STUDENTS' PERCEPTIONS OF INTERNATIONAL AGRICULTURE AFTER AN INTERNATIONAL AGRICULTURAL EXPERIENCE

A Thesis

by

KASEY LYNN MILLER

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

December 2011

Major Subject: Agricultural Leadership, Education, and Communications

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Approved by:

Chair of Committee, Tracy A. Rutherford
Committee Members, Kim E. Dooley
Leonardo Lombardini
Head of Department, John Elliot

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ABSTRACT

Students' Perceptions of International Agriculture after an International Agricultural Experience. (December 2011)

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Chair of Advisory Committee: Dr. Tracy A. Rutherford

Study abroad and internship experiences are the best ways for students to globalize their education. The purpose of this study was to identify students' perceptions of international agriculture before and after they participated in an international agricultural study abroad and internship. The objectives were to identify the attitudes about both international agricultural study abroad programs and internships, compare and contrast perceptions of international agriculture based on study abroad experience or internship, and identify any motivations, barriers, and benefits of international agricultural experiences to student development. The results indicated the major motivations, barriers, and benefits, the role of agriculture in students' decisions to study or intern abroad, and the importance of the length of a trip abroad. Major motivations included travel/international experience, education, work experience/hands-on activities, culture, and agriculture/natural resources; barriers included cost, time off work/schedule, language, safety and health, and time away from home; finally, benefits included experience in international agriculture and natural resources, culture, international travel, global perspective, and education. This study found that international agriculture was a

major motivator, even with the students who had no agricultural background. It also indicated that short-term study abroad trips and internship programs during break times from school are increasingly popular. Universities can use this case to understand better and improve international learning opportunities for students and increase interest and knowledge in agriculture.

DEDICATION

I dedicate this degree to my extremely supportive family, friends, and Jared. Without your love and encouragement, this thesis would not have been possible. Thank you for sticking with me when it seemed overwhelming. You survived the tears and gave me laughter. You made this experience far better than I ever expected.

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To Jared, thank you so much for loving me. You helped more than you know.

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CHAPTER I

INTRODUCTION

The world is full of exotic places; it is full of beaches, mountains, rainforests, and deserts. Americans spend billions of dollars traveling across the world to see these places. According to the U.S. Travel Association, Americans spent $121.1 billion in international travel in 2009 (U.S. Travel, 2010). Travel offers many great opportunities for cultural and professional development and is now almost necessary to distinguish a student's résumé. However, it is expensive and time consuming, which can make it very difficult for students to travel.

One way for students to experience the world is through study abroad trips. There are many benefits from participating in these trips. Student participants in study abroad showed increased levels of nine characteristics that fall under the subheadings of personal development, academic commitment, intercultural development, and career development (Dwyer & Peters, 2004). Although there are benefits to study abroad trips, there are also costs. So why do students decide to participate in a trip that often takes them far from home, costs more than a normal semester, and sometimes requires learning another language?

Analysis of the Study Abroad Goals Scale (SAGS) shows that there are three main motivations for students to study abroad: to enhance their cross-cultural skills, to

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This thesis followed the style of the *Journal of International Agriculture and Extension Education.*

become more proficient in subject matter and to socialize (Kitsantas, 2004). Personal interests, peer influence, desire to experience something different and affordability also motivate students to go on a study abroad trip (Zhai, 2000). While there have been many studies about motivation, barriers, and benefits to study abroad trips, there have been relatively few studies concerning the combination of study abroad and agriculture.

Traveling that enhances learning about agriculture could greatly benefit society as a whole. Agriculture encompasses as many as 30 subject areas, including food and fiber, education, communications, science, engineering, and technology. The diversity of the agricultural industry is reflected in the amount and variety of study abroad trips offered by universities across America. The importance of agricultural study abroad trips stems from the large knowledge gap about American agriculture, one of the country's largest industries. With a global economy, it is increasingly important to not only understand America's place in the world market, but that of our competitors and allies.

Studying agriculture abroad can help a student appreciate American agriculture and also increase understanding of American agriculture in the world market. This understanding will make students competitive in an aggressive job market. It is also important to study the benefits of agricultural study abroad trips to validate their existence in a time of budget cuts, to increase the number of opportunities for agricultural students, and to globalize domestic curriculum.

Conceptual Framework

Motivations to Study Abroad

Students are advsied early in their college career to take a study abroad before they graduate, and, as a result, American student participation in study abroad trips has increased by 5% in the past decade (He & Chen, 2010). But why do students take this advice? In Teichler and Steube's 1991 study (as cited in Zhai, 2000) of cross-national analysis of students' motivation for study abroad, eleven main reasons were identified:

> 1) desire to use/improve a foreign language, 2) desire to live in/make acquaintances from another country, 3) desire to enhance the understanding of the particular study abroad host country, 4) expectation that the study abroad would improve career prospects, 5) desire to travel, 6) desire to gain another perspective on the home country, 7) desire to become acquainted with teaching methods other than those adopted at the home institution, 8) desire to become acquainted with subject matter not offered at home institutions, 9) expectation to get better marks/examination results after return from study abroad, 10) study abroad afforded opportunity to establish ties with family/ethnic heritage, and 11) influence of friends. (p. 39)

The Study Abroad Goals Scale identified three reasons for joining study abroad programs: to enhance their cross-cultural skills, to become more proficient in the subject matter, and to socialize (Kitsantas, 2004). An additional study cites academic credit, language credit, practical experience, résumé building and experience (Peden, 2005, as

cited by Presley, Damron-Martinez, & Zhang, 2010). Clearly, experience, travel, academic credit, and social experiences are main motivating factors, but what are motivations for picking the location of the trip?

According to the 2007 Open Doors Report (as cited by He & Chen, 2010), 58% of American students studied abroad in Europe, making it easily the most popular location of study. Latin America followed in popularity with 16%, then Asia with 9%, Oceania with 6%, and Africa with 3%. Country image plays a part in choosing the destination for a student's study abroad. Undergraduate students often choose the country first and then choose the program or institution (Gertner, 2010). However, in Gertner's study concentrating on the effect of country images on tourist and study destinations, it was concluded that there was no difference in country image when a country is considered as a tourist or a study abroad destination.

The time period of the study abroad also affects a student's motivation to participate. In He and Chen's (2010) study regarding college students' perceptions and attitudes toward the selection of study abroad programs, it was found that respondents preferred to travel during summer break, which generally lasts three months. Spring break was reported to be the second favorite time to travel (18.7%) because of favorable weather. Winter break was the least favorable because of family gatherings during the holiday season. The study results showed that the most preferred travel time was a summer program that lasted two to four weeks. The study also showed that opportunities for touring and social contact at low prices were main motivations, so with that in mind, traveling during the off-season (not during summer months or during spring break)

might actually be more beneficial. Because of work or social obligations, and summer school classes, many students want to take a study abroad trip but cannot afford to take off a whole summer session or semester to do so. Therefore many programs are offering a greater number of short study abroad trips, offered during mini-mesters. These trips are usually about three weeks long, so they can be offered during winter break, spring break, or between the spring semester and a summer session without conflicting with family or work obligations. These trips, because they are so much shorter in duration, are often much cheaper, thus allowing more students to participate.

Demographics play a small part in the motivation to participate in study abroad programs and the activities offered during such programs. According to He and Chen (2010), females are more influenced by social contact and are thus more likely to tour a city or go shopping. Males are more interested in participating in sports. Schroth and McCormack, in their 2000 study of sensation seeking and need for achievement in study abroad students, found that the students were serious about their programs and sought experiences not available at home, but not with reckless abandonment. The participating students did not fit the stereotype of dangerous sensation seekers, but instead needed to seek new experiences through the mind and senses by traveling abroad. These demographics are a small part in influencing a student's destination choice, but it is important to understand what activities students will participate in while they are abroad. One study showed that in business students, males are less likely to participate in a study abroad than females (Presley et al., 2010). The study found that ethnically, there was no difference in minority (African Americans and Latino Americans) students' desire to

study abroad, but admitted that the decision may be more resource-based. Age of students also affects participation. Seniors are more concerned with course content than underclassmen, so the course choice plays more of a role in program selection (He & Chen, 2010). Because many students often pick the desired country before they choose their program, it is useful to know that seniors are more prone to reverse the process and pick the course before the country. Briers, Shinn, and Nguyen (2010) found that 70% of students thought that participating in a study abroad program would improve their competiveness in the global market.

Educational decisions, such as participating in a study abroad, are based on a student's background, for example, home life and socioeconomic status (Salisbury et al., 2009, as cited by Presley et al., 2010). Background includes "enduring beliefs, attitudes, aspirations, perceptions, and values acquired through home and school environments and social class that serve to frame and constrain their choices" (p. 231). A student's family's socioeconomic status plays a large role in their decision, as cost is one of the biggest barriers to study abroad participation. If one's family can help offset costs, then a student is more likely to participate. The level of a student's parents' education also affects a student's willingness to participate, as its correlation to a student's cultural and social capitol before graduation is positive (Presley et al., 2010). When the parents have higher levels of education, it can be assumed that they have more resources; therefore their children have more opportunities to be exposed to cultural experiences. He and Chen's (2010) study showed that students who had no previous international experience

were more likely to want to participate in a study abroad than those who had already been overseas.

As students' background plays a role in their decision, so does the international experience of their professors. Presley et al. (2010) said, "As students may emulate faculty behavior, university administration must proactively pursue and provide study and work abroad opportunities for faculty, enabling them to set an example for students" (p. 230). Universities are supposed to meet local and global needs, and are pressured to internationalize their programs (He & Chen, 2010). Dooley and Rouse (2009) said that if the goal is to internationalize the university, then the first step is to internationalize the faculty. When surveyed after a faculty abroad program to Mexico, 74% percent of faculty said the experience impacted their teaching (Dooley & Rouse, 2009). If more faculty members have positive international experiences, they can motivate their students to do the same through study abroad programs.

Barriers to Study Abroad

Although there are many motivations for students to participate in a study abroad program, there are also many obstacles barring the way for student participation. The Council for International Education Exchange developed a list of barriers to study abroad participation: language requirements, length of study, finance/cost of program, rigid on-campus requirements, admission requirements, lack of support of faculty/department, campus culture, state legislature-mandated requirements, and difficulty in transfer of credits (as cited by Zhai, 2000). Additional barriers include both real and perceived barriers addressing curriculum, faculty, time, and cost. Perceived

barriers and misconceptions play just as big a role to impede participation in study abroad trips (Presley et al., 2010).

Communication is an integral aspect of education, and if students cannot understand their teacher or vice versa, it inhibits learning. As cultural experiences were shown to be a motivation to participate in a study abroad, they can serve as an inhibitor to some if there is an existing language barrier. A language gap has been interpreted as an obstacle to learning about local culture (Gmelch, 1997, as cited by Mancini-Cross, Backman, & Baldwin, 2009). Research has shown that language barriers have created role conflicts, timidity, and defensiveness during travel (Cushner & Karim, 2004; Hottola, 2004; Yoo & Sohn, 2003; as cited by Mancini-Cross et al., 2009). Mancini-Cross et al. (2009) argue in their qualitative study of students studying in Italy that the lack of language fluency does not inevitably create a barrier but may enhance students' enjoyment and contribute to cross cultural interactions. They say that the culture shock experienced by visitors and students can be a positive experience, and serve as a rewarding stimulus and enhance intercultural skills. Complete immersion in another language often forces the students to learn the language more completely. It also contributes to learning community culture and dialect. In Mancini-Cross et al.'s (2009) study, they compiled logs of the students and professors of their experience, and much of the language barrier was addressed in Ray's log; "The very first aspect of Italy that occurred to me was that I understood pretty much nothing. I could not read anything, and I could speak and comprehend what I heard even less. Little did I know that this lack of understanding would be the key to experiencing everything on my trip" (p. 110).

Length of the study abroad program was mentioned as a motivation, but it can also be a barrier. Many students work to pay for their college education, and summertime, which was noted to be a prime time to study abroad, is usually the best time to earn money for college. When students choose to study abroad during the summer to avoid missing a semester at their home university, they also have to choose to give up those workable hours (Marcum & Roochnik, 2001). To encourage participation, study abroad trips are more frequently offered in shorter time increments. The time period of a student's college career in which the trip is taken can also serve as a barrier. Many students choose to take a study abroad trip their junior year, and this is a time when many students flourish on campus. If a student decides to take a study abroad trip during the junior year, they must renew relationships with friends and professors and catch up on major coursework that is offered during the third year of study (Marcum & Roochnik, 2001).

Students are often concerned about whether a study abroad trip will negatively affect their graduation date or whether the course will count towards their degree plan. Carlson et al. (1990, as cited by Zhai, 2000) reported that many students decide not to participate in a study abroad because they doubted that the class would be relevant to their major or their future career. They also worried that the trip would extend their graduation date. This is still a relevant concern 20 years later; Presley et al. (2010) reported that business students were most concerned about a delay in their graduation because of participation in a study abroad. Beiner and Commanday (1981, as cited by Zhai, 2000) said that students perceive study abroad as disruptive of their academic

progress and irrelevant to their career goals. With such a competitive job market, though, gaining international experience should prove to be beneficial, even if it means taking extra time to graduate.

A fear that study abroad trips do not pertain to a student's major is a valid concern. The 2007 Open Doors Report (as cited by He & Chen, 2010) reported that in their study abroad program students studied social sciences the most, at 21.7%, then business and management at 17.7%, humanities at 14.2%, foreign languages at 7.8%, fine or applied arts at 7.5%, physical or life sciences at 6.9%, education at 4.1%, health sciences at 3.8%, and engineering at 2.9%. Even lower than the amount of engineering students studying abroad are agriculture students. Brooks, Frick, and Bruening (2006) reported that in the 2002-2003 academic year, 1.5% of all U.S. students who studied abroad were in agriculture. Carlson et al. (1990; as cited by Zhai, 2000) suggested that if faculty members were more encouraging, more students might participate. Brooks et al. (2006) reported that their survey participants noted lack of support as barriers most frequently. Beiner and Commanday (1981, as cited by Zhai, 2000) argued that U.S. colleges are reluctant to accept credits from institutions that are not supervised by U.S. academic institutions. Brooks et al. (2006) suggested alleviating the low support barrier; "If administrators of colleges of agriculture wish to make positive, lasting initiatives that infuse international perspectives into undergraduate studies, then they may need to provide training and support for faculty and staff that fosters enthusiasm for those programs" (p. 100). Trips such the faculty abroad studied by Dooley and Rouse (2009)

are also ways to provide more support to students wishing to study abroad by allowing faculty to experience the benefits.

Perhaps the biggest barrier to study abroad is cost (He & Chen, 2010; Presley et al., 2010; Fischer, 2008; Marcum & Roochnik, 2001; Zhai, 2000). When making the decision to participate, cost is a large contributor to the decision process. Because of the economic downturn, 94% of Forum on Education Abroad members surveyed said that they were very or somewhat concerned about the rising costs of study abroad programs, as opposed to 68% from the year just before (Fischer, 2008). The study also showed with the high costs of study abroad programs, many programs are offering classes in cheaper locations, such as South and Central America.

The availability of scholarships greatly affects the decision to participate (He & Chen, 2010; Presley et al., 2010). Students are responsible for paying trip fees, airfare, and tuition, plus providing spending money and meals. Often the student is notified of the trip costs and airfare, but not the tuition and fees. Tuition and fees account for a large portion of a study abroad, not to mention one of the largest costs of a traditional school year. According to tuition information from a large southern state university, for a resident undergraduate, 12 hours (which constitutes as a full-time student) of tuition and fees costs $4,193.01. For a non-resident, 12 hours of tuition and fees costs $8,843.01. Study abroad trip fees can vary in cost, ranging from $1,500 to more than $6,000. If students do not get much assistance from their family, then the time spent away from their employment can be detrimental to supporting the rest of their education.

Benefits of Study Abroad

Despite the numerous barriers to study abroad, there are even more benefits for students who decide to participate. He and Chen (2010) note that study abroad trips expand students' worldview, spur intellectual and personal growth, enhance self-image and sociability, create a more positive attitude to other cultures, and foster multicultural understanding and tolerance. A study of study abroad trips administered through the Texas Agricultural Extension Service 4-H program showed that participants experienced increased sensitivity to other cultures, increased interest in global events, and increased involvement in community activities (Boyd et al., 2001). Dwyer (2004), in her study on the impact of study abroad program duration, concluded that study abroad trips have "a significant impact on students in the areas of continued language use, academic attainment measures, intercultural and personal development, and career choices. Most importantly, the study illustrates that this impact can be sustained over a period as long as 50 years" (p. 161). Bicknese's (1974, as cited by Pellegrino, 1998) study about study abroad participants' perceptions before, immediately, and ten months after they had studied in Germany reported that learners experienced changes in their opinions about themselves, the studied language, the studied culture, and their own culture and individual values. In a holistic appraisal, Bicknese (1974, as cited by Pellegrino, 1998) concluded

> The vast majority of the students gain an impressive proficiency in the target language; they penetrate the host culture far more deeply than they could in several years on their home campuses; they experience a liberal education in its

> broadest sense; they begin to construct for themselves a solid foundation of knowledge and personality, which will enable them to pass judgment more objectively throughout their lives; their linguistic skills and factual knowledge will qualify them for a great variety of professions in this world of shrinking geographic dimensions. (p. 112)

The benefits will be grouped into five major sections: language, personal development, career attainment, academic requirements, and then a look at agricultural benefits.

Once a student works past the language barrier, language can become a benefit of a study abroad trip. In a case study of a summer class studying engineering and Italian in Italy, the language barrier actually enhanced the students' enjoyment and contributed to cross-cultural interactions (Mancini-Cross et al., 2009). The students interacted with the family who owned the local restaurant where the students ate lunch every day. They interacted with the a husband, wife, three children, and grandfather, through an interpreter and eventually through their own Italian language skills. Due to their everyday interactions, the language barrier served as a uniting aspect between the students and the Italian family, and each party found ways to communicate. Mancini-Cross et al. (2009) summarized the language benefit as

> The supposition that the lack of language proficiency was beneficial to intercultural communication is supported in this study with the finding that unless the Italian family or the group of students had been extremely proficient in either English or Italian, neither would have likely made an effort to

> communicate that led to the same level of connection and satisfaction as occurred in such a short period of time. (p. 120)

An additional benefit of a study abroad is the availability of spontaneous, out of classroom interaction with native speakers in authentic settings (Pellegrino, 1998). Even more important than speaking in natural settings is the retention of language increases. Dwyer and Peters (2004) surveyed 3,400 International Education Students study abroad participants and reported that 42% of the respondents who lived in a home now use a language other than English on a regular basis. Respondents who lived in a dorm room or apartment with local students resulted in 32% and 38% in language retention, respectively. Students who lived in an apartment with other U.S. students reported only 18% retention. Even if students do not go to a country to specifically learn a language, being surrounded by the language motivates them to learn the language of their host country (Bruening & Frick, 2004). Study abroad allows students to experience language in its authentic form, and if a student can use the language on a day-to-day basis, they will retain that information.

