of interpretations that universities across the U.S. have offered. Thus, the operational definition of study abroad used for this research is described as students pursuing educational opportunities in a foreign country as part of their degree program, while experiencing a new culture and environment, and impacting the local destination.

As stated previously, U.S. students are "studying abroad in record numbers", and there has been an average increase of 8% in students participating each year (IIE, 2008c, p.1). The 2008 Open Doors Report, an annual report published by the IIE, indicated that in the past decade (since 1996/97) the number of U.S. students abroad had increased almost 150% from 100,000 to 241,791 total students in 2006/07 (IIE, 2008). There are multiple factors which have influenced the upward trend in the number of students studying abroad. First, the benefits for students in a global society are being recognized (CALS AFP, 2005; Cushner, 2004; Hoffa, 2007; IIE, 2008c; McMurtrie, 2008). Also, there has been a favorable push towards an increase in participation by universities and the federal government because international education is recognized as a
national security initiative (CALSAFP, 2005; McMurtrie & Wheeler, 2008; Obst, Bhandari, & Witherell, 2007). Additionally, there has been an increase in the variety of programs and destinations made available to study abroad students. Lastly, the affects of globalization have fostered an environment more suitable for international travel (Hoffa, 2007).

There has been a growing recognition of the importance for university students to have international exposure and experience in order to compete in a globalized world (CALSAFP, 2005; Cushner, 2004; Hoffa, 2007; IIE, 2008c; McMurtrie, 2008). The Americans Call for Leadership on International Education (2006) confirmed that 90% of Americans value international education as an opportunity to prepare students for an interconnected world. This idea was supported by studies that have shown traveling abroad provides an opportunity for students to experience multiple cultures and understand globalization (Association for International Educators [NAFSA], 2006; Danzig & Jing, 2007). Baker’s (1983) study on the effects of a semester abroad program in Austria stated three quarters of the students reported an increased interest and understanding of world affairs. The consensus of research suggests that study abroad prepares students to develop the global understanding necessary to conduct themselves effectively in a competitive international environment (CALSAFP, 2005; Cushner, 2004; Danzig & Jing, 2007; NAFSA, 2006). Other benefits of studying abroad that have been noted include an increase in participants’ cultural awareness, an increase in acceptance of other cultures, an increase in tolerance for people who are culturally different, and a reduction of negative images and stereotypes (Bower, 1973; Murphy, 1992). The 2008 Longitudinal Report of Study Abroad 1993-2007 at UNCG reported that past study abroad students indicated the benefits to studying abroad included a greater understanding of other cultures, growth in interpersonal skills and adaptability, maturity, self-confidence, and self awareness (Fischer, 2008).
In addition, there has been a push by universities and federal government to increase the number of study abroad students each year. This excerpt includes a few examples of how universities have responded to the need for international education:

University of Minnesota has established a goal of 50% of all undergraduate students to study abroad within the next decade. Harvard University recently announced plans to make study abroad a degree requirement. San Francisco State University plans to double the number of undergraduate studying abroad by 2010. Michigan State University, with a strong and growing program, has focused heavily on nontraditional countries. And Baltimore’s Goucher College made national news by announcing in September 2005 that study abroad, backed by a $1,200 voucher from the college for travel, will become a degree requirement for students entering in fall 2006. (CALSAFP, 2005, p. vii)

Study abroad has been identified as a critical component to the U.S.’s national security because it has been recognized as a major means of producing foreign language speakers, enhancing foreign language learning, and preparing students to be global citizens (CALSAFP, 2005; McMurtrie & Wheeler, 2008; Parker, 2008). Increasingly, government officials and higher education leaders are becoming aware of “the risks to America’s national security… if the next generation of students fails to experience and understand foreign cultures and acquire the self-confidence, independence, and leadership qualities that result from studying abroad” (Obst et al., 2007, p. 6).

In June 2007, the Senator Paul Simon Study Abroad Foundation Act, which was based on Lincoln Commission Report, was passed in the House of Representatives and subsequently passed unanimously in June 2008 in the Senate Foreign Relations Committee (Association of Public and Land-Grant Universities [ASPLU], 2008). NAFSA (2008) reported the goal of this legislation is to create more globalized American citizens by establishing an innovative public-private partnership which will be able to:

- “Increase participation in quality study abroad programs.
• Encourage diversity in the student population who studies abroad.
• Diversify locations in study abroad, particularly in developing countries.
• Make study abroad a cornerstone of higher education” (¶ 2).

A major variation in study abroad programs is the opportunity to partake in more short-term, faculty-led programs (Hoffa, 2007; IIE, 2008c). Since the 1998/99 academic year, short-term study abroad programs have had more student participation each year than the semester and year-long programs because they offer a more flexible international study opportunity to students who would otherwise be unable to participate. The programs are able to be more discipline-specific and may potentially remove financial, academic, or personal barriers (Obst et al., 2007). For example, 55.4% of all U.S. students who studied abroad during the 2006/07 academic year participated in short-term programs, while another 40.2% partook in a semester abroad program and the remaining 4.4% studied abroad for a full academic year (Obst et al., 2007). Another change in study abroad programs has been the choices of destination for study abroad programs. The Open Doors Report (2008) found that more frequently students are choosing non-traditional destinations to study abroad, with places such as China, Argentina, South Africa, Ecuador and India, seeing a growth of more than 20% over the last year.

Finally, the role of globalization can also be attributed to the expansion in study abroad programs. Globalization and internationalization have been central issues for higher education worldwide for almost the last decade (Altbach, 2002). The term globalization implies to the increasing interconnectivity of economies, cultures, and information due to the shift in spatial and temporal contours (Meethan, 2001). The increasing interconnectivity has occurred because of advancements in technology, more effective dissemination of information, and faster transportation that has restructured all global relationships to a more integrated and interdependent world society (Hjalager, 2007; Meethan, 2001). Globalization has ultimately
caused an increase in international education by creating an environment that demands and facilitates travel and tourism (Hjalager, 2007). Furthermore, as participation in international education grows, globalization may also spread as students share knowledge, information, and culture with other parts of the world while studying abroad.

Educational Tourism

One of earliest forms of recorded tourism is educational tourism. During the 17th and 18th centuries the “Grand Tour” enticed diplomats and scholars to cultural centers throughout Europe for an educational and cultural experience (Goeldner & Ritchie, 2006; Ritchie, Carr, & Cooper, 2003). Educational tourism has been defined in many ways and according to Ritchie et al. (2003), it may be separated into two travel markets. The first market identifies those who take part in general travel for education where education or learning is a key component of the tourism experience. The second market is that of university students or schools, where education and learning is the primary objective and the tourist experience is a resulting aspect. Both of these groups are considered tourists and both have direct tourism-related impacts and needs (Ritchie et al., 2003). Educational tourism can therefore be defined as “tourist activity undertaken by those who are undertaking an overnight vacation and those who are undertaking an excursion for whom education and learning is a primary or secondary part of their trip” (Ritchie et al., 2003, p. 18).

Educational tourism can also be defined as “a program in which participants travel to a location as a group with the primary purpose of engaging in a learning experience directly related to the location” (Bodger, 1998, p. 28). Additionally, Weaver (2006) wrote that educational tourism is a form of alternative tourism (see Table 1) in that there are similar travel motivators and local goods and services are preferred. A final interpretation of educational tourism can be illustrated through the description of educational tourists who have been identified as those who
participate in study tour and attend workshops to learn new skills or improve existing ones while on vacation (Gibson, 1994).

It is important to note the inconsistencies of how educational tourism can be interpreted due to the intricacy of the market (Ritchie et al., 2003). The definition from Ritchie et al. (2003) encompasses study abroad students as educational travelers because it states that education may be the primary purpose for traveling and the tourist experience may be secondary. For study abroad students, learning, earning academic credit, and taking part in the tourist experience are all primary reasons for participating in a study abroad program. If education or academic credit were not important, students would not be participating in a study abroad program, but traveling independently where they could tailor the tourist experience. Thus, this study will use the definition from Ritchie et al. (2003) in order to identify the study abroad students as part of the educational market. Furthermore, it has been suggested that educational tourism could offer a model for responsible tourism, tourism that has the potential to avoid the problems inherent in traditional or unplanned tourism by providing benefits to both the host community as well as to the participants in the program (Sumka, 2007).

As noted in Table 1, the Responsible Travel Handbook (2006) defined responsible tourism as being tourism that produces more economic benefits for local people while providing a great experience for the visitor. Responsible tourism greatly influences the social impact of travel, such as developing cultural respect and increasing quality of life for the host destination. Mader (2006) described responsible tourism as the idea of traveling with the familiar golden rule of “treating others the way they wish to be treated.”

Sustainable Tourism

The idea of sustainable development came into light in 1987 with the Brundtland Commission’s publication of Our Common Future, which firmly established sustainable
development as a component of international development thinking and practice (Sneddon, Howarth, & Norgaard, 2006). Sustainable development was defined by the Brundtland Commission as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987, p. 43). The notion of sustainable development was a pragmatic response to the problems that were faced with the promotion of global economic development, such as natural resource depletion, global warming, and unequal distribution of wealth (Sneddon et al., 2006). Even though the World Commission on Environment and Development (WCED) examined the socio-cultural and economic impacts of development, the primary area of concern was the implication of global development on the environment.

In 1992, the Rio de Janeiro Conference on Environment and Development (also known as the Earth Summit) offered the Principles of Agenda 21 and international agreements on climate change and biodiversity, to further address the impacts of global development on the natural environment (Boyle & Freestone, 1999; Sneddon et al., 2006). At the Earth Summit, the widening gap of access to the economical opportunities and the disparity among those countries with fewer resources was formally recognized (Sneddon et al., 2006). However, it was not until the 2002 World Summit on Sustainable Development in Johannesburg that the standard definition of sustainable development was expanded to include more importance on each of the three dimensions: economic, social, and environmental. The Johannesburg Declaration (2002) formally acknowledged the three dimensions of sustainable development as being interdependent in that they can be both mutually reinforcing or in competition. The key to successful sustainable development is finding the balance, or a working trade-off, of the costs and benefits between the three dimensions (Hunter 1997; Swarbrooke, 2000; United Nations Environmental Program [UNEP] & World Tourism Organizations [WTO], 2005).
The aforementioned summits emphasized that fundamental changes, from global policy to style of living, were needed in order to rectify the onset of some of the world problems such as global warming and poverty. Thus, the concept of sustainability became relative in all aspects of life, including travel and tourism (Edgell, 2006). Tourism is considered one of the largest industries in the world and it can be easily identified as a major contributor to the challenges raised by the idea of sustainable development (Dubois, 2001). In 1980, the Manila Declaration had already contended that “tourism resources cannot be left uncontrolled without running the risk of their deterioration or even destruction” (WTO, 1980, p. 4). In addition, the 1985 Joint Declaration of the World Tourism Organization (WTO) and the United Nations Environmental Program (UNEP) advocated for the ‘rational management’ of tourism for one of the first times in history (Inskeep, 1991; Weaver, 2006). It has been asserted that applying the idea of sustainability to the tourism industry as a guiding philosophy was idyllically appropriate (Muhanna, 2006; UNEP & WTO, 2005).

The 1989 Hague Declaration on Tourism used the term sustainable tourism and by the early 1990’s, the expression started to regularly appear in tourism planning and development research literature (Bryd, 2007; Inskeep 1991; Southgate & Sharpley, 2002). It should be noted that sustainable tourism principles had been practiced long before the term ‘sustainable tourism’ came into existence. Some examples of types of tourism that have been identified with similar characteristics include alternative tourism, rural tourism, cultural tourism, and many others. These forms of tourism all have some characteristics that are similar to those denoting sustainable tourism. A common misconception though is that sustainable tourism only applies to small-scaled tourism when in actuality it refers to any type of tourism that is based on the principles of sustainable development (UNEP & WTO, 2005). Table 1 provides more clarification of key terms.
Defining Sustainable Tourism

Sustainable tourism is often better understood by acknowledging its purpose. The holistic goal of sustainable tourism is to maximize the positive impacts of tourism development while minimizing the negative, by focusing on the balance of the costs and benefits to the economic, socio-cultural, and environmental dimensions (Edgell, 2006; Gunn, 1994; Swarbrooke, 1999; Weaver, 2006). Due to there being no one set definition, it may be more effective to describe sustainable tourism by the principles that guide it. Key principles of sustainable tourism include the following that was adapted from a compilation by Byrd (2003):

3. Respect and understanding for other cultures is fostered (As cited from Southgate & Sharpley, 2002; Bramwell & Lane, 1993).
4. Works to maintain or improve environmental quality (As cited from Alipour, 1996; Faulkner, 1998; WTO, 1998).
5. Benefits and costs to stakeholders are equally shared throughout the community (As cited from Alipour, 1996; Faulkner, 1998; WTO, 1998).
6. There is inclusion of stakeholders in the entire planning process (As cited from Faulkner, 1998; Garrod & Fyall, 1998; Southgate & Sharpley, 2002; Swarbrooke, 1998; Vincent & Thompson, 2002; Gunn, 1994).
7. There is an integration of all levels of government support (As cited from Garrod & Fyall, 1998; Southgate & Sharpley, 2002).
8. To be successful there needs to be a common goal of sustainability between stakeholders in the tourism industry, stakeholders who are community members and residents, and stakeholders in the management agencies (As cited from Horochowski & Moisey, 1999). (Bryd, 2003, p. 23-25)

These principles should guide the proper planning and development of sustainable tourism and many researchers believe that this is the only sensible option of progression to have long-term tourism sustainability (Edgell, 2006; Goeldner & Ritchie, 2006). Also, understanding modern sustainable tourism policy will help direct tourism development in the right direction and ensure its positive growth (Edgell, 2006).
Achieving sustainable tourism is a continuous process and requires the constant monitoring of impacts through the use of sustainable tourism indicators. Indicators are variables that can be measured to reveal the changing condition and are a means through which existing information can be filtered and new information collected (Weaver, 2006). If sustainable tourism indicators suggest that tourism is negatively altering part of the destination, then adaptive or corrective measures should be taken to prevent further unwanted impact (Mader, 2006). Monitoring sustainable tourism indicators are a critical task included in the management of sustainable tourism development. This study found no research on current indicators in place specifically for study abroad students to measure their impact while abroad.

The process of sustainable tourism development requires planning and management in order to be effective and if done properly may add to the quality of life of all stakeholders involved. As Edgell (2006) stated, “sustainable tourism, properly managed, can become a major vehicle for the realization of humankind’s highest aspirations in the quest to achieve economic prosperity while maintaining social, cultural, environmental integrity” (p. 1).

