

**THE RELATIONSHIPS BETWEEN THE FRIENDSHIP NETWORKS AND
SOJOURNER ADJUSTMENT OF CHINESE INTERNATIONAL STUDENTS
IN THE US**

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Abstract

More and more Chinese students choose to come to the United States to pursue their advanced studies. While they study and live in a different country, they may encounter many obstacles and personal problems. They tend to feel a loss of family, and source of support behind. They will encounter an unfamiliar environment and it is very challenging for them to adjust to the new environment. Under this situation, friends are considered more important than family members. A famous Chinese saying goes: A man depends upon his parents at home and upon his friends abroad.

This was a study of the relationships between the friendship network of Chinese international students and their self-reported sojourner adjustment. It explored how Chinese international students form their friendship networks and whom they will choose to interact with and share their deep thoughts as they sojourn abroad. The key research questions were the relationship between the frequency of interaction with Chinese and non-Chinese friends and their sojourner adjustment, the relationship between the degree of self-disclosure with Chinese and non-Chinese friends and their sojourner adjustment.

The findings showed that international students are more likely to develop friendships with co-national students because they find it easier to communicate with each other and have common norms and beliefs. In addition, most Chinese students live close to other Chinese students. This helps them to become friends with each other more easily. Previous studies support this assumption that physical distance affects the frequency of social interaction. Second, for the degree of self-disclosure, the analysis demonstrated that Chinese international students share their inner thoughts and feelings more with Chinese friends than

non-Chinese friends – mainly due to the language barriers and culture differences. Previous studies showed different cultures can affect the formation and intimacy of interpersonal friendships. Even though international students need intercultural contact, cultural distance hindered the ability and willingness to interact meaningfully with non-Chinese students. Third, the finding showed that the relationship between the frequency of interaction and the degree of self-disclosure and their sojourner adjustment were highly correlated. Most of the participants reported they were satisfied with living in the new environment and satisfied with their academic performance. They choose to live close to their Chinese friends in order to help them adjust to life abroad and reduce the stress from their new life and academic study.

The findings of this study should help researchers have a better understanding of communication patterns of Chinese international students and formation of their friendship network and their sojourner adjustment abilities. To help Chinese international students to adapt to the sojourning environment faster and more efficiently is the value of this study. Chinese international students are facing different stresses from their sojourn life and academic studies. For those who suffer extreme pressures, organizations within and outside of Universities should provide more daily life information and strategies for dealing with life's daily challenges and ease the pressure of starting a new life in a foreign country. In addition, they should organize more activities to create an environment for Chinese international students to associate and communicate with non-Chinese students.

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Chapter 1

Introduction

With the increasing globalization of the world, more and more international students have chosen to study in the US (Open Doors, 2010). America represents one of the most developed countries in the world and contains numerable institutions of high educational method and quality. American universities are viewed as the most renowned places of learning and having the most advanced science and technology. Asian students are becoming one of the largest and fastest growing student groups in American universities (Open Doors, 2010). According to the Institute of International Education report, the number of international students at colleges and universities in the United States increased by 3% to 690,923 during the 2009-2010 academic year. Currently Chinese student enrollment in the United States totals nearly 128,000 students which were more than 18% out of the total international students, making China the leading sending country, followed by India and South Korea (Open doors, 2010).

According to former U. S. Ambassador to China Jon Huntsman, more than 100 million Chinese students studied in America since the beginning of China's 'reform and opening' in the late 1970s, which had promoted the Sino-American economic development (Open Doors, 2010). According to Commerce Department data, international students contributed \$199 billion for the U.S economy from 2009 to 2010. Given that 18.5% of foreign students were from China, Chinese students spent billions of dollars to help the economic recovery across the US.

Studying and residing in the U.S. is considered to be a big challenge for Asian students,

due to their inadequate language abilities, insufficient social communication skills, cultural differences, academic concerns, social isolation, differences in education systems, and a lack of understanding of American culture and society (Zhang & Rentz, 1996). They may encounter many personal difficulties as well, such as racial discrimination, housing, financial problems, loneliness and other emotional ups and downs. A great amount of past research has concluded that Asian students, especially Chinese students on American campuses, frequently confront more severe difficulties in adjusting when compared to students of other nationalities (Heikinheimo & Shute, 1986; Lin & Yi, 1997). Loneliness and solitude can lead to emotional depression. When Chinese students encounter these kinds of psychological difficulties, they were more likely to talk with local counterparts instead of friends of other nationalities (Bochner, Buker, McLeod 1976).

There has been much research on the topic of intercultural friendship (Gudykunst, 1983, 1985). Through the years a large amount of communication literature had contributed to the interpersonal relationship development among Chinese sojourners in the United States (e.g., Bochner et al., 1977; Furnham & Alibhai, 1985; Gareis, 1995, 2000a).

Several studies have described the important connection between relationships with hosts and the self-adjustment for successfully integrating into the U.S. society (Furnham, 1988; Searle & Ward, 1990). They have found that international students can benefit from making friends with host country nationals, who provide them with opportunities to gather essential information about living in the US, learning about cultural differences and improving social communication skills. However, findings have also shown that it is difficult to develop friendships with Americans for most Asian students (e.g., Bochner et al., 1976).

Language barriers can be an initial problem for Chinese students to make friends with non-Chinese students, but a deeper obstacle can be dealing with cultural differences (e.g., Bochner et al., 1976). Most Asian students more commonly develop friendships with co-national students, because it is easier to communicate and they have more in common (Yeh, 1976; Yeh, et al., 1979).

Despite the fact that the International Students Associations and other university organizations help international students to interact with the host culture by providing a variety of community activities, such as cultural performances, international communicative hours, academic exchanges, international clubs, quality contact with non-Chinese students is still difficult. Yum (1988) concluded that positive contact works best under certain conditions, for instance when status is equal among contact members, when a favorable social climate exists and when contact is more intimate than casual. Thus it is important to study further the conditions that produce quality contacts.

Research Objectives

With the growing number of Chinese international students in American universities, it is necessary to better understand the friendship networks of Chinese international students in the US and their relationships between these networks and their sojourner adjustment.

Thus the main objectives of this study were:

1. To investigate the friendship network of Chinese international students who study in the US.
2. To examine the relationships between characteristics of Chinese international students' friendship networks and their self-reported sojourner adjustment.

Chapter 2

Literature Review

Aristotle proclaimed that without friends no one would choose to live (Aristotle, *Nicomachean Ethics*, V.3. 1131a10-b15). To develop friendships is viewed as an important skill by every culture. Hall (1976) described how the behavior of all human beings is influenced by their culture. In other words, culture has a great influence on social behavior and what is acceptable in one culture may not be so in another. According to Nicotera (1993), different cultures can affect the character, function, and forms of interpersonal friendship differently. The relationship development success is guided by cultural norms (Gudykunst, 1983, 1985). Several studies (Gudykunst, 1983, 1985) have explored the manner in which friendship networks are developed in different cultures.

Thus, literature review focuses on five main topics. First, the elements that affect intercultural friendship formation; Second, how cultural variations can influence the formation and function of intercultural friendships; Third, how culture shock influences intercultural friendship networks; Fourth the terms of sojourner adjustment, sojourner adjustment models and sojourner's friendship network; and fifth how social support can be important in helping international students adjust to a new environment.

Friendship Formation

You can make more friends in two months by becoming interested in other people than you can in two years by trying to get other people interested in you.

---Dale Carnegie (1936, p. 58)

As Dale Carnegie says, friendships get started and develop by expressing an interest in other people. Other scholars have found additional important factors. According to Fehr (1996), four kinds of elements are necessary for the formation of friendships: environmental (being in the same place at the same time), individual, situational, and dyadic (Fehr, 1996, p. 43). Byrne's study (1970,1971) showed that the more the strangers appeared to have in common, the more likely they were to be attracted to each other. By contrast, the less the similar attitudes, the less chance for them to be friends. Other research (Willmott, 1987) has shown that opportunities and common interests play essential roles in the formation of friendship.

Environmental factors are the first step to form the friendship through physical proximity or propinquity (Fehr, 1996). Festinger, Schachter, and Back (1950) discovered that proximity or propinquity leads to liking. Other studies (Ebbesen, Kjos & Konecni, 1976) have indicated that friendship can be formed due to the location of one's residence (residential proximity) (e.g., Nahemow & Lawton, 1975), work place (Sykes, 1983), or university (e.g., Menne & Sinnott, 1971). In other words, people who lived closer were more likely to be friends than who lived farther away. Proximity was considered an essential and necessary factor for forming friendship (Fehr, 1996). To become friends with someone, the contact action was obviously needed. Therefore, proximity was one of the standard predictors of friendship formation (Fehr, 1996).

Individual factors are another factor for bringing two people into contact with other (Fehr, 1996). According to Rodin, when we met with a pool of strangers, we first excluded whom we did not want as a friend (Rodin, 1982). She discussed three criteria of deciding

whom we did not want as a friend. They were exclusion criteria, dislike criteria, and disregard criteria. Moreover, she also discovered that exclusion judgments exist ahead of inclusion judgments, which meant we decided not to make a friend with someone before to decide whom we did want as a friend (Rodin). According to Rodin, the judgments of disliking played a key role in the early stages of friendship formation. She also mentioned that we rejected people as our friends not only because we did not like them, but rather because they seemed not meet our criteria for friendship. This criterion included their race, educational background, physical attractiveness, age, the way they dressed and so on (Rodin).

According to Fehr (1996), we are more likely to make friends with those who are “good-looking, socially skilled, responsive, not shy, and similar to us in a variety of ways” (PP.57). But even if a person owned all of the attributes that mentioned above, it still did not ensure that a friendship necessarily would develop (Fehr). Several situational factors could be involved as well.

Situational factors played an important role in formatting friendship and can influence whether or not a friendship will be developed (Fehr, 1996). Fehr (1996) raised four factors that might influence to form friendship networks, such as “Probability of Future Interaction”, “Frequency of Exposure”, “Outcome Dependence”, “Availability”(PP. 58-60). These factors showed that individuals who can be potential friends also depend on different kinds of situational factors.

Finally, another necessary factor in forming friendships depend on dyadic variables such as whether two people like each other and whether appropriate self-disclosure exists (Fehr, 1996). Reciprocity of liking was conducted through a classic experiment by Backman

and Secord (1959). Their study confirmed that in most cases people were attracted to people who like them or who they presume like them. Other research (Curtis & Miller, 1986) showed that individuals who believed that they were liked by others actually ended up being liked more than those who thought they were disliked. According to Fehr, at the first stages of a relationship, it is important to build friendship by reciprocal self-disclosure, which ensured each had the necessary information about the other. People may be attracted to those who reveal personal information to them because intimate disclosure sent a message of desire to develop closeness (Curtis & Miller, 1994). However, too much self-disclosure may result in disliking for the partner and a failure to reciprocate with equally intimate self-disclosure (Robin, 1975). Berg and Archer (1980) found that greater liking happens when self-disclosure is reciprocated during a first encounter. Reciprocity was important for the development of trust in a relationship (Altman, 1973).

Willmott (1987) discovered that there were a number of essential conditions, which contribute to building friendship, such as opportunities and common interests and so on. We first need to create certain opportunities to meet our potential friends, and then start a topic of conversation that both are interested in (Willmott). Gareis (2000a) indicated that similarity and proximity were two factors that influence intercultural friendship formation. Also she added culture, personality, adjustment stage, and communicative competence as important factors.

Cultural Variation

Culture is defined as shared beliefs, values, and norms that are stable over time (Cooper,

Thomas & Simonds, 2007). Beliefs are ideas about the world that people assume are true, values differ from culture to culture and norms are socially shared expectations of appropriate behaviors (Cooper, et, al. 2007). Many scholars have focused on how cultural variations affect the adjustment of international students. Babiker et al. (1980) explored the concept of “culture distance” and the degree to which greater cultural differences between international students’ nations and their host countries provide greater adjustment difficulties.

Hofstede (1980, 1991) identified four cultural dimensions of work related value differences based on data collected from 40 nations: Individualism/Collectivism; Power Distance; Masculinity/Femininity; Uncertainty Avoidance. Later a fifth cultural dimension was added.