Personal growth is certainly gained through a study abroad. Being put in a new environment, often with people that the participants do not know or have only met a few times, and studying a subject in an entirely different setting fosters ingenuity and adaptability in students. Study abroad trips allow for opportunities for individual growth and development through an interesting and fun experience (Presley et al., 2010). Dwyer and Peters (2004) reported that 97% of those surveyed reported that studying abroad served as a catalyst for increased maturity, 96% reported increased self-confidence, 89%

reported that study abroad enabled them to tolerate ambiguity, and 95% reported that it had a lasting impact on their world view. The survey also concluded that study abroad fosters lasting friendships; over half of the respondents said they were still in contact with friends made during their study abroad and 73% said that their study abroad experience still influenced family decisions. Bruening and Frick (2004) said that students bridge a cultural gap during a study abroad and become more aware of cultural differences and similarities. This increased cultural awareness decreases ethnocentrism in leadership practices (Pojman & Fieser, 2009, as cited by Moore, Williams, Boyd, & Elbert, 2011) in organizations and future careers.

Study abroad trips make their participants highly marketable in the career market (Dwyer & Peters, 2004; Moore et al., 2011; Presley et al., 2010). Moore et al. (2011) cited the Report of NAFSA's Task Force of the Institutional Management of Study Abroad (2008) as saying, "In order to thrive in the global marketplace and lead effectively in a global context, college graduates must learn foreign languages, experience other cultures and societies, and have an understanding of how the international system functions at both the macro and micro level" (p. 117). According to Dwyer and Peters (2004), 75% of their survey respondents said that they acquired skill sets abroad that influenced their career path, and 62% said that their study abroad trip sparked an interest in a career direction that they pursued after the experience. The "human capital theory" suggests that individuals acquire productive qualities, such as knowledge, understandings, talents, and skills, which can be enhanced through education and exchanges for increased earnings, power, and occupational status. Multinational

companies want to hire graduates who have cross-cultural experiences and language skills (Acker & Scanes, 2000; as cited by Bruening & Frick, 2004). It is argued that students use a decision-making process similar to that of a formal cost-benefit analysis when making any education decisions, especially one so large as a study abroad trip (Salisbury et al., 2009; as cited by Presley et al., 2010). Being able to use skills such as cost-benefit analysis, adaptability, and decreased ethnocentrism will help students once they enter the job market.

In addition to enhancing job market marketability, study abroad trips help fulfill academic requirements and spur further educational goals. According to Moore et al. (2011), many institutions of higher learning are starting to, or have started, requiring some form of internationalization in their curricula. At Texas A&M University, students are required to complete six credit hours of International and Cultural Diversity courses to fulfill university core curriculum requirements. Additionally, study abroad trips foster international institutional linkages, which can include scholarly partnerships, collaborative research, shared data flows, and various other institutional interactions (Marcum & Roochnik, 2001), which again, can help the student groom their international skills even at home. At home, many students can change or expand their educational goals because of their study abroad experience. Dwyer and Peters (2004) reported that 87% of respondents said that study abroad influenced subsequent educational experiences, 63% said that the trip influenced their decision to expand or change majors, and 64% said that it impacted their decision to continue to graduate school.

There were few studies found regarding the benefits of agricultural study abroad trips. However, Bruening and Frick (2004) studied a group of agricultural students as they took an international course that focused on modified international rapid appraisal method of data collection and analysis. The course was followed by a ten-day field study in Puerto Rico. They posit that students need to "understand the importance of international markets and their role in helping to set U.S. policies" (p. 90). The combination of course work and international field study allowed the students to bridge the cultural gap. It also provided important ways for students to gain experiences needed to make progress in seeing how others live, work, and learn (Acker & Scanes, 1998; as cited by Bruening & Frick, 2004). The benefits that came from this study were many. Students learned that there are many similarities in production agriculture, no matter where the production occurs, such as the application of pesticides, problems with labor, and marketing problems. The students' learning was not limited to production practices, but also offered insight into themselves. When asked what the students learned about themselves, one student replied

> I learned that I am not culturally diverse and I want to get more. I want to learn about others and want to see others' values in another setting. I also learned about the priorities in my life and how I can take a step back to make changes in a pivotal point in my life. I found that it is fun to broaden your horizons and that I liked doing this sort of stuff and will do more of it in the future. It was interesting to communicate with others even if there is a language barrier. I learned that I deepened my understanding about my interest in international agriculture. This

> experience has deepened my thoughts and opinions and my career goals about the future of agriculture and how students like me can have an impact. (p. 93)

Other specific benefits produced by this international agricultural experience included: knowledge of tropical production agriculture, knowledge and appreciation of cultural differences and similarities, use of modified rapid appraisal method and Participatory Community Appraisal, the interest in learning new agricultural knowledge and information about an interesting place, problem solving using a hands-on approach in an international setting, adaptability of international production, motivation to learn another language and culture, appreciation of other people and cultures, and reduced stereotypical views (Bruening & Frick, 2004). With as many benefits that spawned from one agricultural study abroad trip, more research needs to be done about agricultural study abroad trips and their impact on students.

Purpose

The purpose of this study is to identify students' perceptions of international agriculture before and after they participated in an international agricultural experience.

Objectives

The objectives in this study were to

(a) Identify the attitudes about both international agricultural study abroad programs and internships;

(b) Compare and contrast perceptions of international agriculture based on study abroad experience or internship; and

(c) Identify motivations, barriers, and benefits of international agricultural experiences to student development.

Design

This study was a mixed-method design. It had two descriptive parts, a quantitative survey and a qualitative phenomenon. Qualitative data were collected in two focus groups with students interning in Costa Rica or Guatemala in the Cultivating Global Leaders in Agriculture: Enhancing Participation in Undergraduate Experiential Learning Opportunities for Minorities program, and students prepared for the trip through a one-hour Horticulture Special Topics class. One focus group occurred before the trip to gather students' expectations and anticipated outcomes. The second focus group occurred shortly after the trip to gather actual outcomes and changed perceptions.

Quantitative data were collected using a Likert-type 5-point scale to measure students' perceptions of international agriculture after a study abroad experience. Data were collected within a year of their study abroad experience.

Journal Article One

Sample

This study used a purposive and convenience sample. A purposive sample reaches the people with the most relevant information. This sample was chosen because all of the students have taken the semester-long course, Horticulture Special Topics, to prepare for their international experience and all were participating in the Cultivating Global Leaders in Agriculture: Enhancing Participation in Undergraduate Experiential Learning Opportunities for Minorities program in either Costa Rica or Guatemala. Their

preparation and the internship choices made them the best sample possible. All members of the Horticulture Special Topics class were invited to participate in three different focus group sessions for the pre-trip focus group six weeks before they left for their internship. They were given a pizza dinner/lunch incentive to attend. Six students (N = 6) participated in the pre-trip focus group. All students (N = 15) were invited to participate in the post-trip focus group. A pizza dinner was again offered as an incentive. Ten students (N = 10) students participated in the post-trip focus group.

Instrumentation

Two sets of focus groups were conducted, before and after an international internship; questions were adapted from the focus group interview questions used by Zhai (2000) in her study about the influence of study abroad programs on college student development in the College of Food, Agricultural, and Environmental Sciences.

The focus group questions were checked by a panel of experts. Consistency and neutrality were determined through member checking, audit trails, and peer debriefing.

Data Collection

The qualitative instrument was administered by means of two sets of focus groups. The students were given an option to attend one of three available focus groups six weeks before they left for their internship. They were given a pizza dinner/lunch incentive to attend. The second set of focus groups was administered at the beginning of the fall semester, once all students had returned from their internship. Again, a pizza dinner incentive was offered.

The first focus groups were conducted in the same building and classroom in which the student's class was held during the spring semester. Entry was gained by one of the professors of the course. The second focus groups were located in the new agriculture and life sciences building because of its appeal as the new agriculture headquarters on campus.

Data Analysis

Qualitative data were analyzed in Glaser and Strauss' (1967; as cited by Merriam, 2009) constant comparative method, including open coding, axial coding, selective coding, and bracketing, in which analysis includes finding regularities, patterns, and connections within earlier determined categories to extract information-rich conclusions (Dooley, 2011). Merriam (2009) suggested using unit coding to create categories. The beginning stages of data analysis used open coding, which is a broad and expansive form of coding that identifies any segment of data that could be useful. Once unit coding was finished, axial coding was conducted to sort and group the open codes together (Merriam, 2009). The axial codes were then grouped into categories, which were subsequently narrowed and sub-categories emerged. To ensure trustworthiness, member checking, audit trail, and peer debriefing were used. Dooley (2011) encouraged that member checking be done during and concluding the interview or focus group by summarizing the data collected to allow the respondents to confirm or correct. The audit trail uses raw data and open coding units to track, reduce, and reconstruct the data during analysis (Dooley, 2011). This allows for maximum traceability and trustworthiness in the research document. Peer debriefing was also used to triangulate information by

sending a written memo to colleagues with a general understanding of the study to analyze materials, test working hypotheses and emerging designs, and offer other explanations (Dooley, 2011).

Study Limitations

The study was limited in that more students participated in the post-trip focus group. It would have been helpful to have more responses for pre-trip perceptions.

Journal Article Two

Population

The population included all students who had participated in a study abroad trip led by faculty in the College of Agriculture and Life Sciences within the previous year (N=117). The population for the survey was selected to encompass the study abroad programs across several disciplines within agriculture and to gain different perspectives of international agriculture.

Sample

The quantitative portion of this study used a purposive sample (N = 44); students who participated in a study abroad program led by faculty in the College of Agriculture and Life Sciences from January 2010 to January 2011 were selected. The survey was sent to all students because the sample size was manageable and to ensure that the data could be generalized to all students participating in an agricultural study abroad program. The response rate was due to convenience responses; only those who chose to answer the survey were part of the sample.

Instrumentation

The research instrument measured students' perceptions of international agriculture using a five-point Likert-type scale. Students responded whether they *strongly agreed, agreed, no opinion, disagreed,* or *strongly disagreed* with 14 statements about international agriculture and their study abroad program; eight statements about demographics; and three open-ended questions about their motivations, barriers, and benefits of their study abroad program. The survey instrument was adapted from Rouse (2009) in her study about students' Eurocentric views about agriculture, which had a reliability of .91.

Students' demographic information (classification, gender, and major) was collected with the survey instrument. Previous literature suggested that demographics play little in the benefits gained of study abroad trips, but this study wanted to see if previous agricultural experience, i.e. whether the student had grown up on a ranch or farm, played a role in gaining benefits from an agricultural study abroad trip.

A panel of experts tested content validity. Due to testing for concepts instead of constructs, there is no need to have a reliability analysis for this study. Attitudes and opinions were broken up into two separate concepts, six questions about study abroad programs and eight questions about agriculture, instead of a single construct. Because of these separate concepts and that each survey statement was not compared against each other, there was no reason to justify conducting an internal measure of consistency.

Data Collection

The quantitative instrument was administered through students' Texas A&M University email accounts. University accounts are active past students' graduation for six months, so the survey was administered in May to allow students who graduated in the previous December would still have access to their university email account.

Students completed the survey on their own computer or on any computer with access to the Internet, such as an open access lab on campus. The questionnaire took five to ten minutes to complete. Dillman's (2007) Tailored Design Method was used to ensure responses. A personalized email was sent two days before the instrument to explain the purpose of the study and their qualifications to participate. A second personalized email was sent two days after the pre-notice email with the link to the survey. Non-respondents received personalized follow-up emails with links to the survey for three times after the initial email. All contact information, including names, passwords, and e-mail addresses, was kept strictly confidential. A thank-you email was sent after the completion of the survey.

Data Analysis

SPSS was used for statistical analysis. Descriptive statistics (mean, standard deviation, independent sample *t*-tests) were used to analyze the quantitative data. The open-ended questions were grouped into categories and frequencies were counted, both with ranked responses and overall number of responses.

Study Limitations

This study cannot be generalized to a broader audience due to the homogeneity of the small sample that responded. Using the university email system was also a limitation. It is supposed to be accessible to students six months after graduation, but that does not guarantee that students check that email account. Another limitation was the no agriculture production knowledge questions were asked, just agricultural production perception questions.

CHAPTER II

STUDENTS' PERCEPTIONS OF INTERNATIONAL AGRICULTURE BEFORE AND AFTER AN INTERNATIONAL AGRICULTURAL INTERNSHIP EXPERIENCE

Introduction

Study abroad programs allow students to experience the world. There are many benefits to students from participating in these trips. In Dwyer and Peters' 2004 study student study abroad participants showed increased levels of nine traits that fall under the subheadings of personal development, academic commitment, intercultural development and career development (Dwyer & Peters, 2004). Although there are many benefits to study abroad trips, there are also costs. So why do students decide to participate in a trip that takes them far from home, costs more than a normal semester, and sometimes requires learning another language? More importantly, why do students choose to overcome those barriers for an agricultural study abroad trip?

There have been many studies about motivation, barriers, and benefits to study abroad trips, though there have been relatively few studies concerning the combination of study abroad and agriculture. Traveling that enhances learning about agriculture could greatly benefit society as a whole. Agriculture encompasses as many as 30 subject areas, including food and fiber, education, communications, science, engineering, and technology. The diversity of the agricultural industry is reflected in the amount and variety of study abroad trips offered by universities across America. The importance of agricultural study abroad trips stems from the large knowledge gap about American

agriculture, one of the country's largest industries. If Americans don't understand their own country's industry, how can they fully appreciate that of another country? With a global economy, it is increasingly important to not only understand America's place in the world market, but that of our competitors and allies.

This study looks at American students' perceptions of international agriculture before and after they have taken an international agricultural internship. Studying agriculture abroad can help a student appreciate American agriculture and gain a better understanding of American agriculture in the world market. This understanding will help students to be competitive in an aggressive job market. It is also important to study the benefits of agricultural study abroad trips to validate their existence in a time of budget cuts, to increase the number of opportunities for agricultural students, and to globalize domestic curriculum.

Conceptual Framework

Globalization is an increasingly important aspect of education, research, and outreach mission of the university (Acker & Scanes, 1998; as cited by Bruening & Frick, 2004). Bruening and Frick (2004) report that globalization in undergraduate education focuses in three areas: integration of international examples and activities in the curriculum, short- and long-term student travel including internships, and a broad range of international experiences for professors. Study abroad and internships are the best ways for students to globalize their education. American student participation in study abroad trips has increased by 5% in the past decade (He & Chen, 2010). To investigate

the increase in number or participants, one must look at the motivations, barriers, and benefits to experiences abroad.

Motivations

Teichler and Steube's 1991 national analysis (as cited in Zhai, 2000) of study abroad, eleven student motivations were identified

> 1) desire to use/improve a foreign language, 2) desire to live in/make acquaintances from another country, 3) desire to enhance the understanding of the particular study abroad host country, 4) expectation that the study abroad would improve career prospects, 5) desire to travel, 6) desire to gain another perspective on the home country, 7) desire to become acquainted with teaching methods other than those adopted at the home institution, 8) desire to become acquainted with subject matter not offered at home institutions, 9) expectation to get better marks/examination results after return from study abroad, 10) study abroad afforded opportunity to establish ties with family/ethnic heritage, and 11) influence of friends. (p. 39)

The destination is a big motivation for study abroad. According to the 2007 Open Doors Report (as cited by He & Chen, 2010), 58% of American students studied abroad in Europe, making it easily the most popular location of study. Latin America followed in popularity with 16%, then Asia with 9%, Oceania with 6% and Africa with 3%. Country image plays a part in choosing the destination for a student's study abroad. Undergraduate students often choose the country first and then choose the program or institution (Gertner, 2010).

The time period of the study abroad also affects a student's motivation to participate. In He and Chen's (2010) study of college students' perceptions and attitudes toward the selection of study abroad programs, it was found that respondents preferred to travel during summer break, which generally lasts three months. Spring break was reported to be the second favorite time to travel (18.7%) because of favorable weather. Winter break was the least favorable because of family gatherings during the holiday season. The study results showed that the most preferred travel time was a summer program that lasted two to four weeks. Many academic programs are offering a greater number of short study abroad trips, offered during mini-mesters. These trips are usually 1-2 weeks long, so they can be offered during winter break, spring break, or between the spring semester and a summer session without conflicting with family or work obligations. These trips, because they are so much shorter in duration, are often less expensive, thus allowing more students to participate.

Demographics play a small part in the motivation to participate in study abroad programs and the activities offered during such programs. Presley, Damron-Martinez, and Zhang (2010) reported that ethnically, there was no difference in minority (African Americans and Latino Americans) students' desire to study abroad, but admitted that the decision may be more resource-based. Age of students also affects participation. Seniors are more concerned with course content than underclassmen, so that their course choice plays more of a role in program selection (He & Chen, 2010). Briers, Shinn, and Nguyen (2010) showed that 70% of students thought that participating in a study abroad program would improve their competiveness in the global market.

As students' background plays a role in their decision, so does the international experience of their professors. Presley et al. (2010) said, "As students may emulate faculty behavior, university administration must proactively pursue and provide study and work abroad opportunities for faculty, enabling them to set an example for students" (p. 230). Universities are supposed to meet local and global needs, and are pressured to internationalize their programs (He & Chen, 2010). Dooley and Rouse (2009) stated that if the goal is to internationalize the university, then the first step is to internationalize the faculty. When surveyed after a faculty abroad program to Mexico, 74% percent of faculty said the experience impacted their teaching (Dooley & Rouse, 2009). If more faculty members have positive international experiences, they can motivate their students to do the same through study abroad programs.

Barriers

Communication is an integral aspect of education, and if students cannot understand their teacher or vice versa, it inhibits learning. As cultural experiences were shown to be a motivation to participate in a study abroad, they can serve as an inhibitor to some students if there is a language barrier present. A language gap has been interpreted as an obstacle to learning about local culture (Gmelch, 1997, as cited by Mancini-Cross, Backman, & Baldwin, 2009). Research has shown that language barriers have created role conflicts, timidity, and defensiveness during travel (Cushner & Karim, 2004; Hottola, 2004; Yoo & Sohn, 2003; as cited by Mancini-Cross et al., 2009). Mancini-Cross et al. (2009) argue in their qualitative study of students studying in Italy that the lack of language fluency does not inevitably create a barrier but may enhance

students' enjoyment and contribute to cross cultural interactions. They say that the culture shock that is experienced by visitors and students can be positive experience, and serve as a rewarding stimulus and enhance intercultural skills. Complete immersion in another language often forces the students to learn the language more completely. It also contributes to learning community culture and dialect. In Mancini-Cross et al.'s (2009) study, they compiled logs of the students and professors of their experience, and much of the language barrier was addressed in Ray's log; "The very first aspect of Italy that occurred to me was that I understood pretty much nothing. I could not read anything, and I could speak and comprehend what I heard even less. Little did I know that this lack of understanding would be the key to experiencing everything on my trip" (p. 110).