**Linking Study Abroad and Sustainable Tourism**

The foremost reason for addressing the relationship between study abroad and sustainable tourism is because of the increase in participation and the advocating for upwards of one million students to study abroad each year (CALSAF, 2005). Also as mentioned previously, the 2008 *Open Doors Report* stated that the number of students who are traveling to untraditional locations has increased significantly (IIE, 2008c). Many of these destinations are not as developed and established with regard to tourism as some of the traditional locations such as those in Europe and Australia. Tourism has typically been welcomed by communities who view tourism development as a means to supplement their economy. In addition, many of the same communities took the risk of being exposed to the negative impacts of tourism development because either the potential
benefits outweighed the potential costs, or the community was not aware of the potential costs (Reid, 2003). These communities may have lacked the proper policies related to the planning and development of sustainable tourism and thus were more susceptible to the negative impacts and consequences of tourism.

It is important to note that students visiting less developed countries have typically encountered different value systems (Cole, 2005; Shaw & Williams, 1994). Tourists from westernized cultures have values, attitudes, beliefs, and behaviors that have been determined by their cultural identity and their way of life that may have been significantly different from those in developing nations (Cole, 2005; Thyne, Lawson, & Todd, 2004; Weaver, 2006). Particularly, it has been stated that the largest cultural differences are found between Asian and Western societies (Reisinger & Turner, 1998 as cited from Samovar & Porter, 1998). This disparity of cultural values has often resulted in miscommunications, suspicions, shortcomings, misunderstandings, and conflict (Cole, 2005; Turner, Reisinger, & McQuilken, 2001). In addition to the social and cultural differences, there have also been distinctions in values towards the environment and economic system. For example, in developing countries, infrastructure or policy for recycling, reducing energy use, or proper waste management may either not exist or not be on the same level as to which the visitor may be accustomed. Also, if the local economy is not stable it may be more at risk for financial leakage and the poverty level may be more prevalent and severe than the visitor has encountered before. When considering Maslow’s Hierarchy of Needs, a reason for the lack of value for the environment and economy is because they may not be considered primary concerns if the basic life-functions of existence are not fully met (i.e. no jobs, no food, or no healthcare). These incongruities of value often lead to unintentional visitor impacts.
Visitor Impacts

Incidents that occur when visitors are insensitive to their surroundings can be attributed to their unawareness of the adverse impacts their actions cause (Cole, 2005; Edgell, 2006; Marion & Reid, 2007). Hendee and Dawson (2002) identified five undesirable visitor actions: careless, unskilled, uninformed, unavoidable, and illegal. A few examples of insensitive visitor behavior include: tourists purchasing souvenirs such as coral, exotic rocks, or seashells; visitors trampling fragile vegetation or otherwise not practicing Leave No Trace Principles; visitors taking historic artifacts from preservation or designated sites; and/or tourists taking pictures of locals or their personal property without permission (Edgell, 2006; Marion & Reid, 2007).

Visitors and tourists often lack information or have inadequate guidance on appropriate behavior prior to visiting a new destination (Cole, 2005 as cited from Commission for Sustainable Development (CSD), 2005; see also Cole, 2007). According to Curtis and Headicar (1997), many people are ready and willing to change their travel choices given the right kind of information and encouragement. It can be argued that many tourists are open to learning appropriate behavior while traveling because few wish to cause any harm (Cole, 2005, 2007). The practice of successful sustainable tourism is not solely the responsibility of the destination; the visitor also has responsibilities (Edgell, 2006). For sustainable tourism to be successful it is mandatory that all the stakeholders in the tourism industry, which includes the tourists, should be educated about the policies and principles of sustainable tourism (Byrd et al., 2008; Edgell, 2006).

Theoretical Basis

This research incorporated two distinct theories. The first theory, The Stakeholder Theory, was used to develop the theoretical base and need for the research. The second theory, the Theory for Reasoned Action, was used to guide the development of the educational
programming needed for educating the stakeholders. Both theories are briefly conceptualized below.

**Stakeholder Theory**

The concept of a stakeholder was first introduced in 1963 by the Stanford Research Institute (SRI) who stated that a stakeholder is “any group without whose support the organization would cease to exist” (SRI, 1963 adapted from Freeman, 1984, p. 31). The Stakeholder Theory gained popularity in research literature in 1984 when Freeman wrote *Strategic Management: A Stakeholder Approach*. He modified the SRI’s original definition to “any group or individual who can affect or is affected by the achievement of the organization’s objectives” (Freeman, 1984, p.46). In 1995, Donaldson and Preston refined Freeman’s definition reporting that in addition to being able to affect or is affected by the achievement of the organization’s objectives, the group or individual must also have a legitimate interest in the organization. Additionally, stakeholders tend to have a moderate to strong connection with the community and must share the costs of development as well as the benefits (Kline, 1999 adapted from The International Ecotourism Society, 1990).

Research has shown sustainable tourism planning requires local community participation and stakeholder involvement (Soefield, 2003; Warburton, 1998). A commonly used definition of sustainable tourism, which places emphasis on the stakeholder involvement, states that it is “a form of tourism which meets the needs of tourists, the tourism industry, and host communities today without compromising the ability of future generations to meet their own needs” (Swarbrooke, 1999, p. 13). Stakeholder involvement is a critical component of sustainable tourism development. Additionally though, stakeholders must have an understanding of the concepts of tourism and sustainability in order for their involvement in tourism planning to be successful (Byrd, 2007; Faulkner, 1998). With better understanding of sustainability, tourism
policies, and development, stakeholders can make informed decisions about tourism in their community (Byrd, 2007).

Examples of possible stakeholders in a community include visitors, residents, business owners, local government officials, and/or special interest groups. In this study we focused on one particular stakeholder group: the tourist. With this notion, the research identified the study abroad students as stakeholders to the program destination. A breakdown of their relationship can be shown in Figure 2.

| Tourist as Stakeholders | Study Abroad Students as Tourists | Study Abroad Students as Stakeholders |

Figure 2. Conceptual design of the relationship between study abroad students and the host destination

A typical semester-long study abroad program lasts fifteen weeks but a study abroad program can range in length anywhere between two weeks to an entire year. During this time, students become part of the community and should share the costs and benefits of tourism to the destination. As it has been stated, it is important that all stakeholders, including visitors, to be educated and aware of how their actions affect the destination environmentally, socio-culturally, and economically.

**Theory of Reasoned Action and Planned Behavior**

The Theory of Reasoned Action was first introduced in 1967 and has been used to predict and explain human behavior that deals with the relationships among beliefs, attitudes, intentions and behavior (Azjen & Fishbein, 1980; Fishbein, 1967, 1973,1980; Fishbein & Ajzen, 1975; Fishbein & Manfredo, 1992). The premise of this theory is that an individual’s behavior is a function of four key elements; action, target, context and time. Once a behavior is identified the
theory assumes that this behavior can be predicted based on two determinates: a person’s attitude and a person’s subjective norms. In addition, the theory implies that behaviors can be altered or modified by providing an intervention that either changes the internal perceptions or beliefs of that individual by changing the social structure’s perception or beliefs (Fishbein & Manfredo, 1992).

As mentioned above, the Theory of Reasoned Action is a function of two determinants: attitudes and subjective norms. The attitudes determinant is based on personal factors such as the person’s positive or negative feelings toward the behavior in question, or attitude toward the behavior. The second determinant, subjective norm, is the perception of the social pressures to perform or not perform in a certain action (Fishbein & Manfredo, 1992). Generally, individuals will intend to perform a behavior when they have a positive attitude towards it and they believe their ‘significant others’ think they should perform it (Fishbein & Manfredo, 1992).

The Theory of Reasoned Action was extended in 1985 through the proposal of the Theory of Planned Behavior (Ajzen, 1991). Its foundation is based on the same principles as the Theory of Reasoned Action, but also includes a new component, the perceived behavior control. This dimension can account for behavior that is not exclusively determined by the individual’s attitude towards or subjective norm of the particular behavior, but by the individual’s perceived ability to perform that behavior (Ajzen, 1991). The perceived behavior control for an individual is based on the beliefs about factors that may facilitate or impede them from performing the behavior (Ajzen, 1991).

An example of the theory applied to an aspect of a study abroad student traveling sustainably would be if they choose to carbon offset their trip. For this action to happen the student would have to have positive feelings towards carbon offsetting, perceive that there are social pressures to perform this action, and also perceive that the behavior would not be too
difficult to complete. Another example of a social pressure affecting a person’s intent of behavior could be that some travelers are waiting for supportive framework to collectively facilitate the practice of sustainable tourism principles. Individuals many times look to the government and/or businesses to take the lead in setting standards and appropriate behavior (Haq, Whitelegg, Cinderby, & Owen, 2008). To conceptualize this theory, see Figure 3.
Figure 3. A Theory of Planned Behavior. Arrows indicate the direction of influence within hypothesized relationships.

Code of Ethics

During the 1990s, after the wake of the environmental movement, ‘codes of ethics’ were the first response in an attempt to self-regulate sustainable standards of operation and activities within the tourism industry (Dubois, 2001; Weaver, 2006). Efforts to regulate standards were designed for a number of stakeholder groups including tour operators, transportation, accommodations, services, tour guides, the host community, and visitors (Cole, 2005; Dubois, 2001; Malloy & Fennell, 1998). Voluntary behavior initiatives in the tourism field were numerous and included terms such as codes of ethics, codes of conducts, ethical guidelines, sustainable tourism criteria, and many other variations of expression. This study followed the lead of Malloy and Fennell (1998) which used the term ‘code of ethics’ to encapsulate all the different variations of expression which have similar meaning and intent. Endorsement of these ‘codes of ethics’ have been more prominent among not-for-profit organizations in the U.S., mainly because there is no overriding governmental organization to execute this task (Edgell, 2006). A few examples of not-for-profit organizations that have endorsed a code of ethics include The International Ecotourism Society (TIES), American Society for Travel Agents (ASTA), and Sustainable Travel International (STI).

Purpose of Code of Ethics

The purpose of a code of ethics is to provide a set of guidelines that are directed to influence the attitudes and behavior of those claiming to abide by it (Weaver, 2006). To note the interpretation and comparable focus, ethics is a philosophical exploration into values of an individual’s or organization’s action and is a “more collective and pragmatic notion, which attempts to rationalize a collective action and its consequences” (Dubois, 2001, p.2). Malloy and Fennell (1998) looked at the origin of 414 statements in their study of 40 different codes within the tourism field and suggested that they were derived from an organization’s basic assumptions,
core values, norms, and beliefs. A code of ethics for tourists should educate visitors about the communities they visit and how to behave without causing offense (Cole, 2005). Codes of ethics typically adopt ethical principles focusing on a sense of responsibility rather than precise conduct and therefore are voluntary; however obligations to a personal standard of ethics or peer pressure can be a source of enforcement (Cole, 2005, 2007; Garrod & Fennell, 2004).

Techniques for enforcement of a desired behavior can be considered hard or soft intervention methods. Hard intervention enforcement methods are more obligatory and externally imposed and typically are found in the form of regulations, rules or laws that are put into effect by an authority organization (Weaver, 2006). While this method can be the more effective and aggressive to alter or modify behavior, it may also decrease visitor freedoms and can be costly to develop and implement. As previously stated, soft intervention enforcement methods are more voluntary and internally enforced but may not be as effective in altering behavior. However, soft intervention methods are less costly to develop and implement and do not carry negative connotations that laws and rules often do (Marion & Reid, 2007).

Specifically, a code of ethics for tourists is a soft intervention visitor management enforcement tool that can be used to educate visitors, to increase tourist confidence, to prevent conflict between stakeholders, and/or to influence the behavior in order to reduce the potential negative impacts of tourism (Mason, 2005; Cole, 2005). A further comparison of hard and soft intervention methods are expanded on in the conclusion section.

Research indicates that people act because the behavior is enjoyable, challenging, or because they endorse the values underlying the action (Haq et al., 2008; Osbaliston & Sheldon, 2003). Behavior does not change without a preceding change in attitude, and attitudes can be influenced by access to new information, appeals to emotion or pressure from others (Cole, 2005 as cited from Roberts & Rognvaldson, 2001; Eagly & Chaiken, 1993; Haq et al., 2008). Looking
back at the Theory of Reasoned Action, one can apply the idea that if one wants to “change or reinforce a given intention of behavior, one must change or strengthen the attitude toward performing that behavior, and/or change or strengthen the subjective norm with respect to that behavior” (Fishbein & Manfredo, 1992, p.37). Codes of ethics serve to strengthen the attitude toward performing certain behaviors by educating and making those adhering to the code aware of appropriate behavior. It may also strengthen the subjective norm with respect to that behavior by creating a new standard of appropriate behavior if enough people are adhering to a particular set of behavior set forth by a code of ethics.

A common characteristic of codes of ethics pertaining to sustainable tourism is that they include an articulated commitment to protecting the integrity of the natural environment and local cultures, and a commitment to acting responsibly by implementing proper planning and management with informed participation of all relevant stakeholders (Genot, 1995; Weaver, 2006). In 1995, Genot was able to group the existing ‘codes of ethics’ in the tourism field into three categories: those meant for the host communities, the tourism industry, or the tourist. The tourist has become a primary focus for concern of ethical behavior in recent years (Cole, 2005; Dubois, 2001; Malloy & Fennell, 1998).

The Ten Commandments of Ecotourism from the ASTA is an example of a code of ethics that provides ten general directive statements on how to act responsibly while visiting other communities. Many not-for-profit organizations, international and national government organizations, and private companies have made efforts to help minimize the negative impacts of tourism with similar codes of ethics (Cole, 2005; Mason & Mowforth, 1996). Table 2 provides the list of code of ethics, voluntary travel behavior initiatives, and other sustainable travel tips that this study reviewed.
Table 2.
Examples of organizations or other sources who have implemented a code of ethics, voluntary travel behavior initiatives, and other sustainable travel tips.

