

HEALTH NETWORKS OF FOREIGN STUDENTS

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NOMENCLATURE

AE Agricultural Economics Department

IS School of International Studies

ISS International Student Services

OSU Oklahoma State University

UHS University Health Services

CHAPTER I

INTRODUCTION

In 1930 there were less than 10,000 international students enrolled in higher education institutions in the United States (Torrey, Van Rheen, and Katchadourian 1970). In 1981 there were 326, 299 (Anonymous 1983), in 2000 there were 465,002 (Serafini and Chalungsooth 2002), and in 2005 there were 565, 039 (Open Doors 2005) international students studying in institutions of higher education in the United States. In Oklahoma there were 8,454 international students (Open Doors 2005). In the fall semester of 2005, 1,766 international students enrolled at Oklahoma State University (2005 Student Profile 2006). The international student population represents seven and one half percent (7.5%) of the students at Oklahoma State University.

International students have many needs that are unique to their population, including adjustments to a new culture, language acquisition, and the development of new social networks (Lee, Abd-Ella, and Burks 1981). These factors combined with the stress of academia can cause the newly arrived international student to be more vulnerable medically than American students (Huang 1977). There has been little research conducted on the health needs of international students and has generally focused on the utilization of university health services (Anderson and Newman 1967;

LeMay and Gibson 1975; Liao 1978; Rice 1974; Waishwell 1984) and mental health services (Huang 1977; Kuo and Tsai 1986; Mishra, Crist, and Burant 2003; Sandu 1994). One study addressing foreign student health care found that the primary source of information regarding health care was a friend from the same ethnic group. The author recommended further study in the identification of the network system of international students and how information is shared in that system is necessary (Waishwell 1984).

It is the goal of this research study to examine how the social networks of international students at Oklahoma State University influence their healthcare decision making processes with the intent of generating hypotheses for future research endeavors. Specifically the primary aim was to inductively examine how the network formation of a select group of international graduate students affects their decision-making behavior regarding healthcare. Acculturation of foreign students and general utilization of health facilities in Oklahoma were primarily examined using focus groups and supplemented with survey data. The findings from this study will be presented in this thesis. A general overview of the relevant extant literature is presented, followed by the methodology employed during the completion of this project. Next, the results and general conclusion will be discussed. Finally, recommendations will be offered for further research.

CHAPTER II

REVIEW OF LITERATURE

The purpose of this chapter is to briefly assess the state of the literature relevant to this study. This discussion will include: acculturation of foreign students, general health of foreign students, utilization of health services, and sources of health information.

The literature chosen contributes to the understanding of the development of social networks of international students at Oklahoma State University. Literature describing the acculturation of foreign students is necessary because foreign students are at higher risks of developing medical illnesses (Huang 1977) as a result of stress during this transition period (Misra et al 2003). The professional and friend networks that foreign students develop are the main resource that foreign students use to help with coping (Torrey et al 1970). Since networks are the main resource used by foreign students for coping with their new environment, examining the influence of these networks on foreign students' healthcare decisions is a necessity. The literature concerning general health problems of foreign students and their utilization of health facilities are presented here. This literature along with the few studies on sources of health care information are essential for full understanding of the flow of data in these networks.

General Health of Foreign Students

The health of international students is poorly represented in the extant literature. To make matters worse, the studies conducted are often contradictory (i.e. Maha 1967, Rice 1974, and Miller and Harwell 1983). The majority of research conducted concerns the mental health of foreign students and the usage rates of health services. No studies were found on foreign students' social networks in regard to their health care decision making behaviors.

Foreign students are at higher risks of developing medical illnesses than most Americans (Huang 1977). These illnesses can come in the form of mental illness caused by depression, anxiety, and/or stress during the acculturation process (Misra et al 2003; Ward 1962). Mental health services are often underutilized as a result of students relying on social networks to help with coping (Torrey et al 1970). Many foreign students will arrive with preexisting conditions such as parasites and other tropical afflictions (Serafini and Chalungsooth 2004). They also are more susceptible to general illnesses such as colds, headaches, and fatigue (Miller and Harwell 1983).

Utilization of Health Services

Maha (1967) found that foreign student use health care facilities more (3.7 times per year) than their domestic counterparts (2.7 times per year), and Rice (1974) states, on average, international students utilize healthcare facilities more than domestic students with two more visits per year. Maha (1967) poses two reasons for increased utilization: sympathetic attention on part of the international student and fears of serious health

problems. However, Rice (1974) shows twenty-two percent (22%) of foreign students using healthcare facilities were frequent users and account for the higher visitation rates. Despite increased average usage by foreign students, Miller and Harwell (1983) find many international students underutilize university health services and a surprising number did not know where to go to receive medical treatment. A large proportion of international students rely on self-treatment for their medical care (Arab-Yadzi 1981).

McKinlay (1972) examined the literature on general utilization of healthcare and found the factors that affect utilization can be broadly divided into six categories: economic, socio-demographic, geographic, socio-psychological, socio-cultural, and organizational. Cost is the major factor in the economic approach while variable such as gender are paramount in the socio-demographic category (Roghmann, Hengst, and Zastowny 1979; Anderson and Newman 1967; Cleary, Mechanic, and Greenley 1982). The geographic approach argues that proximity to the clinic is of prime importance whereas the social-psychological approach stresses mental factors such as maturity, and individual perceptions of healthcare (Rosenstock 1966; Mechanic 1979; Suchman 1965). The socio-cultural approach demonstrates that cultural factors such as norms, beliefs, values, and lifestyle influence the use of health services (Suchman 1965; Zola 1966; Friedson 1961; McKinlay 1972) whilst the organizational category states that utilization is determined by the structure of the health care system in the United States (Ross and Duff 1982; McKinley 1972).

International students initially experience difficulty seeing a doctor due to the inability to properly describe symptoms in English. Other difficulties can include cultural insensitivity on part of the doctor, differing expectations, and lack of

understanding the American medical system (Waishwell 1984). According to Stafford, Marion, and Salter (1980) almost forty percent (40%) of international students report that access to medical services contributes to adjustment problems.

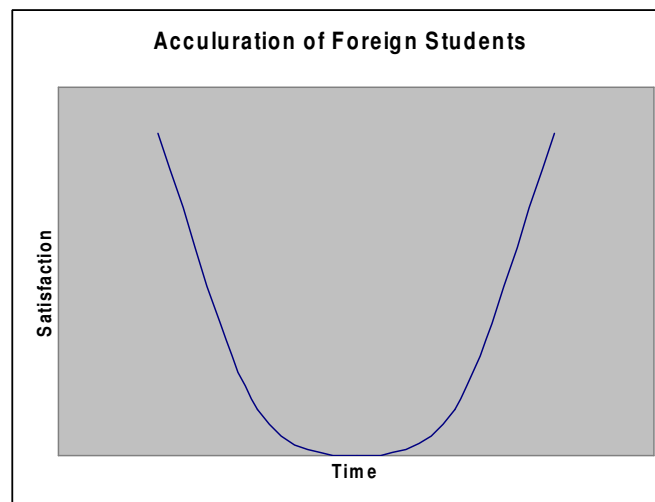
Acculturation of Foreign Students

The adjustment of foreign students to the United States is a difficult process for students must adjust both academically and socially (Hull 1978). One of the greatest problems identified is loneliness (Hull 1978; Lee, Abd-Ella, and Burks 1981). Hendricks and Skinner (1975) found that international students develop a coping strategy that uses other international students; they develop networks that include other international students. Recent research has also shown that foreign students will develop their friendship networks first with foreign students from their own culture, then other foreign students and finally American students (Kashima and Loh 2006). Hendricks and Skinner (1975) maintain that it is rare for a foreign student to study in the United States without knowing anyone already here. Many times students choose schools based upon a network of friends or acquaintances at that school. Other students use brokers that make arrangements for them and introduce them to contacts at the school of choice providing a starting point for a social network. The more ties to international students at the university and the more local ties an international student has increase their chances for positive adjustment (Kashima and Loh 2006). Language difficulties and ignorance of American customs are often barriers to significant levels of interaction with American students (Klein, Miller, and Alexander 1974). Also identified as a barrier is the development of dense social networks consisting mainly of students from their own

cultural background, which inhibits the ability to improve language and culture acquisition (Maundeni 2001).

The methodical study of the acculturation process of foreign students resulted in a model of acculturation defined by a U-shaped curve. This model assumes that every person has established patterns of social behavior in their home country. After finding that these patterns may not be appropriate and acceptable in the United States disorientation is felt until new patterns can be learned and adopted. This process of adjustment also follows predictable patterns (Faust 1981; Lundstedt 1963; Lysgard 1955). Students are excited, happy, and satisfied upon initial arrival in the new environment. The student then enters a period of crisis when homesickness, academic stress, loneliness, and general difficulties in coping occur. Satisfaction increases as the student copes with their new environment (Faust 1981; Lundstedt 1963; Lysgard 1955).

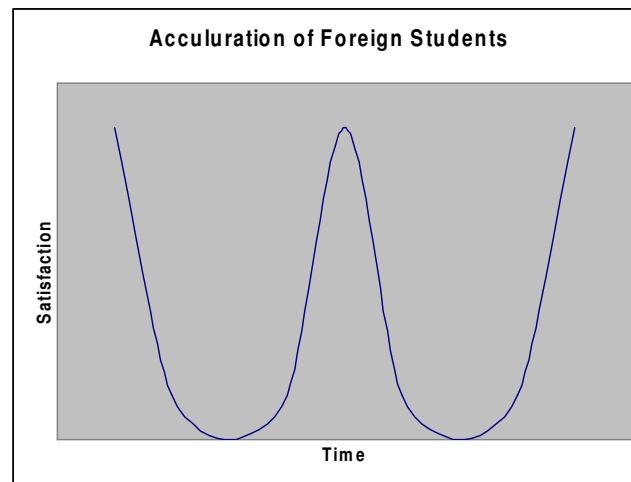
FIGURE 1



Gullahorn & Gullahorn (1963) propose that this theory holds true but it is incomplete. Instead, they describe this process as a W-shaped curve. Their theory states

that after the student copes and has adjusted to their new environment, upon returning home to their countries they go through the same process again—that is a feeling of euphoria is felt immediately upon entry, then depression, then satisfaction after coping mechanisms have occurred.

FIGURE 2



Culture Shock

The study of the acculturation process of foreign students also resulted in a model of acculturation in which cultural adjustments occur in stages (Oberg 1954, 1960; Smalley 1963). The most popular is Oberg's (1960) study of "culture shock." This theory is somewhat similar to the W-shaped curve model and was used initially to explain adjustment in individuals traveling abroad. It was later applied to foreign students. Adjustment occurs in six stages: 1) Incubation Period where traveler is happy, 2) Period of crisis when traveler experiences difficulties and become critical of new area, 3) Period

of Recovery in which understanding of new environment is gained, 4) Period of Acceptance in which the new environment is accepted and enjoyment begins and 5) Period of Culture Shock that occurs upon return home in which the previous stages are felt again but to a lesser degree (Oberg 1960).

The process of acculturation is an individual process and varies greatly. Variables affecting acculturation can include age, gender, marital status, English language proficiency, academic level, length of stay, and nationality (Lee et al 1981; Spaulding & Flack 1976; Deutsch & Wan 1963; Stafford et al 1980; Hull 1978). The reasons for acculturation difficulties are also individual. These causes can include differences in university structure including different emphases in cognitive skills, teaching methods, expectations, and classroom behavior (Marville 1981; Hodgman 1968; Klein et al 1974; Donahue 1970). Other personal adjustment issues can include changes in social status of the student (Zunin 1967) pressure to succeed (Lee et al 1981), financial difficulties (Hendricks & Skinner 1975), homesickness (Akka 1967), medical concerns (Hull 1978; Miller and Harwell 1983), and development of new social networks (Matthews and Quattrochi 1981).