Hofstede (1991) labeled “Confucian work dynamism” or Long-/short-term orientation as the fifth dimension. He tried to distinguish the difference in thinking between East and West. Asian countries with a strong link to Confucian philosophy acted differently from the western cultures. According to Hofstede (1991), long-term orientation in Asian countries is characterized by persistence, ordering relationships by status, having a sense of shame, thrift and savings. On the other hand, short-term orientation was characterized by awareness of face-saving, personal steadiness, respect for traditions, reciprocation of greeting, favors and gifts (Hofstede, 1991).

Individualism/Collectivism

According to Hofstede (1980), individualism-collectivism is the most important. It is also one of the most widely employed measures in social scientific research (Peng, 2003). In

individualist cultures, people value self-achievement and self-respect more than those of collectivistic cultures. Individuals were the most important element in any social setting (Hofstede). Hofstede describes that people in individualistic cultures used personal characteristics and achievements to define themselves. They value individual welfare over that of the group. For example, in individualist societies, such as the United States, people care for their own interests, opportunities and goals (Gao & Ting-Toomey, 1998). In addition, they view human rights and benefits as important above all and they do their best to obtain what they want. Individualism involves people's focus on their own goals, needs and behavioral outcomes and collectivism involves focus on group (Leung & Lind, 1986).

In collectivist cultures, people value group benefits and goals beyond their own achievements. In group-oriented societies, people define themselves as members of clans or communities and consider the group's welfare as most important (Weaver, 1998). For example, in traditional China, the individual's orientation is deeply connected with that of other in-group members such as family and close friends (Gao & Ting-Toomey, 1998).

Individualism emphasizes honesty and directness whereas collectivism values harmony and indirectness.

Power Distance

According to Hofstede's study (1980), power distance is the disparity in power distribution in relationships and organizations. High-power distance culture tends to be authoritarian with a hierarchical structure of social relationships (Cooper, Thomas & Simonds, 2007). People are assumed to be unequal and accept a particular social order or hierarchy

(Wardrobe, 2007). By contrast, low-power distance cultures tend to be less formal and more direct in their communication (Hofstede, 1980).

Masculinity/Femininity

Hofstede (1980) describes masculine cultures as those stressing assertiveness, competition, and material success. Individuals tend to be ambitious, competitive and goal orientation in masculine cultures, they care more about money and physical things. Feminine cultures on the other hand emphasize compassion, emotion, nurturing, affection, and sensitivity (Cooper, Thomas & Simonds, 2007). Individuals in feminine cultures were more sensitive and concerned with relationships.

Uncertainty Avoidance

Hofstede (1980) describes uncertainty avoidance as the degree that a culture can tolerate uncertainty situations (Hofstede, 1980). High-uncertainty avoidance cultures try to reduce the level of ambiguity and seek more predictability and structure, often seen through more rigid religious systems, stronger punishments, and more clearly enforced laws. Low-uncertainty avoidance cultures are more flexible and comfortable with ambiguity and uncertainty. They are better able to deal with aberrant behaviors (Cooper, Thomas & Simonds, 2007).

High-Context/Low-Context

Hall's (1976) differentiated between high and low-context communication. According

to Hall, in high-context communication users did not need to be given much background information, which was already transmitted by through gestures and context and less from explicit words. In other words, individuals in high-context cultures expected that others can understand their meanings without necessarily using explicit expressions. For example, China is a high-context country in which the Chinese people use high-context communicative expressions, which meant the conversation requires a mutual understanding and had a lot of implied shared experiences (Lebaron & Pillay, 2006). In high-context cultures people value nonverbal communication and sometimes their meaning was delivered through their behavior. When they communicate with others they pay more attention to others' behavior and nonverbal information, such as tone of voice, gestures and facial expressions (Weaver, 1998). People in such cultures tend to respond negatively to certain nonverbal signs or such phrases as "maybe," "it is difficult" (Weaver).

In a low-context culture, individuals are primarily verbally oriented. When they communicate with others in person they paid more attention on the messages but less focus on nonverbal messages (Weaver, 1998). They use low-context messages expressing direct feelings and requests as the most effective communication for accomplishing their goals. Low-context communicators expected their words to be interpreted specifically and literally (Lebaron & Pillay, 2006). In America, people prefer frankness and direct feedback or opinions when they communicate with others. They do not like to guess at peoples' thoughts and ideas, which will create uncomfortable feelings and produce confused answers (Weaver, 1998).

Culture Shock

This section examines the term “culture shock,” which was initially introduced by Oberg (1960) and refers to the distress experienced by the sojourner as a result of encountering unfamiliar signs and symbols in social interaction -- cues that orient us to the situations of daily life. According to Oberg (1976), there were six aspects of culture shock: 1) strain due to the effort required to make necessary psychological adaptations, 2) a sense of loss and feelings of deprivation in regard to friends, status, profession and possessions, 3) being rejected by and/or rejecting members of the new culture, 4) confusion in role, role expectations, values, feelings and self-identity, 5) surprise, anxiety, even disgust and indignation after becoming aware of cultural differences, 6) feelings of impotence due to not being able to cope with the new environment.

Weaver (1998) proposed three basic causal explanations for culture shock: 1) the loss of familiar cues, 2) the breakdown of interpersonal communication, and 3) an identity crisis. These three states occur in adjustment to any new social environment.

Many scholars added their own interpretations to the term “culture shock”. Hall (1959) defined culture shock as removing or distorting many of the familiar cues of one’s environment, and their substitution by other cues, which were strange. Bock (1970) has described culture shock as primarily an emotional reaction that follows from not being able to understand, control and predict another’s behavior.

According to Winkelman (1994), Culture shock was originally conceptualized as “the consequence of strain and anxiety resulting from contact with a new culture and the feelings of loss, confusion, and impotence resulting from loss of accustomed cultural cues and social

rules” (p.121). Smalley (1963) referred to culture shock as rejection and homesickness.

Gudykunst (1995, 1998) highlighted uncertainty and anxiety, two feelings of discomfort, which sojourners commonly experience in their adjustment process.

Weissman and Furnham (1987) defined culture shock as a stress reaction where salient psychological and physical rewards are generally uncertain and difficult to control or predict. Therefore, sojourners remained anxious, confused and apparently apathetic until they had had time to develop a new set of behavioral assumptions that help them to understand and predict the social behavior of the local natives (p. 314).

Sojourner Adjustment

According to Brein and David (1971), the term sojourner referred to many different types of visitors who had sojourned to new cultures in relatively short-term, such as students, trainees, technical assistants, tourists, businessmen, foreign service officers, professors and others. Ady (1995) defined the term sojourner, as an individual who travels or visits another country temporarily and was not intended to stay permanently in the host culture. Other scholars (Bochner, McLeod & Lin, 1977) defined a sojourn period as a temporary stay in a new place.

Ady (1995) also added that sojourner adjustment is a relatively short-term, individually and time-based process that is conceptually distinct from cultural or ethnic assimilation, adaptation, and intercultural communicative competence. For those sojourners who were not able to adjust to the new culture, they might have poor academic and job performance, other physical and mental illness and other negative consequences (Ady, 1995).

Empirical evidence has shown that international students experienced stressful things, such as climate differences, unfamiliar foods, poor living conditions and different behaviors, social values, learning styles and types of verbal and nonverbal communication used (Westwood & Barker, 1990). Brein and David (1971) stressed that the sojourner's successful adjustment to an intercultural experience is highly dependent on his achievement of effective interpersonal relations with his hosts. The degree of social interaction or contact was determined to measure the sojourner's adjustment.

Other studies have defined sojourner adjustment in terms of general satisfaction with one's life in a new environment (Church, 1982). Oberg (1960) mentioned that sojourner adjustment is a time-based process. Brein and David (1971) described sojourner adjustment as effective interpersonal functioning dependent upon "the development of understanding between and the sojourner and host" (p.224).

Searle and Ward (1990) identify that scholars used many variables to measure adjustment such as acceptance of the host culture, satisfaction, feeling of acceptance, and coping with everyday activities (Brislin as cited in Searle & Ward, 1990), mood states (Feinstein & Ward as cited in Searle & Ward, 1990). Ady (1995) categorized the measurement of sojourner adjustment into five areas: general satisfaction, interaction, psychopathology, adjustment to change, and competence.

Sojourner Adjustment Models

Although culture shock had been stated that was most often associated with negative consequences, it may, be important for self-development and personal growth (Adler 1975;

David 1971). Not all sojourners have negative experiences with culture shock (Zuckeman, 1978, as cited in Furnham, 1988). Church (1982) described as a U curve of initial optimism and elation in the host culture and the subsequent dip in the level of adjustment, followed by a gradual recovery to higher adjustment levels. Oberg (1960) also depicted four stages of adjustment that sojourners go through in the host culture. They are (1) the “honeymoon” stage filled with fascination, elation, and optimism lasting from a few days to 6 months depending on how soon they develop real everyday communication with the new culture; (2) the second stage characterized by hostile and emotional attitudes; (3) the recovery stage characterized by increased language ability and familiarity with new culture; (4) the fourth stage in which adjustment is as complete as possible and sojourners are largely enjoying the new culture and customs.

However, according to Blein and David (1971), only U curve was not a comprehensive description of the adjustment process. The W curve function might be a better explanation, which was an extension of the single U curve to a double U curve (UU curve), that makes W curve. It included both the sojourner’s adaptation to a new culture and the sojourner’s re-adjustment to his home culture (Blein & David, 1971). Sewell and Davidsen (1956) indicated that language facility, social interaction with Americans, previous contact with other cultures, and personality characteristics might influence the rate that a sojourner to the United States past through the various phases of W curve.

Sojourner’s friendship network

International students are one type of sojourner. Their friendship patterns tend to

belong to three distinct social networks, (1) the primary network consisting of bonds with fellow compatriots; (2) another network consisting of links with host nationals; and (3) the third network consisting of friendships with other non-compatriot foreign students (Bochner, McLeod & Lin, 1977).

In general, international students are most likely to report that their best friend was from the same culture (Bochner et al., 1976). According to Bochner et al., (1977) and Furnham and Alibhai's (1985), even though international students generally want and need intercultural contact, the ability and willingness to interact meaningfully with host culture peers are largely dependent upon cultural distance. Individuals with greater knowledge were more likely to form intercultural relationships with non-Chinese. Knowledge about the host culture enhances confidence to approach members of the new culture and reduces the potential for intercultural misunderstanding (Gudykunst & Hammer, 1984; Redmond & Bunyi, 1993; Ward & Searle, 1991).

Bochner et al., (1977) and Furnham and Alibhai (1985) demonstrated that international students could benefit from making friends with local students for informational support, such as providing help with language and academic difficulties, while co-nationals were preferred for companionship and emotional support. According to Pruitt (1978), more interaction with host nationals was associated with the fewer academic problems and fewer social difficulties (Ward & Kennedy, 1993b). In addition, language was another important variable for international students to form friendship network with host nationals and other foreign students. Language competence is likely to increase the student's confidence to interact with Americans (Klein et al., 1971, 1980; Ying & Liese, 1990, 1994). Individuals

with better English communication skills were found to form more cross-cultural relationships than those with fewer skills (Church, 1982). Bochner also mentioned that the interactions with foreign students were largely for recreational purposes and may additionally function to provide social support.

Social Support

Not surprisingly, international students frequently report needing more social support than local students (Ward, Bochner & Furnham, 2001). Pedersen (1991) explained that due to the loss of social support, sojourners might feel anxious, alienated, isolated or even disoriented in an unfamiliar environment. Therefore, social support is an essential aspect to the welfare of sojourner (Yeh & Inose, 2003).

Albrecht and Adelman (1987) defined social support as “verbal and nonverbal communication between recipients and providers that helps manage uncertainty about the situation, the self, and the other or the relationship and functions to enhance a perception of personal control in one’s life experience” (p 19). Social support helps sojourners to adjust to a new environment quickly. Social support can be provided in the form of tangible assistance, informational support, and emotional support (Salem, Bogat, & Reid, 1997). Hannigan (1977) pointed out that social support eased homesickness. Social support can buffer the relationship between stress and depression (Jou & Fukada, 1997). In general, it can play a very positive role in an individual’s coping with stress.