<table>
<thead>
<tr>
<th>Source</th>
<th>Name of Code of Ethics</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Society of Travel Agents</td>
<td>The Ten Commandments of Ecotourism</td>
</tr>
<tr>
<td>Business Enterprises for Sustainable Travel</td>
<td>Traveler’s Philanthropy</td>
</tr>
<tr>
<td>Center for Responsible Tourism</td>
<td>Personal Guidelines for Responsible Tourism</td>
</tr>
<tr>
<td>Go Green Travel Green</td>
<td>Travel Tips for the Eco-Conscious Traveler</td>
</tr>
<tr>
<td>Green Passport</td>
<td>Suggested Guidelines</td>
</tr>
<tr>
<td>Lonely Planet : Volunteer</td>
<td>How to Make a Difference Around the World</td>
</tr>
<tr>
<td>Pacific Asia Travel Association</td>
<td>Code for Environmentally Responsible Tourism</td>
</tr>
<tr>
<td>Rainforest Alliance</td>
<td>Tips for the Savvy Traveler</td>
</tr>
<tr>
<td>Rhiannon Batten</td>
<td>Higher Ground</td>
</tr>
<tr>
<td>Sustainable Travel International</td>
<td>Get Involved- Travelers</td>
</tr>
<tr>
<td>The International Ecotourism Society</td>
<td>Your Travel Makes a Difference</td>
</tr>
<tr>
<td>The Partnership for Global Sustainable Tourism Criteria</td>
<td>Global Sustainable Tourism Criteria</td>
</tr>
<tr>
<td>The Travel Foundation</td>
<td>Insider Guide: Make a Difference When you Travel</td>
</tr>
<tr>
<td>Tourism Concern</td>
<td>The Ethical Travel Guide</td>
</tr>
<tr>
<td>Tourism Industry Association of Canada</td>
<td>Code of Ethics and Guidelines for Sustainable Tourism</td>
</tr>
<tr>
<td>Town of Ngadha</td>
<td>Ngadha Code of Conduct</td>
</tr>
<tr>
<td>Travelers Philanthropy</td>
<td>Responsible Travel Tips for Travelers</td>
</tr>
<tr>
<td>World Tourism Organization</td>
<td>Global Code of Ethics for Tourism</td>
</tr>
</tbody>
</table>
Strengths and Weaknesses of Code of Ethics

There are seven main benefits to utilizing codes of ethics in sustainable tourism development (Weaver, 2006). First, they are inexpensive and take little time to develop. Second, they are straightforward statements that are easily understood and are suitable for those who follow the minimalist approach toward sustainable tourism. Third, in many cases those people following the code of ethics are diverse in nature which requires that the statements be stated in general directives as oppose to specific, enforceable guidelines. Fourth, code of ethics identify relevant sustainable tourism indicators, which as mentioned previously, are a very important tool for sustainable tourism planning because indicators are measured to reveal a changing condition. For instance, a statement in a code of ethics could include a variation of “Do not litter” or “Pack it in, pack it out.” These two statements have a direct relationship to the waste management sustainable tourism indicator which can be measured by the amount of trash that is collected from that specific area. Fifth, people are more likely to abide by the behavior if it is voluntary; voluntary travel behavior allows people to choose to change travel behavior rather than forcing them to do so (Taylor & Ampt, 2003). Sixth, some people feel morally or intrinsically obligated to abide, so no costly external enforcement is required. Finally, codes of ethics provide more freedom of setting standards which will adhere to self-regulation and prevent government-regulation from stepping in (Weaver, 2006).

While voluntary sustainable travel behavior initiatives are a good initial step in the education of travelers, there are drawbacks to only implementing this method of regulating behavior. There are four major weaknesses that limit efficacy as a control mechanism of behavior: 1) they can be too generic and offer only general directives and not active goals, 2) they usually do not provide a timeframe of implementation, 3) they are based on voluntary adherence and therefore are difficult to enforce because there is no power of extrinsic reward or punishment,
and 4) they are based on self-regulation (Malloy & Fennell, 1998; Weaver, 2006). Also, awareness of a code does not necessarily indicate an adherence to the ethical tenets they may contain (Weaver, 2006). The complexity of the tourism industry makes standardization and control of behavior of every component nearly impossible, especially with no superseding global organization to set standards (Malloy & Fennell, 1998; Weaver, 2006).

Development of Codes of Ethics

Efficacy of codes largely depend upon how extensively the message is disseminated, absorbed, received, interpreted, integrated, and acted upon in a desired way (Weaver, 2006 as cited from Petty, McMichael, & Brannon, 2002). The presentation and wording of codes of ethics are very important to its effectiveness (Cole, 2005; Genot, 1995; Malloy & Fennell, 1998; Marion & Reid, 2007; Mason & Mowforth, 1995). Weaver (2006) suggested that there are five factors that need to be considered when designing and disseminating codes with the purpose of persuading them to behave in a sustainable way. First, it is important to consider channel factors. Channel factors include how the message is delivered such as in person, through a website or by handing out brochures. Second, consideration is needed on how the message is conveyed, or the source factors. Was the code created by a government, private or not-for-profit organization? Next, message factors should be contemplated in relation to how the message is interpreted; for example, did the code of ethics come across as formal or informal? Receiver factors represent factors or characteristics of the target audience such as their demographics. Finally, code of ethics need to consider situational factors that are out of the control of both the organization executing the code and the target audience following the code (Weaver, 2006).

Another important focus that was discussed at length by Malloy & Fennell (1998) was the need for a more theoretical approach to developing a code of ethics. They indicated that there are two main approaches to creating the statements within the code: deontological or
teleological. The deontological approach focuses on rules or means followed, and does not provide a rationale or justification for performing the action (Malloy & Fennell, 1998). It is also based on assessing right from wrong according to the rules (Cole, 2005). The teleological approach is based on ends or consequences rather than means and that the primary determinant of ethical conduct is the positive end that results from one’s actions (Cole, 2005; Malloy & Fennell, 1998).

Within the teleological approach there are two dominant directions of thinking: hedonism and utilitarianism. Hedonism is the idea of causing the greatest good or pleasure and the least amount of pain for the individual. This study focused on utilitarianism because of its applicability to the research. Utilitarianism means the greatest good or pleasure and least pain for the greatest number, and within this theoretical approach there is a further distinction made between act- and rule-utilitarianism. Respectively, they infer the greatest good for one’s self and the greatest good for the greatest number of people. Rule-utilitarianism is considered the most relevant towards the “codification of behavior because it provides the prescriptive code for behavior, as well as the rationale for doing so” (Malloy & Fennell, 1998, p. 455).

For example, a directive statement within a code of ethics that is deontological in nature may indicate which kind of behavior is preferred in a destination; such as a statement from the ASTA’s Ten Commandments for Ecotourism (n.d.) states “Leave only footprints. Take only photographs. No graffiti! No litter! Do not take away souvenirs form historical sites and natural areas.” An example of a teleological statement from ASTA asserts, “Respect the frailty of the earth. Realize that unless all are willing to help in its preservation, unique and beautiful destinations may not be here for future generations to enjoy” (¶ 2). The latter statement offers some reasoning to the behavior that is being requested.
It has been suggested that to increase the effectiveness of codes of ethics for tourists, the code should include the reasons for the suggested actions and the potentially harmful impact of non-compliance (Malloy & Fennell, 1998; Sirakaya 1997). Additionally, it was also indicated that from an educational perspective there needs to be an explanation of behavior modification, as there are expectations tied to complying with the code (Malloy & Fennell, 1998). Malloy and Fennell (1998) concluded that the codes they reviewed were mostly deontological in nature and they argued that a more theoretical basis would have more utility and that in the future a teleological approach would be more effective. A code of ethics that is teleological in nature would provide the reasoning for the suggested behavior and therefore be more effective.

Furthermore, the consensus of research supports that there is a lack of monitoring and evaluation of the codes (Cole, 2005, 2007; Holden, 2000; Malloy & Fennell, 1998; Mason, 2005). In their review of codes of ethics, Mason and Mowforth (1996) concluded “there has been a clear lack of monitoring and evaluation of codes of conduct [and] the one issue that stands out above all others is the need for further investigation into the use, value, design, uptake and distribution of codes of conduct” (as cited from Marion & Reid, 2007, p. 8).

In review, codes of ethics are designed to inform individuals of acceptable or unacceptable behavior in a particular context (Malloy & Fennell, 1998). The objective of a code of ethics related to sustainable tourism practices of a visitor is to make the visitor aware of the potential impact of their actions on the community so that they may act responsibly (Cole, 2005, 2007). It is also important to develop codes of ethics with a theoretical base and construct them in a manner that is appropriate for reaching the audience so that they are effective (Malloy & Fennell, 1998; Weaver, 2006;). As Cole (2007) concluded, “in theory it is possible to influence tourists’ attitudes and behavior, but, as codes of ethics are voluntary and therefore not enforceable, they may not be ultimately useful” (p. 445). Cole’s findings from the study indicated
that more research is needed to determine the efficacy of codes of ethics and that there needs to be attention paid to the discrepancies between what tourists said and how they actually behaved (Cole, 2007).

**Visitor Education Programs**

*Purpose of Visitor Education Programs*

Education is a key component of sustainable tourism programs (Marion & Reid, 2007). Applying the Theory of Reasoned Action, if an individual wants to “change or reinforce a given intention, he/she must change or strengthen the attitude toward performing that behavior and/or change or strengthen the subjective norm with respect to that behavior” (Fishbein & Manfredo, 1992, p. 37). Visitor education can be employed as a visitor management tool for managers to minimize impacts (Marion & Reid, 2007). Educational programming can also improve the visitor experience by building a deeper appreciation of the area they visit, including appropriate behavior, experiences, and values (Hendee & Dawson, 2002; Marion & Reid, 2007; Powell & Ham, 2008).

A visitor education program’s primary objective is to protect resources by raising the awareness of visitors regarding the potential for negative impacts associated with their visits (Marion & Reid, 2007). Educational programs do not operate to control behavior through hard-intervention enforcement, but through soft-intervention, or internal enforcement, by educating of appropriate behavior to prevent negative visitor impacts. Hard intervention enforcement, or external enforcement, can be in the form of regulations, rules or laws which directly decreases visitor freedoms. It can be costly to implement hard intervention enforcement but is often times the most aggressive and effective in altering visitor behavior (Marion & Reid, 2007). On the contrary, rules and laws can also antagonize visitors if they contain negative connotations.
Visitor education programs acknowledge that most negative visitor impacts were not from mal-intended acts. As stated previously, Hendee and Dawson (2002) identified five undesirable visitor actions: careless, unskilled, uninformed, unavoidable, and illegal. The researchers also stated that visitor education can only effect unskilled and uninformed actions because these actions are more directly related to visitor knowledge. To a smaller degree, careless actions may also be corrected by visitor education as it reminds or places more emphasis of the visitor’s knowledge (Hendee & Dawson, 2002). The visitor impacts resulted from insensitivity to the consequences of their actions or from a lack of knowledge of appropriate low-impact behavior (Bradley, 1979). Visitors still have freedom of choice but they are now aware of the consequences of their actions (Marion & Reid, 2007).

Examples of Visitor Education Programs

Land or park managers are often responsible for managing visitor behavior. An example of an organization that effectively uses visitor education programs to encourage responsible behavior is the U.S. National Park Service. It provides visitor guidelines and pamphlets on topics that will help maintain the integrity of the parks. The park staff is responsible for developing and implementing programs to expand the benefits of natural and cultural resource conservation and outdoor recreation (Edgell, 2006). Another example of an organization that has effective education programs is the U.S. Fish and Wildlife Service. It provides a number of publications on good wildlife management programs to help tourists enjoy their visits while protecting the integrity of the area (Edgell, 2006). A final, unique example of successful visitor educational programming is Leave No Trace.

Leave No Trace, Inc. (LNT) started as the basic principles for visitor management practices for U.S. federal land management programs and it became a self-sustained, not-for-profit organization after much success partnering with the National Outdoor Leadership School.
The purpose of this program is to provide a unified educational response to resource and experiential impacts caused by visitors to natural areas, emphasizing the need for low-impact behavior (Marion & Reid, 2007). What also makes this program unique is that it has moved beyond just the ‘do’s’ and ‘don’ts’ of behavior, but also emphasizes the use of good judgment and educated decision-making of the visitor. Additionally, information is disseminated about LNT through booklets, pamphlets, signs, videos, and training courses. LNT evolved from a basic code of ethics to providing very effective full educational programming. A study by Christensen and Cole (2000) concluded that LNT efforts have been successful in altering visitor behavior over the last 30 years (as cited from Marion & Reid, 2007).

*Development of Visitor Education Programs*

Marion and Reid (2007) reviewed the results of several studies that have assessed the effectiveness of low impact visitor education that used various methods of programming. They highlighted the different media types used to communicate the information and the efficacy of each. Their study clearly indicated that visitor education can be an effective management strategy for addressing visitor impacts to protected area resources by altering visitor knowledge, behavior and/or resource and social conditions in the intended direction. In several of the studies they reviewed, it showed that personal contact was the most effective method of communication that successfully altering visitor behavior in the intended direction. Several of the studies also indicated that interpretative messages that provide reasoning for the suggested behavior were more effective then simple statements (Ham, 1992).

Visitor education programs can be communicated through a variety of methods including literature, personal contact, posters, interpretative signs, videos, websites, training activities, and public outreach methods (Marion Reid, 2007). It is recommended to use diverse range of oral and
visual media, such as signage, flyers, and/or personal contact for creating effective educational programming (Powell & Ham, 2008).

Moreover, the method of development of the programs is salient as well. For example, the Ham (1992) suggests that successful environmental interpretation must be enjoyable, relevant, organized, and thematic (EROT) (Ham, 1992). The purpose of the EROT model is to capture the attention of audiences who can then understand and follow the communication therefore becoming educated on the information (Powell & Ham, 2008). While the EROT model was created specifically for environmental education, these principles can be overlapped in sustainable tourism education (Marion & Reid, 2007). Marion and Reid (2007) also identified message content and delivery, audience characteristics, and theoretical grounding as important components related to education efficacy. In addition, Fishbein and Manfredo (1992) offer their main points for consideration when developing educational methods: salience, selecting target beliefs, multiple determinants, and the Rule of Correspondence.

Strengths and Weaknesses of Visitor Education Programs

The major drawbacks to educational programming include the time needed to develop the program and the financial resources required for material and implementation. For example, the success of LNT can be attributed to the eleven full-time staff members, over 300 public and private partnerships, and an annual budget of over one million dollars (Marion & Reid, 2007). However, visitor education programs are not as costly as enforcing through rules and laws. While the efficacy of codes of ethics is still being questioned, the sum of the research reveals that most visitor education efforts do effectively alter visitor knowledge and behavior in the intended direction to some extent (Marion & Reid, 2007).
Visitor Education Programs for Study Abroad Students

Although constructs are slightly different, it is possible that visitor education programs would be effective for study abroad students. Some educational strategies have been employed by international tourism organizations to address resource and cultural impacts resulting from tourism (UNEP, 1995). Similar to programs for visitors to protected areas, many tourism programs have incorporated the low impact interpretative messages as a basic principle of sustainability (Buckley, 1999; Mason, 1994; Weiler & Davis, 1993; Weiler & Ham, 2002). An example of a not-for-profit tourism organization that has implemented a variety of training and educational initiatives is The International Ecotourism Society (TIES). TIES endorses advocacy campaigns, promotes conferences and trade shows, created the University Consortium Field Certificate Program, provides field and distance learning courses, and offers a large number of resources on ecotourism and sustainable tourism.