Health Information

There have been few studies conducted on the source of information utilized by international students when making healthcare decisions. The few that have been conducted have found that many students depend on the advice of friends or relations (Freidson 1961) especially from the same ethnic group (Waishwell 1984). According to Granovetter (1973) the strength of ties within a social network determines how well

information can be communicated to members of the network. Networks with weak ties form bridges and conduits in the network and between networks that serve to increase the flow of communication. The more tightly integrated the network the greater likelihood that information is passed between students. DiMaggio and Louch (1998) have found that social networks are often used when gathering information concerning a high-risk purchase. This information gathering from within the social network reduces the feeling of potential risk when selecting high-risk services such as health care.

CHAPTER III

METHODOLOGY

The purpose of this chapter is to describe the procedures and processes that were employed in the completion of this study. This discussion will include: population, sample, method, research questions, hypotheses, variables, instrumentation, data collection, and data analysis.

Study Relevance and General Overview of Research Questions

The collection of data proceeded through a three-tier process. First, three focus groups were conducted. Two focus groups were conducted from International Studies and one from Agricultural Economics. Each focus group had two to four participants. Topics addressed during these focus groups included open-ended inquiries into adjustment processes, where healthcare advice is obtained, and health decision-making processes. Questions were also asked concerning the academic programs from the students' respective departments, ethnic communities, their social network connections, and how/why they chose to attend Oklahoma State University.

From the results of these focus groups, a questionnaire was developed and distributed to each student in both programs. Finally, personal interviews were conducted

with the department secretaries and/or heads of each department addressing issues related to departmental acculturation, integration, and contact prior to arrival in the United States of their students. Copies of the interview schedule, focus group schedule, and written questionnaire are in Appendices C, D, and E respectively.

Population

The population chosen for this study consisted of all graduate level international students enrolled for the spring and fall 2007 semesters at Oklahoma State University. As of fall 2005 there were 1, 766 international students at Oklahoma State University. Of these 457 were from India (25.88%), 192 from Japan (10.87%), 176 from China (9.97%), and 97 from South Korea (5.49%). These four countries make up over half the international student population. In all there are students from 119 countries pursuing degrees at OSU with thirty-eight and one half percent (38.5%) undergraduate and sixty-one and one half percent (61.5%) graduate students (2005 Student Profile 2006).

Selection of Subjects

Sample

The data for this research were obtained from a purposive sample of foreign graduate students at Oklahoma State University registered in the spring and fall 2007. For this study two groups of international students from two graduate programs at Oklahoma State University were chosen: international studies and agricultural

economics. These two departments were selected for case study due to the knowledge that they can provide (Stake 1995). The agricultural economics department has international students in its program that are less diverse and integrated than the students in the international studies program. By comparing these opposites more information on networks can be gained. These two departments were also selected due to their demographic statistics: both programs have a diverse set of international graduate students that closely resemble the international student population at both OSU and in the state of Oklahoma. The international studies department currently has students from 6 countries enrolled and the agricultural economics department currently has students from ten countries enrolled. All foreign students in each program were sampled. The written survey was administered to 23 foreign graduate students in the international studies department and 29 foreign students in the agricultural economics department at Oklahoma State University during the Spring and Fall of 2007.

Recruitment Procedures

Every student in both programs was sent an e-mail requesting participation in the study. Focus group solicitation e-mails were sent in late February for the sessions scheduled in early March. The e-mails contained an introductory cover letter as approved by the Institutional Review Board. A copy of this letter is included in Appendix B. In addition, paper copies were sent through campus mail to each international student enrolled in the Agricultural Economics graduate program. Copies of the survey were also placed in each student's mailbox located at the main department office. The International Studies program does not have offices or mailboxes for all their students. The

recruitment of these students involved presenting the research project in a graduate seminar attended by most of the students in the program. Interested students were scheduled to participate in a focus group. Reminder e-mails were sent after one week and confirmation e-mails were sent two days prior to each focus group. Informed consent forms were signed at the beginning of the focus group session. Requests for participation in the written surveys were conducted in the same manner. Written surveys were distributed in both late April 2007 and late August 2007.

Personal interviews were also conducted with one representative from each department's staff and/or administration. The request to participate was made in person for the representative from each academic department. Interviews were scheduled at a time and place that was convenient for each representative. Informed consent forms were completed before each interview.

Research Questions and Hypotheses

The purpose of this research was an exploratory study with the intent of the creation of hypotheses. The primary aim was to inductively examine how the networks that international graduate students form affect the decision-making behavior regarding healthcare. In order to better understand this process acculturation of foreign students and general utilization of health facilities in Oklahoma were examined. The general topics of research/research questions that were explored include:

- 1) What are the acculturation processes of international students to Oklahoma State University?

- 2) How have OSU, International Student Services (ISS), and each academic department respectively aided or hindered the acculturation process?
- 3) How often do foreign graduate students utilize health care facilities?
- 4) What sources of information are being used to obtain information about local healthcare services?
- 5) How do networks influence health care decision-making processes among foreign students?

Variables

This section outlines the variables explored during the completion of this study.

Demographics

The demographic variables included in this study were nationality, gender, age, time in Oklahoma, marital status, and English proficiency. Nationality is defined as the predominant ethnic identity and was asked as an open-ended question of the respondent. Gender was defined as either male or female. Marital status was defined as married, unmarried, or other. English proficiency was defined as poor, fair, good, or very good.

Descriptions were provided to define the differences:

Very Good: You speak fluently with no errors. You have a command of grammar, idiom, and vocabulary can hardly be distinguished from that of a native.

Good: You speak with little conscious effort, though you make occasional errors in grammar, vocabulary, and idioms.

Fair: You speak understandably, even though you make noticeable mistakes. Conscious effort to construct complex sentences is obvious.

Poor: You speak only with considerable conscious effort, even simple constructions. Handles short, simple sentences understandably, though not always accurate.

Potential Health Facilities/Services

The university health services (UHS), university counseling services, dentist, chiropractor, obstetrician / gynecologist, general practitioner, hospital emergency room, Payne County health department, ophthalmologist / optometrist, internal medicine, outpatient surgery center, and counseling are the options examined as possible health care options used by students in Oklahoma. These options listed included clinic based health care facilities as well as doctors in private practice. The specific specialization of the doctors in private practice is listed in place of a more general private practice listing for the purpose of aiding comparison with existing studies.

Sources of Information

Friend of the same nationality, friend who is another foreign student, friend who is American, spouse, parents at home, relatives at home, member of your ethnic community, member of an international organization you are a member of, and someone from your graduate department were options presented as resources for healthcare information. Also provided were non-human sources such as newspapers, magazine, brochures, and television as possible sources. These options were derived from local resource options and extant literature.

Acculturation Challenges

The variables examined as possible adjustment challenges for foreign students included homesickness, obtaining housing, social relationships with opposite sex, English language, finances, developing friendships, everyday problem solving, maintaining cultural customs, attaining medical services, unfriendliness of people in community, finding good food, academic coursework, adjustment to present housing, maintaining religious customs, and relationship to spouse.

Health Service Selection Criteria

Treated with Respect/Attitude of Caregiver, exam thoroughness, location, availability, affordability, information available, doctor speaks your language, quickness of service, types of service offered, acceptability of treatment, satisfaction with diagnosis, and recommended by someone are the characteristics of health care services studied. These were chosen from comments given during the focus groups as well as findings from previous studies.

Data Collection and Recording of Data

The focus groups and interviews were recorded on a digital audio recorder. The audio files from the focus group and/or interview was kept in a locked filing cabinet and digital files will be password protected until transcribed. After transcription, the tapes of the interviews were erased.

The written surveys were sent via campus mail to the researcher upon completion. They were kept in a locked filing cabinet until their destruction following the completion

of the study. Each survey response was recorded into an SPSS database to aid in analysis. The data file was password protected and all entries were coded to protect the identity of the individuals mentioned in each survey.

Research Instruments

Each interview lasted approximately one half hour and was conducted in the office of each respondent. The questions were open-ended regarding the respondents' knowledge and/or concerns related to the following:

- Programs that help students with adjustment to life in the United States and Oklahoma State University
- Recruitment practices of your department.
- General information about programs and organizations affiliated with your department.

A copy of the interview schedule is provided in appendix C.

The focus groups on average lasted forty-five minutes and were conducted in graduate seminar rooms located in each respective department. The questions were open-ended regarding the respondents' knowledge and/or concerns related to the following:

- Adjustment to life in the United States and Oklahoma State University.
- Use of health care facilities offered by Oklahoma State University and the community of Stillwater, OK.
- Sources of information for health care.

- Involvement in various organizations and how those organizations have affected your health care choices.
- Reasons behind the decision to attend Oklahoma State University.

A copy of the focus group questions is provided in appendix D.

The written questionnaire was developed from extant literature and the results of the three focus groups. It contains both forced choice and open-ended questions. Two faculty members at Oklahoma State University evaluated the questionnaire in terms of appropriateness and validity. In addition, the questionnaire was pre-tested by several graduate students at Oklahoma State University. The questionnaire included inquiries regarding the following:

- Adjustment challenges to life in the United States and Oklahoma State University.
- Helpfulness of orientation programs sponsored by international student services and each individual academic department.
- Use of health care facilities offered by Oklahoma State University and the community of Stillwater, OK.
- Sources of information for health care.
- Involvement in various organizations and how those organizations have affected your health care choices.

A copy of the written questionnaire is provided in appendix E.

Data Analysis

The data was analyzed using several methods. The responses from all three focus groups were analyzed manually using a content analysis approach. They were then coded thematically and compared. A descriptive summary of the focus group includes basic demographics of the attendees, common themes across focus groups, and differences in content of the discussions.

The information gathered from the interviews were collected as background data in order to compare organizational processes affecting the acculturation and integration of international students into Oklahoma State University and each academic department. They were analyzed using content analysis focusing on divergent themes relating to acculturation.

The written questionnaires were analyzed using the statistical package SPSS. The descriptive analyses included: percentage responses as a whole and by academic department to demographic and categorical variables. Descriptive analysis was the sole focus of the analysis due to the hypothesis generation intent of the study and a low response rate of the written questionnaire. The results were then compared to extant studies for the purpose of theory and hypothesis generation.

CHAPTER IV

FINDINGS

The purpose of this chapter is to describe in detail the results of this study. The primary aim was to examine how the networks that international graduate students form affect their decision-making behavior regarding healthcare. In order to better understand this process, acculturation of foreign students and general utilization of health facilities in Oklahoma were examined. The goal was to explore these areas with intent of hypothesis development. The topics of research that will be presented include: response rate and data collection challenges, characteristics of the respondents, description of the academic departments, acculturation of foreign students, sources of information, health service utilization, and health insurance.

Response Rate and Data Collection Challenges

The written survey was administered to 52 graduate students in the international studies and agricultural economics departments at Oklahoma State University during the Spring and Fall of 2007. There were 23 enrolled foreign students in international studies and 29 in agricultural economics at this time. The response rates for the written surveys were low. Only three international studies students (13.04%) and five students from agricultural economics (17.2%) completed and returned the written questionnaire.

The overall response rate was 15.38 %.