According to Cohen and Wills (1985), social support can operate both by contributing to the resources available to individuals to cope with the stressor and by reducing the stress

response to the stressor. Cobb (1976) pointed out that social support provides three different kinds of information: (1) people were cared for and loved; (2) people were highly esteemed; (3) people belonged to a network of communication with mutual obligations. Winkelman (1994) showed that a social support networks help to ameliorate stressor, reduce culture shock, and facilitate intercultural adjustment.

Research Questions

This literature review has focused on four main areas: friendship formation, cross-cultural differences, sojourner adjustment, and social support. Based on this review, the present study was designed to explore the following research questions.

RQ 1: What is the relationship between the frequency of interaction with Chinese friends and their self-reported sojourner adjustment?

RQ 2: What is the relationship between the frequency of interaction with non-Chinese friends and their self-reported sojourner adjustment?

RQ 3: What is the relationship between the degree of self-disclosure with Chinese friends and their self-reported sojourner adjustment?

RQ 4: What is the relationship between the degree of self-disclosure with non-Chinese friends and their self-reported sojourner adjustment?

Chapter 3

Methodology

Overview of the Design

The data for the present study were mainly collected through a self-administrated questionnaire, using snowball sampling. The questionnaires were distributed to the Chinese international students at the University of Hawaii at Manoa (UH) through a Chinese Students and Scholars Association Mailing list (CSSCUH-L list) and friends and classmates of the researcher.

Sample

A total of 69 students at UH took the survey either online or by hard copy. However, because of incomplete responses, there were a total 52 participants who finished the entire questionnaire to be included in the sample. Participants had to be Chinese nationality, born and raised in China and speak Mandarin Chinese as their first language.

First, the questionnaires were sent to Chinese international students through the Chinese Students and Scholars Association Mailing list (CSSCUH-L list) used by over 600 Chinese students and scholars in Hawaii to share information and make announcements.

Second, students who lived in the dorm and other classmates of the researcher were chosen to fill the questionnaire either online or by hard copy.

Questionnaire

The questionnaire was composed of two parts: (1) demographic information; (2) items

designed to help answer the research questions. Both fill-in and multiple choice response documents were included. (See Appendix A)

Part one assessed the demographic information. It included home country, year in college, length of stay in the US, gender, and age.

Part two included two separate sections. The first section focused on respondents' frequency of interaction and degree of self-disclosure with their Chinese and non-Chinese friends. The frequency of interaction with friends was defined as how often individual interact and communicate with their friends. The degree of self-disclosure with friends was defined as how much they share our innermost thoughts and feelings (Berndt, 1986). The relationships between college students become closer when they have opened themselves up to others. They tell their secret stories, including their innermost thoughts and feelings, deepest fears and desires. Self-disclosure makes people feel special and we often respond by sharing deeper parts of ourselves (Barry, 2006).

The second part of the questionnaire asked respondents about their self-reported sojourner adjustment of studying and living in the US. In this study, self-reported ability of sojourner adjustment referred to the respondent's general satisfaction, social interactions, academic performance and adjustment to a new educational system, self-confidence of expressing their thoughts, language ability.

Procedure

To pretest the questionnaire, it was given to 10 Chinese international students at UH for the purpose of seeking advice and suggestions. The participants were asked to give advice

and suggestions on the questionnaire designing, including the structure, the content, the question numbers and other related concerns. Based on their responses, changes were made to the final questionnaire.

The final revised questionnaires were available online and the link were sent to Chinese international students through the Chinese Students and Scholars Association Mailing list (CSSCUH-L list) and the International Students Mailing list at UH. Meanwhile, the hard copies of the questionnaire were distributed to my classmates, students who live in the dorm, and associates of the researcher. The questionnaire link was sent to them and they were asked by the researcher to send the link to their friends and answer the questions.

Consent form

This research project was approved by the Institutional Review Board (IRB) of the University of Hawaii. All of the participants completed the IRB approved consent form.

For the protection and privacy of interviewees, all identities were kept strictly confidential. All data were used for analytical purposes only and were not available to anyone except the researcher. If any of the participants would have appeared to have serious emotional depression or stress issues, I would have suggested that he contact the University's counseling center (none did).

Please see the full consent form in Appendix B.

Chapter 4

Results

The data were analyzed by using the Statistical Package for Social Science (SPSS). Pearson Correlation analysis helped me determine the degree and significance of relationships between and among my variables based on my research questions. This chapter is divided into two segments. The first segment presents the demographic information of the respondents. The second segment reports the statistical results related to the research questions.

Demographic Information

A total of 69 surveys were distributed to the Chinese international students who were currently studying at the University of Hawai'i at Manoa during the Spring 2012 semester. 52 surveys were returned. The return rate was 75%.

Table 1 and Figure 1 show the age of respondents. Most of the respondents were young, as 58.5% reported being between 26 to 35 years old, and 24.5% reported being between 18 to 25 years old. As shown in Table 2 and Figure 2, 64.2% was female and 34% were male. This sample included a higher percentage of graduate students (83%), which also matched the official data of the higher percentage of Chinese graduate students (see Figure 4). 13.2% were working on their Bachelor's degree, and 1.9% were visiting scholars (see Table 3 and Figure 3).

The overall thesis data match the Chinese international students official data based on the International Student Service office's report. In the spring semester 2012, the office had

reported that Chinese international students whose ages between 18-25 occupy 31% of all the Chinese international students, age between 26-35 occupy 64% of all the Chinese international students. Regarding the gender data, 61.30% were female students and 38.70% were male students. Of all the Chinese international students who are studying at the University of Hawai'i at Manoa, 81.1% were working on their Master's or PHD degree, 13.4% were working on their Bachelor's degree, and 5.5% were visiting scholars (See Figure 4).

Table 5 and Figure 5 show that more than half of all the respondents had been living in Oahu, Hawai'i for more than 2 years, which is 60.4%, 11.3% of the respondents have been living in Oahu, Hawai'i less than one year, 26.4% have been living in Oahu, Hawai'i for one to two years. Table 6 and Figure 6 show that a little bit more Chinese international students chose to live off campus in either an apartment or house. A total 58.5% of the respondents reported that they live off campus, 32.1% live in the apartment off campus, and 26.4% live in the house off campus. And a total 39.7% of all the respondents reported that they live on campus, 34% live in the dormitory while only 5.7% live in the apartment on campus. Regarding the respondents' friends' nationality, in this research non-Chinese friends are considered people from countries other than China. The majority of the respondents reported that they have both Chinese and non-Chinese friends. Only 7.5% of all the respondents reported that they do not have non-Chinese friends (see Table 7 and Figure 7).

Table 1. Age of Respondents

AGE CATEGORY		Frequency	Percent
Valid	18-25	13	24.5
	26-35	31	58.5
	36-OLDER	8	15.1
	Total	52	98.1
Missing	System	1	1.9
Total		53	100.0

Figure 1. Age of Respondents

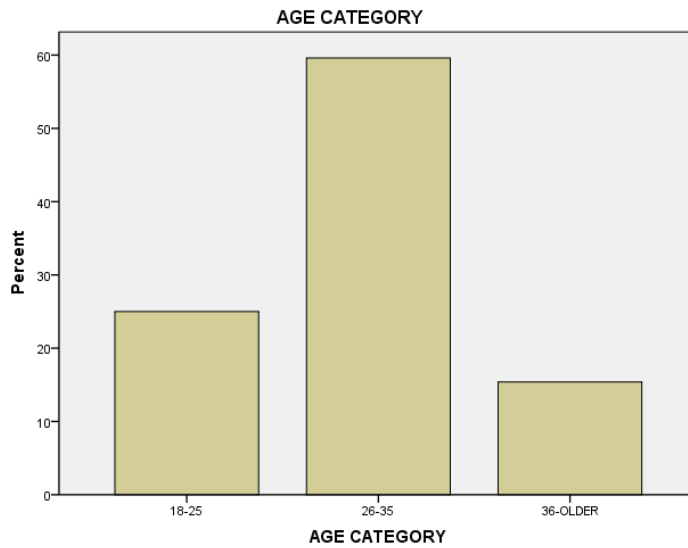


Table 2. Gender of Respondents

Gender		Frequency	Percent
Valid	Male	18	34.0
	Female	34	64.2
	Total	52	98.1
Missing	System	1	1.9
Total		53	100.0

Figure 2. Gender of Respondents

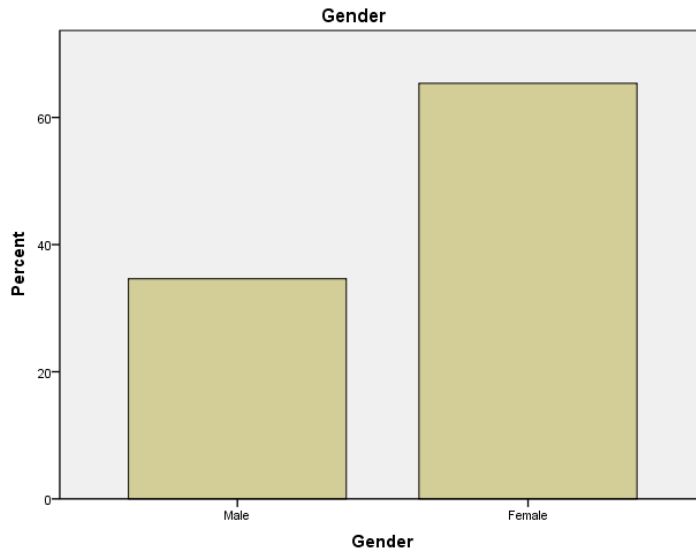


Table 3. Respondents' degree level

Degree Level		Frequency	Percent
Valid	Undergraduate	7	13.2
	Master's or PHD	44	83.0
	Visiting Scholar	1	1.9
Total		52	98.1
Missing	System	1	1.9
Total		53	100.0

Figure 3. Respondents' degree level

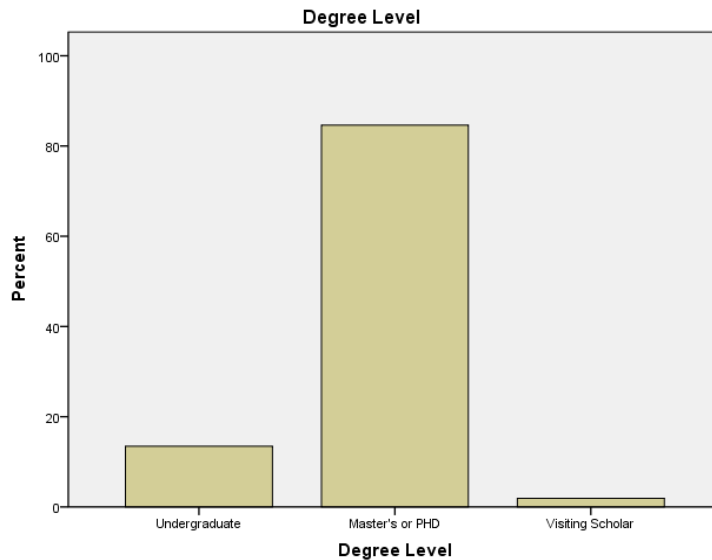
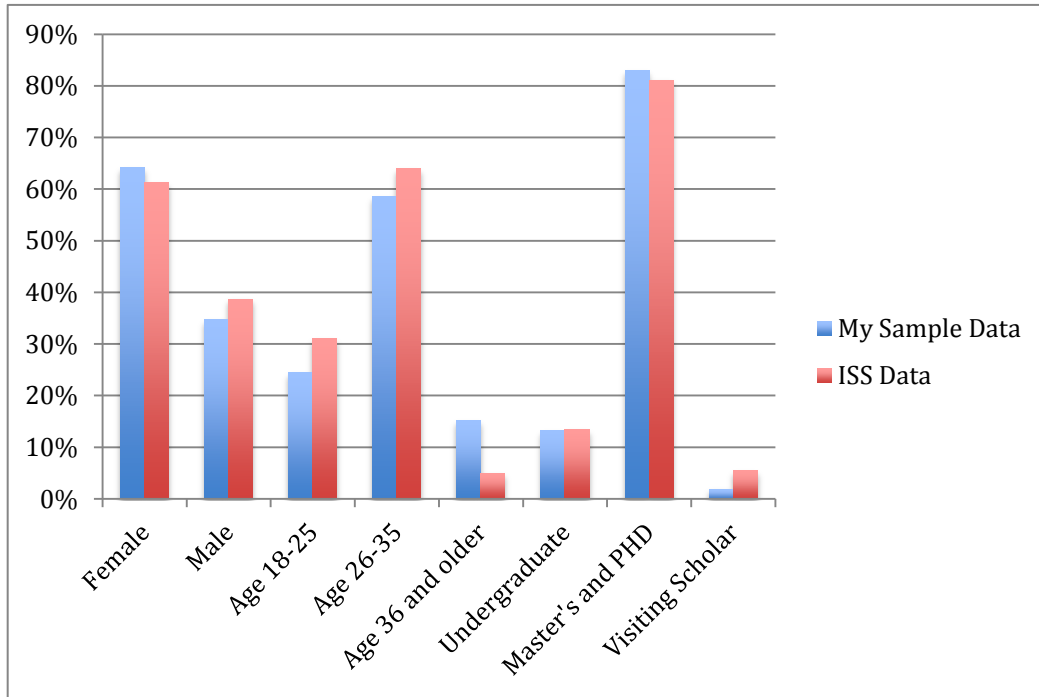