It is important to incorporate visitor education programs into visitor management strategies. Education can be used as an indirect and voluntary form of visitor management that can be implemented by not just protected area managers, but also stakeholders in the tourism industry (Marion & Reid, 2007). Visitor education programs for protected areas offer a good model for sustainable tourism education for study abroad students because they have a similar purpose to protect the integrity of a certain area. Study abroad programs offer a unique trip structure because in most cases, students participate in pre-departure programming and orientation, are referred to study abroad handbooks, and are traveling through organized, established programs. Such travel allows for more than a code of ethics to merely be given, but also interpretative sustainable education programming for further understanding of the practices that they should be participating in while abroad. Additionally, educating the students prior to
departure allows for the highest level of understanding and can result in students implementing what they have learned (Nyaupane, Teye, & Paris, 2008).

**Integrating Sustainability into Higher Education**

A mission statement is a formal statement regarding the purpose of an organization and the reasons for its existence. It should represent the major values of the organization and the goals and objectives should reflect how the mission of the organization is to be achieved (Wegner & Jarvi, 2005). The subsequent sections review mission statements of universities and colleges, international program centers, and other organizations who are working to integrate sustainability into higher education institutions.

**Mission Statements of Universities and Colleges**

Pertaining to higher education, mission statements are typically created to balance the relationship between educational goals and the educational needs of the outside world (Velcoff & Ferrari, 2006). A brief review of mission statements from universities across the U.S. showed that many higher education institutes are acknowledging and are including global citizenry as part of the university’s overall mission. Excerpts from a sample of mission statements include the following: “develop future leaders of our nation and the world” (University of Miami), “prepare students… for leadership and service as world citizens” (Georgia Southern University), “prepare students to lead lives of personal integrity and civic responsibility in a global society…[and] prepare graduates to compete in a diverse world market” (University of Tennessee), “to support research and teaching on global issues” (Columbia University), “provide education that equips students with intellectual and professional skills, ethical principles, and an international perspective” (UNC Charlotte) and “students…learn to engage the world” (Middlebury College).

The mission statement for the University of North Carolina at Greensboro (UNCG) includes the
following passage: “a global university in which intercultural and international experiences and perspectives inform learning, discovery, and service.”

Mission Statements of International Programs Centers

Looking specifically at the UNCG International Programs Center (IPC), part of their mission is to help assist “students, faculty, and staff to integrate knowledge and develop skills to be effective world citizens in the future global economies and intercultural societies” (UNCG IPC, 2008). Across the board, mission statements from international program offices or study abroad offices all signified that they are committed to developing skills for students and faculty so that they can be effective world citizens in the future. For example, the mission of Rutgers University’s Office of International Programs is to “support the development of activities, programs, exchanges and events that create deeper international and global awareness”, and the mission of the Study Abroad Office at North Carolina State University includes “providing academically-based international experiences which will give them the skills to be active, informed, and culturally sensitive citizens in the global community.”

Organizations for Sustainability in Higher Education

Additionally, the vision of the Association for Advancement of Sustainability in Higher Education (AASHE) is “to see higher education take a leadership role in preparing students and employees to achieve a just and sustainable society…” (2008a, ¶ 3). The University of North Carolina Tomorrow Commission is the organization implementing the initiatives from the UNC Tomorrow Report that help guide and shape the mission of the UNC institutional system so that it may proactively face the challenges of the 21st century. The findings from the December 2007 report stated that a new goal of UNC is to “embrace environmental sustainability as a core value among its institutions” (UNC Tomorrow Commission, 2007). Through this report, they also suggest a number of ways to incorporate innovative strategies to meet this goal, such as
leveraging research expertise to coordinate programs, creating research and environmental centers, and by increasing community awareness of environmental and sustainability issues.

Higher education has an important responsibility in making sure that students are educated on sustainability issues so that they incorporate the values they learn while attending college into the rest of their everyday lives (AASHE, 2008a). A four year study completed by Robert Riesenber (2008) of Whatcom Community College in Bellingham, WA found that just one course assignment that places emphasis on an issue related to sustainability, may alter a student’s attitude towards integrating sustainable principles into other aspects of life for at least 6 weeks after the assignment was completed. Additionally, AASHE is developing and evaluating an assessment tool in order to gauge how colleges and universities are becoming sustainable. The Sustainability Tracking, Assessment & Rating System (STARS) is designed to:

- Provide a guide for advancing sustainability in all sectors of higher education, from education and research to operations and administration.
- Enable meaningful comparisons over time and across institutions by establishing a common standard of measurement for sustainability in higher education.
- Create incentives for continual improvement toward sustainability.
- Facilitate collaboration and information sharing about higher education sustainability practices and performance.
- Recognize sustainability achievements for all institutions, including leaders and beginners.
- Build a stronger, more diverse campus sustainability community.

(AASHE, 2008b, ¶ 2)

Furthermore, the Association for International Educators (NAFSA) has created a task force on Environmental Sustainability in Education Abroad that has documented recommendations for study abroad administrators and faculty. The task force asked two fundamental questions, “How can education abroad programs be both high quality and low impact,” and “How can education abroad contribute in general to the movement towards greater environmental awareness?” (NAFSA, 2008).
Review of Study Abroad Handbooks and Programs

A brief review of the UNCG Pre-Departure Student Handbook for Faculty-Led Programs indicates that it does not reference any sustainable tourism practices. Some of the main issues discussed within the handbook include passport issues, flight arrangements, health information, safety while abroad, how to deal with emergencies, and special needs and concerns. While they do have an IPC Standard of Student Conduct, which includes the basic UNCG Code of Student Conduct, it does not expand to how to travel sustainably, let alone why this is important. The handbook does address culture shock and cultural issues, but it does not include the benefits or consequences of students’ actions nor the potential positive or negative impact of such actions on the host community.

However, the 2008 Green Passport Handbook from the Office of Study Abroad at the University of North Carolina at Chapel Hill, was created by Rodney Vargas is intended to educate study abroad students about sustainable tourism practices. This is a supplemental handbook that includes tips for sustainable travel as well as some of the influential writings that discuss the issue of study abroad and sustainable tourism. It is based on the premise of the Green Passport Program (GPP), which is a social networking tool that provides guidelines to students for minimizing their impacts on the host destinations while studying abroad. It allows students and faculty to join individually or as a program group so that they can keep track of their actions while abroad. Additionally, the program includes a pledge, similar to a code of ethics that each member of the GPP signs when joining the program. The GPP was first piloted in the fall of 2007 and currently has 26 user groups. The international programs offices of Ithaca College and Yale University have also promoted utilizing the GPP to their study abroad students.

A final example of a higher education institute currently implementing sustainable tourism concepts in their international education programs is Middlebury College. Middlebury
has made a university goal to be a leader in making the world more environmentally sustainable. They use study abroad as a valuable resource in achieving this goal. Middlebury recognized the potential impacts of study abroad, both positive and negative, and have sought to use the study abroad program as a way to contribute toward leadership in global sustainability. In doing this, they also recognized the need to educate the students on sustainable tourism prior to studying abroad. They not only encourage students to take part in the GPP, but also provide a ‘Going Green Guide’ for program directors and sustainable grants for students who conduct research on sustainability issues while abroad.

Conclusion

The goal of this literature review was to bring together the topics of study abroad and sustainable tourism in order to provide evidence that these areas are intertwined and are in need of being further researched. The growing participation in study abroad programs and the increase of programs to less traditional locations are major reasons why researchers should know and understand the type of impacts- the economic, socio-cultural, and the environmental impacts- study abroad students have on their destinations. For example, questions that researchers should be asking include “Are study abroad students eating their meals at local or global restaurants”, “Are study abroad students spending money on local products?” or “How many study abroad students are carbon offsetting their flights?” While this study found no current sustainable tourism indicators in place to answer these questions or to show the extent of the impacts specifically caused by study abroad students, research suggested that negative visitor impacts usually occur due to visitor unawareness of how their actions impact the destination.

Through the Theory of Reasoned Action and Planned Behavior it is shown that behavior may be altered or modified through intervention (i.e. education). Therefore, sustainable tourism education, in the form of a code of ethics and/or visitor education programs, has the potential to
minimize the negative impacts caused by study abroad students as well as it has the potential to educate them on the importance of sustainable tourism. The significance of educating study abroad students on sustainable tourism is based on the premise of the stakeholder theory and the idea that all stakeholders, including visitors, must understand sustainable tourism principles in order for it to be successful.

Moreover, some higher education institutions and international programs offices suggest in their mission statements that they may be ideal organizations to provide education to study abroad students on participating in sustainable tourism practices. As sustainability is becoming integrated into the higher education campuses and curriculums, a next step could be to incorporate sustainability into the study abroad programs.
CHAPTER III

METHODOLOGY

Introduction

The purpose of this research was to determine if study abroad students were prepared to and actively participated in sustainable tourism practices while studying abroad. Through the use of a modified Importance-Performance Analysis (IP Analysis) technique, this study measured the preparedness and frequency of participation by the study abroad students with regard to 25 attributes, or statements representing types of travel behaviors.

Background of Population and Participants

The study population consisted of all University of North Carolina Greensboro (UNCG) students who participated in a full-year, semester, or short-term/faculty-led study abroad program during the 2007/2008 academic year, and/or the 2008 fall semester. According to the 2007/08 Institutional Profiles of the University of North Carolina (2008), approximately 17,000 students were enrolled at UNCG in the fall of 2006 and of these students, 68% are females and 32% males. The majority of the students identified their ethnicity as White/Non-Hispanic (69.4%), followed by African-Americans (20.1%), Asian/Pacific Islanders (2.9%), and Hispanics (2.1%) (University of North Carolina General Administration, 2008). The International Programs Center (IPC) at UNCG has one of the largest bilateral student exchange programs in the country with more than 48 exchange partners worldwide (UNCG IPC, n.d.). Additionally, the UNCG IPC is part of the International Student Exchange Program (ISEP) which is a network of 275 colleges and universities in 39 countries, collaborating to provide affordable access to international education for all students (ISEP, n.d.).
In total, the 381 students who studied abroad during the 2007/2008 academic year and/or the 2008 fall semester, were contacted and asked to participate in the study with the assistance of the IPC who provided the names and emails of those students. An initial email (Appendix A) was sent to the students inviting them to take the survey and an additional reminder email (Appendix B) was sent one week later (Dillman, 2007). Of the 381 surveys sent out, there were four immediate undeliverable emails. A total of 120 students began the survey however, 18 were considered unusable due to incompleteness, leading to a total of 102 respondents and a final response rate of 27.1%.

Materials

The collection of data for this study was completed through the use of an online survey. The survey was sent to subjects via SurveyMonkey which is secure software for online surveys. Students were sent an email with a link to the survey which enabled them to complete the survey by entering their answers directly into the webpage. The survey took approximately ten minutes to complete. It was available online for only a two-week period, from January 27th through February 10th, 2009. There was an incentive for participation. Upon completion of the survey, participants had the option to enter a drawing for a one-night stay at the Greensboro-Highpoint Airport Marriott Hotel in which 79 students entered the drawing.

The procedures of this study were reviewed and approved by the University of North Carolina at Greensboro Institutional Review Board. The consent form was included as the introduction page to the survey and by clicking forward to the survey page the participant had agreed to take part (See Appendix C). The consent form addressed the participants’ rights to not begin or complete the survey. In addition, the confidentiality agreement stated that no names or identifiers would be kept with the data, ensuring anonymity. The data was prepared in a spreadsheet by SurveyMonkey that was then imported into SPSS for analysis.
Instrument

An original instrument was designed specifically for this study in order to capture the necessary information (See Appendix C for instrument). The survey included 25 attributes, or statements representing types of travel behaviors, which were created by researching established codes of ethics, voluntary travel behavior guidelines, and other responsible travel initiatives of private and not-for-profit organizations (table 2 lists the sources used to create the statements in this study). The researcher made an effort to select an appropriate balance of attributes that evenly reflect behaviors associated with each of the three dimensions of sustainability; nine environmental statements, eight socio-cultural statements, and eight economic statements. While many of the attributes overlapped between the three dimensions, they are identified with the dimension they best represent. Additionally, seven experts in the field of sustainable tourism, international education, and/or IP Analysis reviewed the attributes and instrument format in order to provide feedback.

Two 5-point Likert scales were created for the 25 attributes in order to measure: 1) Students’ preparedness of sustainable tourism practices, and 2) Frequency of students actively participating in sustainable tourism practices. The instrument was formatted so that the scales had the following ratings: 1 “Very Unprepared”, 2 “Somewhat Unprepared”, 3 “Undecided”, 4 “Somewhat Prepared”, 5 “Very Prepared”; and 1 “Never”, 2 “Infrequently”, 3 “Undecided”, 4 “Sometimes”, 5 “Always”. Six of the statements were purposefully created as negative statements to prevent patterns of non-randomness. An IP Analysis was completed using a modified Preparedness-Frequency matrix which is explained in a section below.

In addition, there were five socio-demographic questions and four program-specific questions in a multiple-choice format. The respondents were also asked to give the name of their
program and identify their main host destination(s). Lastly, the respondents were given an opportunity for additional comments.

**Procedure**

Once the data was uploaded into SPSS, it was cleaned and a missing value analysis was run to verify responses were at random. Statistical tests that were run on the data include descriptive statistics for frequencies and central tendencies. Also the mean value of preparedness and frequency for each attribute were taken into a new spreadsheet on SPSS to complete an IP Analysis. To complete this analysis, three variables were entered into the new spreadsheet; one variable for the label of the attribute, one for the preparedness mean scores, and one for the frequency mean scores. Using the simple scatter application, these points were then applied to the graph and then the central axis was added at the median value and variable names were entered next to each plotted point.

**Importance-Performance Analysis**

The IP Analysis was first introduced into the field of marketing in the late 1970s after empirical research indicated that consumer satisfaction was a function of both expectations related to certain important attributes and judgments of attribute performance (Martilla & James, 1977; Wade & Eagle, 2003). It is often used to measure customer satisfaction by identifying weaknesses of a brand, product, or service (Martilla & James, 1977; Wade & Eagle, 2003). It compares the two basic criteria that consumers use in making a choice: importance of attributes and consumer evaluation (performance). In the past, the IP Analysis has been applicable to studies in the areas of banking, dentistry, and healthcare (Wade & Eagle, 2003). In 1985 Guadagnolo was one of the first to apply the technique for evaluation in parks and recreation (Anderson & Gladwell, 2004). Specific to the tourism field, the IP Analysis has been applied to marathons, ski resorts, escorted tours, hotels, visitor centers, cabins, and park concessionaires.
Researchers have also used the IP Analysis technique in the area of tourism management in parks and protected areas (Wade & Eagle, 2003).

