FRIENDSHIP NETWORKS AND SOJOURNER ADJUSTMENT OF

JAPANESE INTERNATIONAL STUDENTS IN OAHU, HAWAI'I

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ABSTRACT

A study of 103 Japanese international students at the University of Hawai'i at Mānoa showed a strong relationship between the degree of intimacy with their close non-Japanese friends and sojourner adjustment.

Results from this present study also revealed that Japanese international students at the University of Hawai'i at Mānoa had significant relationships between the degree of intimacy with their close non-Japanese friends and their ability of sojourner adjustment. This finding revealed that Japanese international students' ability to meet their own needs or desires (sojourner-centric adjustment) and their ability to meet the requirements of the host environment (environment-centric adjustment) were positively related to how intimately they have friendships with their close non-Japanese friends. The more intimate the relationship they have with non-Japanese friends, the higher the sojourner adjustment was found in this study.

Results from this study supported that having close friends with host nationals will facilitate sojourners to have better sojourner adjustment in a new environment.

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CHAPTER 1
INTRODUCTION

Background

The number of students studying abroad has increased since World War II

(Bochner, 1973; Furnham & Alibhai, 1985). In the United States alone, there is

roughly half a million international students and worldwide the total number of

international students is about one million (Institute of International Education, 1997).

In recent decades, a large number of students from all over the world have been

attracted to study in the U.S. (Sandhu, 1995 as cited in Yeh & Inose, 2003).

According to the Japan-U.S. Educational Commission, Japan always ranked in

the top ten of nations that send students to the U.S. for a college education from 1954

to 2001 (Japan-U.S. Educational Commission, 2002). From 1988 to 2003, Japan

ranked in the top five of nations, which send students to the U.S. for a college

education (Institute of International Education, 2003). In a recent annual report by the

Institute of International Education, it showed that 586,323 international students

attended U.S. colleges and universities during the 2002-2003 academic years. Of that

number, 45,960 were Japanese international students (Institute of International

Education, 2003). Japan ranked fourth behind India (74,603), China (64,757), and

South Korea (51,519) in those counties that send the most students to the U.S.

The International Student Services (ISS) at the University of Hawai'i at

Mānoa (UHM) reported that 1,562 international students attended UHM in the spring

2004 (International Student Services, 2004). According to ISS, the top five countries

that send students to UHM in the spring 2004, were Japan (519) followed by China

(197), Korea (172), Taiwan (86), and Canada (76). In the undergraduate program, the top five countries that send students to UHM were Japan followed by Korea, Taiwan, China, and Hong Kong. In the graduate program, the top five countries that send students to UHM were China followed by Japan, Korea, Taiwan, and Canada.

The presence of international students in American higher educational systems challenges administrators to understand how international students adapt to the new environment as they accomplish their scholastic goals. International students bring different values, beliefs, norms, and languages to American academic institutes. American colleges also benefit from the international students enrolled there in many ways. These international students enrich campus life and help promote diversity and globalization, which are ongoing priorities in American educational systems. Brein and David (1971) also indicate that the presence of international students on U.S. campuses provides a rich opportunity for intercultural communication research to look at.

Much like American students, international students have to adjust to the new college environment. Several studies have indicated that the added strain of being in a different country can prove to be overwhelming for international students (Furnham, 1997). They are also under considerable pressure to maintain and rehearse their national and cultural identity (Bochner, 1973). Furnham and Tresize (1983) suggest the following three main areas of problems encountered by international students: (1) the problem of living in a foreign culture, such as racial discrimination, language problems, accommodation difficulties, separation reactions, dietary restrictions, financial stress, loneliness, and so on; (2) the problem of late adolescents/young adults

asserting their emotional and intellectual independence; (3) the academic problems associated with higher education.

The term "culture shock" has been used in the past decades to describe unfavorable reactions to new unfamiliar environments (Oberg, 1960). While the impact of culture shock has been investigated, possible mitigating factors have been largely looked at. Some researchers have postulated that support from friends may help to counter culture shock, and it is also implicated in the adjustment of international students.

The growing population of international students on U.S. campuses necessitates a comprehensive study of their problems and needs in adjusting to their new environment. Support through social networking represents one important area of focus in examining how international students adjust to their new environment.