Numerous difficulties were encountered in the recruitment of participants for this study as evidenced by the low overall response rate. The initial set of surveys was distributed with only two weeks left in the spring 2007 semester. A total of three surveys were returned even after multiple attempts at contact. Surveys were sent out again at the beginning of the second week of the Fall 2007 semester. This time four surveys were returned after multiple attempts to recruit. A third and final set of surveys were mailed in the tenth week of classes in the Fall 2007 semester. Requests were made in person and through e-mail for participation. The assistance of student group officers and professors in each department were enlisted to ask for participants. After the third round of survey distribution, no further attempts were made to recruit and/or contact potential subjects in order to stay within the limits of this research projects' institutional review board approval. It is theorized that the low response rate is a result of the surveys distribution occurring too late or too early in the semester. Other possibilities are the requirement of the Institutional review board of informed consent forms for the surveys or general apprehension of filling out surveys concerning health care (too personal). Confusion on whether they needed to fill out the survey was brought up as well. One student remarked, "I went to your focus group. I already told you everything. I didn't think I needed to fill out one of the surveys too."

Many of these same challenges were experienced in the recruitment of participants for the focus groups, especially in the agricultural economics department. In the international studies department, the majority of participants were recruited

immediately prior to the beginning of the session. Refreshments were served at the focus group sessions, possibly the reason for the increased participation.

Characteristics of Respondents

The gender ratio was skewed in both departments and overall. The response from agricultural economics was five (100%) male and from international studies was one (33.3%) male and two (66.6%) females. The respondents ranged in age from 23-44 years, with an average of 31.8 years. The respondents included three (37.5%) married students and five (62.5%) unmarried students. Two (25%) students lived on-campus, while six (75%) resided off-campus. The stated religion of respondents was Christian (37.5%), Buddhist (12.5%), Hindu (12.5%), and None (37.5%). Table I presents the general demographics of gender, age, marital status, residence, and religion by department.

FIGURE 3

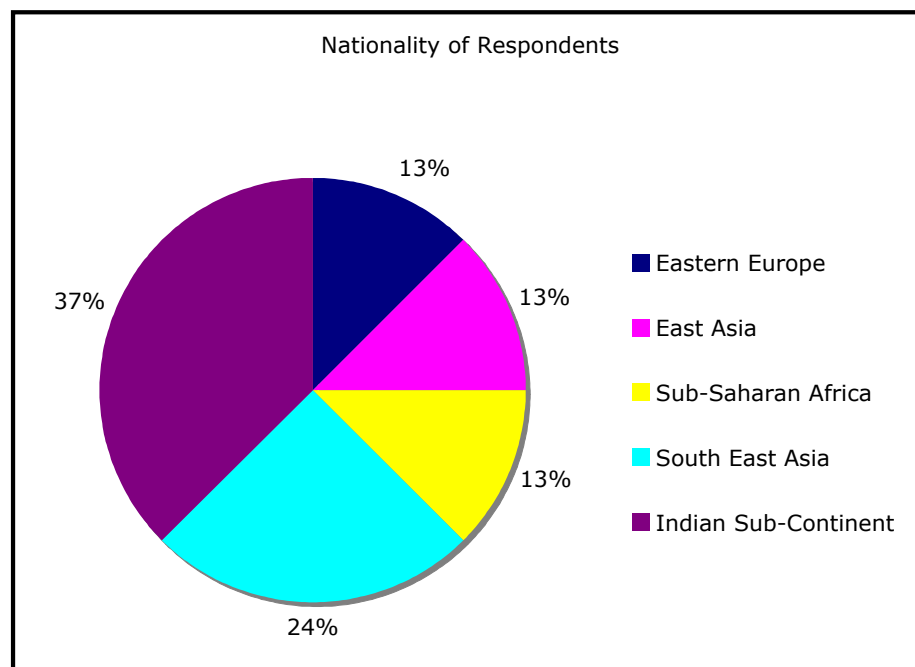


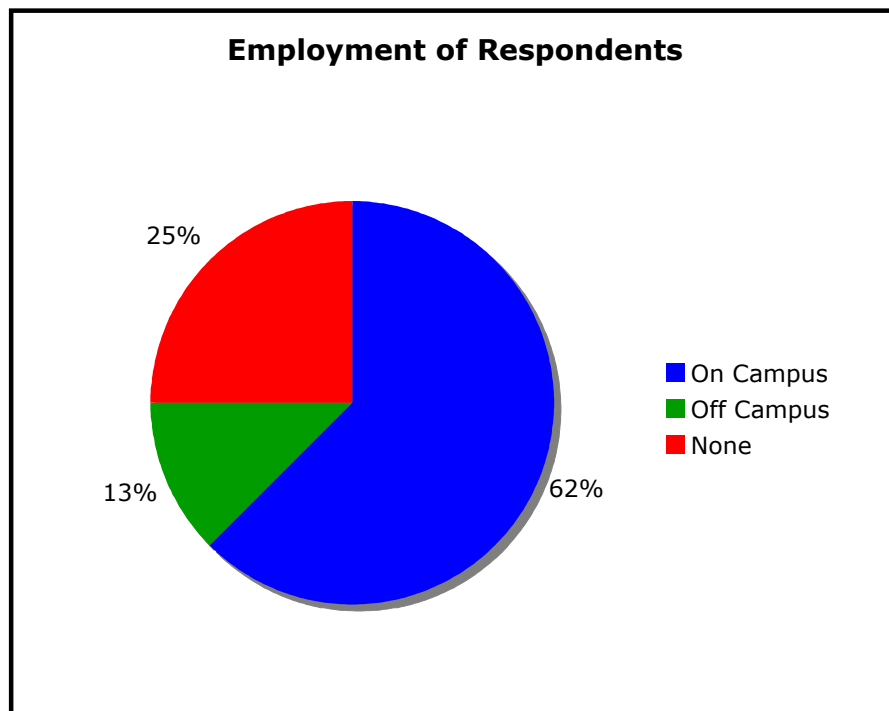
TABLE I

General Demographic Comparison by Academic Department						
Demographic Characteristics	Agric. Econ.		Intl. Studies		Total	
	%	N	%	N	%	N
<i>Gender</i>						
Male	100.0	5	33.0	1	75.0	6
Female	0.0	0	66.0	2	25.0	2
<i>Age</i>						
18-23	0.0	0	33.3	1	12.5	1
24-29	20.0	1	33.3	1	25.0	2
30-35	80.0	4	0.0	0	50.0	4
36+	0.0	0	33.3	1	12.5	1
<i>Marital Status</i>						
Married/Partner	40.0	2	33.3	1	37.5	3
Never Married	60.0	3	66.6	2	62.5	5
<i>Residence</i>						
On Campus	20.0	1	33.3	1	25.0	2
Off Campus	80.0	4	66.6	2	75.0	6
<i>Religion</i>						
Christian	20.0	1	66.6	2	37.5	3
Hindu	20.0	1	0.0	0	12.5	1
Buddist	20.0	1	0.0	0	12.5	1
None	40.0	2	33.3	1	37.5	3

The home countries of the respondents closely resemble the international student population on campus. There were three (37%) students from the Indian Subcontinent (India and Nepal), two (24%) from South East Asia (Malaysia and Thailand), one (13%) from East Asia (South Korea), one (13%) from Sub-Saharan Africa (Nigeria), and one (13%) from Eastern Europe (Bulgaria). See figure 3. Generally on the OSU campus the international students consists of the following percents: 27.86% from the Indian Subcontinent (India and Nepal), 9.85% from South East Asia (Malaysia, Indonesia, and Thailand), 17.95% from East Asia (South Korea, Vietnam and Japan), 9.97% from China, 4.26% from Sub-Saharan Africa (Nigeria), and less than 3% from the other regions of the world.

Most (five) of the respondents were employed on-campus (62%), one (13%) off-campus, and two (25%) were not employed. See figure 4.

FIGURE 4



The length of time that the respondents have lived in Oklahoma ranged from five months to seven years. They were equally divided in each of the following time categories: less than one year, one to two years, three to five years, and six or more years. See table II for the length of time in Oklahoma by academic department.

TABLE II

Length of Time in Oklahoma						
Facility	Ag. Econ.		Intl. Stud.		Total	
	%	N	%	N	%	N
< 1 Year	40.0	2	0.0	0	25.0	2
1-2 Years	40.0	2	0.0	0	25.0	2
3-5 Years	0.0	0	66.6	2	25.0	2
6+ Years	20.0	1	33.3	1	25.0	2

Description of Academic Departments

The two departments that were surveyed were international studies and agricultural economics. For international studies the graduate advisor was interviewed and a faculty member was interviewed for agricultural economics with the goal of gathering information about department recruitment and orientation procedures for graduate students. A copy of the interview schedule is provided in appendix B. This information provides valuable insights into the acculturation processes of international students to OSU (research question one) and how the department influences acculturation

(research question two).

International Studies

Each department took a unique approach. The school of international studies (IS) recruits their students through a network approach. According to a student in one of the focus groups, "I decided to attend OSU because my sister went here. She graduated from another program, but she had friends in international studies who highly recommended the program. She was able to give me names of some of her friend's here so I wouldn't feel so alone." Many of the current international students in the program applied because they knew someone in the program and the program was recommended. A high number of students also apply due to information found on the program website. At the time of the interview the program had 23 graduate students from 15 different countries.

Prior to his or her arrival in the United States the graduate advisor contacts each individual, often by either e-mail or telephone. The topics discussed are often related to bureaucratic issues for admission (to both OSU, IS, and to the USA). Not uncommonly housing is also discussed. Most students are picked up at the airport by a representative from the department and brought to Stillwater (a 65 mile trip). The department offers assistance in the location of housing and facilitates the completion of all paperwork for the university such as enrollment.

The school of international studies offers both formal and informal orientation programs for students. The formal orientation program begins with a welcome luncheon held the first week of classes and is attended by all students in the program. New students are introduced to all current students in the program. Also required is an

orientation session in which the academic/bureaucratic policies and explained in detail as well as basic information about living in Stillwater are addressed. It is not uncommon for the graduate advisor to take new students to Wal-Mart and to help provide other needed items. For example, there was an instance in which one of the foreign students' had an apartment but did not have a bed to sleep on because she could not afford it at the beginning of the semester. The graduate advisor anonymously provided an air mattress and other basic household goods to the student. According to the graduate advisor, "to this day, this particular student will tell me that God had taken pity on her and provided her with these items when she needed them the most. I always just smile back and agree with her. I was just glad to be able to help her out, and I know that she was grateful."

This department has many informal programs that help international students adjust. A student group associated with the departments, Student Association for Global Affairs (SAGA), of which virtually every student in the department is a member. They are an extremely active group and have weekly events. The officers follow up regularly with all students. They host lecture series, intramural sports teams, cultural dinners, and cultural field trips around the region to list a few of their activities.

Agricultural Economics

The agricultural economics department is much different. There are 29 international students from ten countries. Students are not actively recruited. A professor in the department states, "students are contacted only by letter and e-mail for notifications of admissions, due dates, and visa. We don't do anything more than that. International Student Services takes care of the rest for our foreign students." The first contact with

students is on their arrival to Stillwater and only for enrollment purposes. Little to no assistance is offered in the areas of housing and settling in. They refer each international student to the respective student group (i.e. Japanese Student Association, Korean Student Association, etc.). The orientation is formal and takes place once per week focusing on introducing the new students to the faculty members and their research interests. There is a student group for the department that facilitates social events, but it is not as active as SAGA in international studies and does not draw a high percentage of participation from the international students. There are no formal follow up programs. “The only follow-up that we have with students is if they don’t pass their classes or are performing poorly in their assistantship if they have one. Otherwise than that, we assume that they are doing ok” is one of the comments from a professor in the program.

The students in both departments rate the orientation program similarly: one third (33.3%) find it useful, one third (33.3%) find it unhelpful, and one third (33.3%) are somewhere in-between.

Acculturation of Foreign Students

The first two research questions deal with the acculturation of foreign students at Oklahoma State University. The participants of the focus groups as well as the written survey answer the first research question, what are the acculturation processes of international students. A common theme from the focus group was that many of international students in the international studies program arrived knowing at least one person here. Some were friends, and some were friend of friends. This was not the experience of the two students from agricultural economics. One stated, “I did not know

anyone here when I arrived. It was very hard. I felt so alone for the first month.”