Figure 4. Comparison between my sample data and ISS data



ISS is the International Students Service department at University of Hawaii at Manoa

Table 5. Respondents' time length in Oahu

Time Length in Oahu		Frequency	Percent
Valid	less than 1 year	6	11.3
	1-2 years	14	26.4
	more than 2 years	32	60.4
	Total	52	98.1
Missing	System	1	1.9
	Total	53	100.0

Figure 5. Respondents' time length in Oahu

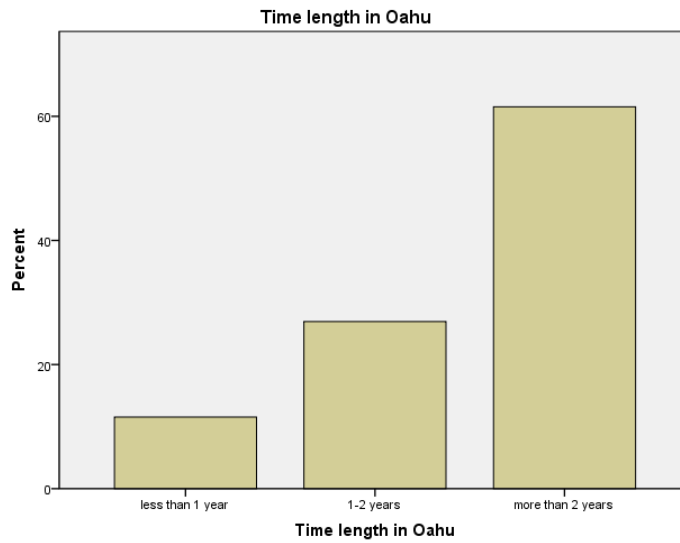


Table 6. Respondents' current residence in Oahu

Where to live		Frequency	Percent
Valid	on campus (dormitory)	18	34.0
	on campus (apartment)	3	5.7
	off campus (apartment)	17	32.1
	off campus (house)	14	26.4
	Total	52	98.1
Missing	System	1	1.9
Total		53	100.0

Figure 6. Respondents' current residence in Oahu

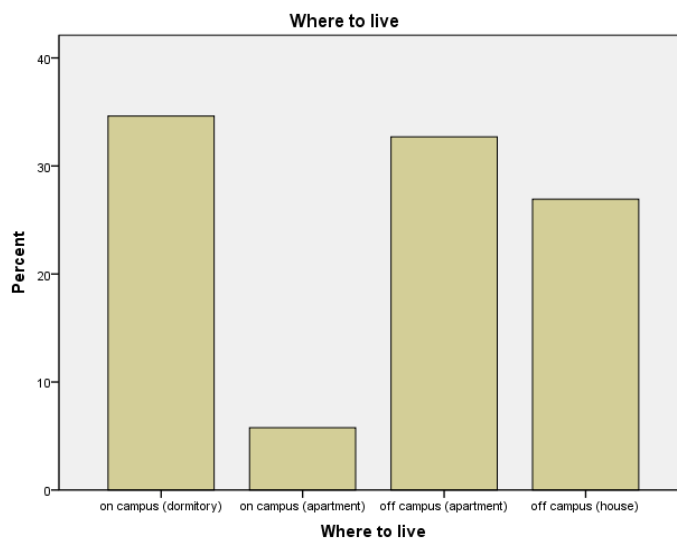
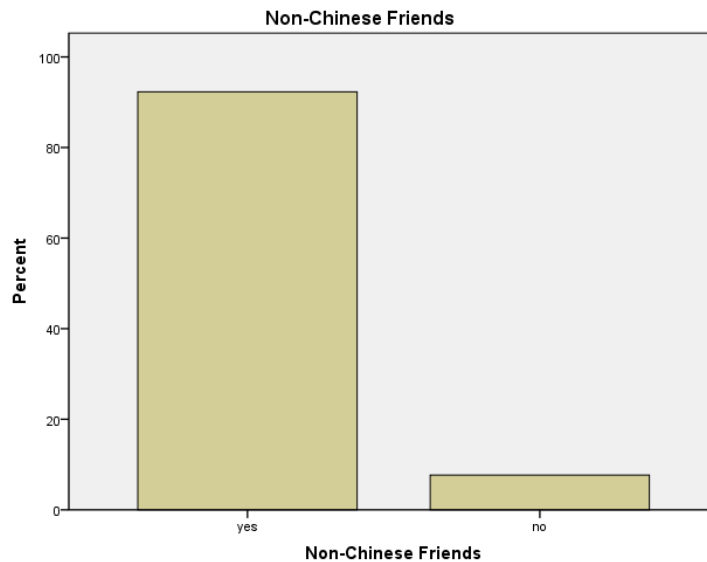


Table 7. Non-Chinese Friends

Have Non-Chinese friends		Frequency	Percent
Valid	yes	48	90.6
	no	4	7.5
	Total	52	98.1
Missing	System	1	1.9
	Total	53	100.0

Figure 7. Non-Chinese Friends



Frequency of interaction

The frequency analysis indicated that the Chinese international students saw their Chinese friends in person on a daily basis with the highest frequency (see Figure 8), and saw their non-Chinese friends in person on a weekly basis with the highest frequency (see Figure 9). For communication with Chinese and non-Chinese friends over email or social media, the frequency analysis showed that the weekly interaction had the highest frequency (see Table 8-1 and Figure 8-1, Table 9-1 and Figure 9-1).

Table 8. Mean Frequency of interaction with Chinese friends

		How often see friends in person	Communicate with them over email or social media
N	Valid	52	52
	Missing	1	1
Mean		1.71	1.77
Std. Deviation		.750	.703

Table 8-1. How often see friends in person

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	24	45.3	46.2	46.2
	Weekly	19	35.8	36.5	82.7
	Monthly	9	17.0	17.3	100.0
	Total	52	98.1	100.0	
Missing	System	1	1.9		
Total		53	100.0		

Figure 8-1. How often see Chinese Friends in person

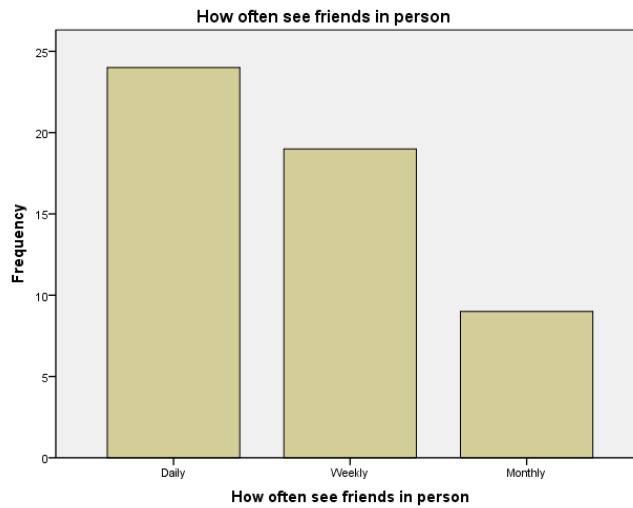


Table 8-2. Communicate with them over email or social media

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	20	37.7	38.5	38.5
	Weekly	24	45.3	46.2	84.6
	Monthly	8	15.1	15.4	100.0
	Total	52	98.1	100.0	
Missing	System	1	1.9		
Total		53	100.0		

Figure 8-2. Communicate with Chinese friends over email or social media

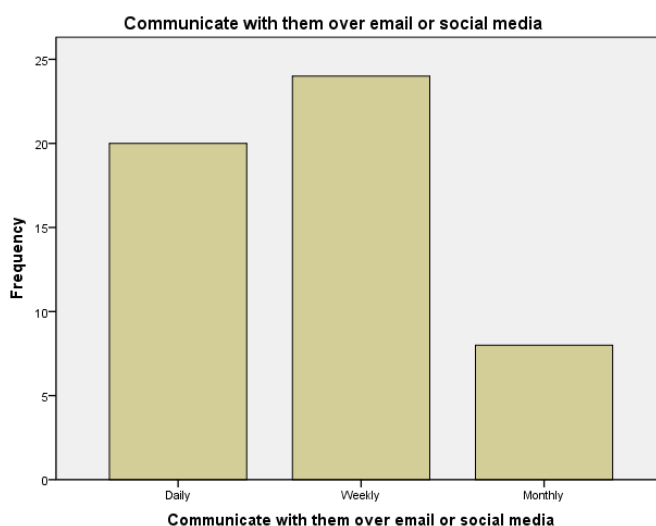


Table 9. Mean Frequency of interaction with non-Chinese friends

		How often see non Chinese friends in person	Communicate with non Chinese over email or social media
N	Valid	52	52
	Missing	1	1
Mean		1.98	2.19
Std. Deviation		.874	.817

Table 9-1. How often see non-Chinese friends in person

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	16	30.2	30.8	30.8
	Weekly	25	47.2	48.1	78.8
	Monthly	7	13.2	13.5	92.3
	Never	4	7.5	7.7	100.0
	Total	52	98.1	100.0	
Missing	System	1	1.9		
Total		53	100.0		

Figure 9-1. How often see non-Chinese Friends in person

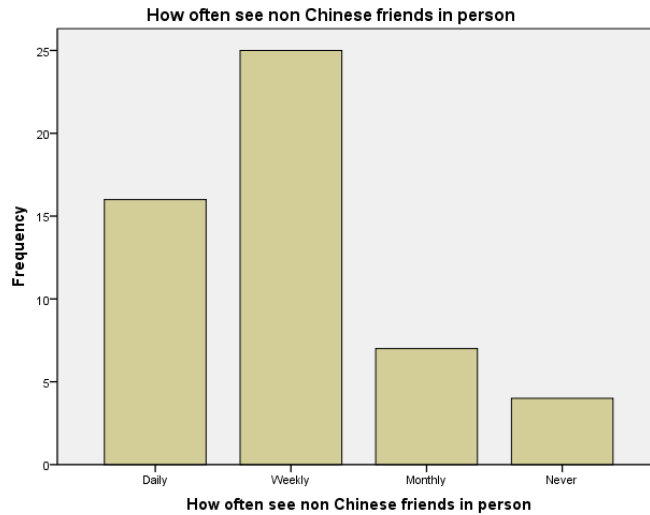
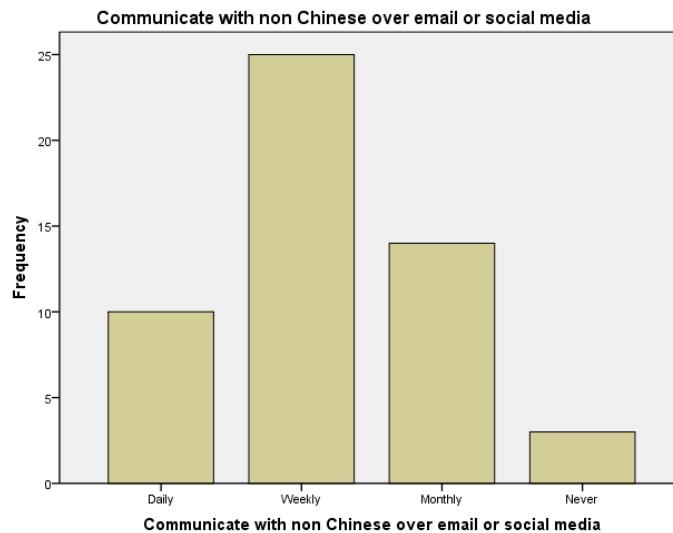


Table 9-2. Communicate with non-Chinese over email or social media

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	10	18.9	19.2	19.2
	Weekly	25	47.2	48.1	67.3
	Monthly	14	26.4	26.9	94.2
	Never	3	5.7	5.8	100.0
	Total	52	98.1	100.0	
Missing	System	1	1.9		
Total		53	100.0		

Figure 9-2. Communicate with non-Chinese friends over email or social media



Degree of self-disclosure

The frequency analysis showed that the total frequency of Chinese international students agree or strongly agree that they would talk to their Chinese friends when they need opinions was higher than the neutral or disagree frequency (see Table 10-1 and Figure 10-1). The frequency showed that higher frequency of Chinese international students had neutral or disagrees that they would talk to their non-Chinese friends when they need opinions from non-Chinese friends (see Table 11-1 and Figure 11-1). Of all the participants, 18.9% of Chinese international students disagree or strongly disagree to tell secrets to their Chinese friends, whereas 37.7% reported that they disagree or strongly disagree to tell secrets to their non-Chinese friends (see Table 10-2 and Figure 10-2, Table 11-2 and Figure 11-2).