Students are often concerned about whether a study abroad trip will negatively affect their graduation date or whether the course will count towards their degree plan. Carlson et al. (1990, as cited by Zhai, 2000) reported that many students decide not to participate in a study abroad because they doubted that the class would be relevant to their major or their future career. They also worried that the trip would extend their graduation date. With such a competitive job market, though, gaining international experience should prove to be beneficial, even if it means taking extra time to graduate.

A fear that study abroad trips do not pertain to a student's major is a valid concern. The 2007 Open Doors Report (as cited by He & Chen, 2010) said that in their study abroad program, students studied social sciences the most, 21.7%; then business and management, 17.7%; humanities, 14.2%; foreign languages, 7.8%; fine or applied arts, 7.5%; physical or life sciences, 6.9%; education, 4.1%; health sciences, 3.8%; and

engineering, 2.9%. Even lower than the small amount of engineering students studying abroad are agriculture students. Brooks, Frick, and Bruening (2006) reported that in the 2002-2003 academic year, 1.5% of all U.S. students who studied abroad were in agriculture.

Perhaps the biggest barrier of all to study abroad is cost (He & Chen, 2010; Presley et al., 2010; Fischer, 2008; Marcum & Roochnik, 2001; Zhai, 2000). When students make the decision to participate, cost is a major component of the decision process. Because of the economic downturn, 94% of those surveyed of the Forum on Education Abroad said that they were very or somewhat concerned about the rising costs of study abroad programs, as opposed to 68% from the year just before (Fischer, 2008). The study also showed with the high costs of study abroad programs, many programs are offering classes in less expensive locations, such as South and Central America.

Benefits

Despite the numerous barriers to study abroad, there are even more benefits for students who decide to participate in study abroad programs. He and Chen (2010) note that study abroad trips expand students' worldview, spur intellectual and personal growth, enhance self-image and sociability, create a more positive attitude to other cultures, and foster multicultural understanding and tolerance. A study on study abroad trips through the Texas Agricultural Extension Service 4-H program showed that participants experienced increased sensitivity to other cultures, increased interest in global events, and increased involvement in community activities (Boyd et al., 2001). Dwyer (2004), in her study on the impact of study abroad program duration, concluded

that study abroad trips have "a significant impact on students in the areas of continued language use, academic attainment measures, intercultural and personal development, and career choices. Most importantly, the study illustrates that this impact can be sustained over a period as long as 50 years" (p. 161). In a study about study abroad participants' perceptions before, immediately, and ten months after they had studied in Germany, Bicknese (1974, as cited by Pellegrino, 1998) reports that learners experienced changes in their opinions about themselves, the studied language, the studied culture, and their own culture and individual values. In a holistic appraisal, Bicknese (1974, as cited by Pellegrino, 1998) concludes:

> The vast majority of the students gain an impressive proficiency in the target language; they penetrate the host culture far more deeply than they could in several years on their home campuses; they experience a liberal education in its broadest sense; they begin to construct for themselves a solid foundation of knowledge and personality, which will enable them to pass judgment more objectively throughout their lives; their linguistic skills and factual knowledge will qualify them for a great variety of professions in this world of shrinking geographic dimensions. (p. 112)

There have been few studies regarding benefits of agricultural study abroad trips. However, Bruening and Frick (2004) studied a group of agricultural students as they participated in an international course that focused on modified international rapid appraisal method of data collection and analysis. The course was followed by a ten-day field study in Puerto Rico. They posit that students need to "understand the importance

of international markets and their role in helping to set U.S. policies" (p. 90). The combination of course work and international field study allowed the students to bridge the cultural gap. It also provided important ways for students to gain experiences needed to make progress in seeing how others live, work, and learn (Acker & Scanes, 1998; as cited by Bruening & Frick, 2004). Specific benefits produced by this international agricultural experience included knowledge of tropical production agriculture, knowledge and appreciation of cultural differences and similarities, use of modified rapid appraisal method and Participatory Community Appraisal, the interest in learning new agricultural knowledge and information about an interesting place, problem solving using a hands-on approach in an international setting, adaptability of international production, motivation to learn another language and culture, appreciation of other people and cultures, and reduced stereotypical views (Bruening & Frick, 2004). With as many benefits that spawned from one agricultural study abroad trip, more research needs to be done about agricultural study abroad trips, especially agricultural internships, and their impact on students.

Purpose

The purpose of this study was to identify students' perceptions of international agriculture before and after they participated in an international agricultural internship.

Objectives

The objectives in this study were to

(a) Identify attitudes about international agricultural internships before and after a trip;

(b) Compare and contrast perceptions of study abroad experiences and international internships; and

(c) Identify benefits of agricultural internships to student development.

Methods

Qualitative data for this phenomenology were collected using a focus group with students interning in Costa Rica or Guatemala with the Cultivating Global Leaders in Agriculture: Enhancing Participation in Undergraduate Experiential Learning Opportunities for Minorities program, and prepared for the trip through the Horticulture Special Topics class. The internships were supplemented by a National Institute of Food and Agriculture Higher Education Challenge Grant, No. 2009-38411-19756; travel costs were lessened through this grant. The students were prepared to implement lessons from the Junior Master Gardener curriculum in their respective internship countries. The students taught lessons in Spanish to different communities about horticultural projects. The focus groups that occurred before the trip gathered students' expectations and anticipated outcomes and those that occurred after the trip gathered their experiences and attitudes after their experience.

This study used a convenience and purposive sample. A purposive sample reaches the people with the most relevant information. This sample was chosen because all of the students had taken the semester-long course, Horticulture Special Topics, to prepare for their international experience and all were participating in the Cultivating Global Leaders in Agriculture: Enhancing Participation in Undergraduate Experiential Learning Opportunities for Minorities program in either Costa Rica or Guatemala

(*N*=15). Their preparation and the internship choices made them the best sample possible. All members of the Horticulture Special Topics class were invited to participate in three different pre-trip focus group sessions six weeks before they left for their internship. They were given a pizza dinner/lunch incentive to attend. Seven students chose to participate. For the post-trip focus groups, all participants were invited via email. They were given the option to attend one of two focus groups during the first week of fall classes. Ten students participated in the post-trip focus groups.

The pre-trip focus groups were conducted in the same building and classroom in which the student's class was held during the spring semester. Entry was gained by one of the professors of the course. The post-trip focus group was held in the new agricultural headquarters building on campus because of the appeal of being the new building on campus and because of easy and close parking access. A conference room was reserved for the focus group's use.

Focus group questions were adapted from the focus group interview questions used by Zhai (2000) in her study about the influence of study abroad programs on college student development in the College of Food, Agricultural, and Environmental Sciences.

Confidentiality was ensured by assigning a code for the participants using a letter in their name. Qualitative data were analyzed using Glaser and Strauss' (1967; as cited by Merriam, 2009) constant comparative method, including open coding, axial coding, selective coding, and bracketing, in which analysis includes finding regularities, patterns, and connections within earlier determined categories to extract information rich

conclusions (Dooley, 2011). Merriam (2009) suggested using unit coding to create categories. The beginning stages of data analysis used open coding, which is a broad and expansive form of coding that identifies any segment of data that could be useful. Once unit coding was finished, axial coding was conducted to sort and group the open codes together (Merriam, 2009). The axial codes were then grouped into categories, which were subsequently narrowed and sub-categories emerged. To ensure trustworthiness, member checking, audit trail, and peer debriefing were used. Dooley (2011) encouraged that member checking be done during and concluding the interview or focus group by summarizing the data collected to allow the respondents to confirm or correct. The audit trail uses raw data and open coding units to track, reduce, and reconstruct the data during analysis (Dooley, 2011). This allows for maximum traceability and trustworthiness in the research document. Peer debriefing was also used to triangulate information by sending a written memo to colleagues with a general understanding of the study to analyze materials, test working hypotheses and emerging designs, and offer other explanations (Dooley, 2011).

Results

The responses to the focus group were categorized into four categories and a total of seven sub-categories. Representative quotes from the students are provided for each category and sub-category. Data from pre-trip and post-trip focus groups are listed in each category, but are distinguished in the text.

Context

What they would be doing in their respective countries was part of their motivation, but this category hints at how they absorbed information from the class. It also includes the internship timeline and housing. One of the students said of their purpose, "We're not supposed to do the projects for them; we're supposed to organize ourselves out of a job" (C).

The students implemented the Junior Master Gardener lessons to multiple age groups of children in the communities they visited (B, C, D, E, J, M, T). The students going to Costa Rica would be in country for seven weeks; those in Guatemala stayed for four weeks. The students in Costa Rica had the least certainty about their housing situation. They said that they would be staying with host families, but that their actual housing could be a variety of things. One student said that they had been warned that a beach hut would be "standard," but that running water could not be promised at their host family house (B). She also said that they had been recommended to keep an open mind about their housing. Another student said that there could be more modern amenities, too, such as satellite TV and internet (C), but they could be staying anywhere in between the two (T). The Costa Rica-bound students said that they would not be staying together; they would be paired with another U.S. student in the program, but they would be staying in one place (B, C, T).

The Guatemala students said that they would be staying in a hostel in Antigua (E, J, M). H said that there would be two girls to a room. M said that the hostel was reserved for just their group, but they would get to interact with locals by going out after their

workday. He said that he was the only male going to Guatemala, and because he is older and had experience living abroad, he felt like he would be in a “protector” role. M said that if he was younger he would be nervous, but his experience has shown him that when abroad, you get to gain experience with other people with the same purpose.

They agreed that the program would be unpredictable (B, C, D, E, J, M, T); they may work in different communities or stay in the same community and work with different people (J, M). The unpredictability and uncertainty of their schedules caused nervousness in some students. Some were also worried about their Spanish skills were note strong enough, but two students said that teaching would help them learn Spanish (B, M). They said that they would be teaching in groups (J), so that made them more comfortable. One student (B) said they will be teaching about sustainability and efficiency, and will also be serving as American ambassadors. Several students said that they would be agents of change in their communities (C, D, T). They will be organizing the projects, but not do the projects, so that the communities feel ownership in the projects.

After their internship, the students were able to give far more details about their housing and Junior Master Gardener duties. Those in Guatemala stayed in a hostel, with the eight females in one room and the one male in a room by himself (D, J, La, Ld, H, Ht, M). Though they weren’t fully immersed, they had interactions with the staff at the hostel and had opportunities to travel on the weekends (D, J, La, Ld, H, Ht, M). Those in Costa Rica had more variety in their homestays, but all had running water and almost all had electricity, but no one had internet (T). The Costa Rica student interns had American

partners stay at their homestay or they lived individually with their host families (B, C, T). Both countries had potable water (Ht, T).

The group in Guatemala traveled to a different community in the mountains everyday, so they used the same activities but for different people (Ht, La). When they first reached a community, they built demonstration organic gardens to teach about companion planting, soil conservation, composting, and nutritional activities (D, H, Ht, J, La, Ld, M). They taught in Spanish (D, H, Ht, J, La, Ld, M) to mostly children between the ages of five to 16 years old (La), and occasionally teachers (Ht, Ld) and community leaders (M). One student said that they did about five activities with the children, but that the activities were mostly geared toward younger children (La). She said that second grade was the optimal age for their activities. One of the most rewarding experiences, one student said, was when they taught girls from the Population Council, which was made up of girls from age five to 18 (D). She said that they helped inspire the girls in the council to realize that there were more opportunities open to them instead of just having children when they reached age 15. The girls were very interested in education and at the end of the activities, many of them said that their goals were to get an education.

The students said that the communities were very responsive to the projects (J, La, Ld). They had many positive interactions with the local people. One student said that she offered to help a family start a garden on their land after they got rid of the ants, and also talked with them about information she gained in her food processing class (J).

When asked about the long-term effect of the projects after the students left, they weren't certain. One student (J) responded,

> Maybe it's a Hispanic thing, I see this at church, but they want people to guide them through a project instead of doing it themselves. Maybe it's because they don't have as many resources. They may feel incapable of doing the rest by themselves.

The students did say that they left information packets in Spanish with each community and that their agriculture technician, Dale, checked on the communities after they left (La, Ld).

The students in Costa Rica stayed in one community for all seven weeks of their internship and taught at the elementary school everyday (B, C, T). They organized community projects and organize fundraisers (B, C, T). They said it was hard to think of new activities, but that a Junior Master Gardener guide, brainstorming sessions, and weekly topics helped inspire new teaching topics (C, T). One student said it was much harder than she was expecting; thinking of activities, getting the community excited about them, and organizing fundraisers, and the difficulty of the tasks was only exacerbated by the language barrier, but she said that she learned more about herself by pulling it off (C). M said that he felt like the trip had a real purpose, not to just let them travel.

Motivation

The students' motivations for participating in this particular international internship were a large component of this study. Two of the students summarized several

of the student's sentiments, "This internship will let me travel, but not in touristy areas" (T). E said, "I want the culture shock." This group of students said that they wanted a more realistic view of other countries, one that will let them be immersed in the culture (J, M, T). Travel was a major motivator for the group, but all of the pre-internship focus group participants had traveled abroad before, even if for a short amount of time (B, C, D, E, J, M, T). Several of the students said that this internship tied into their major (B, J, M), that it would give them work experience (D, J), and would increase their knowledge of international agriculture (B, C, D, M). Several of the students said that the internship was a culmination of many of their interests (B, H, La, Ld)). Many of them were excited to learn more Spanish, especially in a natural setting (B, La, Ld, M, T). One girl (J) was Hispanic and said they she chose this internship because she is "much more comfortable with people of my own culture." Two students took the class without anticipating taking the internship, but their interest grew during the class (Ht, La). Most of the students heard about the internship from their advisor (B, C, D, H, Ht, La, Ld, M, T) and many also saw presentations from program alumni (B, C, D, La, Ld, T). Three students mentioned that it was cheaper than a study abroad trip (B, D, T).

Perceptions

Central American Culture

The students were asked about their current perceptions of the culture and the area before they actually experienced it. One student was unworried, he said, "People try to make you feel comfortable" (M). The students perceived that Central Americans are warm, friendly, welcoming, humble, colorful, lively, and passionate (J, M). Many said

that they are agriculturally aware as a whole (M), but that kids serve as part of the labor force, mostly on family farms (J). One student (M) said that Central Americans are very spiritual − to the earth, not necessarily religious. One of other students (T) brought up that many Central Americans are Catholic. Some students said that living conditions were much poorer (D, J) and that they were not very educated (J). Students said that they are very family-oriented (B), more male-oriented (B, T), and elders are respected (B), but not as ethnically diverse (E). The dress is much more conservative than the United States (B). Several students said that Central America is not as safe as the U.S. (B, H), and mentioned that Costa Rica has no military (B, T). They also mentioned that it is much more politically turbulent (E).

The students had much more solid perceptions of Central American culture after their internship. They said that Central Americans are loving (J), playful (T), hospitable and friendly (Ht, La), hard working (Ld), family oriented (Ht), and much more relaxed then American culture (B, H). One student said that they "said buenos dias to everyone we saw" (Ht). J said that they don't have much, but that they are happy with what they have. La mentioned that they were willing to share what they have and several students mentioned that they realized that Americans are too materialistic (D, H, Ht, J). The students mentioned that Central American culture was more "primitive," there was no hustle and bustle, and they used the term "tranquila" (B, H). It was acceptable to be 30 or 45 minutes late (C). Another student (M) said that Central Americans were very formal during some things. He said, "chivalry's not dead." He said that Central Americans always used titles if possible, and did formal introductions and endings of

presentations. He also said that if they learned anything, they always applauded. Pura Vida was a lifestyle in Costa Rica (B, C, T). Costa Rica was very green in that they were committed to reforestation and organic produce (B, T). Some Costa Ricans even used bio-digesters to convert animal waste into fuel (B). Some of the students said that they were worried about gender inequality before going down, but two students said it actually helped, that more people were willing to help because they were female (B, C).

However, there were some unpleasant things about the culture. The students in Guatemala were present during a campaign period for an election and they experienced the political turbulence firsthand. They were told not to talk about politics (J, La, Ld), but saw firsthand protests in the streets. One student said that she saw tires burning in the middle of roads in protest (Ld). Several students said that they were delayed getting to places because of protests (La, Ld, D). Politics were different in Costa Rica, but there was still unrest. The students said that the government appeared to be together, but there were a lot of problems with theft (C). There were houses in urban areas that had burglar bars and sometimes barbed wire on the windows. (T). T also mentioned that she heard that Costa Rica was having Social Security problems.

Central American Agriculture

The students were asked about their perceptions of Central American agriculture production practices and major exports. The students' agricultural knowledge was also evident in this category. This category also generated some understanding of the students' perceptions of American agriculture. One student said, "They use agriculture, or at least one type of crop, to build their other industries off of" (M).

The students said that Central American agriculture is more integrated into the culture (M). They use traditional methods, and they utilize all of the resources available, especially land (B, C, M). One student said that they use hand tools in multiple ways (M). He mentioned that a machete is used more as an extension of the farmer's hand and is always kept in their toolbox. Several students said that there is much indigenous agricultural knowledge (B, C, E), but that the students will be teaching subjects other than horticulture, too (B, C, E, T). One student mentioned that major Central American agricultural exports included cacao, coffee, and pineapples (B). Another student thought that Central Americans grew their own crops, but was generally unsure about agriculture (J).

The students came back with much more knowledge of Central American agriculture than before they left. They were able to name many of the crops grown and identify which were major cash crops. They mentioned that broccoli, corn ("milpa"), fruit (pineapples, bananas, mangos) and coffee were major crops (Ht, J, La, Ld, M, T). M mentioned that major cash crops, cabbage, broccoli, and squash, were presented differently. He said the, "cash crop presentation was perfect, perfect lines and perfectly weeded." He mentioned that it might be an adoption from U.S. mono-cropping. He also said that the produce was "out of this world" (M). Everything was done by hand, because the steep terrain didn't allow for mechanization, and most were smaller farm plots (Ht, La, Ld). It was said that technology would misplace a lot of workers (J). Agriculture is a major part of life and they make their living off of it (H, J). A student said in Guatemala that the farms weren't just subsistence farms; they sold their produce

for a living and those farmers were the biggest skeptics of organic produce (La). She said that switching to organic was the biggest risk for them, so they were the most hesitant. They learned the most about the agriculture because of their technician, Dale (M), and by traveling to many different communities (Ht).