Research on social support has suggested that social support buffers stress by providing the individual with emotional support and guidance (Caplan, 1974; Cobb, 1976). According to Cobb (1976), social support provides an individual with three kinds of information that he/she is cared for and loved; esteemed and valued; and that he/she belongs to a network of communication and mutual obligation. Brislin (1981) discusses that group support can prevent tension from having a debilitating effect on cultural adjustment. Furnham (1997) also expresses that social support and social networks of international students reduce stress and facilitate cultural adjustment by providing the individual with informational and emotional support. Furnham and Alibhai (1985) state that it might be predicted that foreign students with a strong and

supportive friendship networks would be happier and better adjusted than those without such a network.

A number of studies on international students' friendships have been done by Bochner and his colleagues (Bochner, Buker, & McLeod, 1976; Bochner, Hutnik, & Furnham, 1985; Bochner, McLeod, & Lin, 1977; Bochner & Orr, 1979; Furnham, 1997; Furnham & Bochner, 1982). They find that international student friendship patterns belong to three social networks. The international students' friends are with co-national, with host national, and multicultural. Bochner et al (1976) confirm that the person most likely to be an international student's "good friend" will be an individual of the same culture and sex.

Research Problems

Theoretically and empirically based studies have shown the benefit of friendship networks on the cultural adjustment of international students. However, from the review of the literature available, there seems to be no conclusive agreement on which type of friendship pattern positively relates to a sojourner's adjustment.

The formations of cross-cultural friendships have shown to be important in international students' adjustment in the United States (Ying, 2002). The literature has long suggested that adjustment in a new context is facilitated by the formation of friendship with members of the host culture (Church, 1982; Ying & Liese, 1994; Ying 2002). Indeed, cross-cultural affiliation may be the most crucial predictor of successful cross-cultural adjustment (Church, 1982). Sellitz and Cook (1962) find that sojourners who had at least one close host national friend experienced fewer problems than sojourners with no close host national friends. Furnham (1997) cites

several studies that reported a significant relationship between the social interaction of

sojourners with members of their host country and feelings of satisfaction with their

sojourn. Some studies (Kagan & Cohen, 1990; Mallinckrodt & Leong, 1992;

Tompson & Tompson, 1996; Wan, Chapman & Biggs, 1992) have found moderately

strong evidence that social interaction between international students and host

students had a direct correlation to facilitating cultural adjustment and reducing stress.

On the other hand, there are some scholars (Bochner et al., 1976; Hull, 1978;

Pedersen, 1991) who found that co-national friendship networks or networks with

others with a similar ethnic background to be a more efficient source and more vitally

important factor in the process of sojourner adjustment. Hull (1978) claims that

cultural similarities must play as important role as friendship patterns in predicting

positive experiences abroad. Pedersen (1991) cites that contact with co-nationals to

be an important factor in helping international students cope with cultural differences

in their new environment. Co-national friendship networks tend to be the most

immediate and readily available (Pedersen, 1991). In Sykes and Eden's (1987 as

cited in Searle & Ward, 1990) study, fellow nationals were reported to be the most

significant source of emotional support. Data collected by Sandhu and Asrabadi

(1994) has revealed that international students in the U.S. often feel socially alienated.

They reasoned that it is a natural response of international students to seek out co-

nationals during the cultural adjustment process (Sandhu & Asrabadi, 1994). There is

little in the way of interaction between host national and international students (e.g.,

Bochner, et al., 1976; Bochner et al., 1977; Furnham & Alibhai, 1985; Furnham &

Bochner, 1986; Ward & Kennedy, 1993; Westwood & Barker, 1990). A study on

friendship patterns done by Bochner et al. (1977) state that only 29 % of international students had friendships with host national. In most cases, these limited interactions are not very meaningful and seldom progress beyond a superficial level.

A second problem is that there is still considerable confusion and divergence with the definition of sojourner adjustment (Ady, 1995). Searle and Ward (1990) also point out that a lack of agreement on definitions and key constructions in the literature makes it difficult for investigators to accurately measure and report a sojourner's adjustment. For instance, the terms "cultural or cross-cultural adjustment," "cultural or ethnic assimilation," "cultural adaptation," and "sojourner adjustment" are frequently used interchangeably in the literature (Ady, 1995).

Finally, the lack of consistent conceptual definition of a sojourner's adjustment has resulted in the lack of unified sojourner's adjustment measurement (Ady, 1995). There are numerous variables that have been utilized as indices of a sojourner's adjustment (Searle & Ward, 1990).

Significance of the Study

There were a number of reasons why this study is significant.

The number of Japanese international students in the U.S. is very significant, which prompted this study.

The advantages of studying cross-cultural friendships among Japanese international students are also numerous. Whetherell (1982) mentions that all cross-cultural research can (1) help us learn how different social environments influence psychological and communicative structures; (2) help us discover possible universal

phenomenas about human attributes; and (3) aid us in evaluating possible culture-bound theories and make useful changes in them.