Students of both groups did eventually make friends. The students from international studies tended to have more friends in their department than agricultural economics. One student comments, “if not for the events that the school of international studies held, I would have never had any fun here at school. I would have sat in my apartment every night and weekend. I am really happy that they [SAGA] have all those events.” Half of the agricultural economics students participated in the programs student organization, while all participated in the international studies student group.

The survey responses on networks indicated that of the students who lived with roommates, these roommates were either met through the International Student Services (ISS) orientation (16.6%) or are someone that they knew from their home country (16.6%). One student lived with their parents (16.6 %) and two were married and lived with their spouses (33.3%). The international students’ closest friends in Oklahoma tend to be students at OSU (71.4%) as well. Students either had 100% as the amount of their friends that attend university or none at all. Sixty percent of these friends were international students from the same nationality as the respondent, twenty percent were other international students, and twenty percent were American students.

The international student experiences many challenges upon their arrival in a new country. The frequencies of the experience of these challenges are listed in appendix F. The most common of the challenges experienced are financial issues (24%), adjustment to present housing (25%), developing friendships (37.5%), and finding good food (37.5%) top the list. Five (62.5%) of the respondents list attaining medical care as a challenge. According to a student in agricultural economics, “the most difficult thing for

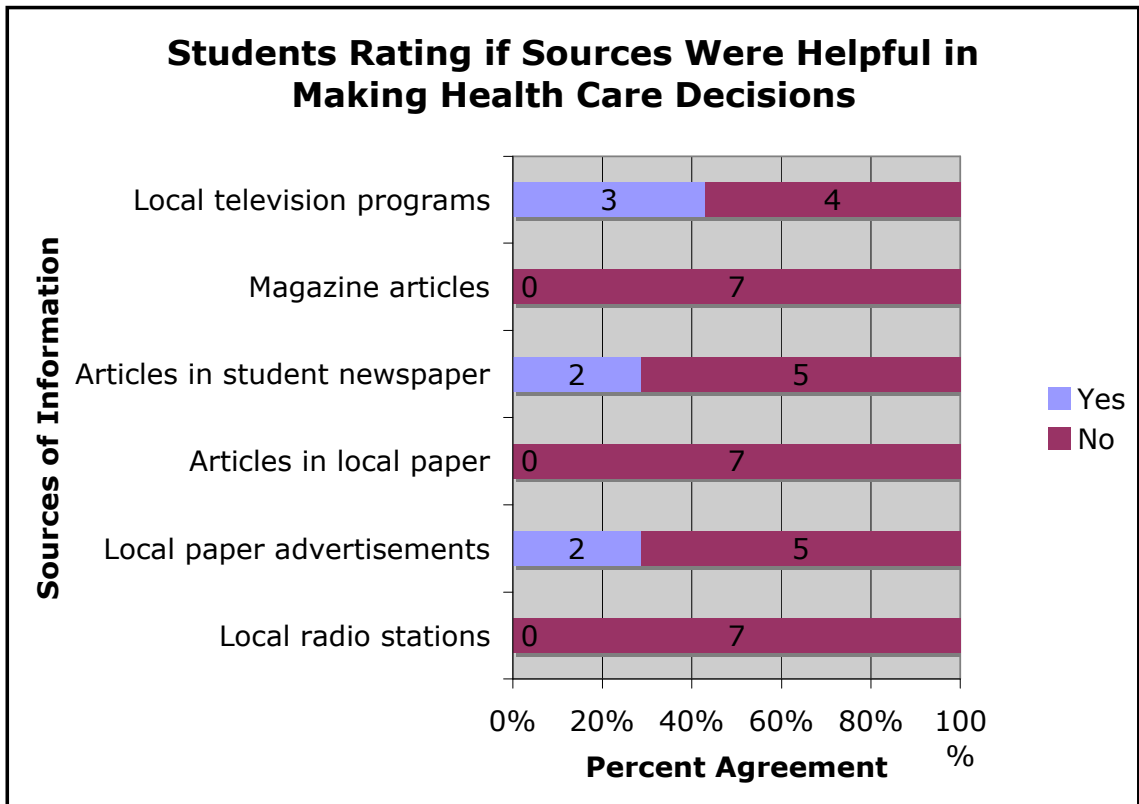
me when I first arrived was just making it to Stillwater. There is no direct bus from the airport in Oklahoma City and a cab ride from that far would have cost a fortune. I had to take a cab to a greyhound bus station then wait 12 hours for the next bus to Stillwater. It was really hard.” Relationship with spouse is the only challenge listed by all respondents as never and issue and/or not appropriate. There was not a significant difference between the two groups in frequencies of challenges experienced.

The international students rated the campus orientation program conducted by the International student services similarly: one third (33.3%) find it useful, one third (33.3%) find it unhelpful, and one third (33.3%) are somewhere in-between. This was identical to the ratings of the orientation programs conducted at the departmental level. The most useful information to seventy (70%) of the students was information on how to keep their legal student status.

Sources of Information

Research question four aimed to determine the sources that foreign students used to find out information about health care. The sources that were considered the most important were friend of the same nationality (75%), friend who is a foreign student (62.5%), parents from home (42.8%), and someone from your academic department (75%). Appendix G list the frequencies of the sources that are used as resources on medical care options.

FIGURE 5



Other print sources were also evaluated on their helpfulness in making these kinds of decisions. The sources that were found to be the most helpful were local television programs (42.8%), articles in the local paper (28.5%), and articles in the student paper (28.5%). Summaries of all sources considered can be found in figure 5.

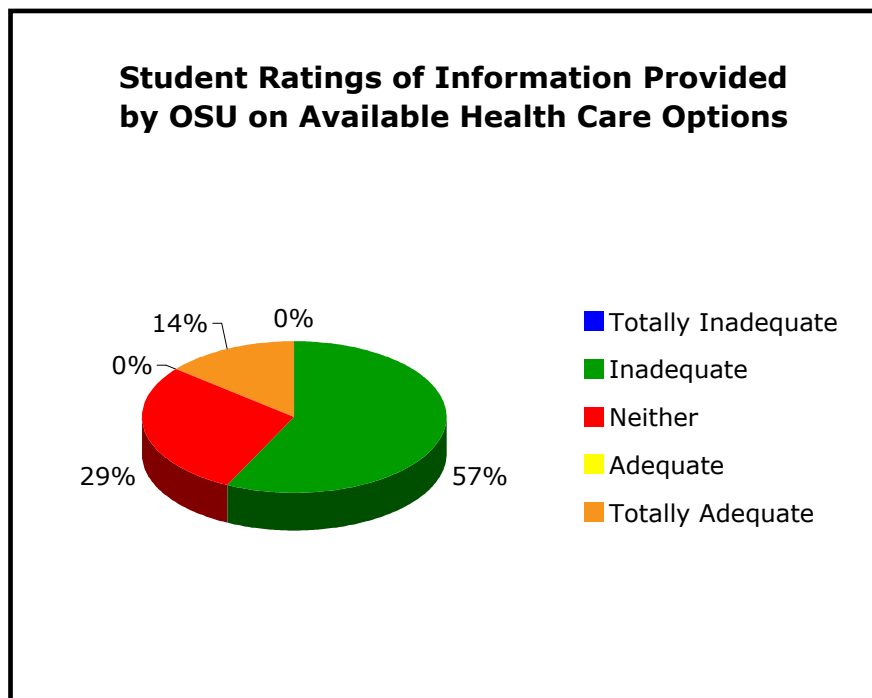
It was also noted that many of the respondents in the survey and the focus groups find their advisors (graduate and program), leaders of student organizations, faculty members, and classmates as helpful sources of information on health care.

A common theme in the focus groups is the level of satisfaction with the information that the university has provided regarding health services. Most (88.8%) felt that OSU provided inadequate information regarding health care. Information regarding

health insurance policy that OSU offers all students was the most common complaint. One student commented, OSU sent us this brochure, which described the insurance that they said we had to buy to come. I didn't understand most of it.. It had so many words in it that I didn't understand. We don't have health insurance in my home country – the government provides all of our health care.” Health insurance will be covered in more depth in the next section.

On the written surveys 57% of respondents felt that OSU provided inadequate information regarding health services. Only 14% (one student) felt that the information provided was adequate. These students also rated the information received from international student services (43%) and their academics departments (50%) as inadequate. Only 12.5% rated the information as adequate and the remainder had no opinion on the issue. See figure 6 for more information.

FIGURE 6



Health Care Utilization

A central focus of this study was to examine the overall satisfaction of international students with University Health Services (research question number four). First, the student use of several facility types in Oklahoma was measured. Table III shows the number of students in each department that have utilized these types of facilities. Several types of health facilities were not utilized and thus removed from the table. These include university counseling, Stillwater Medical Center (emergency room), internal medicine, surgery, and off-campus counseling offices. Sixty percent students had utilized the University Health Center at some point during the past year and 37.5% had been to the Payne Country Health Center. Two had visited UHS in a previous year.

TABLE III

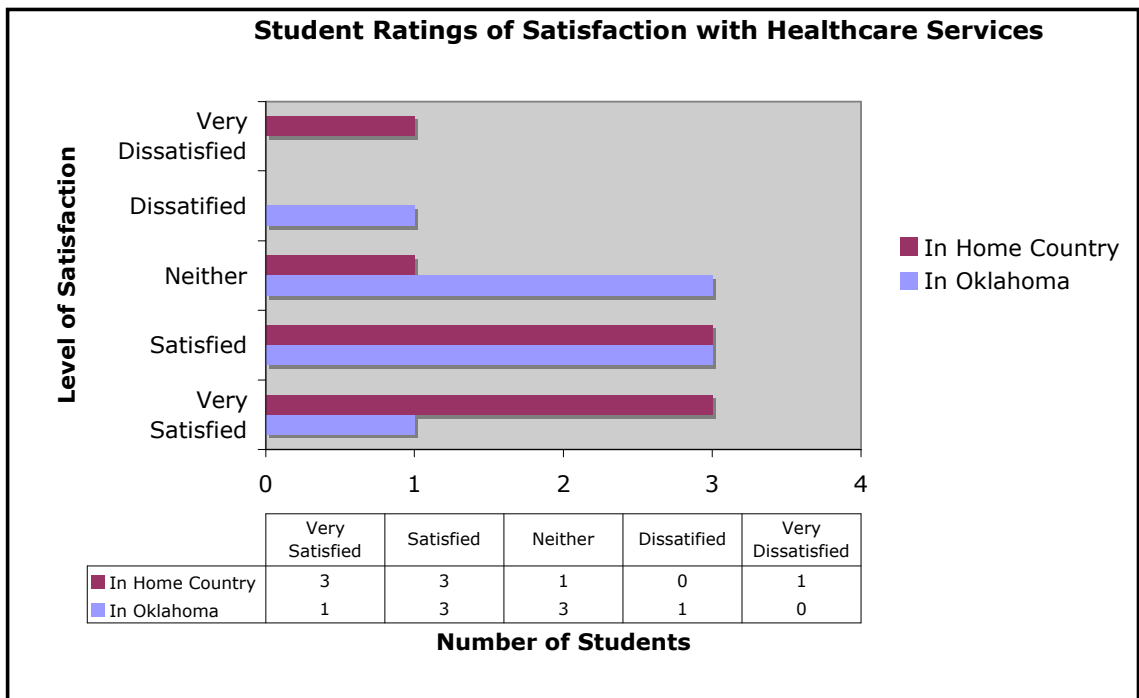
Number of Students Using Health Facility by Department						
Facility Type	Agri. Econ.		Intl. Studies		Total	
	%	N	%	N	%	N
University Health Center	60.0	3	100.0	3	100.0	6
Dentist	0.0	0	33.3	1	12.5	1
Chiropractor	0.0	0	33.3	1	12.5	1
Obstetrician/Gynecologist	0.0	0	33.3	1	12.5	1
General Practitioner	20.0	1	33.3	1	25.0	2
Payne County Health Dept	40.0	2	33.3	1	37.5	3
Ophthalmologist/Optomtrist	0.0	0	33.3	1	12.5	1

The respondents on average used the University Health Center very little. One half (50%) had only seen by a doctor at the clinic once or twice in the past year. The rates of utilization are shown in table IV. Three students (37.8%) utilized the Payne County Health Center. One student was a high consumer of medical care services. This student accounts for nine or more visits to the University Health Services and the Obstetrician/gynecologist. This student had also visited all types of facilities in table IV at least once. All eight students (100%) chose University Health Services as their preferred medical provider of choice.