Table 10. Mean Frequency of Degree of Self-disclosure with Chinese friends

		Need Opinions	Tell Secrets
N	Valid	52	52
	Missing	1	1
Mean		2.19	2.73
Std. Deviation		.841	.992

Table 10-1. Need Opinions from Chinese friends

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	11	20.8	21.2	21.2
	Agree	22	41.5	42.3	63.5
	Neutral	18	34.0	34.6	98.1
	Strongly Disagree	1	1.9	1.9	100.0
	Total	52	98.1	100.0	
Missing	System	1	1.9		
Total		53	100.0		

Figure 10-1. Need Opinions from Chinese friends

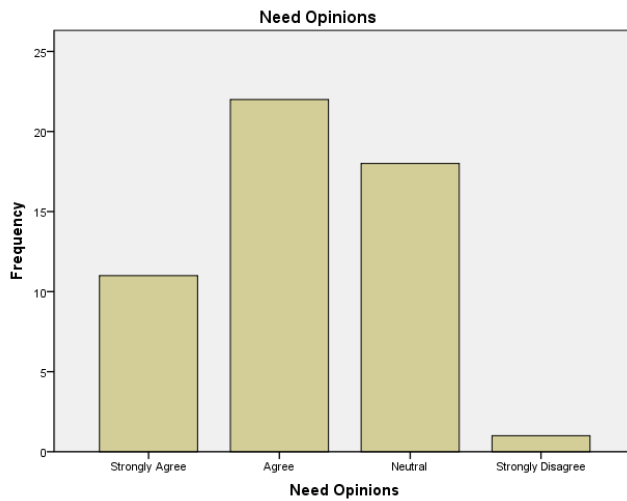


Table 10-2. Tell Secrets to Chinese friends

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	4	7.5	7.7	7.7
	Agree	19	35.8	36.5	44.2
	Neutral	19	35.8	36.5	80.8
	Disagree	7	13.2	13.5	94.2
	Strongly Disagree	3	5.7	5.8	100.0
	Total	52	98.1	100.0	
Missing	System	1	1.9		
Total		53	100.0		

Figure 10-2. Tell Secrets to Chinese friends

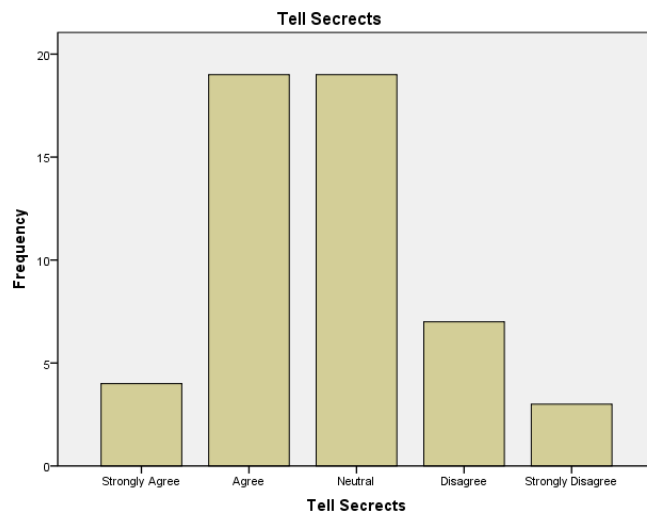


Table 11. Mean Frequency of Degree of self-disclosure with non-Chinese friends

		Need Opinions from non Chinese friends	Tell Secrets with non Chinese friends
N	Valid	52	52
	Missing	1	1
Mean		2.67	3.15
Std. Deviation		.879	1.161

Table 11-1. Need Opinions from non-Chinese friends

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	3	5.7	5.8	5.8
	Agree	21	39.6	40.4	46.2
	Neutral	19	35.8	36.5	82.7
	Disagree	8	15.1	15.4	98.1
	Strongly Disagree	1	1.9	1.9	100.0
	Total	52	98.1	100.0	
Missing	System	1	1.9		
Total		53	100.0		

Figure 11-1. Need Opinions from non-Chinese friends

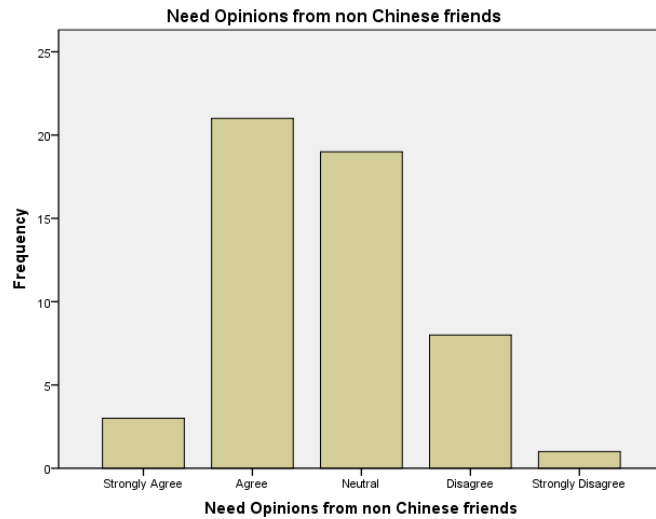
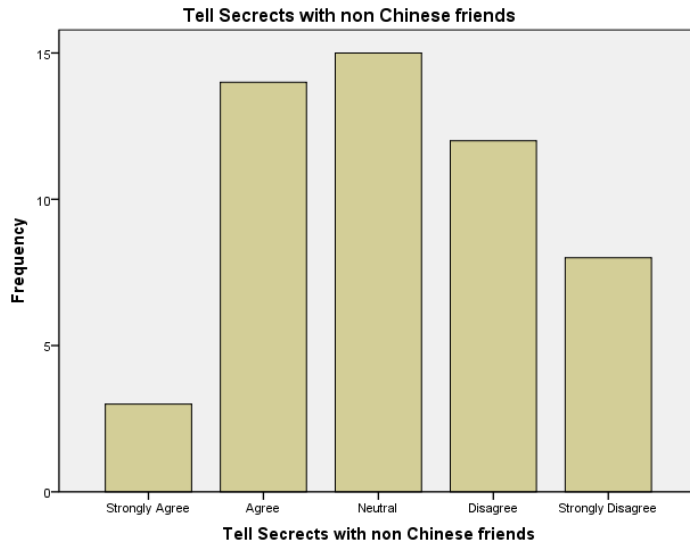


Table 11-2. Tell Secrets to non-Chinese friends

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	3	5.7	5.8	5.8
	Agree	14	26.4	26.9	32.7
	Neutral	15	28.3	28.8	61.5
	Disagree	12	22.6	23.1	84.6
	Strongly Disagree	8	15.1	15.4	100.0
	Total	52	98.1	100.0	
Total		53	100.0		

Figure 11-2. Tell Secrets to non-Chinese friends



Sojourner Adjustment

The results of distribution of sojourner adjustment data indicated that the most frequent answers were “agree” and “strongly agree” (see Table 12 – Table 17).

Table 12. Frequency of Comfortable with living in a new environment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	16	30.2	30.8	30.8
	Agree	27	50.9	51.9	82.7
	Neutral	8	15.1	15.4	98.1
	Strongly Disagree	1	1.9	1.9	100.0
	Total	52	98.1	100.0	
Missing	System	1	1.9		
Total		53	100.0		

Table 13. Frequency of Satisfied with my academic performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	13	24.5	25.0	25.0
	Agree	24	45.3	46.2	71.2
	Neutral	10	18.9	19.2	90.4
	Disagree	4	7.5	7.7	98.1
	Strongly Disagree	1	1.9	1.9	100.0
	Total	52	98.1	100.0	
Missing	System	1	1.9		
Total		53	100.0		

Table 14. Frequency of Communicate with non-Chinese outside-of-class

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	16	30.2	30.8	30.8
	Agree	21	39.6	40.4	71.2
	Neutral	13	24.5	25.0	96.2
	Disagree	1	1.9	1.9	98.1
	Strongly Disagree	1	1.9	1.9	100.0
	Total	52	98.1	100.0	
Missing	System	1	1.9		
Total		53	100.0		

Table 15. Frequency of Join social clubs or local communities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	11	20.8	21.2	21.2
	Agree	15	28.3	28.8	50.0
	Neutral	18	34.0	34.6	84.6
	Disagree	7	13.2	13.5	98.1
	Strongly Agree	1	1.9	1.9	100.0
	Total	52	98.1	100.0	
Total		53	100.0		

Table 16. Frequency of Good enough to speak English to communicate with non-Chinese

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	12	22.6	23.1	23.1
	Agree	23	43.4	44.2	67.3
	Neutral	12	22.6	23.1	90.4
	Disagree	4	7.5	7.7	98.1
	Strongly Agree	1	1.9	1.9	100.0
	Total	52	98.1	100.0	
Missing	System	1	1.9		
Total		53	100.0		

Table 17. Good enough to understand English to Communicate with non-Chinese

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	13	24.5	25.0	25.0
	Agree	25	47.2	48.1	73.1
	Neutral	8	15.1	15.4	88.5
	Disagree	5	9.4	9.6	98.1
	Strongly Disagree	1	1.9	1.9	100.0
	Total	52	98.1	100.0	
Missing	System	1	1.9		
Total		53	100.0		

The Correlation between the two questions of Frequency of Interaction with Chinese friends

The relationship between the two questions was of assessing the degree of interaction with Chinese friends was assessed by using Pearson correlation analysis. The analysis showed that the two questions were significantly correlated ($r=.875, p<.01$) (See Table 18). The two questions score of the degree of interaction with Chinese students were illustrated in Table 18.

Table 18. Result of Pearson Correlation Analysis of the Degree of Interaction with

Chinese Students

		How often see friends in person	Communicate with them over email or social media
How often see friends in person	Pearson Correlation	1	.875**
Communicate with them over email or social media	Pearson Correlation	.875**	1

** Correlation is significant at the 0.01 level (2-tailed).

The Correlation between the two questions of Frequency of Interaction with non-Chinese Friends

The Pearson Correlation Analysis shows that the two questions of the degree of interaction with non-Chinese friends were significantly correlated ($r=.828, p<.01$). The two questions score of the degree of interaction with Chinese students were illustrated in Table 19.