Importance-performance scores that are gathered from the results of the Likert scales on the instrument are plotted onto a two-dimensional axis which arbitrarily puts each point into one of the four grid sections, or quadrants. The quadrant that the score falls in can indicate the appropriate action needed to modify or maintain the desired evaluation of each attribute (Wade & Eagle, 2003). There are four main steps to the IP Analysis: first, the researchers develop a list of attributes relevant to the research question; second, they create an instrument that measures the attributes; third, the researches take the mean and/or the median of the importance-performance scores for each of the attributes listed and plot them on the matrix; and fourth, they plot the grid lines to denote the four quadrants (Anderson & Gladwell, 2004). The grid lines are placed by averaging the total of all the means and/or medians (i.e. the y-axis is placed by averaging all preparedness mean or median scores, and the x-axis is placed by averaging all frequency mean or median scores).

Each of the four quadrants is labeled as to refer to which areas are doing well and which need the most improvement in terms of the marketing effort (Martilla & James, 1977). Figure 4 is an example of a traditional IP matrix that used a 5-point scale for each attribute.
The results of an IP Analysis are graphically displayed to allow for easy interpretation and understanding of their application. Quadrant A contains attributes that received a low performance/high importance score, which managers can translate into the area which needs the most concentration. In quadrant B, both performance and importance scores are high for the attributes and managers would be advised to ‘keep up the good work’ for these attributes. Quadrant C is considered ‘low priority’ because performance and importance scores were low, indicating that the attribute is not one that managers should dedicate time to improving. Finally, quadrant D contains attributes that received high performance/low importance scores which can be interpreted by managers as attributes that may be ‘possible overkill.’ The interpretations for
the IP scores can then be applied to areas, such as marketing research, for improvement of the attributes (Anderson & Gladwell, 2004; Martilla & James, 1977).

Martilla and James (1977) provided several recommendations when using the IP Analysis technique that were applied to this study. First, the attributes for the study were carefully chosen because if critical factors were overlooked, the data would have been limited. Contrarily, it was also important to screen the list of attributes for unnecessary items so that the list was a manageable size in order to avoid low response rates and unnecessary data manipulation. Second, it was important to keep separate measures of preparedness and frequency (or traditionally seen as importance and performance) to help minimize compounding and order effects. Third, placement of the grid axis on was based on judgment. As previously mentioned, axis lines can be placed on the average of either the mean or median scores depending which is the most appropriate option. This study situated the axis based on the average of the median scores because locating the grid lines on numbers that were true to the 5-point interval scale were more appropriate for interpretation. Fourth, median values are theoretically preferable to means because often the attributes are not measured on a true interval scale. However, this study computed both mean and median values to compare for similarities and because they were close in value. The mean scores were used in order to avoid discarding the additional information they contain. Fifth, when analyzing the grid, particular attention was paid to extreme points as they may indicate the greatest disparity between the two variables measured. The IP scores represent individual attributes. Therefore, outliers represent attributes that consistently scored extremely high or low on the preparedness and/or frequency scales by all respondents and indicate a pattern that needs attention.
Preparedness-Frequency Matrix

This study measured the preparedness and frequency of sustainable tourism practices of study abroad students through the use of an IP analysis; however instead of a traditional IP matrix, a modified matrix was used which is referred to in this study as a Preparedness-Frequency matrix. Along the X-axis is the frequency measurement which refers to how often the student performed the certain action related to the attribute. Along the Y-axis is the preparedness measurement, referring to how well the International Programs Center prepared students to practice the attributes.

The interpretations of the results of the preparedness-frequency matrix are different from that of the traditional importance-performance matrix. In quadrant A, attributes scored low in frequency and high in preparedness which indicates to researchers that the ‘Programming needs modifying.’ Students are being prepared for the attribute but few are practicing it, which implies that the preparation was not adequate. In quadrant B, attributes scored high both in preparedness and frequency which can be interpreted by researchers that no action is needed and that they should ‘Maintain programming here.’ Students felt prepared and were positively participating in the attributes that’s fell into quadrant B, which is the ideal result that educational programming seeks to achieve. In quadrant C, both frequency and preparedness scores are low for the attributes suggesting that ‘Programming is needed.’ This quadrant is where the most attention needs to be paid because there is either a lack of programming or the existing programming needs major improvement. Finally, in quadrant D, ‘Little programming is needed’ because the frequency scores are high even though the preparedness scores are low. Since the students are already performing the desired action it can be implied that little programming is needed. If programming exists for attributes falling in quadrant D, it can be indication that the programming is not effective. However because the desired action is still being achieved, less concentration is needed.
An example of the Preparedness-Frequency matrix can be seen in Figure 5. Additionally, Figure 5 also indicates the relationship to the hypothesis matrix of possible outcomes.

Figure 5. Preparedness-Frequency Matrix. Scores fall into the matrix and quadrants indicate the appropriate actions that need to be taken.
CHAPTER IV

RESULTS

Introduction

The results are divided into three sections. The first section includes the demographics of the respondents and the second section includes a brief summary of the program types and trip specifics. The final section reviews the IP analysis on the Preparedness-Frequency matrix.

Demographics

The demographic profile sample of UNCG study abroad students is similar to that of the UNCG overall student population discussed in the Methods section (see Table 3). Seventy-nine percent of the respondents were female. Almost 93% of respondents (92.8%) were single, 4.1% of the respondents lived with their partner, and 3.1% were married. The ethnicity of the sample was predominantly White/not of Hispanic origin (82.5%), followed by 9.3% of African-American or black ethnicity. The median age while studying abroad was 21 with a mean age of 22; the oldest student to study abroad during this time frame was 37 years of age and the youngest was 19. The most common class standings of the respondents while studying abroad were juniors (45.4%), seniors (26.8%), and sophomores (19.6%).
Table 3.

Demographics of Respondents

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Response Options</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>20.6%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>79.4%</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Married</td>
<td>3.1%</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>92.8%</td>
</tr>
<tr>
<td></td>
<td>Living with Partner</td>
<td>4.1%</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>African American/Black</td>
<td>9.3%</td>
</tr>
<tr>
<td></td>
<td>American Indian or Native</td>
<td></td>
</tr>
<tr>
<td></td>
<td>American</td>
<td>2.1%</td>
</tr>
<tr>
<td></td>
<td>Asian American</td>
<td>2.1%</td>
</tr>
<tr>
<td></td>
<td>Hispanic, or of Spanish Origin</td>
<td>1.0%</td>
</tr>
<tr>
<td></td>
<td>White / not of Hispanic Origin</td>
<td>82.5%</td>
</tr>
<tr>
<td></td>
<td>Multiracial</td>
<td>3.1%</td>
</tr>
<tr>
<td>Age while Abroad</td>
<td>Median Age</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Mean Age</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Age Range</td>
<td>19-37</td>
</tr>
<tr>
<td>Class Standing while Studying Abroad</td>
<td>Freshmen</td>
<td>1.0%</td>
</tr>
<tr>
<td></td>
<td>Sophomore</td>
<td>19.6%</td>
</tr>
<tr>
<td></td>
<td>Junior</td>
<td>45.4%</td>
</tr>
<tr>
<td></td>
<td>Senior</td>
<td>26.8%</td>
</tr>
<tr>
<td></td>
<td>Graduate Student</td>
<td>7.2%</td>
</tr>
</tbody>
</table>

Length of Program and Trip Specifics

Of the three basic options for length of trip, exactly half (50.0%) of the respondents participated in a semester-long study abroad program while roughly a third (32.4%) participated
in short-term/faculty-led, and 17.6% participated in a full-year. While national statistics have typically shown that short-term/faculty-led trips have had more participation than the other two options for study abroad programs, UNCG has the highest participation in the semester abroad programs. This can be attributed to the large bilateral-exchange program at the university.

Additionally, 85.6% of the students said that they traveled independently outside of the program. Students reported staying at a mixture of lodging options, with the dorm (33.3%), Hostel (32.4%), and Homestay (28.4%) being the most popular. Almost all the respondents (97.9%) reported that they would study abroad again.

Table 4.
Program Type and Trip Specifics

<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of Program</td>
<td>Short-term/ Faculty-Led</td>
<td>32.4%</td>
</tr>
<tr>
<td></td>
<td>Semester Abroad</td>
<td>50.0%</td>
</tr>
<tr>
<td></td>
<td>Full Year</td>
<td>17.6%</td>
</tr>
<tr>
<td>Traveled Independently</td>
<td>Yes</td>
<td>85.6%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>14.4%</td>
</tr>
<tr>
<td>Types of Lodging Used</td>
<td>Dorm</td>
<td>33.3%</td>
</tr>
<tr>
<td></td>
<td>Homestay/ Residential Placement</td>
<td>28.4%</td>
</tr>
<tr>
<td></td>
<td>Rented Apartment</td>
<td>17.6%</td>
</tr>
<tr>
<td></td>
<td>Hotel</td>
<td>17.6%</td>
</tr>
<tr>
<td></td>
<td>Hostel</td>
<td>32.4%</td>
</tr>
<tr>
<td></td>
<td>Other (ex. stayed with friends,</td>
<td>7.0%</td>
</tr>
<tr>
<td></td>
<td>primitive lodging)</td>
<td></td>
</tr>
<tr>
<td>Would Study Abroad Again</td>
<td>Yes</td>
<td>97.9%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>2.1%</td>
</tr>
</tbody>
</table>
Table 5 provides a list of the country destinations visited by the respondents. Spain (16.7%), United Kingdom (16.7%), Mexico (9.8%), Australia (7.8%), and Ecuador (6.9%) were the five most popular destinations visited by the respondents.

Table 5.

Host Destinations listed by Country.

<table>
<thead>
<tr>
<th>Country</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>17</td>
<td>16.7%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>17</td>
<td>16.7%</td>
</tr>
<tr>
<td>Mexico</td>
<td>10</td>
<td>9.8%</td>
</tr>
<tr>
<td>Australia</td>
<td>8</td>
<td>7.8%</td>
</tr>
<tr>
<td>Ecuador</td>
<td>7</td>
<td>6.9%</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>5</td>
<td>4.9%</td>
</tr>
<tr>
<td>Finland</td>
<td>5</td>
<td>4.9%</td>
</tr>
<tr>
<td>Germany</td>
<td>5</td>
<td>4.9%</td>
</tr>
<tr>
<td>China</td>
<td>4</td>
<td>3.9%</td>
</tr>
<tr>
<td>France</td>
<td>4</td>
<td>3.9%</td>
</tr>
<tr>
<td>Russia</td>
<td>4</td>
<td>3.9%</td>
</tr>
<tr>
<td>Denmark</td>
<td>3</td>
<td>2.9%</td>
</tr>
<tr>
<td>Estonia</td>
<td>3</td>
<td>2.9%</td>
</tr>
<tr>
<td>Italy</td>
<td>2</td>
<td>2.0%</td>
</tr>
<tr>
<td>Japan</td>
<td>2</td>
<td>2.0%</td>
</tr>
<tr>
<td>Poland</td>
<td>1</td>
<td>1.0%</td>
</tr>
<tr>
<td>Sweden</td>
<td>1</td>
<td>1.0%</td>
</tr>
<tr>
<td>Thailand</td>
<td>1</td>
<td>1.0%</td>
</tr>
<tr>
<td>Turkey</td>
<td>1</td>
<td>1.0%</td>
</tr>
<tr>
<td>No response</td>
<td>2</td>
<td>2.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>102</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

**IP Analysis for Preparedness-Frequency Matrix**

Table 6 provides the means and standard deviation scores of the 25 attributes in the IP analysis. The highest mean preparedness ratings were for the statements “Used electronic communication instead of standard mail” (M = 4.11, and “Studied and integrated into local
culture” (M = 4.10). The highest mean frequency ratings were for “Studied and integrated into local culture” (M = 4.75), and “Used electronic communication instead of standard mail” (M = 4.65).

The lowest mean preparedness ratings were for “Utilized Green Passport Program” (M = 2.11) and for “Carbon offset your trip” (M = 2.27). The lowest mean frequency ratings were for “Donated money in support of organized charities for conservation and preservation of local cultural and natural resources” (M = 2.14) and “Participated in a volunteer or conservation program” (M = 2.17) (see Table 6).

The results of the IP Analysis on the Preparedness-Frequency matrix are shown in Figure 6. The majority of the attributes fell into quadrant B (high preparedness and high frequency) and quadrant C (low preparedness and low frequency). The 11 attributes that fell into quadrant B are not focused on in this study because the quadrant indicates that the study abroad students are prepared for and participating in those attributes. The attributes in quadrant B included “Supported local businesses”, “Integrated into culture”, “Stayed with local residents”, “Traveled outside tourist district”, “Used local guides”, “Participated in activities with respect for the local culture and heritage”, “Used public transportation”, “Spoke native language”, “Stayed at locally owned lodging”, “Used electronic communication”, and “Participated in activities that threatened wildlife or plant populations”.

There were a total of ten attributes which fell into quadrant C designated as “Programming is needed.” Those attributes include “Supported global business”, “Carbon offset your trip”, “Participated in a volunteer or conservation program”, “Used personal motorized transportation”, “Donated money in support of organized charities”, “Practiced Leave No Trace Principles”, “Asked permission to take pictures/videotape”, “Bargained for the absolute lowest
price in local markets”, “Utilized the Green Passport Program”, and “Chose lodging based on their sustainable principles”.

There was only one attribute that fell into quadrant A (Programming needs modifying) which was “Purchased or collected natural artifacts such as coral, rocks, and/or shells.”

Furthermore, three attributes fell into quadrant D (‘Little concentration needed’) which were “Purchased local products”, “Sought to minimize personal waste and conserve energy”, and “Donated to local homeless, beggars, or children on the street.”