TABLE IV

Students Rate of Health Facilities Usage in the Past Year				
Facility	Number of Visits			
	1-2	3-5	6-8	9+
University Health Center	3	2	0	1
Dentist	0	1	0	0
Chiropractor	1	0	0	0
Obstetrician/Gynecologist	0	0	0	1
General Practitioner	2	0	0	0
Payne County Health Dept	3	0	0	0
Ophthalmologist/Optomtrist	1	0	0	0

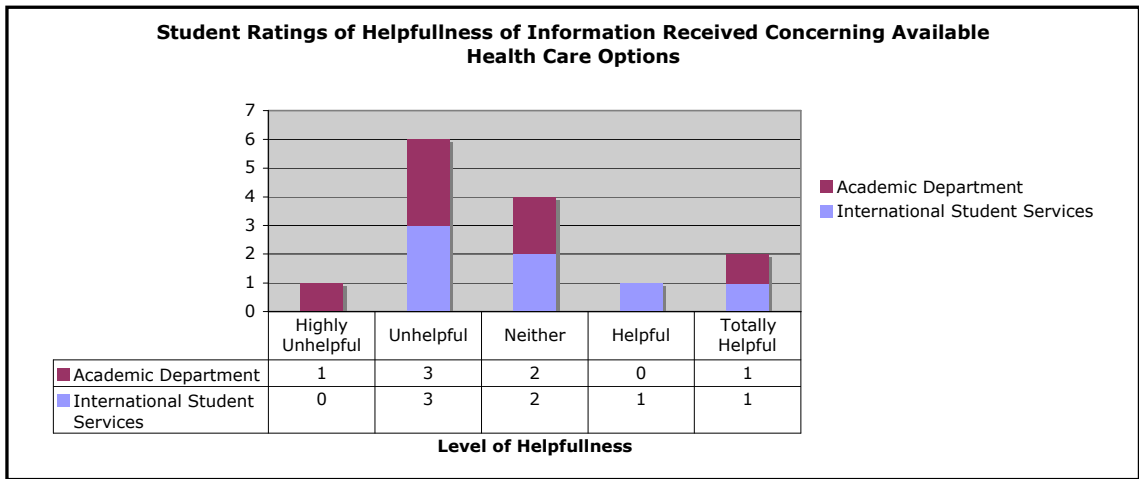
FIGURE 7



The overall student satisfaction with health services offered in Oklahoma varied. Four students (50%) were satisfied or very satisfied with health services here while six (75%) were satisfied or very satisfied with the care available in their home countries. Figure 7 offers more information on comparisons of satisfaction with healthcare services in Oklahoma and students home countries.

A significant percentage of students also expressed the concern that information that is provided them by ISS and their academic department concerning their health care options are highly unhelpful (37.5-50%) with 25% stating information provided has been neither helpful nor unhelpful. See figure 8 for specific breakdowns by department.

FIGURE 8



Just as important as the overall students’ satisfaction with the services that UHS provides is the reasons that they are chosen as the primary health provider. The majority of students (87%) chose UHS as their preferred provider of due to financial reasons. “I go there because it is the cheapest place to go. It’s too expensive to go anywhere else. Even the voodoo village [UHS] can be experience and hard to pay for,” remarks one student. Figure 7 lists the relative importance of reasons why health care facilities are chosen. Availability, affordability, information available, quickness of service, and acceptability of treatment were listed as the most important factors to choosing a health care provider. The relative rankings of these factors are shown in figure 9.

Many international students have experienced challenges accessing health services. The respondents stated three reasons preventing access to health care on the Oklahoma State University campus. They are insurance difficulties (62.5%), could not afford it (37.5%), did not know where to go (12.5%), and could not get an appointment (12.5%). See table V for more information by department.

FIGURE 9

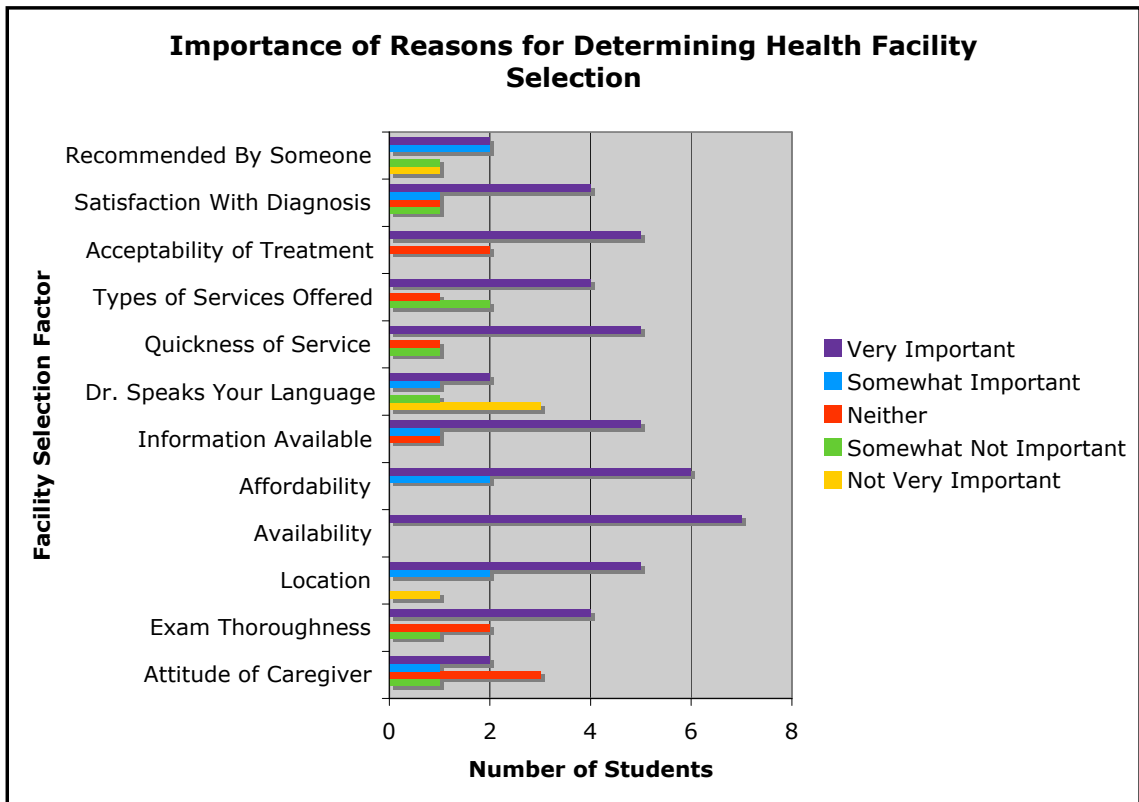
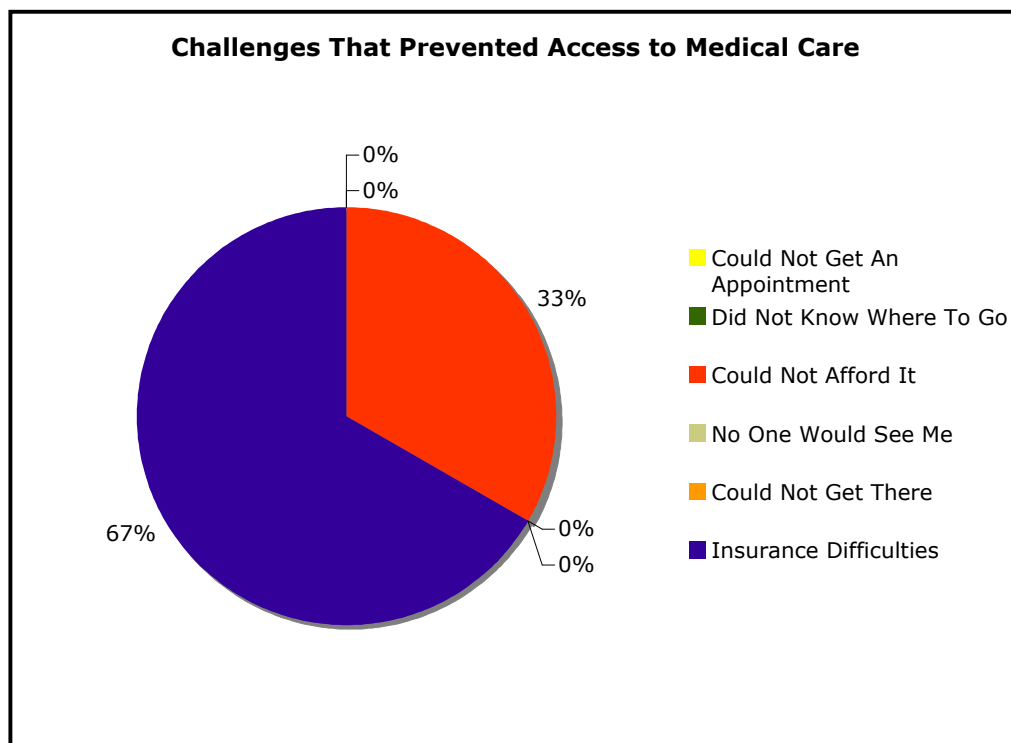


TABLE V

Challenges to Obtaining Health Services						
Challenge	Agri. Econ.		Intl. Studies		Total	
	%	N	%	N	%	N
Could Not Get An Appointment	20.0	1	0.0	0	12.5	1
Did Not Know Where To Go	20.0	1	0.0	0	12.5	1
Could Not Afford It	40.0	2	33.3	1	37.5	3
No One Would See Me	0.0	0	0.0	0	0.0	0
Could Not Get There	0.0	0	0.0	0	0.0	0
Insurance Difficulties	40.0	2	66.6	3	62.5	5

Half (50%) of the respondents stated that insurance difficulties and affordability were challenges that resulted in the denial of health care service. Figure 10 shows that 67% of these barriers to health care were due to insurance difficulties and 33% were due to affordability of services. It is to be noted that the most common issue brought up in focus groups concerning the affordability of health care service was the cost of the required immunizations. None of the international students in the focus groups were aware that these shots could be obtained free of charge at the Payne County Health Center. These shots cost over \$300 at University Health Services. After I informed one student of this service they remarked, “I wish that they [OSU] had told me this. I am really upset that they didn’t let me know about this. I had to work extra to pay for those shots.”