Table 19. Result of Pearson Correlation Analysis of the Degree of Interaction with

non-Chinese Students

		How often see non-Chinese friends in person	Communicate with non-Chinese over email or social media
How often see non-Chinese friends in person	Pearson Correlation	1	.828**
Communicate with non-Chinese over email or social media	Pearson Correlation	.828**	1

** Correlation is significant at the 0.01 level (2-tailed).

The Correlation between the two questions of the Degree of Self-disclosure with Chinese Friends

The Pearson Correlation Analysis shows that the two questions addressing between “Need Opinions” and “Tell Secrets” with Chinese friends were significantly correlated ($r=.$

815, $p < .01$). The statistics were illustrated in Table 20.

Table 20. Result of Pearson Correlation Analysis of the Degree of Self-disclosure with Chinese Students

		Need Opinions	Tell Secrets
Need Opinions	Pearson Correlation	1	.815**
Tell Secrets	Pearson Correlation	.815**	1

** Correlation is significant at the 0.01 level (2-tailed).

The Correlation between the two questions of the Degree of Self-disclosure with non-Chinese Friends

The Pearson Correlation Analysis shows that the two questions addressing between “Need Opinions” and “Tell Secrets” with non-Chinese friends were also significantly correlated ($r = .914$, $p < .01$). The statistics were illustrated in Table 21.

Table 21. Result of Pearson Correlation Analysis of the Degree of Self-disclosure with non-Chinese Students

		Need Opinions from non Chinese friends	Tell Secrets with non Chinese friends
Need Opinions from non Chinese friends	Pearson Correlation	1	.914**
Tell Secrets with non Chinese friends	Pearson Correlation	.914**	1

** Correlation is significant at the 0.01 level (2-tailed).

The Correlation between the six questions of the Sojourner Adjustment

Table 22 indicates that the six questions addressing sojourner adjustment were highly significantly correlated.

Table 22. Result of Pearson Correlation Analysis of Sojourner Adjustment

		Comfortable with living in a new environment	Satisfied with my academic performance	Communicate with non-Chinese outside-of-class	Join social clubs or local communities	Good enough to speak English to communicate with non-Chinese	Good enough to understand English to Communicate with non-Chinese
Comfortable with living in a new environment	Pearson Correlation	1	.892**	.926**	.835**	.874**	.898**
Satisfied with my academic performance	Pearson Correlation	.892**	1	.942**	.854**	.970**	.979**
Communicate with non-Chinese outside-of-class	Pearson Correlation	.926**	.942**	1	.835**	.917**	.922**
Join social clubs or local communities	Pearson Correlation	.835**	.854**	.835**	1	.868**	.856**
Good enough to speak English to communicate with non-Chinese	Pearson Correlation	.874**	.970**	.917**	.868**	1	.950**
Good enough to understand English to Communicate with non-Chinese	Pearson Correlation	.898**	.979**	.922**	.856**	.950**	1

** Correlation is significant at the 0.01 level (2-tailed).

In conclusion, all the individual correlations within each variable were very significant.

See the Appendix C of the detailed Pearson Correlations data between the frequency of interaction with Chinese students and the Sojourner Adjustment.

See the Appendix D of the detailed Pearson Correlations data between the frequency of interaction with non-Chinese students and the Sojourner Adjustment.

See the Appendix E of the detailed Pearson Correlations data between the degree of

self-disclosure with Chinese students and the Sojourner Adjustment.

See the Appendix F of the detailed Pearson Correlations data between the degree of self-disclosure with non-Chinese students and the Sojourner Adjustment.

The Research Questions

Because all of the questions for each variable were highly correlated, it made sense to combine or transform them into an overall variable in order to direct address the research questions.

The means associated with RQ1 (What is the relationship between the frequency of interaction with Chinese friends and their self-reported sojourner adjustment?) was presented in Table 23. And the Correlations between Frequency of Interaction with Chinese friends and Sojourner Adjustment are depicted in Table 24.

Table 23. Mean Frequency of Interaction with Chinese friends and Sojourner Adjustment

	Mean	Std. Deviation	N
FrequencyCH	1.7404	.70357	52
Adjustment	2.1538	.89956	52

Table 24. Corrections between Frequency of Interaction with Chinese friends and Sojourner Adjustment

		FrequencyCH	Adjustment
FrequencyCH	Pearson Correlation	1	.885**
Adjustment	Pearson Correlation	.885**	1

** Correlation is significant at the 0.01 level (2-tailed).

FrequencyCH is the overall variable of the Frequency of Interaction with Chinese friends

Pearson Correlation analysis shows that these two variables were significantly correlated ($r = .885, p < .01$). Thus the frequency of interaction with Chinese friends was highly corrected to their sojourner adjustment.

The means associated with RQ2 (What is the relationship between the frequency of interaction with non-Chinese friends and their self-reported sojourner adjustment?) are presented in Table 25. And the Correlations between Frequency of Interaction with non-Chinese friends and Sojourner Adjustment are depicted in Table 26.

Table 25. Mean Frequency of Interaction with non-Chinese friends and Sojourner Adjustment

	Mean	Std. Deviation	N
FrequencyNonCH	2.0865	.80878	52
Adjustment	2.1538	.89956	52

Table 26. Corrections between Frequency of Interaction with non-Chinese friends and Sojourner Adjustment

FrequencyNonCH	Pearson Correlation	1	.963**
Adjustment	Pearson Correlation	.963**	1

** Correlation is significant at the 0.01 level (2-tailed).

FrequencyNonCH is the overall variable of the Frequency of Interaction with non-Chinese friends

Pearson Correlation analysis shows that these two variables were significantly correlated ($r = .963, p < .01$). Thus the frequency of interaction with non-Chinese friends was related to their sojourner adjustment.

The means associated with RQ3 (What is the relationship between the degree of self-disclosure with Chinese friends and their self-reported sojourner adjustment?) are presented in Table 27. And the Correlations between Degree of Self-disclosure with Chinese friends and Sojourner Adjustment are depicted in Table 28.

Table 27. Mean Degree of Self-disclosure with Chinese friends and Sojourner Adjustment

	Mean	Std. Deviation	N
SelfdisclosureCH	2.4615	.87361	52
Adjustment	2.1538	.89956	52

Table 28. Correlations between Degree of Self-disclosure with Chinese friends and Sojourner Adjustment

		SelfdisclosureCH	Adjustment
SelfdisclosureCH	Pearson Correlation	1	.958**
Adjustment	Pearson Correlation	.958**	1

** Correlation is significant at the 0.01 level (2-tailed).

SelfdisclosureCH is the overall variable of the Degree of Self-disclosure with Chinese friends

Pearson Correlation analysis shows that these two variables were highly correlated ($r=.958, p<.01$). Thus the degree of self-disclosure with Chinese friends was related to their sojourner adjustment.

The means associated with RQ4 (What is the relationship between the degree of self-disclosure with non-Chinese friends and their self-reported sojourner adjustment?) are presented in Table 29, and the Correlations between Degree of Self-disclosure with non-Chinese friends and Sojourner Adjustment are depicted in Table 30.

Table 29. Mean Degree of Self-disclosure with non-Chinese friends and Sojourner

Adjustment

	Mean	Std. Deviation	N
SelfdisclosureNonCH	2.9135	.99863	52
Adjustment	2.1538	.89956	52

Table 30. Correlations between Degree of Self-disclosure with non-Chinese friends

and Sojourner Adjustment

		SelfdisclosureNon CH	Adjustment
SelfdisclosureNonCH	Pearson Correlation	1	.935**
Adjustment	Pearson Correlation	.935**	1

** Correlation is significant at the 0.01 level (2-tailed).

SelfdisclosureNonCH is the overall variable of the Degree of Self-disclosure with non-Chinese friends

Pearson Correlation analysis shows that these two variables were highly correlated ($r = .935, p < .01$). Thus the degree of self-disclosure with non-Chinese friends was related to their sojourner adjustment.

Chapter 5

Discussion

This chapter includes three segments. First, the results are discussed in terms of the RQS. Second, several limitations of this study are addressed. Finally, implications for further research are identified.

The Research Questions

As shown in Table 24, Table 26, Table 28, and Table 30, this study showed that the Chinese international students' sojourner adjustment ability was significantly related to how frequently or how intimately they interact with their Chinese or non-Chinese friends. It demonstrated that the frequency of interact and the degree of self-disclosure of Chinese students with their Chinese or non-Chinese friends would facilitate their ability of sojourner adjustment. International students are more likely to experience loneliness and solitude. They may encounter many personal difficulties as well while they live in a country with different cultures and norms. When they have these kinds of problems, they are more likely to talk with their Chinese friends and help each other. These findings are consistent with the previous literature as described in the literature review. Chinese international students like to talk with local counterparts instead of other national friends when they encounter psychological difficulties (e.g. Bochner et al., 1976).

This study revealed that the majority of Chinese international students' had two friendship networks: co-national and other nationals. Sandhu and Asrabadi (1994) have indicated that international students seek out fellow countrymen during the sojourner

adjustment process. This is consistent with the findings in this study. From the survey, 100% of the participants have claimed of having Chinese friends. And 8% of the participants mentioned that they do not have non-Chinese friends. All of the participants of this study were Chinese international students. For most of them, they form their friendship network by choosing other Chinese who live in proximity with them, such as in the same dormitory, in the same house, or within walk distance to each other. Moreover, some Chinese international students have already had connections with Chinese students here via social media while they were in China. They asked those Chinese students who have already settled down to help them find place for them to live in when they arrive in Hawaii. This is consistent with previous studies, which showed that physical distance affects social interaction. Latane (1995) had conducted a study that showed interactions decreased as the distance separating two people. In this study, the data showed that “people who influence us tend to live nearby” (p. 803). And Chinese international students have similar situations with them and experience the similar intensity of stresses of living and studying in a foreign country. They can provide information, advice, and emotional support to each other by sharing their private feelings and thoughts.

The frequency of interaction analysis showed that Chinese students interact more often with their Chinese friends on a daily base than their non-Chinese friends (see Figure 8-1, 8-2, 9-1, 9-2). They can benefit from interacting with co-nation friends because it may help them to disclose the problems they are encountering and understand the American culture. If their friends had already experienced similar types of problems of dealing with the American culture or adjusting the new life style, they might be able to help their friends out and guide

them toward the right direction in their own language. Furnham's study (1985) on the friendship networks of foreign students showed that international students have a strong preference for co-national friends first, other nationals second and host nationals third.

However, it is also important for Chinese students to make friends with other nationals. It is an essential way to learn their culture and improve their ability to deal with isolation. According to Hall (1978), academic sojourners who have made good friends reported that they had less loneliness and were less homesick. However, for the most Asian students it is difficult to develop friendship with Americans. The major obstacles are language barriers and cultural differences (e.g., Bochner et al., 1976).

The degree of self-disclosure analysis indicated that Chinese international students are more likely to share their private feelings and thoughts with their Chinese friends while they share less of their private feelings and thoughts with non-Chinese friends. The primary reason is most likely the language ability and cultural differences. Many students may feel too uncomfortable or insecure to disclose personal problems with non-Chinese friends because it might difficult to explain their personal problems in a second language and the different opinions because of different cultural norms and values. For Chinese international students, they come from the same country and share the same cultural norms and values. They might have more common thoughts and opinions. Most Asian students like to develop friendships with co-national students because it is more easily communicate with each other and have more common ground (Yeh, 1976; Yeh, et al., 1979). In addition, they have similar dietary habits. Chinese students like sharing food with other Chinese students, and they celebrate festivals together. They are experiencing the same situations as international students. They

are supposed to have the most similarities with each other.

In a summary, this study found most of Chinese international students' sojourner adjustment was significantly related to the frequency of interaction and degree of self-disclosure with Chinese and non-Chinese friends. The data also showed that most of the participants were well adjusted in their new environment. Most of them reported that they are satisfied with living in the US and satisfied with their academic performance. A possible reason of the general satisfaction in sojourner adjustment is that there are a higher percentage of the participants were age at 26-35. For this age group, they should be more mature and have life experiences. And most of them claimed that their English ability is good enough to communicate in daily life.

Limitations

There are limitations of this study. First, the participants were Chinese international students, who were studying at the University of Hawaii at Manoa. There are unique characters of Chinese students in Hawaii that might have some limitation on the generalizability of the findings. Chinese international students at the University of Hawaii may be a bit different than in most other universities in the US because of the relatively large percentage of Asian Americans at UH and in the broader Honolulu community. Second, the questionnaire was not translated into Chinese. Therefore, the results might be influenced by the Chinese students' ability to understand English. Since there were 12% of the participants reported that their ability to understand English is not good enough to communicate with non-Chinese friends.