The students who went to Costa Rica stayed in the same community the whole time and said they didn't learn much about agriculture (B, C). Each student said that their community had some livestock or a few farms, but it was mostly subsistence farming (B, C, T). One students said that did create a bigger sense of community, because neighbors would share with each other, especially because not many people had cars (B). One student said that her community liked organic things, and they were very proud of the fact that they were rural (T). Another student lived in a more urban area (with paved roads), and they didn't talk much about organics, and they didn't even eat fruits and vegetables as much (C). They did say that the climate was well-suited for agriculture, that it was stable, at least during the summer (T).

Changed Perceptions of U.S. Agriculture

This category was more focused on their current perceptions of American agriculture and a few possible changes in those perceptions. It built off of their brief explanations from the previous sub-category. There were mixed perceptions of American agriculture, but one student said, "U.S. agriculture is more detached because it's much bigger" (E). One student mentioned that U.S. agriculture has more support from the government (E). They said that the U.S. has more advanced technologies and is more efficient (B, E, J). However, one student said that international agriculture takes

advantage of all the available space, even if it is not as orderly (M). He said that American agriculture is boring and monochromatic. He also said that Central Americans are not educated in pesticide use and worries that American pesticide companies take advantage of them. On a more positive note, one student said she thinks she will be more aware of how Americans view food and where it comes from (T).

Several students admitted to not knowing much about American agriculture (at least production agriculture) in the first place (C, J, La, Ld). Because of this lack of knowledge, this internship inspired a lot of questions (Ld). She said that it didn't change any perceptions, but she does want to learn more now. One student (J) said that one farmer here uses a lot of mechanization, and that one farmer there uses a lot of workers. Agriculture creates more jobs (La). H said that she learned that even in our agriculturally oriented communities, agriculture is not nearly as prevalent as Central American. She said that everyone is involved in agriculture in Central America; it is a lifestyle. However, other students (J, Ld) mentioned that not many people know about agriculture here — that they take it for granted. Many Americans have negative perceptions of agriculture and that they think it is an unimportant or lesser profession. J said that it makes her angry. One student said that being able to use a tractor is a blessing (Ht). Another student said that she thought they would be teaching the Central Americans a lot about agriculture because of U.S. technology, but found out that their system is very efficient (H).

One student said that Central America has more exciting crops, and that they can grow a lot of things in one place (T). M said that American agriculture is boring and

mono-chromatic. Another said that their agriculture sparked an interest in organic practices, because there is not really an organic class at Texas A&M University. She learned a lot of information while in Guatemala (La).

Benefits

Career Opportunities

The students were asked how they thought this internship would affect their employment opportunities once they graduate and all of the students agreed that it would be beneficial. One student said, “This will make me a more competitive employee” (B). All of the students said that this internship will give them work experience and will make them more attractive to future employers (B, C, D, E, J, M, T). Two of the students even mentioned that it would give cultural and educational advantages (J, M). Some of the students remarked that they would gain adaptability, language, and teamwork skills, plus focus their goals (B, M). But they did not forget to mention that it would be fun (M, T).

After the trip, all of the students said that their career goals included international travel or re-enforced a previous desire to travel (B, C, D, H, Ht, J, La, Ld, T, M), especially to Central America (B, La). Another student said that her interest in international development now includes an interest in agricultural development (La). Two students said that they feel more comfortable traveling for a career, and that this trip opened more opportunities for them (Ld, T). One student completely changed her career goals, she now wants to earn a double degree and pursue a career in international development (J). Other students said that the trip sparked an entrepreneurial interest (M),

reinforced a love of gardening (H), and uncovered a love of education, if not teaching (T). One student said that this trip restored his zeal for international agricultural development work, in his words, “it gave me my mojo back” (M).

Skills Expected to Gain

This sub-category was a bit similar to the career opportunities, but looked more specifically at skills that would be gained from this experience, especially personal growth. One student was especially excited to gain personal leadership skills, “This will force us to take a front seat; it’s not going to be done for us” (C). The students expected to gain Spanish, communication, leadership, and problem solving skills, in addition to initiative, adaptability, and inspiration (B, C, D, E, J, M, T). They also expected to gain tropical agriculture, cultural, and indigenous knowledge.

The students came back with many skills and personal realizations. One student said that she came back with a totally different perspective (J). The students said they gained practical agricultural and horticultural skills (D, H, Ht, J, La, Ld). They said that after learning about agricultural practices in the classroom, it was much different to actually use the knowledge. They learned about their own teaching skills, especially with children (Ld, T). Several said they learned much about themselves, leadership, their major, and the culture because of trips on the weekends (D, Ht, J, La, Ld). Several mentioned gaining strong friendships from the trip (J, La, Ld), and that you can be friends with someone even with a language barrier (T). One student said that she got a larger variety of experiences than she expected, not just teaching (La). Many students said that they learned that they can rely on themselves, that they can do anything (B, C,

D, Ht, T), and that it is good to put yourself out there and make mistakes (C, D, H, T). Learning to improve from and to give good constructive criticism was another skill gained (C, T). Improved listening, not just in another language was another re-enforced skill (M). Students also said there is no need to be materialistic, because it takes little to make someone happy (B, D, H, Ht).

Language was a huge skill that improved through this internship. All students said that they improved their Spanish, even those whom were already fluent (B, C, D, H, Ht, J, La, Ld, M, T). Some of the students had taken Spanish classes in high school or college, but said that "meant nothing" or "was useless" (B, La, Ld, T). They did say that they learned a lot of agricultural terms (D, J, M), and those in Costa Rica were forced to learn quickly because they couldn't communicate unless they spoke in Spanish (B, C, T). Many of them said that the language barrier forced them to become more creative with their communication (D, H, M, T). An interesting barrier was created when teaching some students in Guatemala where the students spoke a Mayan language, so no one in the classroom spoke Spanish as their first language. The students said that they became very creative with that situation (D, Ht). Now that they have returned, many students said that they either speak in Spanish here sometimes, or that their English seems to have "gotten worse" or conjugated backwards (B, C, T, Ht, J, La, Ld, T).

Coursework Timeline Effects

This study also wanted to know whether this kind of internship would help or hinder their graduation date, and their reasoning behind taking the trip at this point in

their college career. All students were in agreement that “This won’t delay my graduation. If anything, this will focus where to take my degree” (B).

Every student said that graduation would not be delayed by taking this internship (B, C, D, E, J, M, T). Several of them said this will give them experience, networking, and make their courses more relevant and focused (B, E, J, M). One student said that this internship would expedite his research (M). Another student said that the timing of the internship also allowed her to take more summer classes (J).

After the trip, all of the students said that this internship did not delay their graduation date (B, C, D, H, Ht, J, La, Ld, M, T). Two students said that the timing allowed them to take summer classes before they left (J, La). One student said that she will use the optional credit for her new double-degree that was inspired by this trip (J). M said that the trip expedited his graduation date by allowing him to conduct his thesis research.

Internship v. Study Abroad

An interesting and unplanned category, the conversation compared and contrasted an international internship and a study abroad trip. They discussed why they chose the internship. One student said, “A study abroad is more like a vacation. This internship takes more initiative” (E).

Many of the students expressed that more initiative is needed to get an international internship (B, E, T). They also mentioned that study abroad trips cost more (T). One student said that a study abroad allows for more free time and are generally in more touristy areas (B). Another student chimed in to say that study abroad trips go to

resorts that are like “America in a different country” (T). Many students said that an internship gives a more realistic experience (B, E, T).

After the trip, students came back with an even more positive view of agricultural internships. One student said that study abroad trips have the students go to class and then they get to play (La), but that on the internship, they had the weekends to have fun and explore more (La, Ld). More hands-on learning was a big benefit to the internship (D, La), and another student said that it was nice not to have to worry about classwork, but they could get credit if they needed it (Ld). To get credit for the internship, the students needed to make presentation, write a paper, and write a thank-you note when they returned (La). Many students emphasized that the internship was much cheaper than a study abroad (B, D, T), and that they liked the immersion the internship offered (B, T). However, they said the semester-long one-hour course was not very helpful. They said that making lesson plans in Spanish was helpful (M) and that the presenters were interesting, but not always relevant (B). They said that they really were not sure of what to expect.

Conclusions and Implications

The motivations of this group were varied and interesting. This group of students sought an unconventional international experience. All of the students had traveled abroad before, in various degrees. Some students had only traveled internationally with family on vacations of varying length. One student (C) had only traveled to Mexico on a daytrip. Another student (M), however, has traveled extensively and has even lived by himself in a foreign country. They were all aware of the professional and personal

growth that this internship afforded them, which specifically agreed with eight of the 11 reasons in Teichler and Steube's (as cited by Zhai, 2000) 1991 analysis of students' motivation for a study abroad. The eight reasons that these students agreed with were:

> 1) desire to use/improve a foreign language, 2) desire to live in another country, 3) desire to enhance the understanding of the host country, 4) expectation that the study abroad would improve career prospects, 5) desire to travel, 6) desire to gain another perspective on the U.S., 10) study abroad afforded opportunity to establish ties with family/ethnic heritage, and 11) influence of friends. (p. 39)

A few students chose this internship specifically because of the location (J, M), but it did line up with Latin America being the second most favorite study abroad destination (Open Doors Report, 2007; as cited by He & Chen, 2010). One student chose Central America because he had some experience in Central America (M). Another student (J) chose Central America to connect with her Hispanic culture and because she felt more comfortable working and living with people of her own culture.

The time period of the trip was a major motivator. These students solidified He and Chen's (2010) conclusion that summer break was the most popular time period for a study abroad program. All of the students said that the internship would not delay their graduation date. Two students (J, La) even said that they picked this internship because they could also take more summer classes before they left.

The fact that the program was an internship rather than a study abroad was actually a strong, and unexpected, motivation. All of the students were very excited about their internship. These students thought that an international internship would look

better to employers because the internship would take more initiative. They said that the internship forced them to become more adaptable, increase their language knowledge, and give them a more realistic experience of the host country. The internship was also much cheaper than most study abroad programs, though the USDA grant supplemented much of the trip cost. Most of the students thought that study abroad programs were much more touristy and went to resorts that are very similar to those in America. They thought that study abroad programs were much like a vacation with some schoolwork added.

The students had varying perceptions of Central American culture and agriculture, especially before the internship. The semester-long class prepared them only slightly for cultural and agricultural expectations, but most students were still a bit nervous about what to exactly expect. The nervousness did not dampen their excitement, though, about experiencing Central America firsthand. The students said that they did not know what to expect, but came back incredibly satisfied from their internship. They gained much cultural, personal, language, and agricultural knowledge. Several students were curious about indigenous agricultural knowledge (B, C, D, M). When faced with the prospect of a new international agricultural experience, there were varied perceptions of American agriculture. Some students have positive perceptions of American production agriculture and thought they would be teaching American methods to increase efficiency and technology (B, J, T, Ht). Others sounded almost disgusted with American agriculture because it is much bigger, and thus, to them, detached (E, M). A general perception was that Central America has more small farmers and that agriculture

is more woven into their culture, with the undertone that America is far more urbanized and not as many Americans understand agriculture. The students came back and said that agriculture is more integrated into Central American culture, that it is a lifestyle. They also said that their experience opened their eyes to U.S. agriculture and sparked an interest to learn more about American agriculture. They also said that U.S. agriculture is taken for granted by Americans, in contrast to Central America.

The students expected and gained many professional and personal benefits from this agricultural internship. They expected that the internship would make them more competitive in their job hunt upon graduation because of increased initiative and inspiration, and also increased adaptability, language, teamwork, and leadership skills. They also expected to gain tropical agriculture, cultural, and indigenous knowledge. These expectations agree with Briers, Shinn, and Nguyen (2010) in their report that 70% of students thought that participating in a study abroad program would improve their competitiveness in the global market. The students all said that their career goals now included international development.

They students said that they learned more about adaptability because they did not know what to expect about Central America, despite the class. The students said that the class helped with the lesson plans, especially with teaching in Spanish, but they said that they had very few expectations about Central America from the class. All of the students said that the class helped with Study Abroad office paperwork and with travel arrangements. For the students in Guatemala, the class helped them form friendships, especially because they lived and taught together for the entirety of their trip. The

program for Guatemala had an agricultural technician who traveled to communities with the students, and many of the students said that he was incredibly helpful. The students said that they learned the most about Guatemalan agriculture because of their travels and because of the agricultural technician. The students in Costa Rica stayed in one area and lived in host homes. They learned the most about the Spanish language because of their immersion, but learned much less about Costa Rican agriculture. Because of the severe differences in the two programs, the students got different things out of the class depending on their internship. Research could be done to see what aspects of the class were most effective for participants in each internship. That research could identify whether it is necessary to use professors' resources for a full semester class or whether the information could be transferred through different means.

More research could be done to investigate the perceptions of the internship advisors. Their knowledge and preparation styles could be evaluated to form a consistent method of preparation. This could ensure that students are fully prepared so that they may achieve the maximum benefits from their international experience.

If the perceptions of students and advisors of international internships are thoroughly understood, then the benefits can be maximized for the students who choose to participate and the increase the opportunity for future students to achieve the same benefits of an international agricultural internship.

CHAPTER III

STUDENTS' ATTITUDES ABOUT INTERNATIONAL AGRICULTURE AFTER A STUDY ABROAD EXPERIENCE

Introduction

Travel offers many great opportunities for cultural and professional development and is now almost necessary to distinguish a student's résumé. One way for students to experience the world is through study abroad trips. There are many benefits from participating in these trips. According to Dwyer and Peters (2004), student participants in study abroad showed increased levels of nine traits categorized under four subheadings of personal development, academic commitment, intercultural development, and career development. Although there are benefits to study abroad trips, there are also costs. So why do students decide to participate in a trip that often takes them far from home, often costs more than a normal semester, and sometimes requires learning another language?

Analysis of the Study Abroad Goals Scale (SAGS) shows that there are three main motivations for students to study abroad: To enhance cross-cultural skills, to become more proficient in subject matter, and to socialize (Kitsantas, 2004). Personal interests, peer influence, desire to experience something different, and low cost also motivate students to go on study abroad trips (Zhai, 2000). While there have been many studies about motivation, barriers, and benefits to study abroad trips, there have been relatively few studies concerning the combination of study abroad and agriculture.

Traveling that enhances learning about agriculture could greatly benefit society as a whole. Agriculture encompasses as many as 30 subject areas, including food and fiber, education, communications, science, engineering, and technology. The diversity of the agricultural industry is reflected in the amount and variety of study abroad trips offered by universities across America. Additionally, agriculture is an important aspect in every country's economy. With a global economy, it is increasingly important to not only understand America's place in the world market, but that of our competitors and allies.

This study looks at American students' attitudes of international agriculture after participating in an agricultural study abroad trip.

Studying agriculture abroad can help a student appreciate American agriculture and also gain a broader understanding of American agriculture in the world market. This understanding will help make students competitive in an aggressive job market. It is also important to study the benefits of agricultural study abroad trips to validate their existence in a time of budget cuts, to increase the number of opportunities for agricultural students, and to globalize domestic curriculum.

Conceptual Framework

Motivations to Study Abroad

Students are advised early in their college career to take a study abroad before they graduate, and, as a result, American student participation in study abroad trips has increased by 5% in the past decade (He & Chen, 2010). In Teichler and Steube's 1991

study (as cited in Zhai, 2000) of national analysis of students' motivation for study abroad, eleven main reasons were identified:

> 1) desire to use/improve a foreign language, 2) desire to live in/make acquaintances from another country, 3) desire to enhance the understanding of the particular study abroad host country, 4) expectation that the study abroad would improve career prospects, 5) desire to travel, 6) desire to gain another perspective on the home country, 7) desire to become acquainted with teaching methods other than those adopted at the home institution, 8) desire to become acquainted with subject matter not offered at home institutions, 9) expectation to get better marks/examination results after return from study abroad, 10) study abroad afforded opportunity to establish ties with family/ethnic heritage, and 11) influence of friends.

An additional study cites academic credit, language credit, practical experience, résumé building and experience as motivating factors (Peden, 2005, as cited by Presley, Damron-Martinez, & Zhang, 2010). Briers, Shinn, and Nguyen (2010) found that 70% of students thought participating in a study abroad program would improve their competiveness in the global market. Clearly, experience, travel, academic credit, and social experiences are main motivating factors, but what are motivations for picking the location?

According to the 2007 Open Doors Report (as cited by He & Chen, 2010), 58% of American students studied abroad in Europe, making it easily the most popular location of study. Latin America followed in popularity with 16%, then Asia with 9%,

Oceania with 6% and Africa with 3%. Country image plays a part in students' choosing the destination for a study abroad. Undergraduate students often choose the country first and then choose the program or institution (Gertner, 2010). Country image plays a part in choosing the destination for a student's study abroad. However, in Gertner's (2010), it was concluded that there was no difference in country image when a country is considered as a tourist or a study abroad destination.

The time period of the study abroad also affects a student's motivation to participate. In He and Chen's (2010) study regarding college students' perceptions and attitudes toward the selection of study abroad programs, it was found that respondents preferred to travel during summer break, preferably in two to four week programs. Spring break was reported to be the second favorite time to travel (18.7%) because of favorable weather. Winter break was the least favorable because of family gatherings during the holiday season. Many programs are offering a greater number of short study abroad trips, offered during mini-mesters. These trips are usually 1-2 weeks long, so they can be offered during winter break, spring break, or between the spring semester and a summer session without conflicting with family or work obligations. These trips, because they are so much shorter in duration, are often much less expensive, thus allowing more students to participate.

Demographics play a small part in the motivation to participate in study abroad programs and the activities offered during such programs. He and Chen's (2010) study showed that in ethnically, there was no difference in minority (African Americans and Latino Americans) students' desire to study abroad, but who admitted that the decision

may be more resource-based. Age of students also affects participation. Seniors are more concerned with course content than underclassmen, so that their course choice plays more of a role in program selection (He & Chen, 2010). Because many students often pick the desired country before they choose their program, it is useful to know that seniors are more prone to reverse the process and pick the course before the country.

Educational decisions are based on a student's background, for example, home life and socioeconomic status (Salisbury et al., 2009, as cited by Presley et al., 2010). Background includes "enduring beliefs, attitudes, aspirations, perceptions, and values acquired through home and school environments and social class that serve to frame and constrain their choices" (p. 231). He and Chen's (2010) study showed that students who had no previous international experience were more likely to want to participate in a study abroad than those who had already been overseas. A students' experience with agriculture can affect how much agricultural knowledge is gained from a study abroad program, even if the program is teaching an agricultural course.