Table 6.
Preparedness- Frequency Mean Scores and Standard Deviations

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Purchased local products</td>
<td>3.23</td>
<td>1.193</td>
<td>4.19</td>
<td>.864</td>
</tr>
<tr>
<td>2</td>
<td>Supported Global Business*</td>
<td>2.79</td>
<td>1.205</td>
<td>2.87</td>
<td>1.240</td>
</tr>
<tr>
<td>3</td>
<td>Supported Local Business</td>
<td>3.54</td>
<td>1.256</td>
<td>4.53</td>
<td>.518</td>
</tr>
<tr>
<td>4</td>
<td>Carbon Offset your trip</td>
<td>2.27</td>
<td>1.153</td>
<td>2.65</td>
<td>1.181</td>
</tr>
<tr>
<td>5</td>
<td>Participated in a Volunteer or Conservation Program</td>
<td>2.44</td>
<td>1.215</td>
<td>2.17</td>
<td>1.358</td>
</tr>
<tr>
<td>6</td>
<td>Sought to Minimize Personal Waste and Conserve Energy</td>
<td>2.87</td>
<td>1.318</td>
<td>4.33</td>
<td>.880</td>
</tr>
<tr>
<td>7</td>
<td>Used Personal Motorized Transportation*</td>
<td>2.79</td>
<td>1.323</td>
<td>2.75</td>
<td>1.603</td>
</tr>
<tr>
<td>8</td>
<td>Studied and Integrated into local culture</td>
<td>4.10</td>
<td>1.190</td>
<td>4.75</td>
<td>.516</td>
</tr>
<tr>
<td>9</td>
<td>Donated to local homeless, beggars, and/or children on street*</td>
<td>3.21</td>
<td>1.189</td>
<td>3.83</td>
<td>1.306</td>
</tr>
<tr>
<td>10</td>
<td>Donated money in support of organized charities for conservation and preservation or local cultural and natural resources</td>
<td>2.60</td>
<td>1.253</td>
<td>2.14</td>
<td>1.339</td>
</tr>
<tr>
<td>11</td>
<td>Practiced Leave No Trace Principles</td>
<td>2.35</td>
<td>1.191</td>
<td>3.00</td>
<td>1.232</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>12</td>
<td>Asked Permission to take Pictures/ Videotape of the locals and/or local rituals</td>
<td>3.23</td>
<td>1.334</td>
<td>3.44</td>
<td>1.223</td>
</tr>
<tr>
<td>13</td>
<td>Stayed with Local Residents</td>
<td>3.53</td>
<td>1.307</td>
<td>3.61</td>
<td>1.507</td>
</tr>
<tr>
<td>14</td>
<td>Traveled Outside of program site and typical tourist district</td>
<td>3.74</td>
<td>1.210</td>
<td>4.10</td>
<td>.854</td>
</tr>
<tr>
<td>15</td>
<td>Purchased or Collected natural artifacts such as coral, rocks, and/or shells*</td>
<td>3.32</td>
<td>1.204</td>
<td>3.48</td>
<td>1.423</td>
</tr>
<tr>
<td>16</td>
<td>Used Local Guides</td>
<td>3.46</td>
<td>1.236</td>
<td>3.96</td>
<td>1.167</td>
</tr>
<tr>
<td>17</td>
<td>Bargained for the absolute lowest price in local markets*</td>
<td>3.16</td>
<td>1.194</td>
<td>2.80</td>
<td>1.392</td>
</tr>
<tr>
<td>18</td>
<td>Participated in Activities that were conducted with respect for the local culture and heritage</td>
<td>3.87</td>
<td>1.285</td>
<td>4.22</td>
<td>.869</td>
</tr>
<tr>
<td>19</td>
<td>Used Public transportation</td>
<td>3.70</td>
<td>1.335</td>
<td>4.62</td>
<td>.848</td>
</tr>
<tr>
<td>20</td>
<td>Spoke the native language</td>
<td>3.67</td>
<td>1.383</td>
<td>4.18</td>
<td>1.123</td>
</tr>
<tr>
<td>21</td>
<td>Stayed at Locally owned lodging</td>
<td>3.40</td>
<td>1.332</td>
<td>3.90</td>
<td>1.274</td>
</tr>
<tr>
<td>22</td>
<td>Utilized the Green Passport Program</td>
<td>2.11</td>
<td>1.062</td>
<td>2.07</td>
<td>1.101</td>
</tr>
<tr>
<td>23</td>
<td>Used electronic communication instead of standard mail</td>
<td>4.11</td>
<td>1.275</td>
<td>4.65</td>
<td>.696</td>
</tr>
<tr>
<td>24</td>
<td>Participated in Activities that may have threatened wildlife or plant populations*</td>
<td>3.34</td>
<td>1.048</td>
<td>4.36</td>
<td>1.030</td>
</tr>
<tr>
<td>25</td>
<td>Chose lodging based on their Sustainable principles</td>
<td>2.62</td>
<td>1.221</td>
<td>2.44</td>
<td>1.377</td>
</tr>
</tbody>
</table>

Note. Asterisks (*) denote inversed attributes. These negative statements were specifically created to prevent nonrandom patterns in responses from occurring. The responses were then adjusted during analysis to be displayed correspondingly.
1. Purchased local products
2. Supported Global Business
3. Supported Local Business
4. Carbon Offset your trip
5. Participated in a Volunteer or Conservation Program
7. Used Personal Motorized Transportation
8. Studied and Integrated into local culture
9. Donated to local homeless, beggars, children on street
10. Donated money in support of organized charities
11. Practiced Leave No Trace Principles
12. Asked Permission to take Pictures/ Videotape
13. Stayed with Local Residents
14. Traveled Outside of program site and typical tourist district
15. Purchased or Collected natural artifacts such as coral, rocks, and/or shells
16. Used Local Guides
17. Bargained for the absolute lowest price in local markets
18. Participated in Activities that were conducted with respect for the local culture
19. Used Public transportation
20. Spoke the native language
21. Stayed at Locally owned lodging
22. Utilized the Green Passport Program
23. Used electronic communication instead of standard mail
24. Participated in Activities that may have threatened wildlife or plant populations
25. Choose lodging based on their Sustainable principles

Figure 6. Preparedness-Frequency results and Legend

61
The one attribute that scored into quadrant A and the ten attributes that scored into quadrant C have also been categorized according to the sustainability dimension they were designed to reflect (environmental, socio-cultural, and economic). It is important to note again that attributes may overlap in more than one dimension but they are identified with the dimension they best represent. Six of the attributes reflected the environmental dimension, two of the attributes denoted the socio-cultural dimension, and three of the attributes indicated the economic dimension. Table 7 lists the attributes from quadrants A and/or C in their appropriate dimension.

Table 7.
Attributes in quadrants A and/or C listed according to the sustainability dimension they reflected

<table>
<thead>
<tr>
<th>Environmental Dimension</th>
<th>Socio-Cultural Dimension</th>
<th>Economic Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Offset</td>
<td>Participated in a volunteer or conservation program</td>
<td>Supported global businesses</td>
</tr>
<tr>
<td>Used personal motorized transportation</td>
<td>Asked permission to take picture/videotape of locals</td>
<td>Donated money in support of organized charities</td>
</tr>
<tr>
<td>Practiced Leave No trace</td>
<td></td>
<td>Bargained for the absolute lowest price in local markets</td>
</tr>
<tr>
<td>Purchased or collected natural artifacts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilized Green Passport Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choose lodging based on sustainability principles</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER V
CONCLUSIONS

Introduction

The substantive hypothesis stated that UNCG study abroad students were not prepared and did not participate in sustainable tourism practices. The results only partially supported this hypothesis. Of the 25 attributes examined, only ten attributes were found in quadrant C, where the hypothesis matrix stated that students were not prepared and did not participate in sustainable tourism practices. However, there are conclusions that can be drawn from the findings. In this section, the researchers will discuss the implications and applications of the findings, the limitations to this research, as well as recommendations for future research and program development.

Implications and Applications

The findings showed that educational programming focusing on sustainable tourism is needed for study abroad students. Particularly, sustainable tourism education needs to focus strongly on the one attribute that fell into quadrant A (Programming needs modifying) and the ten attributes that fell into quadrant C (Programming is needed). The three categories of attributes based on the dimensions of sustainability (environmental, socio-cultural, and economic) will be used to analyze the results of this research. As previously shown in Table 7, of the 11 attributes that fell into quadrants A and/or C, six of the attributes reflected the environmental dimension, two of the attributes denoted the socio-cultural dimension, and three of the attributes indicated the economic dimension.
Environmental Dimension

The environmental attributes had the greatest number of responses showing that students were not prepared or participating in several of the sustainable tourism actions. The statements “Minimized waste and conserved energy” and “Used email instead of standard mail” scored high suggesting that students were prepared to and participated in these particular items. The researcher of this study believes that students scored high on these items because they reflect behaviors that the students were previously exposed to and/or performed through campus culture where sustainability was already integrated into parts of their day-to-day life.

It is also important to note that the results indicated that students were not prepared for and did not participate in “Carbon Offset Trip”, “Leave No Trace”, and “Utilized the Green Passport Program.” However these attributes also had high ‘Undecided” responses which may suggest that the respondents were unfamiliar with these programs all together and/or did not understand the terminology used.

Additionally, the findings from the attribute “Participated in activities that may have threatened wildlife and/or plant populations” indicated that the students may have not recognized that some of the activities they participated in may have had a negative impact on their host community. For example, whale watching is a popular tourist activity that allows participants to see a display of whales in the wild; however, many are not aware of the negative impacts this activity has on the environment and wildlife due to the gas used and noise of the motors. Horseback riding is another example of an activity that may threaten wildlife or plant populations. Not all horseback riding operations are inherently bad but if the horses and facilities are not properly cared for, and their waste is not properly disposed of, then this could have negative consequences such as land degradation, erosion and pollution. The subsequent sections
discuss the attributes that reflected travel activities that respondents were not prepared for and did not participate in.

*Carbon Offsetting.* As Sustainable Travel International (2008) states, carbon offsetting is the idea of contributing a financial counterbalance, represented by a carbon offset, for the amount of carbon dioxide produced during a certain activity. Individuals, organizations, or businesses may purchase carbon offsets which may be applied to compensate for the amount of carbon dioxide they produce. The particular activity focused on for this study was in the context of traveling. Airplanes are major contributors of carbon dioxide emissions. More specifically, large aircrafts used for long-distance travel, have been identified as producing the most carbon dioxide. Though carbon offsetting is not the solution to reducing carbon dioxide emissions, it is commendable in providing funding for projects researching other alternative energy methods such as biofuel, windmill, and solar energy projects. Not-for-profit organizations, such as CarbonFund, Sustainable Travel International, Climate Care, and TerraPass, have taken the lead in implementing and providing carbon offsetting as an option for U.S. travelers.

Studying abroad requires international travel and often it is to destinations that are only reachable by airplanes. The carbon dioxide emissions through air travel are inherently a negative impact caused by study abroad programs in which the students may not realize. Suggesting students take responsibility for their carbon dioxide emissions is important and may enhance their awareness for the environmental impacts caused by their travel. Carbon offsetting is a practice that directly addresses the issue of global warming. In general the growth in the tourism industry, which includes the growth in the study abroad market, has tremendously contributed to the dramatic increase in carbon dioxide production.

Study abroad students, and other travelers alike, may be unaware of their environmental impact from flying. Educating and providing informational resources on the practice of carbon
offsetting could help to sustain the travel and tourism industry as a whole. In addition to carbon offsetting this trip, students may apply this practice to other trips and carbon producing activities. It is both the funding received from the carbon offsets that are purchased, as well as the increased awareness, that could lead to the solutions for alternative energy and ultimately the reduction of global warming.

Used Personal Motorized Transportation. Results from the study showed that students “Used personal motorized transportation,” such as individual cars and chartered buses, while studying abroad. The environmental drawbacks of using personal vehicles are linked to the increase in carbon dioxide emission which contributes to global warming as well as the air, land, and water pollution. A negative social implication of using personal motorized transportation is that many times in undeveloped countries, local residents do not have access to highly commoditized methods of travel such as car. Chartered buses often signify “tourist” and highlight the economic inequality and differences in the standard of living between the residents and visitors which may lead to resentment, conflict, and/or cultural stereotyping.

For some study abroad students, especially those participating in short-term programs, transportation decisions, such as using chartered buses, are often made by program directors. While using personal motorized transportation is the normal, expected form of transportation in the U.S., study abroad students should be encouraged to use public transportation and other methods of traveling that are similar to those used by the residents to prevent resentment and cultural stereotyping. Education and awareness of using personal motorized transportation could reduce the potential negative environmental and social impacts.

Leave No Trace Principles. As previously mentioned, Leave No Trace (LNT) refers to a minimalistic approach of low impact practices that were initially designed for wilderness and protected areas that are now being applied to urban setting as well. LNT encourages behavior
that prevents some unwanted visitor impacts such as pollution, erosion, and land degradation. Some study abroad programs incorporate visits to national parks, take nature hikes, or visit otherwise fragile ecosystems where students should know the LNT principles. LNT offers educational programming in the form of workshops, brochures, and other media sources that can be adapted for urban settings, as well as for sustainable tourism education. In addition to integrating the LNT principles, this program should be used as an ideal model for sustainable tourism education for study abroad students.

*Purchased or Collected Natural Artifacts.* Responses from this study implied that study abroad students were “Purchasing or collecting natural artifacts.” Picking up an interesting rock to keep as a souvenir or purchasing a shell necklace at a market may not seem like unsustainable activities, but they have the potential to cause damage to the environment. Collecting shells on the beach or purchasing coral have significant environmental impacts because they may cause an increase in environmental degradation and resource depletion. While unintentional, purchasing and collecting natural artifacts such as rocks, shells and/or coral, encourages scavenging and consumption of a community’s natural resources. In many cases the ecosystems are disturbed or destroyed, in order to extract the natural resources. Furthermore, natural artifacts may also have bacteria or small microorganisms that could potentially spread as an invasive foreign species if introduced into a new environment.

For example, in Ecuador, the tagua nut is found almost solely along the coast. This nut has similar density to ivory and can be carved into figurines or jewelry which can then be sold to tourists in local markets. Residents, who sell tagua nuts for a very small price, often extract them illegally out of protected lands such as the Machalilla National Park. The reason the residents are taking the nuts from the protected areas is because all other land has been exhausted of this nut in an unsustainable fashion.
It is recognized by the researcher that the residents play a crucial role in the impacts caused by scavenging. However, in a case of true sustainable tourism development, all stakeholders including residents and visitors would be educated on sustainable practices. Study abroad students should be aware of the impacts of purchasing or collecting natural artifacts as they may not realize the affect of such a seemingly insignificant activity. Again, education is needed for study abroad students to raise their awareness of the negative implications associated with this behavior.

*Utilized the Green Passport Program.* It was expected by the researcher that most respondents would not have heard of or utilized the Green Passport Program (GPP). From the results, it can be concluded from the low mean scores for both preparedness and frequency that this was true. In addition, there were also a high percentage of “Undecided” responses that may indicate the students were unfamiliar with the program’s name. As described in the literature review, this program was developed in the fall of 2007 and is a social networking tool that provides guidelines and resources to students for minimizing their impact on the host destination while studying abroad. It allows students and faculty to join individually or as a program group so that they can keep track of their actions while abroad. Additionally, the program includes a pledge, similar to a code of ethics that each member of the GPP signs when joining the program.

The GPP is an online sustainable tourism education tool that was designed specifically for study abroad students. Currently the program is being underutilized and the reason for this is unidentifiable. Possibly more marketing and exposure of the GPP to study abroad students would increase participation. Collaborative partnerships between the GPP, organizations working towards integrating sustainability into higher education (i.e. IIE, AASHE,), and universities and colleges, could lead to a more successful implementation of the program. Furthermore as discussed in the literature review, the most effective visitor education programs incorporate
different types of media sources in order to disseminate information. The GPP would be a great online resource to incorporate with other means of education such as sustainable tourism workshops for study abroad students and the addition of a “How to travel sustainably” section to a pre-departure handbook. The researcher of this study highly recommends universities to become involved with the GPP. The educational benefits of this program spread across each of the three dimensions of sustainability and can be a major resource to the students, program directors, and universities.