Implications for Further Research

There were 8% of the participants mentioned that did not have non-Chinese friends. Because of the limitation of study, I did not have the chance to find out why these participants do not have non-Chinese friends. Is this related to their own preference, or personality, or due to their limited personal contact with non-Chinese students?

In this study, a list of key variables were identified that relationship between friendship network and sojourner adjustment of Chinese international students, such as frequency of interaction and degree of self-disclosure. In the future research, social support should be studied as well. When studying abroad, international students face a strange environment and are very likely to undergo stresses from adjusting to a new life and academic pressures. How do international students cope with stress? Will they change the way of forming their friendship network due to the huge amount of stresses?

Due to the limitation of the time and length, the questionnaire didn't include the factors and motivations that sojourner students of formation of friendship networks. These findings may help researchers have a clear picture to determine what the cause is and what the effect is.

References

- Adler, P. S. (1975). The transitional experience: an alternative view of culture shock. *Journal of Humanistic Psychology*, 15, 13-23.
- Ady, J. (1995). Toward a differential demand model of sojourner adjustment. In R. Wiseman (Eds). *Intercultural communication theory*. (pp. 92-114). Thousand Oaks, CA: Sage.
- Albrecht, T. L. & Adelman, M. B. (1987). *Communicating social support*. Newbury Park, CA: Sage.
- Altman, I. (1973). Reciprocity of interpersonal exchange. *Journal for the Theory of Social Behaviour*, 3, 249-261.
- Aristotle. 340BC. *Nicomachean Ethics*, in the complete works of Aristotle, ed. Jonathan Barnes, Princeton: Princeton University Press.
- Babiker, I. E., Cox, J. L., & Miller, P. M. (1980). The measurement of cultural distance and its relationship to medical consultations, symptomatology and examination performance of overseas students at Edinburgh University. *Social Psychiatry*, 15, 3, 109-116.
- Backman, C. W., & Secord, P. F. (1959). The effect of perceived liking on interpersonal attraction. *Human Relations*, 12,379-383.
- Barry, A. F., (2006). *Self-Disclosure in Psychotherapy*. New York : Guilford Press
- Baxter, L. A., & Babbie, E. (2004). *The basics of communication research*. Wadsworth: Thomson.
- Berg, J. H., & Archer, R. L. (1980). Disclosure or concern: A second look at liking for the norm breaker. *Journal of Personality*, 48. 245-257.
- Berndt, T. J. (1986). Children's comments about their friendships. In M. Perlmutter (Ed.). *Cognitive Perspective on children's social and behavioral development* (pp 189-212). Hillsdale, NJ: Lawrence Erlbaum.
- Bochner, S. Buker, E. A. & McLeod, B. M. (1976). "Communication patterns in an international student dormitory: A modification of the "small world" method". *Journal of Applied Social Psychology*, 6, 275-290.
- Bochner, S., McLeod, B. M. & Lin, A. (1977). "Friendship patterns of overseas students: A functional model". *International Journal of Psychology*, 12,277-297.

- Bock, P. (ed.) (1970). *Culture Shock: A Reader in Modern Anthropology*, New York, Alfred A. Knopf.
- Brein, M. & David, K. H. (1971). *Intercultural Communication and The Adjustment of The Sojourner*. *Psychological Bulletin*, 76, 215-230.
- Carnegie, D. (1936). *How to win friends and influence people*. New York: Simon & Schuster.
- Chen, L. (2005). Western theory and non-Western practice: friendship dialectics among Chinese. Conference paper at International Communication Association, 2005 Annual Meeting, New York, NY.
- Church, A. (1982). *Sojourner adjustment*. *Psychological Bulletin*, 91, 540–572
- Cobb, S. (1976). *Social support as a moderator of life stress*. *Psychosomatic Medicine*, 3, 300-14.
- Cohen, S. & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310_357.
- Cooper, P. J., & Thomas, C. C., Simonds, C. J. (2007). *Intercultural communication: a text with readings*. NJ: Pearson Education, Inc.
- Curtis, R. C., & Miller, K. (1986). Believing another likes or dislikes you: Behaviors making the beliefs come true. *Journal of Personality and Social Psychology*, 51, 284-290.
- David, K. (1971). Culture shock and the development of self-awareness. *Journal of Contemporary Psychotherapy*, 4-44-8.
- Ebbesen, E. B., Kjos, G. L., & Konecni, V. J. (1976). Spatial ecology: Its effects on the choice of friends and enemies. *Journal of Experimental Social Psychology*, 12, 505-518
- Fehr, B (1996). *Friendship Processes*. Thousand Oaks, Calif: Sage Publications.
- Festinger, L., Schachter, S., & Back, K. (1950). Social pressures in informal groups: *A study of human factors in housing*. New York: Harper.
- Fontaine, G. (1986). Roles of social support in overseas relocation: Implications for intercultural training. *International Journal of Intercultural Relations*, 10, 361–378.
- Furnham, A. (1988). The adjustment of sojourners. In Y. Y. Kim & W. B. Gudykunst (Eds.), *Cross-cultural adaptation: Current approaches* (pp. 42-61). Newbury Park, CA: Sage.

- Furnham, A. & Alibhai, N. (1985). "The friendship networks of foreign students: A replication and extension of the functional model". *International Journal of Psychology*, 20, 709-722.
- Gao, G., & Ting-Toomey, S. (1998). *Communicating effectively with the Chinese*. Thousand Oaks, CA: Sage.
- Gareis, E. (1995). *Intercultural Friendship: A Qualitative Study*. Lanham, MD: University Press of America.
- Gareis, E. (2000a). Intercultural Friendship: five case studies of German students in the USA. *Journal of Intercultural Studies*, 21, 1, 67-91.
- Gary R. Weaver (1998). *Culture, Communication and Conflict*. MA: Simon & Schuster Publishing.
- Glazer, S. (2006). Social support across cultures. *International Journal of Intercultural Relations*, 30, 605-622.
- Gudykunst, W. B., Ting-Toomey, S., & Chua, E. (1988). *Culture and interpersonal communication*. Newbury Park, CA: Sage.
- Gudykunst, W.B., & Hammer, M.R. (1984). Dimensions of intercultural effectiveness: Culture specific or culture general? *International Journal of Intercultural Relations*, 8, 1-10
- Gudykunst, W. B. (1983). Uncertainty reduction and predictability of behavior in low and high-context cultures. *Communication Quarterly*, 31, 49-55.
- Gudykunst, W. B. (1985). An exploratory comparison of close intracultural and intercultural friendships. *Communication Quarterly*, 33, 4, 270-283.
- Gudykunst, W. B., (1994). *Bridging differences: Effective intergroup communication*. CA: Sage.
- Gudykunst, W. B. (1995). Anxiety uncertainty management (AUM) theory: Current status. In R. L. Wiseman (Ed.), *Intercultural communication theory* (pp. 8-58).
- Gudykunst, W. B. (1998). Applying anxiety/uncertainty management (AUM) theory to intercultural adjustment training. *International Journal of Intercultural Relations*, 22, 187-227.
- Gudykunst, W. B. (1983). Uncertainty reduction and predictability of behavior in low- and high-context cultures. *Communication Quarterly*, 31, 49-55.

- Gudykunst, W. B. (1985). An exploratory comparison of close intracultural and intercultural friendships. *Communication Quarterly*, 33, 4, 270-283.
- Hall, E. T. (1959). *The Silent Language*. Doubleday, Garden City, N.Y.
- Hall, E. T. (1976). *Beyond Culture*. Anchor Press, New York.
- Hannigan, T.(1997). Homesickness and acculturation stress in the international student. In M. A. L. Van Tilburg and A. J. J. M. Vingerhoets (Eds), *Psychological aspects of geographic movement* (pp. 71-81). Tilburg, The Netherlands: University of Tilburg Press.
- Heikinheimo, E. S, & Shute, J. C. M. (1986). The *adaptation* of foreign students: Student views and institutional implications. *Journal of College Student Personnel*,27,399-406.
- Hofstede, G. (1980). *Culture's consequences*. Beverly Hills, CA: Sage.
- Hofstede, G. (1991). *Cultures and organizations: Software of the mind*. New York: McGraw Hill.
- Jou, Y. H. & Fukada, H. (1996). Comparison of differences in the association of social support and adjustment between Chinese and Japanese students in Japan: A research note. *Psychological Reports*, 79, 107-112.
- Kim, Y. Y. (2001). *Becoming intercultural: An integrative theory of communication and cross-cultural adaptation*. Thousand Oaks, Calif.: Sage Publications.
- Latane, L(1995). Distance Matters more than You Think! *Pers Soc Psychol Bull* August 1999 25: 1045-1048,
- Leung, K., & Lind, E. A. (1986). Procedural Justice and culture: Effects of culture, gender, and investigator status on procedural preferences. *Journal of Personality and Social Psychology*, 50(6), 1134-1140
- Levine, K. (1985). *The flight from ambiguity*. Chicago: University of Chicago Press.
- Lin, J. C, & Yi, J. K. (1997). Asian international students' adjustment: Issues and program suggestions. *College Student Journal*, 31, 473-480.
- Klein, M.H., Miller, M.H., & Alexander, A.A. (1971). When young people go out in the world. In W.P. Lebra (Ed.), *Youth, socialization, and mental health: Volume 3. Mental health research in Asia and the Pacific* (pp. 217–232). Honolulu: University of Hawaii Press.

- Klein, M.H., Miller, M.H., & Alexander, A.A. (1980). The American experience of the Chinese student: On being normal in an abnormal world. In A. Kleinman & T.Y. Lin (Eds.), *Normal and abnormal behavior in Chinese culture* (pp. 311–330). Dordrecht, Holland: Kluwer
- Menne, J. M. C., & Sinnett, E. R. (1971). Proximity and social interaction in residence halls. *Journal of College Student Personnel*, 12, 26-31.
- Michelle LeBaron & Venashri Pillay, (2006). *Conflict Across Cultures: A unique experience of bridging differences*. Boston, MA: Intercultural Press
- Montemayor, Raymond (1994). Researchers or graduate students? *PsycCRITIQUES* Vol 39 (4)1994 p.439-440 American Psychological Association, US
- Nahemow, L., & Lawton, M. P. (1975). Similarity and propinquity in friendship formation. *Journal of Personality and Social Psychology*, 32, 205-213.
- Nicotera, A. M. (1993). *Interpersonal communication in friend and mate relationships*. Albany: State University of New York Press.
- Oberg, K. (1960). Culture Shock: Adjustment to new cultural environment. *Practical Anthropology*, 7, 177-182.
- Open Doors. (2010). *Annual Report of the Institute of International Education*. Retrieved on November 15, 2010, from <http://www.iie.org/>
- Pruitt, F. J. (1978). “The adaptation of African students to American society”. *International Journal of Intercultural Relations*, 21,90-118.
- Redmond, M.V., & Bunyi, J.M. (1993). The relationship of intercultural communication competence with stress and the handling of stress as reported by international students. *International Journal of Intercultural Relations*, 17, 235–254
- Robin, Z. (1975). Disclosing oneself to a stranger: reciprocity and its limits. *Journal of Experimental Social Psychology*, 11, 233-260.
- Rodin, M. J. (1982). Non-engagement, failure to engage, and disengagement. In S. Duck (Ed.), *Personal relationships: Vol. 4. Dissolving personal relationships* (pp.31-49). London: Academic Press.
- Salem, D. A., Bogat, G. A., & Reid, C. (1997). Mutual help goes on line. *Journal of Community Psychology*, 25, 189_207.