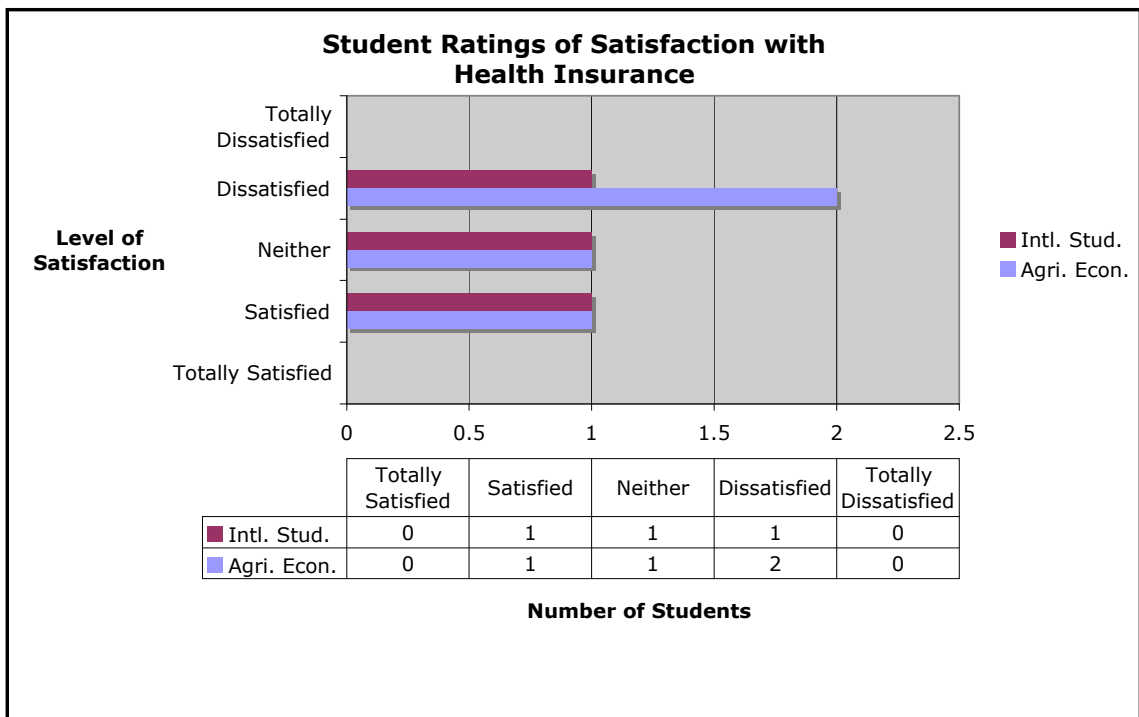
FIGURE 10



Health Insurance

By far the most important topic of the minds of participants in the focus groups and written questionnaires concerning health care was the student insurance plan offered by OSU. OSU requires that all international students carry some form of health insurance. Many opt for the plan offered by OSU (75%) due to cost and easy availability. A large portion (37.5%) of the students is dissatisfied with the student health insurance (figure 11).

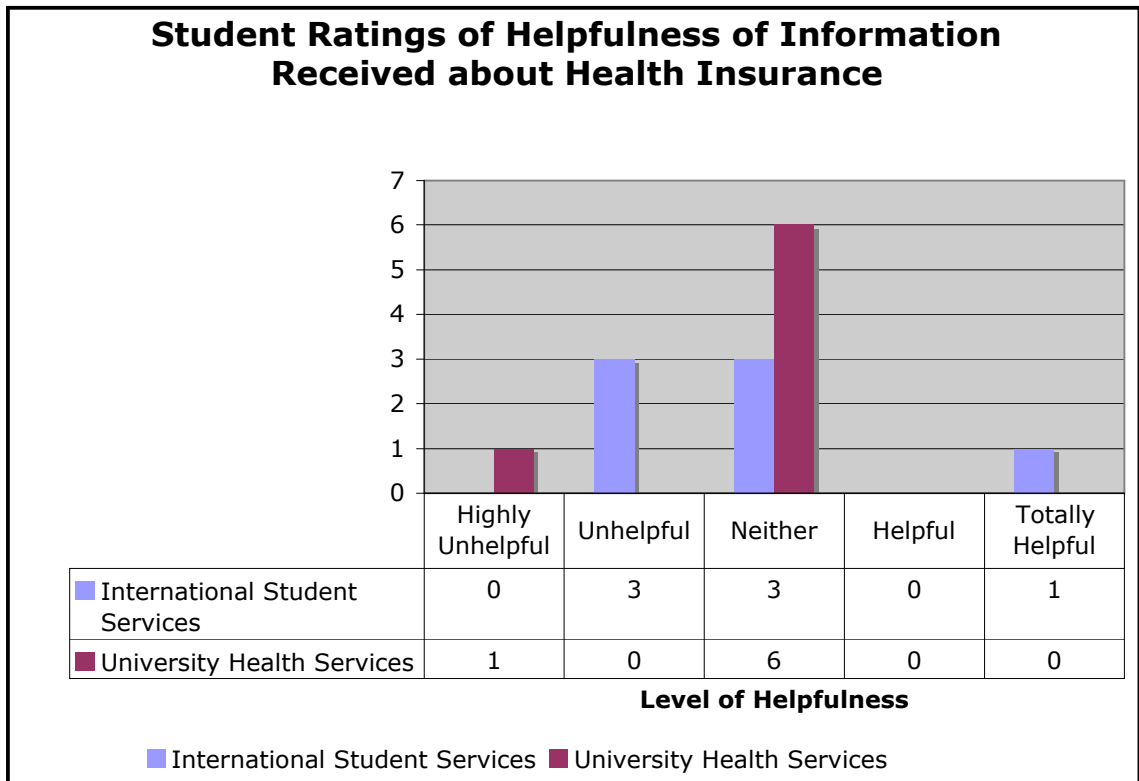
FIGURE 11



Most of the students in the focus groups voiced concerns about the student insurance. The most frustrating of concerns brought up was the inability to understand what the insurance does and does not cover. Even more trying is that there is no one the

students can ask for assistance. One student explains, “I wanted to know after my visit what the insurance would cover. The lady at the check out desk didn’t know. All she stated was that the full amount was to be charged to my account and when the insurance paid them, they would reimburse my account. She didn’t even try to find an answer or figure it out. She handed me a brochure that I didn’t understand. She told me to call that phone number. No one answered at that number. I was on hold for over an hour. I just wish there was someone I could go see to answer my questions.” Students in both the focus groups and questionnaires report that the people at the desk at the university health center cannot answer questions about the coverage even though this is the insurance that OSU encourages all students to have. All they do is give you a pamphlet that lists a number for the student to call. The phones at this number are rarely answered. After remaining on hold for sometimes up to an hour most of the students give up. Concerning the helpfulness of International Student Services and University Health Services in answering health insurance questions only one student rated either department as being helpful (figure 10). The majority gives an indifferent or unhelpful rating (75-87%).

FIGURE 12



CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this chapter is to provide a summary of this study paying special attention to interpretation of results. This chapter includes 1) a summary of the scope of the study, 2) discussion of the research findings, and 3) recommendations.

Summary

The purpose of this research was an exploratory study with the intent of the creation of hypotheses. The primary aim was to inductively examine how the networks that international graduate students form affect the decision-making behavior regarding healthcare. In order to better understand this process acculturation of foreign students and general utilization of health facilities in Oklahoma were examined.

The collection of data proceeded through a three-tier process. First, focus groups were conducted. From the results of these focus groups, a questionnaire was developed and distributed to each student in both programs. Finally, personal interviews were conducted with the departmental representatives.

Discussion of Research Findings

Research question one asked about the acculturation processes of international students to Oklahoma State University. This was answered mainly through data obtained in the focus groups and supported by survey data. It was found that many students knew another student presently at Oklahoma State University prior to their arrival. This aided in the formation of networks for the student. Students in international studies tended to form friend networks quicker than students from agricultural economics. This is due to departmental differences in student assistance. This will be described more under research question two. It was also found that students of both departments found the formal orientation processes of the international student services and their respective departments unhelpful. The top adjustment challenges were developing friendships, finding good food, finances, and adjustment to present housing. These findings were generally consistent with extant literature.

The second research question concerned the role OSU, International Student Services (ISS), and each academic department respectively played in the acculturation process. It was found that ISS conducted an academic orientation to the university. This orientation was rated as unhelpful overall though it should be noted that the segments on how to keep your student status were rated as helpful. The focus groups revealed that it is common practice for ISS to refer all questions of a nonacademic nature to each student's respective country/ethnic organization. The school of international studies greatly aids the formation of networks by a departmental culture that puts intercultural activities as a main focus of the informal acculturation processes. Also an aid is the extent to which the administrative staff will go to assist a student. This environment is

not present in the agricultural communications department. A key finding of this research is that informal acculturation practices of each department are more important than formal acculturation practices (i.e. orientation programs) in the overall adjustment of the foreign student to Oklahoma State University.

The third research question asked how often foreign graduate students utilize health care facilities. This data was obtained through the written survey and it was found that all of the students use the University Health Services as their facility of choice for health care. The majority of students had utilized the facility five or fewer times in the past year. Availability and affordability were listed as the top reasons this facility was chosen. This pattern of utilization is consistent with previous studies, with the exception that the factor, attitude of the physician, is normally listed at the top of the list. In this study this factor was rated as unimportant. Most students list that they are neither satisfied nor dissatisfied or are satisfied with the service that UHS provides. Most students find the information that OSU, ISS, and the academic departments provide on health care as unhelpful. Of the many challenges that impede health care the two most important were affordability and insurance difficulties. Half of the respondents went without health care due to one of these reasons. Dissatisfaction with the availability of information of the student health plan was by far the biggest issue raised by the students.

The fourth research question examined the sources of information used to obtain information about local healthcare services. Respondents indicated the top sources of information were a friend of the same nationality, a friend that is an international student, a member of their graduate department, and a friend who is American. These indications are consistent with recent studies of network formation. This will be addressed in more

detail in the next section. Other sources are rarely used, but of these someone from University Health Services is indicated as the top source.

The fifth research question asked how networks influence health care decision-making processes among foreign students. There have been no previous studies on this topic and this is another area where future studies should be conducted. Generally, it was found that each student's top three people that they solicited advice on healthcare were their advisors (graduate and program), classmates, and leaders of departmental student organizations. Many of the chosen classmates were international students themselves. Only students in the international studies program listed other classmates as a source of information, while most students in the agricultural economics program list the graduate coordinator and staff member in charge of the graduate program.

Conclusions

- 1) Students from the international studies program formed friend networks more readily than agricultural economics students due to increased integration of the international studies department and a multicultural focus of informal activities.
- 2) The individual departments willingness to provide nonacademic (informal) assistance is key to giving the foreign student a more positive acculturation experience.
- 3) University Health Services is the preferred health care provider due to accessibility and affordability though students rate their satisfaction with University Health Services as average.

- 4) International students find information provided by Oklahoma State University, International Student Services, and each department concerning health care and health insurance as unhelpful.

- 5) Respondents indicate the top sources of information were a friend of the same nationality, a friend that is an international student, a member of their graduate department, and a friend who is American.

- 6) There is little separation of international students professional and personal networks. The student is equally willing to ask academic advisors, classmates, and leaders of departmental student organizations advice on health care issues.

Recommendations for Research

- 1) The survey response rate was low for this study. A new method of recruitment and distribution of surveys is needed to improve response rates. A possibility is to employ the use of personal interviews to replace surveys.

- 2) Health information is acquired through both professional and personal networks. It is unclear from the results of this study of the impact of networks on healthcare decision-making behaviors. A complete mapping of these networks for a given population is necessary to properly determine how information concerning healthcare flows through the network and is distributed.

3) Further study into challenges that international students face in accessing health care in Oklahoma should be addressed with a special focus on health insurance.

Recommendations for OSU, ISS, and Academic Departments

1) Academic departments greatly influence the development of new personal and professional networks for new international students. Most departments are successful in aiding with the development of professional networks, but fall short in assisting the development of personal networks. Academic departments need to develop informal acculturation practices that facilitate domestic and international student interaction. This does not need to be conducted in a formal program, but should be of an informal nature. A simple program that emphasizes the need for a designated individual to periodically ensure that all foreign students in the department are adjusting successfully to Oklahoma State University academically and personally with an emphasis on available resources for the student. This type of assistance would also benefit domestic students. Departmental student groups are a valuable potential resource for these types of programs. These student groups should emphasize active participation from domestic and international students.