**Chose Lodging Based on Sustainability Principles.** Similar to transportation decisions, lodging decisions may also be made by university study abroad program directors. Additionally, it is sometimes monetarily infeasible for students to choose lodgings based on sustainable principles since many of the lodging facilities implementing sustainable practices are often more costly. The ‘green market’ is expanding in the tourism industry and many lodging operations have begun incorporating environmentally friendly and socially responsible operating policies. The sustainability principles that lodging operations can implement include activities such as hiring locals, reducing waste through recycling programs, using energy conservation techniques, earning certifications of green building, having socially responsible management policies, etc. Examples of lodging operations that are currently incorporating sustainable practices include the Proximity Hotel in Greensboro, North Carolina, the first LEED platinum certified four-star hotel, and the award-winning ecotourism resort, Alandaluz in Puerto Rico, Ecuador.

Regardless of affordability, it is still important to educate study abroad students about the option of sustainable lodging so that they can make informed decisions during independent travel or future trips. Students should also understand why these principles are important. For instance, why should a hotel hire local workers? Hiring local workers, as opposed to bringing in cheaper employees from elsewhere, will reduce economic leakage and provide jobs for the local
community. Looking at sustainability principles is a component that students should consider when choosing lodging accommodations.

**Socio-Cultural Dimension**

As mentioned in the literature review, the UNCG pre-departure handbook does discuss some cultural issues such as culture shock and cultural differences. The handbook also encourages study abroad students to learn about the destination they are visiting prior to their trip in order to avoid offensive behavior. For example, pointing fingers or hand signals may have negative connotations in other cultures. The data collected indicated that the majority of the students were participating in some sustainable socio-cultural tourism activities. The students reported that they “Integrated into the culture”, “Stayed with local residents”, “Participated in activities with respect to the local culture”, and also “Spoke the native language”. All of these are important aspects to sustainable tourism. However, there were still important attributes that the respondents reported not being prepared for and not participating in, which are discussed in the following sections.

*Participated in a Volunteer or Conservation Program.* The author of this study believes that one of the most important findings from the data was the lack of preparedness and participation of students who “Participated in a volunteer or conservation program.” Voluntourism is a growing trend that entails tourists participating in some type of volunteer activity at a destination during their travel experience. The benefits of volunteering while abroad include: promotion of international relations, reduction of stereotypes, and an increase in cultural understanding.

University International Programs Offices should contemplate building a volunteer program or partnering with organizations that provide the volunteer opportunities while abroad. For example, a goal of Sustainable Travel International is to connect travelers to pre-screened
charity projects around the world. Students could have a positive impact on a community while building relationships between the university and destinations around the world.

Additionally, voluntourism integrated within a study abroad program would give students an opportunity to experience and understand environmental and cultural issues affecting their destination. Studies show that visitors who volunteer at their destination tend to have a strong interest in experiencing authenticity of a place (McGehee, 2005). For students who choose to study abroad for both a learning opportunity and the tourism experience, volunteering abroad could help them to reach their goals. It provides a unique learning experience that can build character, valuable skills, and community relationships for the students participating. The International Programs Offices should be educating students on the benefits of voluntourism and providing the resources for students to be involved in volunteer opportunities while abroad.

*Asked Permission to Take Pictures/ Videotape.* The findings indicated that study abroad students were not prepared for and did not participate in asking permission to take photos and/or videotape of local residents and/or their cultural rituals, prior to doing so. Studies have shown that while a community may welcome visitors, residents would like visitors to ask permission before taking pictures/videotape. Asking permission shows respect to their culture and gives the residents a sense of privacy by not objectifying them or their way of life (Cole, 2007). For example, taking photos of customs may be unwanted by the local community because it is part of a sacred ritual that they would like to keep private. Taking pictures/videotape without permission may result in resentment between the host community and the visitors and is not a sustainable practice. As stated throughout the literature review, most visitor impacts are not done maliciously. Visitors are usually ignorant of the impacts they are causing. The potential negative impacts from this activity could be avoided by educating study abroad students on the necessity of asking permission prior to taking pictures and/or videotape.
Economic Dimension

Study abroad programs can bring considerable economic benefits to a community through the activities that students participate in and through the purchase of items students would need on a daily basis. Most study abroad students need to purchase lodging, personal transportation, food, personal products, gifts, and/or other living expenses during their study abroad program. As an example, if each student of the 241,791 (IIE, 2008b) who studied abroad during the 2006/07 academic year, spent $100 while abroad (a very conservative estimate), then the economic impact of this study abroad market for that year was $24,179,100.

Tourism has the potential to increase employment, foreign exchange, income, and tax revenue (Goeldner & Ritchie, 2006). Proper sustainable tourism education encourages visitors to participate in activities and to purchase products at local stores and restaurants, in an effort to direct the maximize amount of the economic benefits to the local community. Purchasing local products and using local services will also reduce economic leakage and increase the multiplier effect.

The findings showed that the study abroad students were prepared to and participated in the following: “Used of local guides,” “Purchased local products,” and “Stayed at locally owned lodging.” They also did not “Donate to local homeless, beggars, and/or children on the street.” However, the following sections expand on the sustainable tourism practices that the students indicated they were not prepared for and did not participate in.

Supported Global Businesses. The data showed that students “Supported global businesses,” which could include businesses such as chain restaurants or chain lodging operations. Examples of global companies include McDonald’s, Starbucks, Marriott, and Hilton Hotels. The major economic drawback to supporting global businesses while studying abroad is
that it causes severe leakage of the economic impact to the local area. For example, not all of the
profits from a Marriott Hotel located in the Bahamas would stay in that community, but would
filter back to the corporate headquarters and to investors that are typically from the United States
and Western Europe. Additionally, large global companies often train employees from their own
native country for upper management positions, leaving only the low-income jobs to local
residents. This management practice can lead to a number of negative impacts which includes
resentment towards visitors and tourism, displacement of residents, and a lower quality of life due
to the low-income jobs. Educating study abroad students on the benefits of purchasing local
products and using local services may lead to informed consumer decisions that would maximize
the economic benefit to the local community.

*Donated Money in Support of Organized Charities.* As a stakeholder in the host
community, study abroad students could provide support to charity organizations through
donations. The data showed that study abroad students did not, “Donate money in support of
organized charities.” A major barrier to conservation in many countries is that the national and/or
local governments may not be organized or have enough resources to establish programs for the
preservation and conservation of their natural resources. One example of a conservation
organization dependent on visitor donations is the Galapagos Conservation Trust. For many years
the Ecuadorian National Government could do little to help protect this fragile area but through
the support of this organization, and many others like it, the Galapagos Islands are still being
preserved today.

Donations to charitable organizations, often by international visitors, make it possible to
fund conservation projects. When tourists visit an area and become personally attached they tend
to be more willing to donate in order to protect the natural or cultural resources of that area.
Again, if study abroad students were more knowledgeable about why donating to these organized
charities is important and how much the affect of their contributions can make, students would be more apt to participate in this activity.

**Bargained for Absolute Lowest Price in Local Markets.** The results from the data showed that study abroad students “Bargained for the absolute lowest price in local markets.” This is an unsustainable practice that has negative social and economic impacts. It creates resentment between visitors and residents and can also worsen the local seller’s economic situation. For instance, often times vendors in local markets have to make a certain amount of profit from selling their products in order to feed their family or provide basic life necessities. If the buyer is persistent on paying only bottom dollar, the seller may not make enough to absorb the cost of the product itself. This practice only weakens their ability to compete in the market. In response, vendors often times increase the initial price in order to offset the cost because they know visitors expect to have an opportunity to bargain for a lower price. Educating students on the appropriate etiquette at the market and the consequences if of their actions if they push vendors to go to prices they cannot afford, could deter students from bargaining for the absolute lowest prices at the markets.

**Sustainable Tourism Education and Enforcement Continuum**

This research discussed at length the use of “code of ethics” or “visitor education programs” as methods to educate or raise awareness of study abroad students about sustainable tourism. Both methods have their potential benefits as well as their potential weaknesses (discussed in literature review) as being effective tools in preparing students to participate in sustainable tourism. However, these are not the only methods to consider for preparing study abroad students. In addition to using education as a tool, applying more hard intervention or external enforcement methods are also options to ensure that study abroad students are both prepared and participating in these principles. As discussed in the literature review, techniques for
enforcement of a desired behavior can be considered hard or soft intervention methods. Hard intervention enforcement methods are more obligatory and externally imposed and typically are found in the form of regulations, rules or laws that are put into effect by an authority organization. Soft intervention enforcement methods are more voluntary and internally enforced (Weaver, 2006).

The Sustainable Tourism Education and Enforcement Continuum (STEEC), which originated from contextual information on the ‘sustainable tourism quality control continuum’ discussed by Weaver (2006), contains a range of methods that can be employed to educate and enforce tourism stakeholders of sustainable tourism principles. It was designed to address the need of study abroad students to be prepared to and participate in the practice of sustainable tourism. The left side of STEEC signifies the soft intervention, weaker efficacy, internal enforcement, and voluntary means of educating students while the right side denotes the hard intervention, stronger efficacy, external enforcement, and obligatory means for educating students of sustainable tourism practices. For instance, methods such as statements of policy and code of ethics are located further to the left side (see Figure 7) as they have only internal enforcement and more voluntary options. Certification programs and/or providing incentives for adhering to certain sustainable practices (i.e. sustainable grants) are located towards the right side of the continuum because they are more externally enforced and obligatory.

Again, this study focused on the two most applicable methods of educating and enforcing, “codes of ethic” and “visitor education programs.” However, the researcher highly encourages universities and colleges to explore all options and methods of educating and preparing study abroad students for sustainable tourism practices. It is recommended that higher education institutes choose the method best fit for their situation depending on monetary and time resources.
Weaker Efficacy: Internal Enforcement & Voluntary

Educational Programming by Parks and/or Tour Operators

Statements of Policy

Stronger Efficacy: External Enforcement & Obligatory

Educational Programming by Universities/Colleges

Visitor Education Programs

Certification & Accreditation

Incentives and Rewards

Rules & Laws

Codes of Ethics

Tourism Industry (i.e services, accommodations, attractions, tour operators)

Tourists/Visitors

Host Community (developed by & for specific destinations)

Tour Operators

Destinations

Not-for-Profit Organizations

Universities/Colleges

Figure 7. Sustainable Tourism Education and Enforcement Continuum (STEEC)
The purpose of the STEEC model is to be used as a guide for choosing the most appropriate option for preparing abroad students to participate in sustainable tourism practices. Generally, the benefits of the methods that are less effective, are that they are usually more inexpensive to develop and typically take less time to implement. Conversely, the methods that are more effective in educating the students typically need more monetary and time resources for completing. Starting on the left side of the STEEC model, the subsequent sections will discuss the parts of the model.

Statements of Policy. Statements of Policy are good practice statements that are developed and applied by an organization. However, they are also evaluated by the same organization. Therefore, while implementing statements of policy was a step taken by the organization in good faith, there are no ‘checks and balances’ to confirm they are being followed. For instance, a lodging operation that has employed statements of policy regarding the greening of their operations may include policies on how they will reduce office waste or use non-biodegradable cleaning products. However, there is no way to officially report if these polices are or are not being implemented. Statements of policy face issues such as ‘green washing’ and are weak in effectiveness. Applying this concept to study abroad students, an International Programs Office may incorporate statements of policy on sustainability in international education, though they may have little effect on how study abroad students behave. Statements of policy could influence the physical operation of the International Programs Office and who they partner with (if the office attempts to partner with organizations of similar policy).

Codes of Ethics. Discussed heavily in the literature review, this is a viable option for educating study abroad students. When a code of ethics is developed correctly, with a theoretical base, it can be an effective tool for educating students on sustainable tourism. Codes of ethics have been developed for three major stakeholder groups- the tourism industry, the tourists, and
the host community (Genot, 1995). Analyzing this “tourist” section further, there are three main identifiable groups who currently provide code of ethics to tourists: tour operators who provide their clients a code of ethics, destinations or areas that provide their visitors a code of ethics, and not-for-profit organizations who promote sustainable tourism and provide a code of ethics to individuals seeking them out. The fourth group entitled “Universities/ Colleges” was added by the researcher as a visual for how and where universities and colleges should be working to develop an education tool for study abroad students.

Visitor Education Programs. Again, this aspect was discussed in length in the literature review and falls in the middle of the STEEC model. Visitor education programming has traditionally been provided by park management and tourism destination managers. The researcher of this study believes that universities and colleges should provide similar educational programming for their study abroad students on sustainable tourism practices prior to traveling abroad.

Incentives and Rewards. Incentives and rewards is a method that can be used to prepare study abroad students to practice sustainable tourism through by providing a secondary reason to do so. An example, that was discussed in the literature review, was the sustainable study abroad grants provided to students at Middlebury College. If students incorporate a project that focuses on an aspect of sustainability, they may be awarded $500 for their study abroad trip. Offering exterior incentives can be a creative and effective method to prepare, and in fact persuade, students to participate in sustainable tourism practices. However, this method may also be more costly, especially in the case of providing grants and scholarships.

Certification. There are a few certification programs in existence concerning sustainable tourism and/or ecotourism. Examples include: The International Ecotourism Society University Consortium Field Certificate, the Certificate of Sustainable Tourism Management from a
partnership between TIES and George Washington University, the Sustainable Tourism Ecotourism Certification Program (STEP) from Sustainable Travel International, and the Green Globe Certification Program. While the costs for obtaining certification varies widely (from $200 to $2500), the researcher believes that they can provide a structured curriculum for students learning sustainable tourism. In many cases, certification programs include courses, require internships, and applicants must pass testing of the information. While this may give students a complete education, it requires a great deal of time and financial resources and would be difficult to require all study abroad students to take part in a program like this. Additionally, certification has not been proven to be any more effective in standardizing sustainable tourism practices than any of the other methods because the efficacy of certification programs have not been studied yet.

Rules and Laws. Rules and laws are used for hard intervention and external enforcement and are usually created by an authority figure or overriding organization. They can be considered one of the most effective methods in modifying behavior if properly enforced. However enforcement of sustainable tourism is not feasible and unappealing. There is no easy technique to enforce rules or laws once students are abroad. For example, during the 2007/08 academic year, the University of North Carolina at Greensboro had 373 students who studied abroad. In would be almost impossible to monitor the behavior of each of these students. In addition, rules and laws often come with negative connotations and may antagonize visitors or those having to adhere to them. However, International Programs Offices could potentially include a set of rules of behavior, or modify a current set of rules of behavior, in order to include statements reflecting proper sustainable tourism behavior.
Limitations and Constraints of the Study

There were known and apparent limitations to this study. The two main areas of limitations include sampling and instrument design.