The importance of social aspects of any student's life cannot be overemphasized. The findings from this study will be very useful in helping international student orientation program designers, teachers, advisors, counselors, and administrators to understand the role of friendship networks on a sojourner's adjustment of Japanese international students. Moreover, other fellow Japanese students who are preparing for, or are now attending educational institutions in the U.S., may benefit from this study. The findings from this study will help them to be better prepared for their cross-cultural transition. It also helps international students to adapt to American life and to improve their success in the classroom and beyond.

Many studies have focused on the frequency of interaction between academic sojourners and their host national friendships. However, when it comes to friendships, many research studies on friendship focus on the degree of intimacy. Studies on academic sojourners' friendship networks have not paid much attention to the degree of intimacy among academic sojourners and host national friendships. Therefore, for this study, it was very important to investigate or measure the relationship between not only the frequency of interaction with the subjects' close friends and their sojourner adjustment but also it was very important to investigate the relationship between the degree of intimacy with the subjects' close friends and the subjects' sojourner adjustment.

Not many scholars have done a study to investigate the relationship between academic sojourners' friendship networks and their sojourner adjustment by using the

Sojourner Adjustment Scale introduced by Dr Ady (1995) since the scale is relatively new and has not been utilized by other researchers. Therefore, the findings from this study may help to validate the scale and may help to increase the accuracy and reliability of the measurement.

Research Objectives

The purpose of this study is to explore friendship network patterns of Japanese international students who attended the University of Hawai'i at Mānoa during the fall 2004. It also explores the relationship between the friendship network pattern of Japanese international students and their sojourner adjustment.

Theoretically its purpose is to test the reliability of the Sojourner Adjustment Scale introduced by Ady (1995) by utilizing the scale.

CHAPTER 2
LITERATURE REVIEW

This chapter is to explore the theoretical and empirical studies regarding friendship networks and the sojourner's adjustments. The first section discusses the processes, the conceptualization and the measurement of sojourner adjustment. The second section discusses roles of social support, the functions and patterns of sojourner's friendship networks.

Sojourner Adjustment

Much of the literature on sojourner adjustment is very broadly based and does not specifically refer to Japanese international students, but rather to sojourners in general. Even so, it is important to review this literature to have a better understanding of the process of sojourner adjustment as it applies to foreign students.

Culture Shock

Empirical evidence has suggested that international college students experience more intense stress than do American students (Ebbin & Blankenship, 1986). In addition, international students experience stressful things such as changes in climate, food, living conditions and standards, social values, different behaviors, learning styles, and types of verbal and nonverbal communication (Westwood & Barker, 1990). These new experiences often result in a loss of culture and personal identity (Westwood & Barker, 1990). Increased stress, frustration, anger, fear, or depression can be a common experience for the sojourner (Church, 1982). Some scholars (e.g., Berry, 1997; Burke, 1986) state that international students experience the same problems as well as local students, and in addition they encounter problems

that arise from having to adjust to a new culture and function in an unfamiliar

educational setting. Exposure to an unfamiliar environment can create anxiety,

confusion and depression (Lin & Yi, 1997). These conditions can lead to complaints

of nervousness, loneliness, insomnia, and physical illness, all of which appear to

interfere with their studies, friendships, and so on (Lin & Yi, 1997).

This section sets out to look at how anthropologists, psychologists, and

sociologists have used the term "culture shock." There remains no clear definition of

culture shock (Furnham, 2004), but the term, "culture shock" was initially introduced

by an anthropologist Oberg (1960), and referred to the distress experienced by the

sojourner as a result of losing all the familiar signs and symbols of social interaction.

According to Oberg (1960), there are six aspects of "culture shock": 1) strain because

of 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, and 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.

Researchers since Oberg have seen "culture shock" as a normal reaction, as

part of the routine process of adaptation to cultural stress and the manifestation of a

longing for a more predictable, stable, and understandable environment (Furnham &

Bochner 1986).

Other scholars also have attempted to improve and extend Oberg's definition

and concept of "culture shock." Guthrine (1975), for example, has used the term

"culture fatigue" to describe sojourner symptoms such as irritability, impatience, depression, loss of appetite, poor sleep, and vague physical complaints. Smalley (1963) also used the term, "language shock," as one of the basic elements of culture shock because it is in the language domain where many of the cues to social relations lie. Byrnes (1966) used "role shock" to describe the role ambiguity and loss of personal status that are often experienced by technical assistants or management personal overseas. Several researchers have simply placed the emphasis on slightly different problems such as language, physical irritability, and role ambiguity.