2) Students find that overall formal orientation sessions are unhelpful, especially in the area of nonacademic issues such as access to medical care. The orientation sessions need

to include both academic (keeping legal status, program requirement, etc.) and nonacademic (bus systems, access to medical care, health insurance) topics.

3) All the students in the study complained about the lack of information about the health insurance that is offered by OSU. Specifically, the lack of a single person that they could ask personally who would be able to answer their questions was mentioned. Staff in either the University Health Service or personnel services should be trained to answer these questions about the student health insurance plan. This information regarding where to ask these questions should be readily accessible to all students on the university's website, and discussed in depth in the orientation seminar.

Concluding Comments

The international student population is expected to continue increasing over the next several years. Seeing that international students have many needs that are unique to their population, including adjustments to a new culture, language acquisition, and the development of new social networks more research is needed in the experience of the international student on campus.

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APPENDIX A

IRB RESEARCH AUTHORIZATION LETTER

Oklahoma State University Institutional Review Board

Date: Friday, April 27, 2007
IRB Application No GU079
Proposal Title: Health Networks of Foreign Graduate Students at Oklahoma State University

Reviewed and Processed as: Expedited

Status Recommended by Reviewer(s): Approved Protocol Expires: 4/26/2008

Principal Investigator(s)

Whitney D. McAllister 2903 N. Perkins Rd., Apt. A11 Stillwater, OK 74075	Beth Schaefer Caniglia 012 Classroom Bldg. Stillwater, OK 74078
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The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 219 Cordell North (phone: 405-744-5700, beth.mcternan@okstate.edu).

Sincerely,



Sue C. Jacobs, Chair
Institutional Review Board

APPENDIX B

Recruitment Letter

April 24, 2007

Dear Student,

You are part of an important group at Oklahoma State University - the growing community of international students. Your feelings about the University and services offered by the Stillwater community are very important. For my master's thesis research, I am interested in learning about how you feel about local health services. I am asking you to participate by completing a questionnaire.

These questionnaires will take between one half hour to forty-five minutes to complete and can be completed at your convenience. You may be assured of complete confidentiality. To have results accurately represent the opinions of the people from your home country, it is very important that I obtain your participation.

The results of this study may be used to help improve programs and services for you and your fellow students. I sincerely hope you can participate.

If you wish to participate, please sign the enclosed consent to participate form. After completion of the survey, please send the survey and consent form in the enclosed envelope through campus mail to Whitney McAllister at CLB 006. The surveys can also be dropped off in person at 006 Classroom Building, or 204 Wes Watkins Center.

Please contact me if you have any questions. I can be reached at (918) 510-5801 or wd.holbrook@okstate.edu.

I hope you can contribute to the results of my study. I would appreciate your assistance in helping with this request.

Sincerely,

Whitney McAllister
School of International Studies

2903 N. Perkins Rd. Apt A106
Stillwater, OK 74075
(918) 510-5801

APPENDIX C

INTERVIEW SCHEDULE

I will ask you questions about your department including recruitment practices, formal and informal orientation programs, and departmental sponsored activities. *Participation in this interview is voluntary. You do not have to participate if you do not want to. You are not required to answer all questions in this interview.* This interview will remain private. All computer files from the audio tape recording will be password protected and any hard copies will be kept in a locked cabinet.

Interview Questions

How many international students are in your program? How many countries do they represent?

1. How do you attract international students to your program?
2. Generally, how much contact do you have with your international students prior to their arrival in the U.S.? What topics are normally discussed during these sessions, i.e. academic admissions information, housing, other advice? Do you often make exceptions to posted deadlines to admit specific international students?
3. Upon arrival, when is the first time your department has contact with your international students (do you pick them up at airport or see for enrollment first day of classes)?
4. Please describe the types of departmental orientation programs that you have for new students. Is there a separate orientation for international students (not the university one) in your department? Please describe it.
5. Please describe any informal orientations that your department offers, such as assistance in finding housing, introductions to other students, etc.?
6. Does your department facilitate any social activities for your students? Are there any organizations that are affiliated with your department? What types of activities do they engage in?
7. Please describe any follow-up programs, either informal or formal, that you have to ensure that your foreign students are adjusting to life in the U.S.
8. Is there anything else that I have not mentioned that you would like to add?

APPENDIX D

FOCUS GROUP SCHEDULE

During this focus group questions will ask you to provide information about general resources of information, reasons for selection of healthcare providers, attitudes about local health care options, and adjustment to OSU. *Participation in this focus group is voluntary. You do not have to participate if you do not want to. You are not required to answer all questions asked during the focus group.* Responses given will remain private. All audio and video files will be password protected and any hard copies will be kept in a locked cabinet.

Focus Groups Questions

1. Tell us your name and how long you have been in the United States.
2. How did you learn of the International Studies Program at OSU?
3. Why did you choose to attend OSU?
4. Think back to when you first arrived in Oklahoma. Describe the difficulties that you encountered during your first months here.
5. How did you solve/adjust to these difficulties? Who were your first friends here (International or American students)?
6. What role, if any, did the school of international studies and related programs/organization such as SAGA have in helping you?
7. What role, if any, did your particular ethnic community and/or related organization such as ISO or Japanese Student Organization, Family Resource Center, etc. have in helping you?
8. In general, what various resources have you utilized to learn more about healthcare options? For example, friends, people from international studies, people from your ethnic community or professionals at the health care clinic?
9. When you are looking for sources of information, do you find the people in your department helpful?
10. Have you and anyone you know have good experiences with the university health clinic? Bad Experiences?
11. Do you and anyone you know feel comfortable using the university health center? If not, what other health facilities in Stillwater have you or anyone you know used instead?

12. Do you feel as international students that the university health center is attentive to your needs?

13. Were services at the university health center consistent with what you would use in your home country?

14. Have you or anyone you know resisted using the university health center? Why?

15. Thinking back, what could have helped you make the process of adjustment to OSU easier? Is there anything that you came wanting to say that you didn't get a chance to say?

APPENDIX E

WRITTEN QUESTIONNAIRE

Health Networks of Foreign Graduate Students



The Experiences of Foreign Graduate Students at
Oklahoma State University

Participation in this survey is voluntary. You do not have to participate if you do not want to. You are not required to answer all questions on this survey. Thank you for your assistance.

Please return both the consent form and survey through campus mail to:

Whitney McAllister
006 Classroom Building

In this first section, I would like to ask you about your satisfaction with your experience at Oklahoma State University.

1. Many students experience challenges in adjusting to a new environment. Please indicate to what extent you personally have experienced the following challenges.

Types of Potential Challenges	Almost Never	Sometimes	Often	Almost Always	N/A
Homesickness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Obtaining housing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social relationships with opposite sex	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
English language	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Finances	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Developing friendships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Everyday problem solving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maintaining cultural customs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attaining Medical services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unfriendliness of people in community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Finding Good Food	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Academic coursework	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adjustment to present housing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maintaining religious customs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relationship to spouse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. What were your top adjustment challenges upon initial arrival in Stillwater?

3. Is there anything that Oklahoma State University (International Student Scholars Office (ISS) or your academic department) *did* to make adjustment easier? If yes, please describe.

4. Which of the following best describes the *ISS* orientation that you attended?

- I attended Orientation Week
- I attended a Make-up Orientation

5. How helpful is the information that you received from *ISS* during orientation? Please rank from highly unhelpful (1) to totally helpful (5).

Highly Unhelpful				Totally Helpful
1	2	3	4	5

6. What topics at your *ISS* orientation were the most helpful? Please describe.

7. Are there any topics that you wish *ISS* had included in their orientation? If yes, please describe.

8. How helpful is the information that you received from your *academic department* during their orientation? Please rank from highly unhelpful (1) to totally helpful (5).

Highly Unhelpful					Totally Helpful
1	2	3	4	5	

9. What topics at your *academic department* orientation were the most helpful? Please describe.

10. Are there any topics that you wish your *academic department* had included in their orientation? If yes, please describe.

11. Is there anything that Oklahoma State University (ISS or your academic department) *could have done* to make adjustment easier? If yes, please describe.

Many foreign students have experienced difficulties obtaining health care while attending university. This section will ask you about your experiences in this regard.

12. Have you used the following types of medical services in the past year? Please indicate to what extent you personally used the following services.

Type of Service Used	None	1-2	3-5	6-8	9 +
A. University Health Center	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. University Counseling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Dentist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Chiropractor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. Obstetrician / Gynecologist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F. General Practitioner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G. Hospital Emergency Room	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H. Payne County Health Dept.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I. Ophthalmologist/Optometrlist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
J. Internal Medicine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
K. Surgery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
L. Counseling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
M. Other, _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. What is your first choice for general health care in *Oklahoma*?

- University Health Center
- General Practitioner
- Emergency Room
- Payne County Health Department
- Other _____

14. What are the most important reasons that you chose this facility? Please rate these reasons from one to five, with one (1) being not very important to five (5) being very important to you.

Reasons Chose Healthcare Provider	Not Very Important					Very Important
Treated with Respect/Attitude of Caregiver	1	2	3	4	5	5
Exam Thoroughness	1	2	3	4	5	5
Location	1	2	3	4	5	5
Availability	1	2	3	4	5	5
Affordable	1	2	3	4	5	5
Information Available	1	2	3	4	5	5
Doctor Speaks Your Language	1	2	3	4	5	5
Quickness of Service	1	2	3	4	5	5
Types of Service Offered	1	2	3	4	5	5
Acceptability of Treatment	1	2	3	4	5	5
Satisfaction with Diagnosis	1	2	3	4	5	5
Recommended by Someone	1	2	3	4	5	5
Other, _____	1	2	3	4	5	5

15. Overall, how satisfied are you with your primary choice of health care in Oklahoma?

- Very Satisfied
- Satisfied
- Neither Satisfied or Dissatisfied
- Dissatisfied
- Very Dissatisfied

16. Thinking back to the quality of health care you received in your home country, how satisfied were you with your health care in your home country?

- Very Satisfied
- Satisfied
- Neither Satisfied or Dissatisfied
- Dissatisfied
- Very Dissatisfied

17. Please indicate if you have personally experienced any of the following challenges to obtaining health care services in Oklahoma?

Challenge	Yes	No
Could not get an appointment	<input type="checkbox"/>	<input type="checkbox"/>
Did not know where to go	<input type="checkbox"/>	<input type="checkbox"/>
Could not afford it	<input type="checkbox"/>	<input type="checkbox"/>
No one would see me	<input type="checkbox"/>	<input type="checkbox"/>
Could not get there	<input type="checkbox"/>	<input type="checkbox"/>
Insurance Difficulties	<input type="checkbox"/>	<input type="checkbox"/>
Other, _____	<input type="checkbox"/>	<input type="checkbox"/>

18. Have you ever gone without medical care due to one of the challenges listed above?

- No
- Yes → → → If yes, please indicate which challenge(s) prevented you from obtaining medical care
 - Could not get an appointment
 - Did not know where to go
 - Could not afford it
 - No one would see me
 - Could not get there
 - Insurance Difficulties
 - Other, _____

19. How helpful is the information that you received from *International Student Scholars (ISS)* about available health care options? Please rank from highly unhelpful (1) to totally helpful (5).

Highly Unhelpful					Totally Helpful
1	2	3	4	5	

20. How helpful is the information that you received from your *academic department* about available health care options? Please rank from highly unhelpful (1) to totally helpful (5).