Barriers to Study Abroad

The Council for International Education Exchange formed a list of barriers to study abroad participation: language requirements, length of study, finance/cost of program, rigid on-campus requirements, admission requirements, lack of support of faculty/department, campus culture, state legislature-mandated requirements, and difficulty in transfer of credits (as cited by Zhai, 2000). Perceived barriers and misconceptions play just as big a role to impede participation in study abroad trips (Presley et al., 2010).

As cultural experiences were shown to be a motivation to participate in a study abroad, culture can serve as an inhibitor to some if there is a language barrier present. A language gap has been interpreted as an obstacle to learning about local culture (Gmelch, 1997, as cited by Mancini-Cross, Backman, & Baldwin, 2009). Research has shown that language barriers create role conflicts, timidity, and defensiveness during travel (Cushner & Karim, 2004; Hottola, 2004; Yoo & Sohn, 2003; as cited by Mancini-Cross et al., 2009). Mancini-Cross et al. (2009) argue in their qualitative study of students studying in Italy that the lack of language fluency does not inevitably create a barrier but may enhance students' enjoyment and contribute to cross cultural interactions. Mancini-Cross et al. (2009) say that the culture shock experienced by visitors and students can be a positive experience and serve as a rewarding stimulus and enhance intercultural skills. Complete immersion in another language often forces the students to learn the language more completely. It also contributes to learning community culture and dialect.

Length of the study abroad program was mentioned as a motivation, but it can also be a barrier. Many students work to pay for their college education, and summertime, which was noted to be a prime time to study abroad, is usually the best time to earn money for college. When students choose to study abroad during the summer to avoid missing a semester at their home university, they also have to choose to give up those workable hours (Marcum & Roochnik, 2001). Study abroad trips are more frequently offered in shorter time increments to encourage participation.

Students are often concerned about whether a study abroad trip will negatively affect their graduation date or whether the course will count towards their degree plan.

Preseley et al. (2010) reported that business students were most concerned about a delay in their graduation because of participation in a study abroad. With such a competitive job market, though, gaining international experience should prove to be beneficial, even if it means taking extra time to graduate.

A fear that study abroad trips do not pertain to a student's major is a valid concern. The 2007 Open Doors Report (as cited by He & Chen, 2010) reported that in their study abroad program, students studied social sciences the most, at 21.7%, then business and management at 17.7%, humanities at 14.2%, foreign languages at 7.8%, fine or applied arts at 7.5%, physical or life sciences at 6.9%, education at 4.1%, health sciences at 3.8%, and engineering at 2.9%. Even lower than the small percentage of engineering students studying abroad are agriculture students. Brooks, Frick, and Bruening (2006) reported that in the 2002-2003 academic year, 1.5% of all U.S. students who studied abroad were in agriculture.

Perhaps the biggest barrier of all to study abroad is cost (He & Chen, 2010; Presley et al., 2010; Fischer, 2008; Marcum & Roochnik, 2001; Zhai, 2000). Because of the economic downturn, 94% of Forum on Education Abroad members surveyed said that they were very or somewhat concerned about the rising costs of study abroad programs, as opposed to 68% from the year just before (Fischer, 2008). The study also showed with the high costs of study abroad programs, many programs are offering classes in less expensive locations, such as South and Central America.

Benefits of Study Abroad

There are even numerous benefits for students who decide to participate in study

abroad programs. He and Chen (2010) note that study abroad trips expand students' worldview, spur intellectual and personal growth, enhance self-image and sociability, create a more positive attitude to other cultures, and foster multicultural understanding and tolerance. A study on study abroad trips through the Texas Agricultural Extension Service 4-H program found that participants experienced increased sensitivity to other cultures, increased interest in global events, and increased involvement in community activities (Boyd et al., 2001). Dwyer (2004) concluded that study abroad trips have "a significant impact on students in the areas of continued language use, academic attainment measures, intercultural and personal development, and career choices. Most importantly, the study illustrates that this impact can be sustained over a period as long as 50 years" (p. 161). In a study about study abroad participants' perceptions before, immediately, and ten months after they had studied in Germany, Bicknese (1974, as cited by Pellegrino, 1998) reported that learners experienced changes in their opinions about themselves, the studied language, the studied culture, and their own culture and individual values. In a holistic appraisal, Bicknese (1974, as cited by Pellegrino, 1998) concluded

> The vast majority of the students gain an impressive proficiency in the target language; they penetrate the host culture far more deeply than they could in several years on their home campuses; they experience a liberal education in its broadest sense; they begin to construct for themselves a solid foundation of knowledge and personality, which will enable them to pass judgment more objectively throughout their lives; their linguistic skills and factual knowledge

> will qualify them for a great variety of professions in this world of shrinking geographic dimensions. (p. 112)

Study abroad benefits will be grouped into four major sections: language, personal development, career attainment, academic requirements, and then a look at agricultural benefits.

Once a student works past the language barrier, language can become a benefit of a study abroad trip. An additional benefit of a study abroad is the availability of spontaneous, out of classroom interaction with native speakers in authentic settings (Pellegrino, 1998). Even better for students than speaking in natural settings is the fact that retention of language increases. Even if students do not go to a country to specifically learn a language, being surrounded by the language motivates them to learn the language of their host country (Bruening & Frick, 2004). Study abroad allows students to experience language in its authentic form, and if a student can use the language on a day-to-day basis, they will retain that information.

Personal growth is certainly gained through a study abroad. Study abroad trips create opportunities for individual growth and development through an interesting and fun experience (Presley et al., 2010). Dwyer and Peters (2004) reported that 97% of those surveyed reported that studying abroad served as a catalyst for increased maturity, 96% reported increased self-confidence, 89% reported that study abroad enabled them to tolerate ambiguity, and 95% reported that it had a lasting impact on their world view. The survey also concluded that study abroad fosters lasting friendships; more than half of the respondents said they were still in contact with friends made during their study

abroad and 73% said that their study abroad experience still influenced family decisions. Bruening and Frick (2004) said that students bridge a cultural gap during a study abroad and become more aware of cultural differences and similarities. This increased cultural awareness decreases ethnocentrism in leadership practices (Pojman & Fieser, 2009, as cited by Moore, Williams, Boyd & Elbert, 2011) in organizations and future careers.

Study abroad trips make their participants highly marketable in the career market (Dwyer & Peters, 2004; Moore et al., 2011; Presley et al., 2010). Moore et al. (2011) cited the Report of NAFSA's Task Force of the Institutional Management of Study Abroad (2008), "In order to thrive in the global marketplace and lead effectively in a global context, college graduates must learn foreign languages, experience other cultures and societies, and have an understanding of how the international system functions at both the macro and micro level" (p. 117). Being able to use skills such as cost-benefit analysis, adaptability, and decreased ethnocentrism will help students once they enter the job market.

There have been few studies regarding benefits of agricultural study abroad trips. However, Bruening and Frick (2004) studied a group of agricultural students as they took an international course that focused on a modified international rapid appraisal method of data collection and analysis. The course was followed by a ten-day field study in Puerto Rico. The researchers posit that students need to "understand the importance of international markets and their role in helping to set U.S. policies" (p. 90). The combination of course work and international field study allowed the students to bridge the cultural gap. It also provided opportunities for students to gain experiences needed to

make progress in seeing how others live, work, and learn (Acker & Scanes, 1998; as cited by Bruening & Frick, 2004). Specific benefits produced by this international agricultural experience included knowledge of tropical production agriculture, knowledge and appreciation of cultural differences and similarities, use of modified rapid appraisal method and Participatory Community Appraisal, interest in learning new agricultural knowledge and information about an interesting place, problem solving using a hands-on approach in an international setting, adaptability of international production, motivation to learn another language and culture, appreciation of other people and cultures, and reduced stereotypical views (Bruening & Frick, 2004). With as many benefits that spawned from one agricultural study abroad trip, more research needs to be done about agricultural study abroad trips, especially agricultural internships, and their impact on students.

Purpose

The purpose of this study was to identify students' perceptions of international agriculture after they participated in an agricultural study abroad program.

Objectives

The objectives in this study were to

(a) Identify students' attitudes about agricultural study abroad trips;

(b) Compare change in perceptions of international agriculture based on selected variables, such as gender, age, and discipline; and

(c) Identify motivations, barriers, and benefits of agricultural study abroad programs to student development.

Methods

The targeted population included all students who have participated in a study abroad trip led by faculty in the College of Agriculture and Life Sciences between January 2010 and January 2011. The accessible population for the survey (*N*=117) was selected to include study abroad programs offered by several disciplines within agriculture and to gain different perspectives of international agriculture.

This study used a purposive census (*N*=117) — it used students who specifically participated in a study abroad program led by faculty in the College of Agriculture and Life Sciences between January 2010 and January 2011. The survey was sent to all students because the sample size was manageable and to ensure that the data could be generalized to all students participating in an agricultural study abroad program at Texas A&M University.

The research instrument measured students' perceptions of international agriculture using a five-point Likert-type scale. Students responded whether they *strongly agreed, agreed, no opinion, disagreed,* or *strongly disagreed* with 25 statements about international agriculture and their study abroad program. The survey instrument was adapted from Rouse (2009) in her study about students' Eurocentric views about agriculture, which had a reliability score of .91. The survey had three open-ended questions and the qualitative data were analyzed in Glaser and Strauss' (1967; as cited by Merriam, 2009) constant comparative method, including open coding, axial coding, selective coding, and bracketing, in which analysis includes finding regularities,

patterns, and connections within earlier determined categories to extract information rich conclusions (Dooley, 2011).

Students' demographic information (classification, gender, and major) was collected with the survey instrument. Previous literature suggested that demographics play little in the benefits gained of study abroad trips, but this study wanted to see if previous agricultural experience, i.e. whether the student had grown up on a ranch or farm, played a role in gaining benefits from an agricultural study abroad trip.

A panel of experts tested content validity. Due to testing for concepts instead of constructs, there is no need to have a reliability analysis for this study. Attitudes and opinions were broken up into two separate concepts, those about study abroad programs and about agriculture, instead of a single construct of agricultural study abroad programs. Because of these separate concepts and that each survey statement was not compared against each other, there was no reason to justify conducting an internal measure of consistency.

The quantitative instrument was administered through students' Texas A&M University Neo email accounts. Neo accounts are active past students' graduation for six months, the survey was administered in May so it was assumed that students who graduated in the previous December would still have access to their university email account.

Students completed the survey on their own computer or on any computer with access to the Internet, such as an open access lab on campus. The questionnaire took no more than 10 minutes to complete. Dillman's Tailored Design (2007) method was

followed. A personalized email was sent two days before the instrument to explain the purpose of the study and their qualifications to participate. A second personalized email was sent two days after the pre-notice email with the link to the survey. Non-respondents received personalized follow-up emails with links to the survey seven days after the initial email. A personalized thank you email was sent after the completion of the survey. All contact information, including names, passwords, and e-mail addresses, was kept strictly confidential.

SPSS was used for statistical analysis. Descriptive statistics (mean, standard deviation, independent sample *t*-tests) were used to analyze the quantitative data. Constant comparative method (Glaser & Strauss, 1967; as cited by Merriam, 2009) analysis was used to analyze the three open-ended questions at the end of the survey. Merriam (2009) suggested using unit coding to create categories. The beginning stages of data analysis used open coding, which is a broad and expansive form of coding that identifies any segment of data that could be useful. Once unit coding was finished, axial coding was conducted to sort and group the open codes together (Merriam, 2009). The axial codes were then grouped into categories, which were subsequently narrowed and sub-categories emerged.

Early and late responders were compared using Dillman's Tailored Design Method (Dillman, 2007).

Results

Of the 117 students who were sent the survey, 49 responded. However, one student opted out and four students began but did not finish the survey, thus, resulting in the final number of useable responses (n = 44) and a response rate of 38%.

Of the respondents, four students participated in the FESIA Study Abroad/Reciprocal Exchange in Ag Economics with the Department of Agricultural Economics; five students participated in the Soil, Water, and Environmental Studies with the Department of Biological and Agricultural Engineering; seven students participated in the Tropical and Field Biology trip with the Departments of Entomology and Fisheries and Wildlife Sciences; 14 students participated in the Natural Resources trips with the Department of Recreation, Parks, and Tourism Sciences; 11 students participated in the Innovation Diffusion and Technological Change trip with the Department of Agricultural Leadership, Education, and Communications; and three students participated in the Asian Economic Development trip with the Department of Agricultural Economics. Four students visited France only; five students visited Belgium, the Netherlands, France, Germany, and Luxembourg; 11 students visited Costa Rica; three students visited the Philippines, Singapore, and Sri Lanka; seven students visited Australia only; four students visited Fiji and Australia; three students visited New Zealand; and seven students visited Dominica. Twenty-three (52.3%) students participated in a study abroad program that lasted one to three weeks in length, 11 (25%) students participated in a program that lasted one month, and 10 (23%) students participated in a program that lasted one summer session (five weeks).

Based upon classification at the time of the survey, the participants included two juniors, 33 seniors, and nine graduate students. One participant was Asian; five were Hispanic; three were Multi-racial, excluding black; and 35 were White. The gender breakdown was heavily female, with 31 females and 13 males. Twenty-nine students reported that they had not ever lived on a ranch or farm, and 15 reported that they had. Thirty-six participants reported that they were in the College of Agriculture and Life Sciences, three were in the Mays Business School, one was in the College of Education and Human Development, two were in the Dwight Look College of Engineering, and two were in the College of Science.

The small and homogenous sample was a limitation to the study. This data cannot be generalized past this sample.

Objective 1

The first objective attempted to identify student attitudes about agricultural study abroad trips. Table 3.1 shows the means and standard deviations for the eight agricultural study abroad statements related to the students' attitudes about their visited country's agriculture. In regards to the eight agriculturally-centered questions, the students agreed that they learned about international agriculture. The students agreed that their study abroad group interacted with local agriculturalists (M = 4.20) and that they gained a more global perspective of agriculture from their study abroad (M = 4.45). The students disagreed that international agriculture did not affect American agriculture (M = 2.16); that their study abroad negatively affected their views of American agriculture (M = 2.32); and that their study abroad did not change their understanding of

American agriculture (*M* = 2.45). The students neither agreed nor disagreed that international production practices were very different from U.S. practices (*M* = 3.91); that international agriculture was as diverse as American agriculture (*M* = 3.50); and that agriculture was a major export in their country of study (*M* = 3.43).

Table 3.1
Students' Perceptions of Agricultural Statements (*N* = 44)

Statement	*M*	*SD*
I gained a more global perspective of agriculture from my study abroad.	4.45	.59
My study abroad group interacted with local agriculturalists.	4.20	.90
Production practices in my country of study were very different from U.S. practices.	3.91	.29
International agriculture was as diverse as American agriculture.	3.50	.85
Agriculture was a major export in my country of study.	3.43	1.02
My study abroad did not change my understanding of American agriculture	2.45	.93
My study abroad negatively affected my views on American agriculture.	2.32	.91
International agriculture did not affect American agriculture.	2.16	.99

There were six statements regarding perceptions about study abroad programs in general. Table 3.2 illustrates the students' perceptions of their study abroad trips. The students strongly agreed that their study abroad experience was a positive experience (*M* = 4.91) and that their study abroad had many hands-on activities (*M* = 4.57). The students agreed that they felt adequately prepared for their trip (*M* = 4.05). The students strongly disagreed that they learned nothing about themselves during their study abroad trip (*M* = 1.39). The students neither agreed nor disagreed that they felt better prepared for the job market because of their study abroad (*M* = 3.86) and that their study abroad was much like a vacation (*M* = 3.48).

Table 3.2
Students' Perceptions of Study Abroad Statements (*N* = 44)

Statement	*M*	*SD*
My study abroad experience was a positive experience.	4.91	.29
My study abroad had many hands-on activities	4.57	.55
I felt adequately prepared for the trip.	4.05	.75
I feel better prepared for the job market because of my study abroad.	3.86	.85
My study abroad was much like a vacation.	3.48	1.02
I learned nothing about myself from my study abroad.	1.39	.75

The frequencies of each of the most prevalent responses are also important results. Over 90% (*n* = 40) of the students strongly agreed that their study abroad experience was a positive experience. Over 43% (*n* = 19) agreed that production practices in their country of study were very different from U.S. practices. Over 47% (*n* = 21) disagreed that international agriculture did not affect American agriculture. Almost 41% (*n* = 18) disagreed with their study abroad negatively affected their views of American agriculture. Over 52% (*n* = 23) agreed with international agriculture was as diverse as American agriculture. Over 38% (*n* = 17) agreed with their study abroad was much like a vacation. Just over 59% (*n* = 26) strongly agreed that their study abroad had many hands-on activities. It was an even split between agreed and strongly agreed at 43.2% (*n* = 19) each that their study abroad group interacted with local agriculturists. Just over 45% (*n* = 20) agreed and 50% (*n* = 22) strongly agreed that they gained a more global perspective of agriculture from their study abroad. More than 70% (*n* = 31) strongly disagreed that they learned nothing about themselves from their study abroad. Almost 41% (*n* = 18) agreed that they felt better prepared for the job market because of their study abroad. Over 34% (*n* = 15) neither agreed nor disagreed and 36.4% (*n* = 16)

agreed that agriculture was a major export in their country of study. Half of the students, 50% (n = 22), disagreed that their study abroad did not change their understanding of American agriculture. Over half, 52.3% (n = 23), agreed that they felt adequately prepared for the trip.

Objective 2

The second objective attempted to compare change in perceptions of international agriculture based on selected variables, such as gender, age, and discipline. The respondents were predominately female (70.5%, n = 31), were from the College of Agriculture and Life Sciences (81.8%, n = 36), have never lived on a farm (65.9%, n = 29), were seniors when surveyed (and had gone on their study abroad within the last year) (75%, n = 33), and were white (79.5%, n = 35). Due to the homogeneity of the respondents, it is impossible to compare the change in perceptions based on demographic variables.

Objective 3

This objective qualitatively measured the students' motivations, barriers, and benefits from their study abroad programs. The students ranked each motivation, barrier, and benefit.

The students' motivations were divided into 12 categories: affordability, agriculture/natural resources, culture, education, fun, friends, global perspective, personal growth, recommendation by friends or presentations, schedule/graduate on time, travel/international experience, and work experience/hands-on activities. The five first ranked motivations included travel/international experience, which overwhelmingly

topped the list with 24 responses; followed by work experience/hands-on activities with five responses; agriculture/natural resources with four responses; and both culture and schedule/graduate on time had three responses.

The top five second-ranked motivations were travel/international experience (13), education (11), work experience/hands-on activities (7), culture (5), and agriculture/natural resources (3).

The top five third-ranked motivations were education (12), travel/international experience (8), work experience/hands-on activities (7), culture (5), and personal growth (3).