- Sandhu, D.S., & Asrabadi, B.R. (1994). Development of an acculturative stress scale for international students: Preliminary findings. *Psychological Reports*, 75, 435-448.
- Searle, W., & Ward, C. (1990). The prediction of psychological and sociocultural adjustment during cross-cultural transitions. *International Journal of Intercultural Relations*, 14, 449-464.
- Sewell, W. H., & Davidsen, O. M. (1956) The adjustment of Scandinavian students. *Journal of Social Issues*. 9-19
- Shiyong Peng. (2003). *Culture and Conflict Management in Foreign-invested Enterprises in China*. Bern, Switzerland: Peter Lang AG.
- Smalley, W. A. (1963). Culture shock, language shock, and the shock of self-discovery. *Practical Anthropology*, 10, 49-56.
- Stroebe, W., & Stroebe, M. (1998). [Textbook of health psychology – a social psychological approach] *Lehrbuch der Gesundheitspsychologie – ein sozial psychologischer Ansatz*. Frankfurt: Verlag Dietmar Klotz
- Sykes, R. E. (1983). Initial interaction between strangers and acquaintance: A multivariate analysis of factors affecting choice of communication partners. *Human Communication Research*, 10, 27-53.
- Wallace V. Schmidt. Roger N. Conaway. Susan S. Easton. William J. Wardrope (2007). *Communicating Globally. Intercultural Communication and International Business*. California: Sage Publications, Inc.
- Ward, C., Bochner, S., & Furnham, A. (2001). *The psychology of culture shock*. PA: Routledge
- Ward, C. & Kennedy, A. (1993a). "Psychological and sociocultural adjustment during cross-cultural transitions: A comparison of secondary students at home and abroad". *International Journal of Psychology*, 28, 129-147.
- Ward, C., & Searle, W. (1991). The impact of value discrepancies and cultural identity on psychological and sociocultural adjustment of sojourners. *International Journal of Intercultural Relations*, 15, 209–225
- Weissman, D., & Furnham, A. (1987). The expectations and experiences of a sojourning temporary resident abroad: A preliminary study. *Human Relations*. 40, 313-326.
- Westwood, M. J., & Barker, M. (1990). Academic achievement and social adaptation among international students: A comparison groups study of the peer-pairing program.

International Journal of Intercultural Relations. 14, 251-263.

Winkelman, M. (1994). Cultural shock and adaptation. *Journal of Counseling and Development*, 73, 121–127.

Yeh, C. J., & Inose, M. (2003). International students reported English fluency, social support satisfaction, and social connectedness as predictors of acculturative stress. *Counseling Psychology Quarterly*. 16 (1), 15-28

Yeh, E. K. (1976). Cross-cultural adaptation and personal growth: *The case of Chinese students*. *Acta Psychologica Taiwanica*, 18,95-104.

Yeh, E. K., Chu, H. M., Klein, M. H., Alexander, A. A., & Miller, M. H. (1979). Psychiatric implications of cross-cultural education: *Chinese students in the U.S.A.* *Acta Psychologica Taiwanica*, 21, 1-26.

Yum, J. O. (1988). Multidimensional analysis of international images among college students in Japan, Hong Kong, and the United States. *Journal of social Psychology*, 128, 765-777.

Zhang, N., & Rentz, A. L. (1996). Intercultural adaptation among graduate students from the People's Republic of China. *College Student Journal*, 30, 321-329.

Appendix A

Questionnaire

All answers will be kept confidential and will be used anonymously for analysis only.

Part I. Demographic Information:

1. What age category are you in?
A. 18-25 B. 26-35 C. 36-older
2. What is your gender?
A. Male B. Female
3. What degree level are you studying at UH Manoa?
A. Undergraduate B. Master's or PHD C. Visiting Scholar D. Other
(specify)
4. How long have you been in Oahu?
A. Less than 1 year B. 1-2 years C. More than 2 years
5. Where do you live now?
A. on campus (dormitory) B. on campus (apartment)
C. off campus (apartment) D. off campus (house)
6. Do you have Chinese friends in Hawaii?
A. Yes.
B. No.
7. Do you have non-Chinese friends in Hawaii?
A. Yes.
B. No.

Part II. Questions:

★Please complete the form according to the example provided at the top.

	Choose one number	Chinese Friends	Non-Chinese Friends
1. How often do you see them in person?	1.Daily 2.Weekly 3.Monthly 4.Never		
2. How often do you communicate with them over email or other social media?	1.Daily 2.Weekly 3.Monthly 4.Never		
3. I talk to them when I need someone's opinion	1.Strongly agree 2.Agree 3.Neutral 4.Disagree 5.Strongly disagree		
4. We tell our secrets to each other.	1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree		

★Please choose the answer that best describes your situation.

- (1) I am comfortable with living in a new environment.
 1. Strongly agree
 2. Agree
 3. Neutral
 4. Disagree
 5. Strongly disagree
- (2) I am satisfied with my academic performance.
 1. Strongly agree
 2. Agree
 3. Neutral
 4. Disagree
 5. Strongly disagree
- (3) I am willing to communicate with non-Chinese outside-of-class.
 1. Strongly agree
 2. Agree
 3. Neutral
 4. Disagree
 5. Strongly disagree
- (4) I am willing to join social clubs or local communities.
 1. Strongly agree
 2. Agree
 3. Neutral
 4. Disagree
 5. Strongly disagree
- (5) My ability to speak English is good enough to communicate with non-Chinese.
 1. Strongly agree
 2. Agree
 3. Neutral
 4. Disagree
 5. Strongly disagree
- (6) My ability to understand English is good enough to communicate with non-Chinese.
 1. Strongly agree
 2. Agree
 3. Neutral
 4. Disagree
 5. Strongly disagree

Appendix B

Consent form Agreement of participation The Relationships between the Friendship Networks and Sojourner Adjustment of Chinese International Students

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This research project is intended to examine: what are the relationships between characteristics of Chinese international students' friendship networks and their self-reported sojourner-centric adjustment.

In this research project, you will fill out a questionnaire. The questionnaire includes two parts: (1) general information; (2) questions. It will take at most 10 minutes for you to complete. In the general information part, if you do not have five friends in Hawaii, then you do not need to continue answering the questions. It will be the end of the questionnaire, thank you for your participation.

For the protection and privacy of interviewees, all identities will be kept strictly confidential. All data will be used for analysis purpose only and will not be available to anyone except the researcher and the University of Hawai'i Committee on Human Studies.

There will be no direct benefits to you in participating in my research projects and no compensation as well. Also, I believe that there will be little or no risk to you in participating in my research projects. However, the result of this project will help me complete my thesis paper.

Participation in this research project is completely voluntary. You may choose not to participate at any time during the duration of the project for any reason.

If you have any questions about this project, please contact me at (808) 292-8654. If you have any questions about their rights as a research participant, please contact the University of Hawai'i, Committee on Human Studies (CHS) at (808) 956-5007 or by e-mail at uhirb@hawaii.edu.

Certification

I certify that I have read and understand this consent form and agree to participate in this research project. My participation in this research is given voluntarily. I understand that I may discontinue participation at any time without prejudice. I certify that I have been given a copy of this consent form to take with me.

Appendix C

Correlations—Frequency of Interaction with Chinese friends and Sojourner Adjustment

		How often see friends in person	Communicate with them over email or social media	Comfortable with living in a new environment	Satisfied with my academic performance	Communicate with non-Chinese outside-of-class	Join social clubs or local communities	Good enough to speak English to non-Chinese	Good enough to understand English to Communicate with non-Chinese
How often see friends in person	Pearson Correlation	1	.875**	.739**	.773**	.767**	.880**	.770**	.784**
Communicate with them over email or social media	Pearson Correlation	.875**	1	.867**	.840**	.844**	.901**	.832**	.851**
Comfortable with living in a new environment	Pearson Correlation	.739**	.867**	1	.892**	.926**	.835**	.874**	.898**
Satisfied with my academic performance	Pearson Correlation	.773**	.840**	.892**	1	.942**	.854**	.970**	.979**
Communicate with non-Chinese outside-of-class	Pearson Correlation	.767**	.844**	.926**	.942**	1	.835**	.917**	.922**
Join social clubs or local communities	Pearson Correlation	.880**	.901**	.835**	.854**	.835**	1	.868**	.856**
Good enough to speak English to non-Chinese	Pearson Correlation	.770**	.832**	.874**	.970**	.917**	.868**	1	.950**
Good enough to understand English to Communicate with non-Chinese	Pearson Correlation	.784**	.851**	.898**	.979**	.922**	.856**	.950**	1

** Correlation is significant at the 0.01 level (2-tailed).

Appendix D

Correlations--Frequency of Interaction with non-Chinese friends and Sojourner Adjustment

		How often see non-Chinese friends in person	Communicate with non-Chinese over email or social media	Comfortable with living in a new environment	Satisfied with my academic performance	Communicate with non-Chinese outside-of-class	Join social clubs or local communities	Good enough to speak English to communicate with non-Chinese	Good enough to understand English to communicate with non-Chinese
How often see non-Chinese friends in person	Pearson Correlation	1	.828**	.868**	.894**	.867**	.853**	.872**	.898**
Communicate with non-Chinese over email or social media	Pearson Correlation	.828**	1	.810**	.913**	.889**	.864**	.950**	.894**
Comfortable with living in a new environment	Pearson Correlation	.868**	.810**	1	.892**	.926**	.835**	.874**	.898**
Satisfied with my academic performance	Pearson Correlation	.894**	.913**	.892**	1	.942**	.854**	.970**	.979**
Communicate with non-Chinese outside-of-class	Pearson Correlation	.867**	.889**	.926**	.942**	1	.835**	.917**	.922**
Join social clubs or local communities	Pearson Correlation	.853**	.864**	.835**	.854**	.835**	1	.868**	.856**
Good enough to speak English to communicate with non-Chinese	Pearson Correlation	.872**	.950**	.874**	.970**	.917**	.868**	1	.950**
Good enough to understand English to communicate with non-Chinese	Pearson Correlation	.898**	.894**	.898**	.979**	.922**	.856**	.950**	1

** Correlation is significant at the 0.01 level (2-tailed).

Appendix E

Correlations—Degree of Self-Disclosure with Chinese friends and Sojourner Adjustment

	Opinions	Tell Secrets	Comfortable with living in a new environment	Satisfied with my academic performance	Communicate with non-Chinese outside-of-class	Join social clubs or local communities	Good enough to speak English to non-Chinese	Good enough to understand English to non-Chinese
Need Opinions	Pearson Correlation 1	.815"	.846"	.888"	.890"	.862"	.923"	.869"
Tell Secrets	Pearson Correlation	1	.857"	.870"	.862"	.885"	.867"	.872"
Comfortable with living in a new environment	Pearson Correlation		1	.892"	.926"	.835"	.874"	.898"
Satisfied with my academic performance	Pearson Correlation			1	.942"	.854"	.970"	.979"
Communicate with non-Chinese outside-of-class	Pearson Correlation				1	.835"	.917"	.922"
Join social clubs or local communities	Pearson Correlation					1	.868"	.856"
Good enough to speak English to non-Chinese	Pearson Correlation						1	.950"
Good enough to understand English to non-Chinese	Pearson Correlation							1

** Correlation is significant at the 0.01 level (2-tailed).

Appendix F

Correlations—Degree of Self-Disclosure with non-Chinese friends and Sojourner Adjustment

	Need Opinions from non Chinese friends	Tell Secrets with non Chinese friends	Comfortable with living in a new environment	Satisfied with my academic performance	Communicate with non-Chinese outside-of-class	Join social clubs or local communities	Good enough to speak English to communicate with non-Chinese	Good enough to understand English to communicate with non-Chinese
Need Opinions from non Chinese friends	1	.914**	.876**	.853**	.852**	.899**	.853**	.858**
Tell Secrets with non Chinese friends	.914**	1	.862**	.878**	.888**	.916**	.888**	.877**
Comfortable with living in a new environment	.876**	.862**	1	.892**	.926**	.835**	.874**	.898**
Satisfied with my academic performance	.853**	.878**	.892**	1	.942**	.854**	.970**	.979**
Communicate with non-Chinese outside-of-class	.852**	.868**	.926**	.942**	1	.835**	.917**	.922**
Join social clubs or local communities	.899**	.916**	.835**	.854**	.835**	1	.868**	.856**
Good enough to speak English to communicate with non-Chinese	.853**	.868**	.874**	.970**	.917**	.868**	1	.950**
Good enough to understand English to communicate with non-Chinese	.858**	.877**	.898**	.979**	.922**	.856**	.950**	1

** Correlation is significant at the 0.01 level (2-tailed).