Highly Unhelpful					Totally Helpful
1	2	3	4	5	

21. Overall, how adequate is the information that you received from Oklahoma State University (ISS, academic department, and other sources) about available health care options? Please rank from totally inadequate (1) to totally adequate (5).

Totally Inadequate					Totally Adequate
1	2	3	4	5	

22. Which of the following *best* describes your health insurance?

- I have the student health insurance offered by Oklahoma State University
- I have health insurance provided by another company
- I do not have any health insurance

23. How helpful is the information that you received from *International Student Scholars (ISS)* about OSU's student health insurance coverage? Please rank from highly unhelpful (1) to totally helpful (5).

Highly Unhelpful					Totally Helpful
1	2	3	4	5	

24. Have you experienced any challenges concerning your insurance coverage (i.e. filing for reimbursement, deductibles, etc.)? If yes, please describe.

25. How easily were you able to obtain answers to your questions concerning health insurance from OSU personnel at the University Health Services? Please rank from very easily (1) to very difficult (5).

Very Difficult					Very Easily
1	2	3	4	5	

26. How satisfied are you with your health insurance? Please rank from totally dissatisfied (1) to totally satisfied (5).

Totally Dissatisfied					Totally Satisfied
1	2	3	4	5	

27. If you have any additional comments about your experiences with health insurance, please write them in the space below.

I would like to ask you about different resources that you have used to obtain information concerning local health care options. Please respond to each question using the following guide:

- Never – I never seek information this way
- Rarely – I usually do not use this source but have on occasion.
- Sometimes – I usually use this source, but not always.
- Always – I always use this resource for information.

28. How often do you consult about health care options in *Oklahoma* with the following individuals?

Contacts	Never	Rarely	Sometimes	Always
Friend of the same nationality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friend who is another foreign student	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friend who is American	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spouse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parents at home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatives at home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Member of your ethnic community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Member of an international organization you are a member of	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Someone from your graduate department	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

29. How often do you consult the following resources for information about health care services in Oklahoma?

Resource	Never	Rarely	Sometimes	Always
Someone from University Health Services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Yellow pages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Written materials available on campus (ex. Brochures)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
American health care professional	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

30. Have you found information provided by the following resources helpful when making health care decisions in Oklahoma?

Resource	Yes	No
Local radio stations	<input type="checkbox"/>	<input type="checkbox"/>
Local paper advertisements	<input type="checkbox"/>	<input type="checkbox"/>
Articles of the local newspaper (Stillwater NewsPress)	<input type="checkbox"/>	<input type="checkbox"/>
Articles in the student newspaper (Daily O'Collegian)	<input type="checkbox"/>	<input type="checkbox"/>
Magazine articles	<input type="checkbox"/>	<input type="checkbox"/>
Local television programs	<input type="checkbox"/>	<input type="checkbox"/>

31. Are there any other resources of information that you use to make health care decisions?

32. Please list the names of the top five people that you use as a resource for information. How do you know each person (in your graduate program, both in an organization, etc.) and for how long? This information will be kept private.

	Name (or initials)	Relationship (e.g. graduate program, ethnic community)	How long known
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____

33. Please list everyone who lives in your household, their gender and relationship to you. If a household member is a roommate, please specify how you know this individual. List yourself first.

Household member	Gender	Relationship (spouse, child, roommate, etc.)	If roommate, how do you know them (in your program, ethnic group, organization, etc)
1	<input type="checkbox"/> Male <input type="checkbox"/> Female	Yourself	N/A
2	<input type="checkbox"/> Male <input type="checkbox"/> Female	_____	_____
3	<input type="checkbox"/> Male <input type="checkbox"/> Female	_____	_____
4	<input type="checkbox"/> Male <input type="checkbox"/> Female	_____	_____
5	<input type="checkbox"/> Male <input type="checkbox"/> Female	_____	_____

34. Approximately what percentage (%) of your closest friends *in Oklahoma* attends Oklahoma State University?

_____ %

Of those friends who are students, which of the following *best* describes the majority of those friends?

- International students of the same nationality as you
- International students of a different nationality from you
- American students

In this last section I would like to ask you some questions for statistical purposes.

35. What is your age?

_____ Years

36. Which of the following *best* describes your marital status?

- Married
- Divorced/Separated
- Never been married
- Other _____

37. Do you live on campus?

- Yes
- No

38. Are you a part-time or full-time student?

- Part-time Student
- Full-time Student

39. Are you employed in your academic department?

- No
- Yes → → Please choose the best description of your employment?
 - Employed full-time
 - Employed half-time (.50)
 - Employed quarter-time (.25)

40. Are you employed somewhere else on campus?

- No
- Yes → → Please choose the best description of your employment?
 - Employed full-time
 - Employed half-time (.50)
 - Employed quarter-time (.25)

41. Are you employed off campus?

- No
- Yes → → Please choose the best description of your employment?
 - Employed full-time
 - Employed part-time

42. What religion are you affiliated with?

- Catholic
- Protestant
- Islam
- Buddhism
- Other, _____

43. What is your nationality?

44. How long have you been in Oklahoma? _____

45. Please rate your ability to speak English using the following scale:

- Very Good:** You speak fluently with no errors. You have a command of grammar, idiom, and vocabulary can hardly be distinguished from that of a native.
- Good:** You speak with little conscious effort, though you make occasional errors in grammar, vocabulary, and idioms.
- Fair:** You speak understandably, even though you make noticeable mistakes. Conscious effort to construct complex sentences is obvious.
- Poor:** You speak only with considerable conscious effort, even simple constructions. Handles short, simple sentences understandably, though not always accurate.

46. If you have any additional comments about your experiences at OSU, please write them in the space below.

Thank you for participating in this research!

If you have questions pertaining to this research, please feel free to contact:

Whitney McAllister
022 Classroom Building
(918) 510-5801 or wd.holbrook@okstate.edu

For information on subjects' rights contact

Dr. Sue C. Jacobs, IRB Chair
219 Cordell North
(405) 744-1676 or irb@okstate.edu

APPENDIX F

Frequency of Experience of Adjustment Challenges by Department											
Source	Almost Never		Sometimes		Often		Almost Always		N/A		
	AE	IS	AE	IS	AE	IS	AE	IS	AE	IS	
Homesickness	0	0	4	2	1	1	0	0	0	0	
Obtaining housing	2	0	2	2	0	1	0	0	1	0	
Social Relationships	1	0	2	1	1	1	0	0	1	1	
English Language	1	1	2	2	2	0	0	0	0	0	
Finances	1	0	2	1	2	0	0	2	0	0	
Developing friendships	1	0	2	0	1	2	0	0	1	1	
Everyday problem solving	3	0	1	2	1	1	0	0	0	0	
Maintaining cultural customs	2	0	3	3	0	0	0	0	0	0	
Attaining medical services	1	1	4	1	0	0	0	1	0	0	
Unfriendliness of people in community	4	2	0	1	1	0	0	0	0	0	
Find good food	2	1	2	0	1	2	0	0	0	0	
Academic coursework	3	0	2	3	0	0	0	0	0	0	
Adjustment to present housing	5	1	1	1	0	0	0	2	0	0	
Maintaining religious customs	5	0	0	1	0	0	0	0	0	1	
Relationship with Spouse	3	0	0	0	0	0	0	0	2	3	

Overall Percentage Frequency of Experience of Adjustment Challenges											
Source	Almost Never		Sometimes		Often		Almost Always		N/A		
	N	%	N	%	N	%	N	%	N	%	
Homesickness	0	0	6	75	2	25	0	0	0	0	
Obtaining housing	2	25	4	50	1	12.5	0	0	1	12.5	
Social Relationships	1	12.5	3	37.5	2	25	0	0	2	25	
English Language	2	25	4	50	2	25	0	0	0	0	
Finances	1	12.5	3	37.5	2	25	2	25	0	0	
Developing friendships	1	12.5	2	25	3	37.5	0	0	2	25	
Everyday problem solving	3	37.5	3	37.5	2	25	0	0	0	0	
Maintaining cultural customs	2	25	6	75	0	0	0	0	0	0	
Attaining medical services	2	25	5	62.5	0	0	1	12.5	0	0	
Unfriendliness of people in community	6	75	1	12.5	1	12.5	0	0	0	0	
Finding good food	3	37.5	2	25	3	37.5	0	0	0	0	
Academic coursework	3	37.5	5	62.5	0	0	0	0	0	0	
Adjustment to present housing	6	75	2	25	0	0	2	25	0	0	
Maintaining religious customs	5	62.5	1	12.5	0	0	0	0	2	25	
Relationship with spouse	3	37.5	0	0	0	0	0	0	5	62.5	

APPENDIX G

Frequency of Consultation for Information About Healthcare Options in Oklahoma by Department								
Source	Never		Rarely		Sometimes		Always	
	AE	IS	AE	IS	AE	IS	AE	IS
Friend of the same nationality	1	0	0	1	3	1	1	1
Friend who is a foreign student	1	0	1	1	3	2	0	0
Friend who is American	2	0	0	0	3	3	0	0
Spouse	2	2	1	0	0	0	1	0
Parents at home	4	0	0	0	0	1	1	1
Relatives at home	5	2	0	0	0	0	0	0
Member of your ethnic community	4	1	1	0	0	2	0	0
Member of an intl organization	3	2	1	0	1	1	0	0
Someone from your department	1	1	0	0	4	2	0	0
Someone from Univ. Health Serv.	1	2	1	0	2	1	1	0
Yellow Pages	4	1	1	1	0	1	0	0
Written Materials on campus	2	0	2	2	0	1	1	0
Healthcare professional	4	3	1	0	0	0	0	0

Frequency of Consultation for Information About Healthcare Options in Oklahoma Combined								
Source	Never		Rarely		Sometimes		Always	
	N	%	N	%	N	%	N	%
Friend of the same nationality	1	12.5	1	12.5	4	50	2	25
Friend who is a foreign student	1	12.5	2	25	5	62.5	0	0
Friend who is American	2	25	0	0	6	75	0	0
Spouse	4	66.7	1	16.6	0	0	1	16.6
Parents at home	4	57.1	0	0	1	14.3	2	28.5
Relatives at home	7	100	0	0	0	0	0	0
Member of ethnic community	5	62.5	1	12.5	2	25	0	0
Member of an intl organization	5	62.5	1	12.5	2	25	0	0
Someone from your department	2	25	0	0	6	75	0	0
Someone from Univ. Health Serv.	3	37.5	1	12.5	3	37.5	1	12.5
Yellow Pages	5	62.5	2	25	1	12.5	0	0
Written Materials on campus	2	25	4	50	1	12.5	1	12.5
Healthcare professional	7	87.5	1	12.5	0	0	0	0

VITA

Whitney McAllister

Candidate for the Degree of
Master of Science

Thesis: HEALTH NETWORKS OF FOREIGN STUDENTS

Major Field: International Studies

Biographical:

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Bachelor of Science in Marketing, Oklahoma State University, Stillwater,
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Name: Whitney McAllister

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Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Title of Study: HEALTH NETWORKS OF FOREIGN STUDENTS

Pages in Study: 78

Candidate for the Degree of Master of Science

Major Field: International Studies

Scope and Method of Study: The purpose of this research was an exploratory study with the intent of the creation of hypotheses. The primary aim was to inductively examine how the networks that international graduate students form affect the decision-making behavior regarding healthcare. In order to better understand this process acculturation of foreign students and general utilization of health facilities in Oklahoma were examined.

Findings and Conclusions: This study found that levels of integration of the foreign students academic department and their willingness to assist the student in nonacademic ways greatly influenced the ease of which the student formed new networks and adjusted to campus. The university health facility was designated as the preferred facility for health service even though satisfaction with the facility was only average. Access to information about the student health insurance plan was listed as the most common barrier to healthcare.

ADVISER'S APPROVAL: Dr. Beth Caniglia