Figure 3.1 shows the visual representation of the overall motivations to study abroad. The overall top motivations were ranked as travel/international experience (44), education (25), work experience/hands-on activities (19), culture (13), agriculture/natural resources (9), schedule/graduate on time (5), friends (4), personal growth (4), fun (3), recommendation by friends or presentations (3), global perspective (2), and affordability (2).

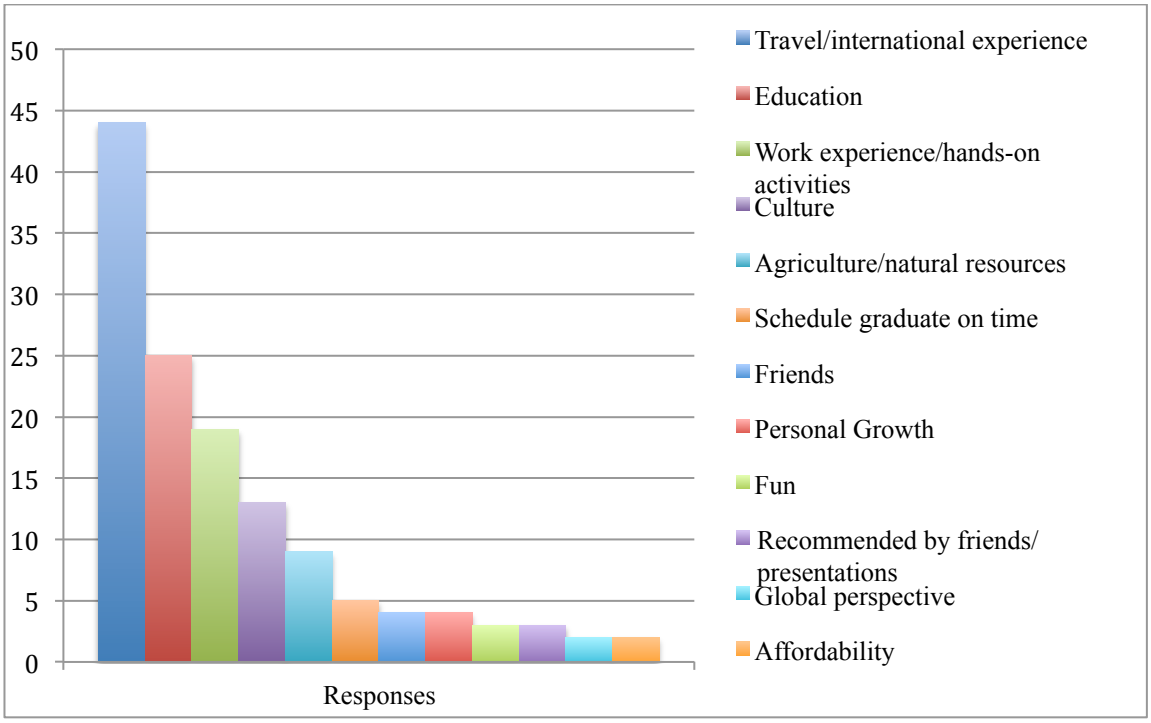

Figure 3.1. The Students' Overall Motivations to Study Abroad. The responses were calculated from the open-ended questions in the survey. The categories were the accumulation of the free responses.

The 12 categories of barriers included class difficulty, cost, cultural differences, language, never traveled before, no agriculture background, not knowing anyone in the program, preparation, safety and health, time away from home, and time off work/schedule.

Cost, with a majority of responses, (26) was the first-ranked barriers; followed by language (3); there was a five-way tie between never traveled before (2), time away from home (2), not knowing anyone in the program (2), safety and health (2), and preparation (2).

The top five second-ranked barriers had a bit more diversity in responses. Cost (12) was still the most common response followed by time off work/schedule (7); safety and health (4); and then a three-way tie with cultural differences (3), language (3), and time away from home (3).

The top five third-ranked barriers were lead by time off work/schedule (6); followed by cost (4), and not knowing anyone in the program (4); and language (3), preparation (3), and time away from home (3).

The overall barriers are shown in Figure 3.2. They were cost (42), time off work/schedule (14), language (9), safety and health (8), time away from home (8), not knowing anyone in the program (7), preparation (7), cultural differences (4), class difficulty (3), never traveled before (3), and no agriculture background (2).

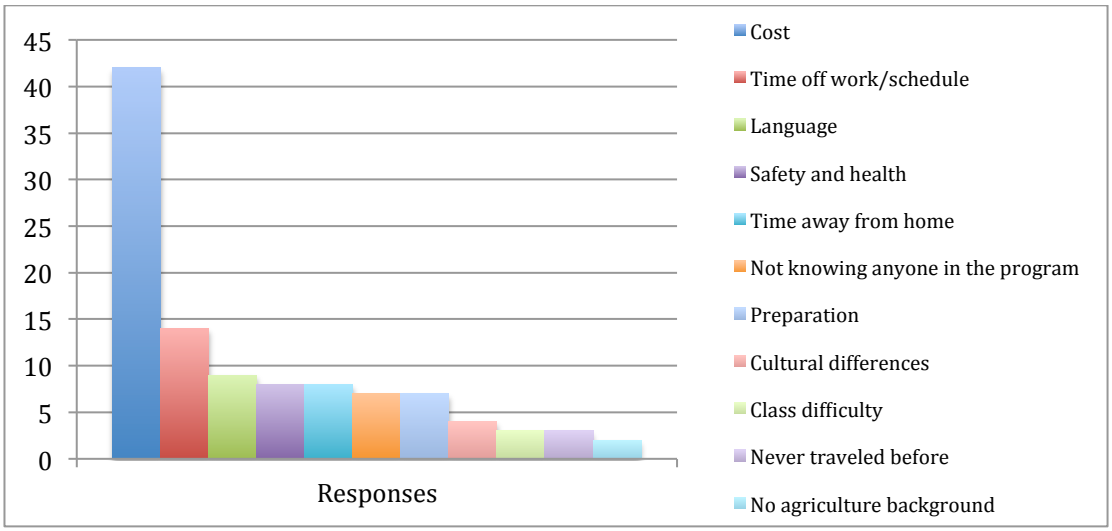

Figure 3.2. The Students' Overall Barriers to Study Abroad. The responses were calculated from the open-ended questions in the survey. The categories were the accumulation of the free responses.

The benefits were divided into 10 categories: cultural experience, experience, education, friends, fun, global perspective, international agricultural and natural resources, international travel experience, personal growth, and work/research experience.

The top five first-ranked benefits were cultural experience (11) international travel experience (7), experience (6), personal growth (6), international agriculture (5), and natural resources with five responses (5).

International agriculture and natural resources topped the list of second-ranked benefits with (10), followed by international travel experience (8), global perspective (6), cultural experience (6), and work/research experience (5).

Education (8) and global perspective (8) tied for the most responses in the third-ranked benefits; followed by international agriculture and natural resources (5) and friends (5); and cultural experience (3), fun (3), international travel experience (3), and work/research experience (3).

The overall benefits are from the study abroad program are shown in Figure 3.3. The benefits were international agriculture and natural resources (20), cultural experience (20), international travel experience (18), global perspective (16), education (14), work/research experience (12), personal growth (11), friends (9), experience (6), fun (4), and language (2).

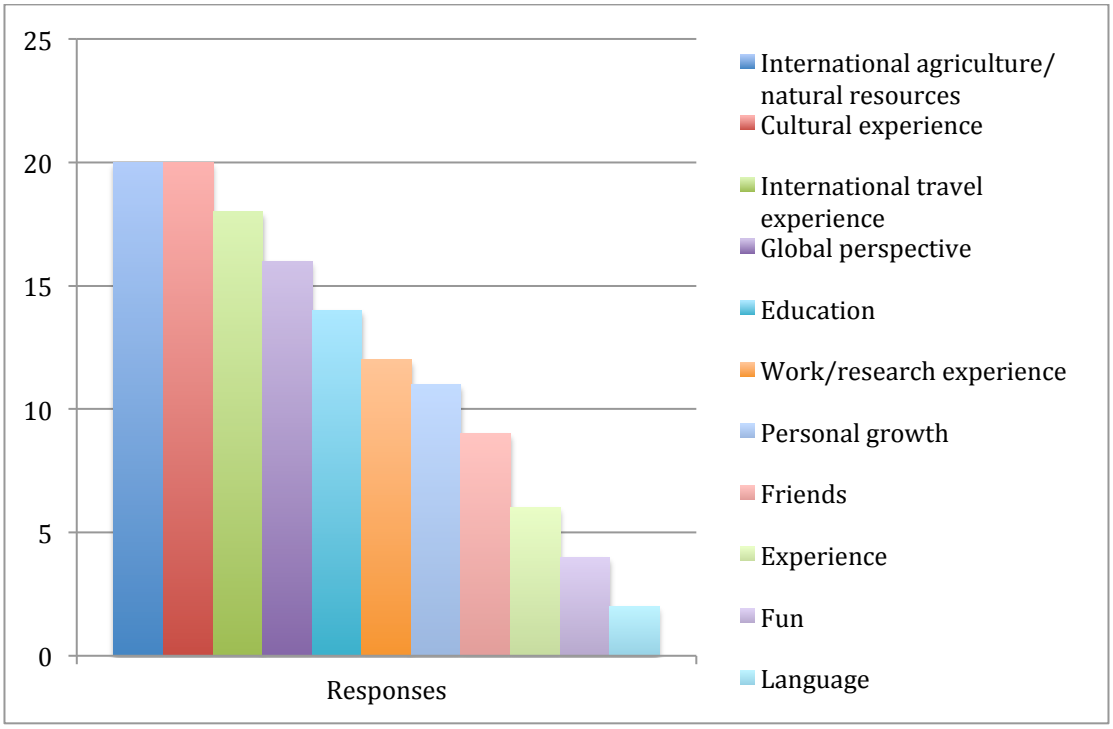

Figure 3.3. The Students' Overall Benefits from Study Abroad. The responses were calculated from the open-ended questions in the survey. The categories were the accumulation of the free responses.

Conclusions and Implications

Overall, the conclusions indicated that agricultural study abroad experiences were positive for students; agriculture was a major motivation for a study abroad trip, regardless of agricultural background; shorter study abroad trips are increasingly popular; and international agricultural knowledge was a first-ranked benefit of the study abroad experience.

The attitudes towards agricultural study abroad trips were very positive, though the real question is whether the attitude was directed at agriculture or just the study abroad experience. Based on the responses to the agriculturally-based questions on the

survey, students agreed that they gained a more global perspective about agriculture and they strongly agreed that they interacted with local agriculturalists and had hands-on activities. However, judging from their lack of opinion about production-based questions, it might be concluded that they did not know about production practices, either in their country of study or in the U.S. Were the correct questions asked on the survey?

More specific agricultural knowledge questions could have been asked to strengthen the survey. It would behoove a future researcher to identify and gauge existing agricultural knowledge before a study abroad trip was taken. Although the students agreed that they felt adequately prepared for their trip, it would be interesting to investigate the amount of agricultural preparation the students received before their trip and how much agricultural attention is given on a study abroad trip.

The study abroad statements coincided with the literature on all counts. However, there was a small discrepancy between the survey responses and the open-ended questions about motivations, barriers, and benefits. On the survey, students indicated that they neither agreed nor disagreed that they felt better prepared for the job market because of their study abroad. However, in the open-ended questions, students responded (without provocation) that their third motivation overall for a study abroad was work experience. In the benefits section of the qualitative analysis, the students listed work experience as their sixth highest benefit. The students responded that they neither agreed nor disagreed that their study abroad was like a vacation, so the level of seriousness that the students regarded the trip is slightly questionable. This is consistent

with Gertner's (2010) study that students often choose the country before they choose the program. This also supports Gertner's conclusion that there was no difference in country image when a country is considered as a tourist or a study abroad destination, meaning that some students chose their country of study because of tourist options or because of the program offered, but there was no interference of either thought process to the other.

The major motivations from this study were travel/international experience, education, work experience/hands-on activities, culture, agriculture/natural resources, schedule/graduate on time, friends, personal growth, fun, recommended by friends or presentations, global perspective, and affordability. The major barriers were cost, time off work/schedule, language, safety and health, time away from home, not knowing anyone in the program, preparation, cultural differences, class difficulty, never traveled before, and no agriculture background. The major benefits international agriculture and natural resources, cultural experience, international travel experience, global perspective, education, work/research experience, personal growth, friends, experience, fun, and language. Besides the agricultural motivations, barriers, and benefits, each category is consistent with the literature, thus, there is no need to continue looking at the motivations, barriers, and benefits to study abroad programs without looking into more discipline specific data.

A trend confirmed by this study is that more short-term study abroad programs that are offered during break times from school (summer, winter, and spring break sessions) are becoming increasingly popular. More than half of the students participated

in a trip that lasted three weeks or less, and the longest trip that any of the students took was five weeks. At least 23% of the students took a trip during the summer session. He and Chen (2010) found that students preferred to travel during summer break. They also found that winter break was the least favorable time to travel because of family gatherings, but this study did not support the literature in that regard. Many students who responded participated in a winter mini-mester, which began January 2 and lasted for the two weeks before the spring semester started. The timeline of the winter mini-mester did not interfere with any holidays, so the trip was still popular among students. The length of the trip was the second barrier listed by the students, which is consistent with Zhai (2010). The students listed getting the time off work in conjunction with the length as their second biggest barrier, which agrees with Marcum and Roochnik (2001). The students listed shorter trips as their sixth motivation because the shorter trip would not delay their graduation date.

This study found that learning about international agriculture was a motivation and benefits for the students. Even though 36 (82%) students reported that they were part of the College of Agriculture and Life Sciences, only 15 (35%) of the students had lived on a farm or ranch. Learning about international agriculture was in the top five of the first- and second-ranked motivations, and was also in the top five overall motivations. International agriculture was even more prevalent in the identified benefits. International agriculture was in the top five in the first-ranked benefits, the top of the second-ranked benefits, and was in the top five in the third-ranked motivations. International agriculture was listed first in the overall benefits with 20 responses. This demonstrates that students

who had no previous agricultural experience still indicated that learning about international agriculture was a major benefit to their study abroad experience.

A recommendation to strengthen this study would be to purposively select a sample that is much more diverse than this convenience response rate. A possible way to do so could involve administering a paper survey in person. If the paper survey was administered by the faculty members at the end of their study abroad trip, then data would be generated by the full population. Another option could be to broaden the scope of the study and involve other universities to gain more information from equivalent Colleges of Agriculture and Life Sciences.

Based on the demographics from this study, the population of 117 students who took an agricultural study abroad within the last year is less than 2% of the entire student population of the College of Agriculture and Life Sciences. In the fall of 2010, the College of Agriculture and Life Sciences had an enrollment of 6,834 (AgriLife Communications, 2011). The College of Agriculture and Life Sciences 2010 – 2015 strategic plan (2010) includes the goal to "enhance and broaden the students' educational experience to make them better understand the world around them and how different perspectives contribute to its strength" (p 12). More specifically, the goal mentions that student participation in academic international experiences should increase by 25%. Because only 1.7% of students take advantage of the agricultural study abroad experience, there needs to be more focus on bringing international curriculum to campus instead, as Presley et al. (2010); He and Chen (2010); and Dooley and Rouse (2009) suggested? Alternatively, does it mean that the college should market the motivations

and benefits of the study abroad more to its best advantage? This study has shown that many agricultural study abroad experiences do not delay graduation date and that students enjoy the shorter time commitment and increased affordability of the trips.

Another study could focus on the marketing materials used to advertise agricultural study abroad trips. Another possible research opportunity would investigate how well study abroad trips entice future employers. Do employers actually hire more people with international experience?

There are many more research opportunities to complement the benefits of agricultural study abroad experiences found in this study. If there is more research done on the benefits of agricultural study abroad trips, then more agricultural international experiences can be made available for students, especially in a time of budget cuts.

CHAPTER IV

SUMMARY AND CONCLUSIONS

In order to study students' perceptions of international agriculture after an international agricultural experience, this study was divided into a qualitative and a quantitative section. The qualitative section was an in-depth phenomenon study of students who participated in the Cultivating Global Leaders in Agriculture: Enhancing Participation in Undergraduate Experiential Learning Opportunities for Minorities internship. The qualitative study consisted of two sets of focus groups, a pre-internship focus group administered six weeks before the internship and a post-trip focus group administered the first week of the fall semester, to gauge the students' expectations and perceptions of international agriculture. Focus group questions were adapted from Zhai's 2000 study. Data were analyzed using Glaser and Strauss' (1967; as cited by Merriam, 2009) constant comparative method; and trustworthiness was ensured by member checking, audit trails, and peer debriefing. The quantitative study surveyed students who had participated in a study abroad trip within the College of Agriculture and Life Sciences between January 2010 and January 2011. Dillman's Tailored Design (2007) was used to ensure survey response, which was administered through students' university email accounts. Descriptive statistics and frequencies were used to analyze data.

For objective one, identify the attitudes about both international agricultural study abroad programs and internships, the conclusions included that a positive attitudes about both study abroad and internship experiences; students gained many benefits,

including practical agricultural knowledge, job experience, cultural and personal growth, and new career goals; agriculture background was not necessary for agricultural motivation; and shorter trips are increasingly popular. The conclusions of the second objective, compare and contrast perceptions of international agriculture based on study abroad experience or internship, compared the trips in that both gave students hands-on experience, a global perspective of agriculture, and students interacted with local agriculturalists. The contrasting characteristics of the programs included that internship students came back with more specific agricultural production knowledge; the study abroad students experience more diversity in their programs and thus experienced agriculture differently; and it is questionable to how serious study abroad students took their programs. The conclusions of the third objective; identify motivations, barriers, and benefits of international agricultural experiences to student development; coincided with previous literature. The biggest conclusions from this study were that agriculture and natural resource knowledge was the fifth-ranked motivation and the top ranked benefit.

The biggest difference between the internship and study abroad studies was that the internship students wanted an unconventional international experience. Most of the internship students used international agriculture as their main motivation for their decision to choose their internship. The study abroad students responded that agriculture was their fifth motivation for their trip, but the overwhelming motivation for the study abroad was travel and international experience. All of the internship respondents had traveled before so they were more focused on the agricultural purpose and the cultural experience. The internship students had more specific agricultural and cultural

perceptions and knowledge, especially after their internship, based from the fact that study abroad students had no opinion about production-based questions (that international production practices were very different from U.S. practices, that international agriculture was as diverse as American agriculture, and that agriculture was a major export in their country of study). However, the study abroad students should be given the benefit of the doubt and the researcher acknowledges that the internship students were asked face-to-face about their agricultural experience and knowledge and the study abroad students were not.