Sampling

Generalizations cannot be made to study abroad students outside of UNCG because of the limited size of the sample (n=102) and because the study consisted of only UNCG students. While the sample is reflective of national demographics of study abroad students, the participation in the three different lengths of the study abroad programs was not comparable. This may be because UNCG has a high number of direct exchanges compared to other universities. Due to time constraints and limited resources, a larger sample that includes study abroad students from other universities was not possible for this study. Additionally, another sampling limitation was that students who studied abroad during their senior year and that have graduated may not be using the same email address and subsequently not received the email.

Instrument Design

A major constraint to the study was that there was no previously designed instrument to collect the information that this study was attempting to analyze. Therefore, the instrument was made specifically for this study and the attributes used were critically chosen. However, other important attributes and factors may have been overlooked which may have put limitations on the data.

Furthermore, there were no established indicators to suggest how much the students should know about sustainable tourism practices and the study could not make assumptions to how much the students understood. This put restraints on terminology that could be used within the questions. Also, as past research has shown, there can be a discrepancy between what visitors say they did/will do and how they behaved/behave (Cole, 2005).


Recommendations for Future Research

This was an initial study to establish the need for more research to examine the relationship between study abroad and sustainable tourism. Similar studies measuring study abroad students’ preparedness for and participation in sustainable tourism practices need to be completed at other universities to evaluate larger populations of the study abroad market. It is highly recommended that a new instrument be developed for future use. The researcher of this study suggests utilizing Azjen’s (2002) *Constructing a TpB Questionnaire: Conceptual and Methodological Considerations* as a resource for development of a new instrument.

It is also highly recommended that qualitative methods, such as interviews and/or focus groups be used to collect data. It was apparent during this study that the richer data was found in the additional comment section indicating the respondents were not able to fully express their opinions throughout the rest of the questionnaire. Another recommendation is to have a sample composed of study abroad program directors and other study abroad administration who may make decisions regarding the students’ lodging, transportation, food and other services. Additionally, more research is needed to evaluate the impacts of the study abroad market on host destinations and the study abroad students’ understanding of sustainable tourism practices through the use of sustainable tourism indicators.

Recommendations for Program Development

The next step in this research is to develop and evaluate educational programming for study abroad students regarding sustainable tourism. Such programs should be based upon theory and development techniques as suggested within the literature review. Development of a code of ethics based on a teleological approach and to consider the five factors: channel, source, message, receiver, and situation. Concentration on the presentation and wording of the codes of ethics is important.
Once the code of ethics is established, development of additional educational programming that will work together compatibly is recommended. This programming should follow the EROT model (enjoyable, relevant, organized, and thematic). Also a mix of different media types (brochures, online social networks, handbooks, PowerPoint, etc.) should be utilized in program development. Workshops or lectures should be created in order to integrate personal contact which is very important for effective educational programming. All programming should be interpretative, inductive, and targeted for the appropriate audience. It is encouraged for universities and colleges to seek partnerships with organizations such as the Institute for International Education or the Association for Advancement of Sustainability in Higher Education, and/or the Green Passport Program in order to design educational programming.

**Recommendations for UNCG**

Specifically for UNCG, the International Programs Center should work with the UNCG Committee on Sustainability. This committee, formed in 2006, develops educational workshops and programs on sustainability issues for all UNCG students and would be a very appropriate partnership in the development of sustainable tourism programming. The IPC should also collaborate with UNCG faculty members who have a research interest in sustainability and/or sustainable tourism. Additionally, as a supplemental resource, the IPC should contact other universities or colleges that have already utilized some methods of sustainable tourism education in their study abroad programs (i.e. Middlebury College, UNC-CH, Ithaca College). Furthermore, provided in the following section are examples of action steps that the UNCG IPC could use to implement creative sustainable tourism educational programming.

First, form a sustainability committee within the IPC, including members who are affiliated with the UNCG IPC, the UNCG Committee on Sustainability, and faculty members who have a research interest in sustainability and/or sustainable tourism. As with the formation of
any committee, goals and objectives need to be identified as well as a timeline for implementation of the sustainable tourism education. One of the initial steps towards creating sustainable tourism education for study abroad students is the development of a code of ethics. Examine established code of ethics as well as consider the findings from this study (i.e. the results which indicate further preparation is needed because study abroad students were not performing those actions). Again, use the suggested techniques within this paper for developing the code of ethics.

Next, outline a sustainable tourism handbook using the UNC-CH Green Passport Handbook and the Responsible Tourism Handbook as models. The committee should decide the appropriate organization of this handbook, but it is recommended by the author of this study to parallel the sustainability dimensions: environmental, socio-cultural, and economic. Research and collaborate on all possible resources on sustainable tourism that should be provided to the students within the handbook.

Once this framework has been completed, marketing methods need to be identified. Utilize the marketing mix (Product, Price, Place, Promotion) regarding decisions around how to market, advertize, and promote the new IPC agenda of endorsing sustainable tourism practices by study abroad students. It would be preferable to brand an expression, similar to that of the “Green Passport.” A few examples include “Passport to Sustainability”, “Sustain your Study Abroad Program”, or “Study Abroad Sustainably.” Depending on resources, a mix of brochures, flyers, posters, and online media sources should be designed.

Finally, interpretative workshops should be created as a main source of personal contact which gives the IPC an opportunity to have discussions with study abroad students about sustainable tourism practices prior to their experience abroad. These sustainable tourism workshops could be offered within the Global Leadership Program or as a workshop offered by the UNCG Committee on Sustainability. It is important to be creative with the development of the
sustainable tourism educational programming and once the program has been executed, continuous evaluation of effectiveness is needed.

Conclusions

Study abroad students are our future world travelers. Their preparation to be sustainable travelers is important because it may influence how they travel in the future. Universities should take the lead in providing sustainable tourism education. Study abroad students are a captive audience. Pre-departure programs and orientations would be excellent opportunities to educate study abroad students about sustainable tourism practices. Not only would sustainable tourism education programming increase the students’ knowledge for their study abroad program, but also for any traveling throughout their life. It is the belief of the researcher that higher education institutions not only have the means and resources, but also the responsibility to educate students with regard to sustainable tourism practices.

The author of this study believes that it is the responsibility of higher education institutes to appropriately prepare study abroad students with education of sustainable tourism principles. Therefore, all universities and colleges should provide resources such as informational handbooks, (i.e. the UNC Green Passport Handbook), brochures and pamphlets, workshops, and a list of online resources where students could access more information on sustainable travel. More importantly, they should also provide a variety interpretative visitor education programs for study abroad students. Study abroad students should strive to do no harm in the locations they visit, and perhaps even leave the area in better economic, socio-cultural, and environmental shape than when they arrived.
REFERENCES


APPENDIX A

INITIAL EMAIL SENT TO STUDY ABROAD STUDENTS
January 27, 2009

TO: UNCG Study Abroad Students

FROM:

Lauren Duffy, Graduate Student, Department of Recreation, Tourism, and Hospitality Management

David Cárdenas, Assistant Professor, Department of Recreation, Tourism, and Hospitality Management

SUBJECT: Study Abroad Survey Invitation

We would like to invite you to take part in a survey to assess your knowledge and understanding of sustainable tourism practices during your study abroad program.

The survey will take approximately 10 minutes to complete. When you finish the survey, you have the option to enter your name for a drawing for a two-night stay at the Greensboro Airport Marriott. All responses are kept confidential and any names entered in the drawing will not be connected with survey responses. This survey will close February 10th, 2009 at 6pm.

Please click on the link below to access the survey:

http://www.surveymonkey.com/s.aspx?sm=L1Vu6I68JJU1ToSnQxRDoQ_3d_3d

If you have any questions or concerns, please email Lauren Duffy (lnduffy@gmail.com) or David Cardenas (dacarden@uncg.edu).

We thank you in advance for participating in this survey. Your input will help improve pre-departure programming for study abroad students.

Thank you again for your time!

Lauren Duffy
Dr. David Cárdenas
APPENDIX B

FOLLOW-UP EMAIL SENT TO STUDY ABROAD STUDENTS
February 4th, 2009

TO: UNCG Study Abroad Students

FROM:

Lauren Duffy, Graduate Student, Department of Recreation, Tourism, and Hospitality Management

David Cárdenas, Assistant Professor, Department of Recreation, Tourism, and Hospitality Management

SUBJECT: Study Abroad Survey Invitation Reminder

If you have not done so already, we would like to invite you to take part in a survey to assess your knowledge and understanding of sustainable tourism practices during your study abroad program.

**If you have already taken this survey, thank you! We greatly appreciate your time. Please do not retake the survey.**

The survey will take approximately 10 minutes to complete. When you finish the survey, you have the option to enter your name for a drawing for a two-night stay at the Greensboro Airport Marriott. All responses are kept confidential and any names entered in the drawing will not be connected with survey responses. **This survey will close February 10th, 2009 at 6pm.**

Please click on the link below to access the survey:


If you have any questions or concerns, please email Lauren Duffy ([lnduffy@gmail.com](mailto:lnduffy@gmail.com)) or David Cardenas ([dacarden@uncg.edu](mailto:dacarden@uncg.edu)).

**We thank you in advance for participating in this survey. Your input will help improve pre-departure programming for study abroad students.**

Thank you again for your time!

Lauren Duffy
Dr. David Cárdenas
APPENDIX C

CONSENT FORM AND SURVEY INSTRUMENT
Thank you for participating in this survey. It should take approximately 10 minutes to complete the questionnaire.

All participants must be 18 years of age or older to complete the survey and must have studied abroad from UNCG during the 2007/2008 or 2008/2009 academic year. There are no foreseeable risks to participating in this study.

The purpose of this study is to assess if UNCG Study Abroad Students are prepared for and actively participate in sustainable tourism practices. This survey is being conducted by the University of North Carolina at Greensboro and will be used to help develop and enhance pre-departure study abroad programming.

By proceeding to the next page, you agree that you understand the procedures and any risks and benefits involved in this research. You are free to refuse to participate or withdraw your consent to participate in this study at any time without penalty or prejudice by selecting the “Exit” option available on each screen. Your participation is entirely voluntary and you may print this consent form for your records. Your privacy will be protected as you will not be identified by name as a participant in this survey.

The research and this consent form have been approved by the University of North Carolina at Greensboro Institutional Review Board, which insures that research involving people follows federal regulations. Questions regarding your rights as a participant in this project can be answered by calling Eric Allen, Research Compliance Officer, at 336-256-1482. Questions regarding the research itself will be answered by Dr. David Cardenas, 336-334-4738.

When you finish the survey, you have the option to enter your name for a drawing for a two-night stay at the Greensboro Airport Marriott.

Thank you for you time!

David Cardenas
Recreation, Tourism, and Hospitality Management
1. Please indicate which type of study abroad program you were enrolled in.
   
   o Short-term/Faculty-Led
   o Semester Abroad
   o Full Year Abroad (2-semesters)

2. What was the name of your study abroad program?

   ____________________________________________
3. Please respond to each of the following statements in regard to your study abroad program:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Prepared</th>
<th>Somewhat Prepared</th>
<th>Undecided</th>
<th>Somewhat Unprepared</th>
<th>Very Unprepared</th>
<th>Often</th>
<th>Sometimes</th>
<th>Undecided</th>
<th>Infrequently</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchased local products (handicrafts, art and/or items specific to local culture)</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 2</td>
<td>3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supported global business (Ex. Starbucks, McDonald, Marriott)</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 2</td>
<td>3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supported local business (Ex. Eating at a local restaurant, purchasing locally grown food)</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 2</td>
<td>3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon Offset your trip</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 2</td>
<td>3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participated in a volunteer or conservation program</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 2</td>
<td>3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sought to minimize personal waste and conserve energy (Ex. reusing bottles, finding local recycling, limiting water use, turning lights off)</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 2</td>
<td>3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Used personal motorized transportation (Ex. rental cars, chartered bus)</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 2</td>
<td>3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studied and integrated into local culture</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 2</td>
<td>3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donated to local homeless, beggars and/or children on the street</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 2</td>
<td>3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donated money in support of organized charities for conservation and preservation of local cultural and natural resources</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 2</td>
<td>3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practiced Leave No Trace Principles</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 2</td>
<td>3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asked permission to take pictures/videotape of the locals and/or local rituals</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 2</td>
<td>3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Please respond to each of the following statements in regard to your study abroad program:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Please indicate how well you feel UNCG’s IPC department prepared you for the following activities before your study abroad trip.</th>
<th>Please indicate how often you did the following activities while on your study abroad trip.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stayed with local residents</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Traveled outside of program site and typical tourist district</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Purchased or collected natural artifacts such as coral, rocks and/or shells</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Used local guides</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Bargained for the absolute lowest price in locals markets</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Participated in activities that were conducted with respect for the local culture and heritage</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Used public transportation (Ex, taxis, public buses)</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Spoke the native language</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Stayed at locally owned lodging</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Utilized the Green Passport Program</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Utilized electronic communication instead of standard mail correspondence (for contact with home or for in country)</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Participated in activities that threatened wildlife or plant populations</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Chose lodging based on their sustainability principles</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>
Questions about you

5. What is your gender?
   o Male
   o Female

6. What year were you born?
   ______

7. Please identify your ethnicity.
   o African American or Black
   o American Indian or Native American
   o Asian American
   o Hispanic, or of Spanish Origin
   o White/ Not of Hispanic Origin
   o Other - - specify ______________________

8. Please select the answer that best describes your marital status.
   o Married
   o Single
   o Living with partner
   o Divorced
   o Separated
   o Widowed

9. What was your enrollment status during your study abroad trip?
   o Freshman
   o Sophomore
   o Junior
   o Senior
   o Graduate Student

10. Please indicate your study abroad program’s main destination.
    City
    _______________________
    Country
    _______________________

11. While on your study abroad program, did you do any independent travel (traveling that was not under the direction or coordination of your study abroad program)?
    o Yes
    o No
12. How would you classify your lodging accommodations during your study abroad program? (Please check all that apply)
   o Dorm
   o Homestay/ Residential Placement
   o Rented Apartment
   o Hotel
   o Hostel
   o Other____________________________________

13. If you had it the chance to do things over, would you participate in a study abroad program again?
   o Yes
   o No

14. If you have any additional comments, please include them here.
   ______________________________________________________________________
   ______________________________________________________________________
   ______________________________________________________________________

Thank you for participating in our survey! If you would like to be entered into a drawing to win a 2-night stay at the Greensboro Airport Marriott please fill out the contact information below.

**This information will be collected separately from your responses in order to achieve complete confidentiality. If you do not want to participate in the drawing, please exit the survey now.**

Thank you, your time is greatly appreciated.

Please provide your contact information for us below so that we may enter your name in our drawing for a free night stay at the Greensboro-High Point Airport Marriott.

Contact Information:
Name: ________________________________________________
Email: ________________________________________________
Phone: ________________________________________________