Another difference, or at least consideration, exists between the internship and study abroad students. The students who took the internship thought that some study abroad programs seemed too touristy and too much like a vacation. This slightly correlates with the fact that the survey respondents neither agreed nor disagreed that their study abroad was much like a vacation. One student (2) even said that summer vacation was a third-ranked motivation for participating in the study abroad trip.

The major conclusions from this study are major motivations, barriers, and benefits; the role of agriculture in students' decisions to study or intern abroad; and the importance of the length of a trip abroad.

The major motivations identified in this study were travel/international experience, education, work experience/hands-on activities, culture, agriculture/natural resources, schedule/graduate on time, friends, personal growth, fun, recommended by friends or presentations, global perspective, and affordability. The major barriers identified were cost, time off work/schedule, language, safety and health, time away

from home, not knowing anyone in the program, preparation, cultural differences, class difficulty, never traveled before, and no agriculture background. Finally, the major benefits were international agriculture and natural resources, cultural experience, international travel experience, global perspective, education, work/research experience, personal growth, friends, experience, fun, and language. Besides the agricultural motivations and benefits, the study abroad motivations, barriers, and benefits are consistent with the literature.

This study found that learning about international agriculture was a large motivation and benefits for the students. Even though 36 (82%) students reported that they were part of the College of Agriculture and Life Sciences, only 15 (35%) of the students had lived on a farm or ranch. Learning about international agriculture was in the top five of the first- and second-ranked motivations, and also in the top five overall motivations. International agriculture was even more prevalent in the benefits. International agriculture was in the top five in the first-ranked benefits, the top of the second-ranked benefits, and was in the top five in the third-ranked motivations. International agriculture won the overall benefits with 20 responses. This shows that students who had no previous agricultural experience still indicated that learning about international agriculture was a major benefit to their study abroad experience. From the qualitative study, two of the students (J, C) had no agricultural background whatsoever, and one of the students (C) was an International Studies major, but still was very interested in the agricultural aspect of this internship. The rest of the focus group students mentioned that this internship was relevant to their agricultural major.

A trend confirmed by this study is that more short-term study abroad programs that are offered during break times from school (summer, winter, and spring break sessions) are becoming increasingly popular. More than half of the students participated in a trip that lasted three weeks or less, and the longest trip that any of the students took was five weeks. At least 23% of the students took a trip during the summer session. He and Chen (2010) found that students preferred to travel during summer break. They also found that winter break was the least favorable time to travel because of family gatherings, but many students who responded participated in a winter mini-mester, which did not conflict with holidays. The length of the trip was the second barrier listed by the students, which agreed with Zhai (2010). The students listed getting the time off work in conjunction with the length as their second biggest barrier, which agrees with Marcum and Roochnik (2001). The students listed shorter trips as their sixth motivation because the shorter trip would not delay their graduation date. The students from the focus groups all said that the timing of their internship would not delay their graduation date. Several of them said this internship gave them experience, networking, and made their courses more relevant and focused (B, E, J, La, Ld, M). One student said that this internship would expedite his research (M). Other students said that the timing of the internship also allowed them to take more summer classes (J, La).

There are several implications that can be made from these two studies. Based on the demographics from this study, the population of 117 students who took an agricultural study abroad within the last year is less than 2% of the entire student population of the College of Agriculture and Life Sciences. In the fall of 2010, the

College of Agriculture and Life Sciences had an enrollment of 6,834 (AgriLife Communications, 2011). The College of Agriculture and Life Sciences 2010 – 2015 strategic plan (2010) includes the goal to "enhance and broaden the students' educational experience to make them better understand the world around them and how different perspectives contribute to its strength" (p 12). More specifically, the goal mentions that student participation in academic international experiences should increase by 25%. Because only 1.7% of students take advantage of the agricultural study abroad experience, does there need to be more focus on bringing international curriculum to campus instead, as Presley et al. (2010); He and Chen (2010); and Dooley and Rouse (2009) suggested.

Or does it mean that the college should market the motivations and benefits of the study abroad more to its best advantage? This study has shown that many agricultural study abroad experiences do not delay graduation date and that students enjoy the shorter time commitment and increased affordability of the trips. A future study could focus on the marketing materials used to advertise agricultural study abroad trips.

This study also produces teaching implications. Because the students said that the class was not fully helpful before their internship, it would be interesting to study methods of preparation before an agricultural study abroad or internship. While it is impossible to fully prepare students for every potential experience, a future study could assess the most valuable information for preparation and develop a consistent method of instruction for faculty members.

Another possible research opportunity would investigate how well study abroad trips entice future employers. Do employers actually hire more people with international experience? There are many more research opportunities to complement the benefits of agricultural study abroad experiences found in this study. If there is more research done on the benefits of agricultural study abroad trips, then more agricultural international experiences can be made available for students.

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APPENDIX A

INFORMATION SHEET
Students' Perceptions of International Agriculture After a Study Abroad Experience

Introduction
The purpose of this form is to provide you (as a prospective research study participant) information that may affect your decision as to whether or not to participate in this research.

You have been asked to participate in a research study for a master's thesis. The purpose of this study is to identify the relationship between agricultural study abroad trips and knowledge of international agriculture, identify any benefits of agricultural study abroad programs to student development, and compare change in perceptions of international agriculture based on selected variables, such as gender, age, and discipline. You were selected to be a possible participant because of your participation in an agricultural study abroad experience.

What will I be asked to do?
If you agree to participate in this study, you will be asked to answer questions regarding your perceptions and expectations of your trip and of Central American agriculture. This study will take an hour of your time before the trip, and an hour after your trip.

What are the risks involved in this study?
The risks associated with this study are minimal, and are not greater than risks ordinarily encountered in daily life.

What are the possible benefits of this study?
You will receive no direct benefit from participating in this study; however, benefits learned from this study could make agricultural study abroad programs more readily available, thus enhancing student development.

Do I have to participate?
No. Your participation is voluntary. You may decide not to participate or to withdraw at any time without your current or future relations with Texas A&M University being affected.

Will I be compensated?
You will receive a free pizza dinner for your participation in each focus group.

Who will know about my participation in this research study?
This study is confidential. The records of this study will be kept private. No identifiers linking you to this study will be included in any sort of report that might be published. Research records will be stored securely and only Kasey Miller and Dr. Tracy Rutherford will have access to the records.

Whom do I contact with questions about the research?

If you have questions regarding this study, you may contact Kasey Miller at 765-894-1135 or kasey415@gmail.com.

Whom do I contact about my rights as a research participant?
This research study has been reviewed by the Human Subjects' Protection Program and/or the Institutional Review Board at Texas A&M University. For research-related problems or questions regarding your rights as a research participant, you can contact these offices at (979)458-4067 or irb@tamu.edu.

Participation
Please be sure you have read the above information, asked questions and received answers to your satisfaction. If you would like to be in the study, attend the focus group and answer the interview questions.

Pre-trip
Focus Group Interview Questions
April 25 & 27, 2011
Moderators: Kasey Miller and Dr. Tracy Rutherford

1. What motivated you to participate in this program?
2. How long will you be abroad?
3. What kind of housing will you have abroad?
4. What purpose will you serve abroad?
5. What are your top five attitudes/beliefs do you have about Central American culture? (Language, social, economic, political issues?)
6. What are your top five attitudes/beliefs about Central American agriculture? (Production agriculture, main exports)
7. What skills do you expect to gain from this experience?
8. How do you think your international agricultural experience will influence your perceptions of American agriculture?
9. How do you think this trip will affect your course work and major timeline?

10. What are your career goals?

11. How do you think this trip will affect your career opportunities?

Post-trip
Focus Group Interview Questions
August 30, September 1 2011
Moderators: Kasey Miller and Dr. Tracy Rutherford

1. How long were you abroad?
2. What kind of housing did you have abroad?
3. What purpose did you serve abroad?
4. What are your top five attitudes/beliefs do you have about Central American culture? (Language, social, economic, political issues?)
5. What are your top five attitudes/beliefs about Central American agriculture? (Production agriculture, main exports)
6. What skills did you gain from this experience?
7. How did your international agricultural experience influence your perceptions of American agriculture?
8. How did this trip will affect your course work and major timeline?
9. What are your career goals?
10. How did this trip will affect your career goals?
11. Did this trip meet your expectations?

Pre-Internship Audit Trail

Motivation

"Much more comfortable with people of my own culture" – J
"Get to travel, but not in touristy areas" – T
"I want the culture shock" – H
Learn Spanish – M, B
Immersion – M, J, T
Ties into major – M, J, B
Travel – M, J, D, B, T, C, H
Internship, work experience – J, D
Experience/learn international agriculture – M, D, B, C
Connect with own culture – J
Been abroad before – M, J, B, T, H, C, D

Purpose

"We're not supposed to do the projects for them; we're supposed to organize ourselves out of a job." – C
Internship – child oriented (multiple age groups) – M, J
Junior Master Gardener – M, J, T, H, B, C, D
Work in separate communities or same community with different people – M, J
Unpredictable – M, J, T, H, B, C, D
Teach to learn Spanish – M, B
Use activities instead of classroom setting – J, H, D, T, B, C
Teach in groups – J
Uncertainty – J
Teach sustainability, efficiency – B, H
Travel- B
Serve as ambassadors – B
Catalysts for change – T, C, D

Perceptions

Central American Culture

"People try to make you feel comfortable." – M
Warm, friendly, welcoming, humble – M, J
Colorful – M
Lively, passionate – M
Spiritual (to earth, not necessarily religious) – M
Agriculturally aware – M

Poorer living conditions – J, D
Not very educated – J
Kids as labor – J
Lots of Catholics – T
Family oriented – B
More conservative clothing – B
Politically turbulent – H
Costa Rica has no military – T, B
Not as safe as here – B, H
Will offend women if refuse food – D
More male-oriented – B, T
Elders are respected – B
Less diverse – H

Central American Agriculture
"They use agriculture, or at least one type of crop, to build their other industries off of." -M
Integrated into culture – M
Traditional methods – M, B, C
Hand tools used multiple ways – M
Use many/all resources available – M
Grow own crops – J
Much indigenous knowledge – C, B, H
Teaching other topics, not just HORT – T, C, B, H
Unsure – J, H
Main crops as chocolate, coffee, and pineapples – B

How perceptions of US agriculture might change
"U.S. agriculture is more detached because it's much bigger." - H
American ag is boring – M
International ag uses all space available – M
Monochromatic– M
Central Americans not educated in pesticide use, taken advantage of – M
US has more advanced technologies, more efficient – J, B, H
How we view food and see where it comes from – T
US is more detached and bigger – H
US ag has a lot of governmental support – H

Benefits

Career opportunities

"This will make me a more competitive employee." - B
Work experience – M, J, T, B, C, H
Fun – M, T
Gains adaptability – M, B
More attractive to employers – M, J, B, T, C, D, H
Cultural and educational advantages – J, M
Gain language - B
Increase teamwork – B
Focus goals – D, C

Skills expect to gain

"This will force us to take a front seat, it's not going to be done for us." - C
Improve Spanish and communication – T, B, C, J, M
Increase leadership, initiative, and problem solving skills – C, B, D,
Indigenous knowledge of agriculture – M
Knowledge of tropical agriculture – M, J
Adaptability – M, B, D
Increased cultural knowledge – J, H, B, D
Inspiration - B

Coursework timeline effects

"This won't delay my graduation. If anything, this will focus where to take my degree." - B
Expedite research – M
Give experience – M, J, H
Networking – M
No delay to course work, graduation – M, J, H, D, T, B, C
Makes course work more relevant, increases focus – M, B
Timing allows for more summer classes - J

Internship vs. Study Abroad

"A study abroad is more like a vacation. This internship takes more initiative." -H
SA more like vacation – H
Internship takes more initiative – H
SA cost more – T
SA allow for more free time, more touristy – B

SA's go to resorts "America in a different country" – T
Internship gives more realistic experience – B, T, H

Post-internship Audit Trail

Motivations
No prior interest in Central America – La,
Joined class without anticipating taking internship – La, Ht
Internship had culmination of interests – La, Ld, B, H ("right up my alley")
Increase Spanish – La, Ld
Heard about it from advisor – La, Ld, B, T, C, D, M
Saw presentation about it – La, Ld, B, T, C, D
Wanted internship – J
Switched from CR to Guatemala, liked living with students instead of family – J
Cheaper than SA – T, B, D
Liked immersion – T

Purpose
Guat, 8 girls in one room, tim by himself – La, Ld, J, D, Ht, H, M
CR – host families – T, B, C
Almost all had electricity and all had running water, but no internet – T
Lived with partners or individually with host family – T, B, C
Water was potable in both countries- T, Ht
Went to several small communities in mountains – La
Taught in Spanish – J, La, Ld, Ht, H, D, M
Started demonstration organic gardens in communities – La, H
Talked about companion planting, soil conservation, composting, nutritional activities – La, Ld, D, M,
Taught children – La, Ht
Members of the Population Council, girls from 8-15 – H, M, Ht, D
Helped inspire girls in Population Council about more opportunities about education, not just have kids at age 15 - D
Did about 5 activities with children – La
Also taught teachers occasionally (twice, but more intimidating) and community leaders – Ld, M, Ht
Every day was new community – H
Same activities, different people - H
Activities were geared toward second grade and younger, though – La
Taught ages 5-16 – La
Community helped with projects, were excited – La, Ld, J
"Maybe it's a Hispanic thing, I see this at church, but they want people to guide them through a project instead of doing it themselves. Maybe it's because they don't have as

many resources. They may feel incapable of doing the rest by themselves." – J (La, Ld agreed)
Information packets were left with the communities after they left – La
Dale (Ag technician) checks on the communities after they leave – La
Good interaction with communities, J offered to help family who owned land to start garden (after they cleared the ants away). Also talked about info from her food processing class.
Costa Rica. Stayed in one community the whole time (7 weeks) – T, B, C
Taught at elementary school everyday – T, B, C,
Did community projects and put on fundraisers – T, B, C
Hard to think of new activities, but they had JMG guide, weekly topics and brainstorming sessions – C, T

Perceptions
Central American Culture
Kids looked younger than they were, because of poorer nutrition – J
Loving, don't have much, but they are so happy with they have – J
We're materialistic – J, H
Very hospitable and friendly – La, Ht "Buenos dias to everyone"
Playful - T
Very family oriented - Ht
Willing to share what they have – La
Were there during an election, very turbulent. Protests in streets, burning tires delayed them. – La, Ld, J, D
Were told not to talk about politics, but saw things from election – J, La, Ld
Politics were different from Guat, not as turbulent. Appear to be together, but have problems with theft – C
Houses in urban areas had burglar bars and sometimes barbed wire on windows, no fire alarms – T, D, Ht
Social security problems - T
Extremely formal ("chivalry's not dead" always give title in presentation, and always applaud with formal ending)- M
Hard-working – Ld
Kids were better at some things than they were – Ld
Taught us – J
Relaxed way of life, more "primitive", no hustle and bustle – H, B ("tranquila")
Pura Vida – T, C, B
Very green (committed to reforestation, into organic, and bio-digester)– T, B
No gender barrier, actually helped - B

Central American Agriculture
Liked organic things – T
Rural pride – T

Urban areas (those with paved roads) didn't talk much about organics or have many fruits and vegetables – C
Rural area had lots of pineapples and mangos, shared and traded with neighbors. No cars – B
Some didn't know about compost - Ht
Broccoli – La, M
Bananas – T
Learned a lot about ag because of their Ag technician (Dale) – M
Cabbage, broccoli, and squash were big cash crops – M, Ht
"Cash crop presentation was perfect, perfect lines and perfectly weeded" – M
Adopted from the states, mono-cropping – M
Corn "milpa" – Ld, La, J
Everything was hand done, steep slopes don't allow for tractors – La, Ht
Some slash and burn - H
Technology would misplace a lot of workers – J
Most were small farm plots, with exceptions – Ld
Skeptic of big changes, surviving off of ag, don't want to risk (organic)– La
Very big, they live off of it. Everywhere was agriculture – J, H
Not subsistence, sell for living, those are biggest against organic - La
Planted coffee trees – J, Ht
Transplants/grafted on a hill – Ld, M, Ht
Didn't learn much about ag – C, B
No travel, her community mostly worked at cardboard factory, had some cattle – T
Had some cattle and horses, no chickens, not many farms – B
More subsistence farming, some cows (for milk and cheese) and chickens - T
Created learning gardens at each place, so learned a lot – Ht
Produce was out of this world – M
Climate is well suited for ag - T

Changed Perceptions of U.S. Agriculture
Didn't know a lot about American ag – J, Ld, La
Created a lot of questions about U.S. ag – Ld
One farmer here uses a lot of mechanization. One there uses a lot of workers, it's how they make their living – La
Didn't change perceptions, but sparked interest, want to know more – Ld
Sparked interest in organic practices, not really an organic class at A&M. Learned a lot of new information about it there – La
Not many people know about agriculture here, people have negative perceptions of it. People think it's unimportant or a lessor profession. Ag is taken for granted here. Makes mad. – J, Ld (agreed)
You can grow a lot of things in one place – T
It's a blessing to use a tractor, appreciate it more – Ht
Thought U.S ag knew everything and technology was great, but their system is great and efficient – H

Central America has more exciting crops – T
U.S. ag is boring, mono-chromatic – M
Learned that even in our agriculturally oriented communities, it's not nearly as prevalent as there. It's a lifestyle for them." – H

Benefits

Career Opportunities

Changed career goals, now want double degree and international development career- J
Increased desire to work internationally, opened Central America as possibility – La, B
More comfortable about traveling for career, opened more opportunities – Ld, T
Opened possibility of agricultural development instead of just int'l dev. - La
Changed or reinforced career goals to include international work – J, La, Ld, B, C, T, D, H, Ht, M
Trip inspired return of mojo – M
Sparked entrepreneurial interest – M
Reinforced love of gardening – H
Don't want to be a teacher, but do want to educate - T

Skills Gained

Came back with totally different perspective – J
Practical ag skills, hoe and machete – Ld, La, H, Ht
Practical Hort. Skills. You study about it here, but it's much different when you actually get to use it. – J, La, D
Increased Spanish! – La, Ld, J, B, C, T, D, Ht, H, M
Forced to learn, total immersion – C, B, T
Learned different ways communicate, had to be creative – M, D, T, H
Learned a lot of Ag terms – J, M, D
Guat – some kids spoke Mayan, so no one was speaking first language – D, Ht
(Still speak in Spanish here sometimes – La, Ld, J, T
English seems to have gotten worse or backwards – B, Ht, D, C, T
Had brief experience with Spanish, didn't account for much – Ld, La, B, T
Teaching skills, especially with kids, find fun ways to teach – Ld, T
Strong friendships – La, J, Ld
Learned so much, about myself and major – Ld
Got a larger variety of experiences than expected, not just teaching – La
Got to know the culture better – J, D, Ht
Trip location allowed for travel on weekends – La, Ld, J
Rely on yourself, can do it – T, D, B, Ht, C
Put yourself out there, ok to make mistakes – D, T, H, C
Leadership – D
Listening improved – M
Learned to improve from criticism – T, C
Overcame obstacles, internship was hard, exacerbated by language barrier, but learned a lot – C

Takes little to make someone happy – B
Become good friends even with language barrier – T
Don't need to be materialistic – H, D, Ht
Felt like this had real purpose - M

Coursework Timeline Effects
Use credit for double-degree (inspired by trip) – J
Allowed to take summer classes before – La, J
Expedited research – M
No delay – La, Ld, J, B, C, T, D, H, Ht, M

Internship vs. Study Abroad
SA go to class and then play. - La
We had time to have fun and explore – La, Ld
More hands-on learning – La, D
Nice to not have to worry about classwork, but can get credit if needed – Ld
To get credit, need to make presentation, write a paper, and thank you note – La
Cheaper than SA – T, B, D
Liked immersion - T
Preparation class not really helpful – All
Making lesson plans in Spanish was helpful – M
Presenters were interesting but not that relevant – B
Didn't feel very prepared – All
The grant was great and very helpful, but the class wasn't as helpful – C and B

1 student double major, hort and agro (junior), 1 international studies major, 1 alec grad student, 1 aled major

All but one had COALS major. H lived on ranch, D and T had some experience with ranch/farm from relatives.

APPENDIX B

INFORMATION SHEET
Students' Perceptions of International Agriculture After a Study Abroad Experience

Introduction
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You have been asked to participate in a research study for a master's thesis. The purpose of this study is [identify the relationship between agricultural study abroad trips and knowledge of international agriculture, identify any benefits of agricultural study abroad programs to student development, and compare change in perceptions of international agriculture based on selected variables, such as gender, age, and discipline. You were selected to be a possible participant because of your participation in an agricultural study abroad experience.

What will I be asked to do?
If you agree to participate in this study, you will be asked to answer questions regarding your perceptions of international agriculture as a result of your study abroad experience. This study will take five minutes of your time.

What are the risks involved in this study?
The risks associated with this study are minimal, and are not greater than risks ordinarily encountered in daily life.

What are the possible benefits of this study?
You will receive no direct benefit from participating in this study; however, benefits learned from this study could make agricultural study abroad programs more readily available, thus enhancing student development.

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Participation

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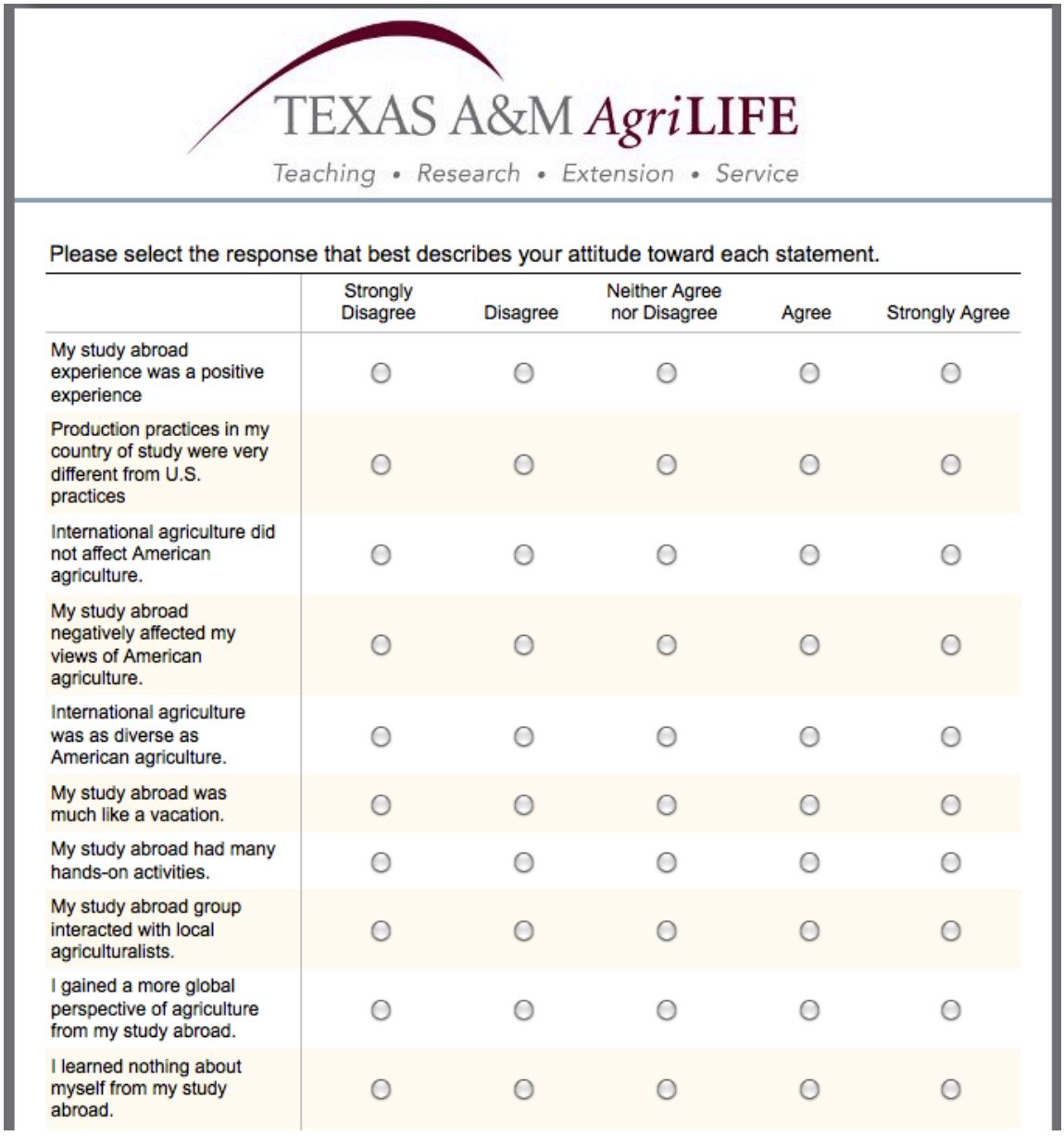


TEXAS A&M AgriLIFE

Teaching • Research • Extension • Service

Please select the response that best describes your attitude toward each statement.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
My study abroad experience was a positive experience	○	○	○	○	○
Production practices in my country of study were very different from U.S. practices	○	○	○	○	○
International agriculture did not affect American agriculture.	○	○	○	○	○
My study abroad negatively affected my views of American agriculture.	○	○	○	○	○
International agriculture was as diverse as American agriculture.	○	○	○	○	○
My study abroad was much like a vacation.	○	○	○	○	○
My study abroad had many hands-on activities.	○	○	○	○	○
My study abroad group interacted with local agriculturalists.	○	○	○	○	○
I gained a more global perspective of agriculture from my study abroad.	○	○	○	○	○
I learned nothing about myself from my study abroad.	○	○	○	○	○

I feel better prepared for the job market because of my study abroad.	○	○	○	○	○
Agriculture was a major export in my country of study.	○	○	○	○	○
My study abroad did not change my understanding of American agriculture.	○	○	○	○	○
I felt adequately prepared for the trip.	○	○	○	○	○

In which Texas A&M University sponsored study abroad program did you participate?

Which country(ies) did you visit?

How long did you participate in the study abroad program?

- ○ 1-3 weeks
- ○ 1 month
- ○ Summer session (5 weeks)
- ○ Summer session (10 weeks)
- ○ Full semester
- ○ Full year

Identify your top three motivations to participate in this study abroad program.

Motivation 1	
Motivation 2	
Motivation 3	

Identify your top three barriers to your participation in this study abroad program.

Barrier 1	
Barrier 2	
Barrier 3	

Identify your top three benefits you gained from this study abroad program.

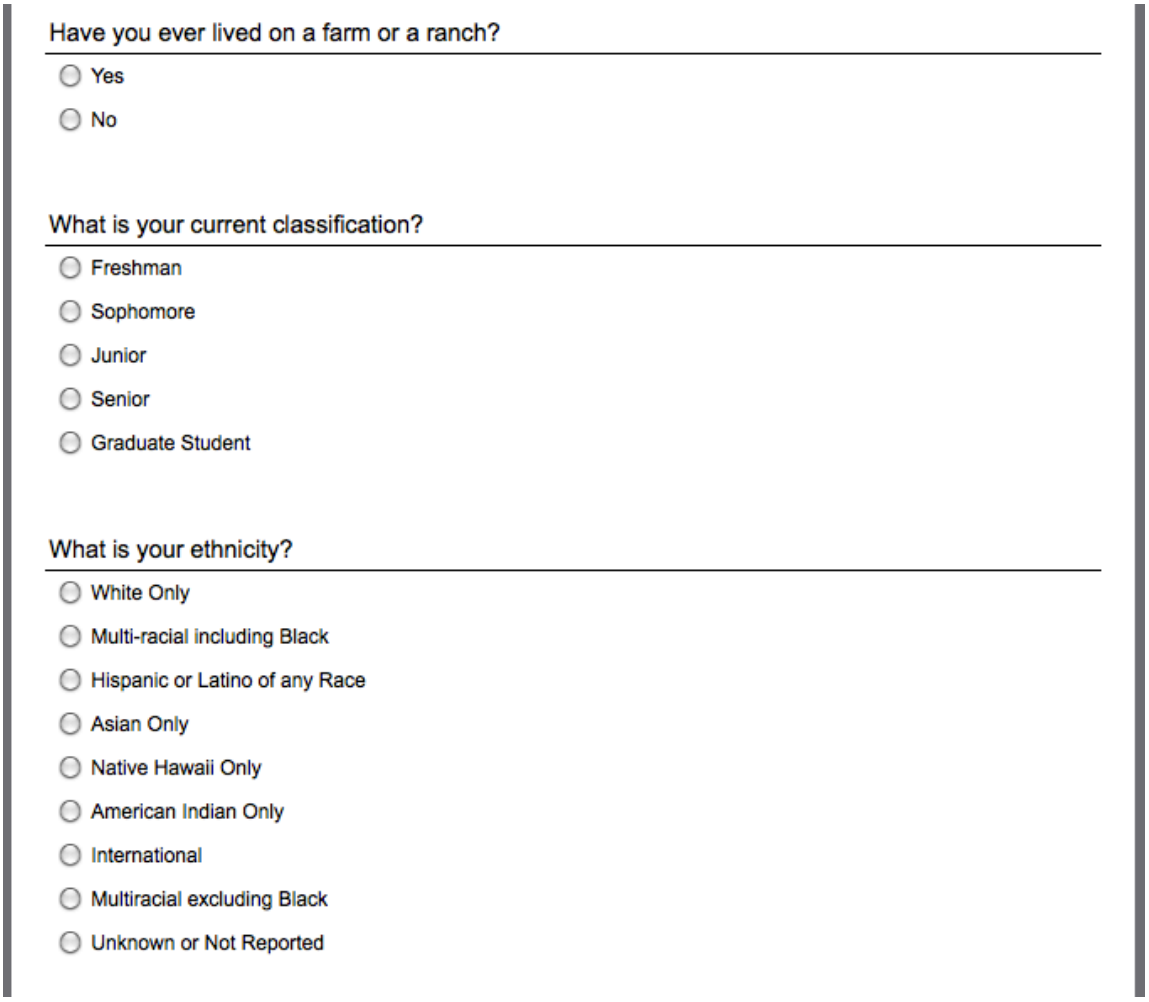
Benefit 1	
Benefit 2	
Benefit 3	

What is your gender?

- ○ Male
- ○ Female

What is your College?

- ○ Agriculture and Life Sciences
- ○ Architecture
- ○ Bush School of Government & Public Service
- ○ Mays Business School
- ○ Education and Human Development
- ○ Dwight Look College of Engineering
- ○ Geosciences
- ○ Liberal Arts
- ○ Science
- ○ Veterinary Medicine & Biomedical Sciences



Have you ever lived on a farm or a ranch?

- Yes
- No

What is your current classification?

- Freshman
- Sophomore
- Junior
- Senior
- Graduate Student

What is your ethnicity?

- White Only
- Multi-racial including Black
- Hispanic or Latino of any Race
- Asian Only
- Native Hawaii Only
- American Indian Only
- International
- Multiracial excluding Black
- Unknown or Not Reported

Survey Audit Trail

Benefit 1

6 Personal growth – 1, 10, 23, 26, 33, 36

5 International agriculture/natural resources – 2, 3, 16, 25, 35

11 Cultural experience – 4, 6, 11, 17, 20, 30, 34, 40, 41, 43, 44

4 Work/research experience – 5, 21, 38, 42

7 International travel experience – 7, 8, 13, 15, 22, 27, 31

2 Global perspective – 19, 24

6 Experience – 9, 18, 28, 29, 32, 37

1 Friends – 39

3 Education – 14, 12, 33

Fun

Benefit 2

4 Personal growth – 4, 10, 14, 17

10 International agriculture/natural resources – 5, 13, 16, 19, 20, 24, 30, 34, 36, 44

6 Cultural experience – 1, 2, 23, 33, 38, 42

5 Work/research experience – 8, 15, 22, 31, 37

8 International travel experience – 3, 6, 11, 15, 21, 22, 35, 43

6 Global perspective – 5, 7, 28, 29, 33, 41

Experience –

3 Friends – 18, 25, 32

3 Education – 8, 9, 39

1 Fun - 12

Benefit 3

1 Personal growth – 16

5 International agriculture/natural resources – 1, 2, 19, 21, 38

3 Cultural experience – 22, 23, 41

3 Work/research experience – 3, 5, 44

3 International travel experience – 9, 24, 25

8 Global perspective – 7, 11, 30, 31, 32, 36, 37, 42

Experience –

5 Friends – 6, 8, 12, 14, 33

8 Education – 4, 15, 17, 18, 20, 33, 35, 39

3 Fun – 17, 20, 27

2 Language – 10, 34

Motivation 1

24 Travel/international experience – 1, 3, 4, 6, 7, 8, 11, 12, 14, 15, 17, 18, 19, 27, 29, 31, 33, 34, 36, 37, 39, 40, 41, 43

2 Education – 5, 35

4 Agriculture/natural resources – 10, 20, 22, 25

3 Culture – 15, 30, 38

5 Work experience/hands-on activities – 9, 13, 16, 23, 42

3 Schedule/graduate on time – 2, 24, 28

2 Recommended by friends or presentations – 26, 31

1 Fun – 21

Motivation 2

13 Travel/international experience – 2, 9, 10, 12, 13, 17, 19, 20, 23, 24, 26, 28, 42

11 Education – 3, 4, 15, 17, 18, 21, 30, 33, 36, 37, 41

3 Agriculture/natural resources – 8, 30, 33

5 Culture – 2, 5, 11, 16, 34

7 Work experience/hands-on activities – 7, 14, 27, 32, 35, 38, 43

1 Schedule/graduate on time – 25

1 Recommended by friends or presentations – 6

Fun –

2 Friends – 39, 40

1 Personal growth – 1

1 Global perspective – 22

Cost

Motivation 3

8 Travel/international experience – 6, 8, 11, 19, 20, 21, 27, 38

12 Education – 3, 9, 12, 14, 18, 22, 24, 29, 35, 36, 37, 43

2 Agriculture/natural resources – 13, 19

5 Culture – 1, 16, 20, 30, 40

7 Work experience/hands-on activities – 10, 26, 31, 34, 39, 42, 43

1 Schedule/graduate on time – 32

Recommended by friends or presentations –

2 Fun – 2, 4

2 Friends – 17, 23

3 Personal growth – 5, 7, 15

1 Global perspective – 33

2 Cost – 25, 41

Barrier 1

26 Cost – 1, 2, 4, 5, 13, 14, 17, 18, 19, 20, 21, 22, 25, 26, 27, 28, 31, 32, 33, 34, 35, 39, 40, 42, 43

2 Time away from home – 3, 12

2 Never traveled before – 6, 8

3 Language – 7, 10, 16

1 Class difficulty – 15

2 Not knowing anyone in program – 11, 24

1 Cultural differences – 9

1 No ag background – 23

1 Time off work/schedule – 29

2 Safety, health (flying) – 37, 38

2 Preparation (vaccines, passport, packing) – 35, 41

Uncertainty-

Barrier 2

12 Cost – 3, 6, 7, 8, 12, 17, 18, 26, 27, 29, 36, 41

3 Time away from home – 1, 9, 31

Never traveled before –

3 Language – 11, 15, 24

Class difficulty –

1 Not knowing anyone in program – 13

3 Cultural differences – 10, 16, 23

No ag background –

7 Time off work/schedule – 5, 20, 23, 37, 39, 40, 43

4 Safety, health (flying) – 19, 28, 35, 38

2 Preparation (vaccines, passport, packing) – 14, 22

1 Uncertainty- 3

Barrier 3

4 Cost – 16, 18, 36, 41

3 Time away from home – 1, 33, 37

1 Never traveled before – 13

3 Language – 5, 8, 23

2 Class difficulty – 4, 19

4 Not knowing anyone in program – 6, 9, 10, 12

Cultural differences –

1 No ag background – 11

6 Time off work/schedule –7, 14, 16, 17, 26, 31

2 Safety, health (flying) – 40, 43

3 Preparation (vaccines, passport, packing) –20, 22, 28

Uncertainty-

VITA

Kasey Lynn Miller earned her Bachelor of Science, Cum Laude, in agricultural communications and journalism from Texas A&M University in May 2010. She was active in Student Bonfire, Texas A&M Women's Chorus, Agricultural Communicators of Tomorrow, Neeley Hall Council, and private voice lessons. She completed internships with the National Association of State Departments of Agriculture in Washington, DC, and the Houston Livestock Show and Rodeo in Houston, Texas.

Her interest in international agriculture was sparked from numerous international trips. She participated in the Natural Resources study abroad trip in Fiji and Australia in 2008. She performed with the Texas A&M Women's Chorus in Hungary, Slovakia, and the Czech Republic in 2009. She visited Canada on a personal trip in 2010. She took another study abroad trip during graduate school to Costa Rica to study methods of technological change in January 2011, which opened the opportunity to serve as photographer and videographer on a faculty USDA Challenge Grant trip to Trinidad and Tobago in March. She started her graduate work in 2010 and received her Master of Science degree in December 2011. She also completed the International Agriculture and Resource Management Graduate Certificate Program through the Norman Borlaug Institute for International Agriculture. While completing her graduate work, she was active in the Agricultural Leadership, Education, and Communications Graduate Student Society. She can be reached through her department at: Department of Agriculture Leadership, Education, and Communications, Texas A&M University, MS 2116, College Station, Texas, 77843–2116.