Bock (1970) has considered "culture shock" primarily as an emotional reaction that follows one from not being able to understand, control, and predict another's behavior. According to Westwood & Barker (1990), "culture shock" is commonly viewed as a normal process of adaptation to cultural stress involving such symptoms as anxiety, helplessness, irritability, and a longing for a more predictable and gratifying environment. Hall (1959) also defines "culture shock" as the removal or distortion of many of the familiar cues of one's environment, and their substitution by other cues, which are strange.

According to Klineberg and Hull (1979), "culture shock" is considered as "a term denoting patterns of behavior which differ from one culture to another, which may cause misunderstanding and even conflict, and which may result in embarrassment as a consequence of failing to recognize the meaning of the 'cues' to emotional and interpersonal reactions (p. 31). They also state that "culture shock" would affect many aspects of social life such as male-female relations, food habits and table manners, personal status, politics, national pride, and the nature and

meaning of friendship. Taft (1977) extends the notion to include the fatigue of constant adaptation the sense of loss of familiar foods, companions, etc., rejection of the host population, confusion of values or identity, discomfort at violation of values, and a feeling of incompetence at dealing with the environment. According to Ting-Toomey (1999), "culture shock" is considered as "transitional process in which an individual perceives threats to her or his well-being in a culturally new environment (p. 245).

Weissman and Furnham (1987) define "culture shock" as a stress reaction where salient physiological and physical rewards are generally uncertain and difficult to control or predict. Thus, a sojourner remains anxious, confused, and sometimes apathetic or angry until he or she has had time to develop a new set of behavioral assumptions that help him or her to understand and predict the social behavior of the local natives (p. 314).

According to Searle and Ward (1990), research using the concept of "culture shock" emphasized the negative emotional states experienced by foreigners as a result of the loss of familiar cues. Culture shock occurs because an individual has not learned appropriate ways to adapt to the new culture (Searle & Ward, 1990).

On the other hand, Zuckerman (1978 as cited in Furnham, 1988) points out that not necessarily all sojourners will have negative experiences with culture shock. Furnham (1988) argues, for instance, that culture shock can be seen as a necessary transitional experience that can result in the adapting of new cultural values, attitudes, and behavior patterns.

Most of the researchers of "culture shock" have been descriptive, in that they have attempted to list the various difficulties that sojourners encounter and their typical reactions.

Sojourner Adjustment Models

Although "culture shock" can cause stress and stress related symptoms, not all people who experience "culture shock" have negative reactions. Some people might not suffer any adverse effects, but instead enjoy the highly arousing stimuli of the unfamiliar (Furnham, 1997). Many researchers have developed theory to examine how an individual adjusts positively or negatively to "culture shock."

The following section explores various developmental models regarding the sojourners' adjustment process in a new environment. A number of researchers have conceptualized the sojourners' adjustment process from various developmental perspectives.

The U-curve Hypothesis

One of the earliest theories of adjustment patterns of sojourners comes from a study done by Lysgaard (1955) known as the U-curve hypothesis. In his study of 200 Norwegian Fulbright grantees that had spent time in the United States, Lysgaard has found that those subjects who had stayed in the U.S. less than six months and those who had stayed longer than eighteen months had "good" adjustment while those who had stayed between six and eighteen months were "less well" adjusted. Those going abroad for a limited period, like a year, show a U-shaped pattern of discomfort: in the first stage they are elated, enjoy the sights and are well looked after. In the second stage, they have to cope with domestic life, and things get more difficult; they keep to

the company of expatriates and are in some degree of culture shock. In the third phase, they have learned to cope better and are looking forward to returning home. Therefore, U-curve of adjustment represents a high initial feeling of adjustment followed by a low and then ending in a high as the sojourner adapts to the new environments (Lysgaard, 1955).

Extensions and Modifications of the U-curve Hypothesis

Extended from Lysgaard's U-curve hypothesis, many other scholars have established models to describe the process of sojourner adjustment over time.

Five years after Lysgaard's study, Oberg (1960) has coined the term "culture shock" and described how individuals abroad go through four phases of cultural adjustment. These begin with feelings of optimism and elation in a "honeymoon stage," which may last from several days to half a year depending on how demanding activities in the new culture are for the sojourner (Oberg, 1960 as cited in Church, 1982). This is followed by a "crisis stage" in which the sojourner develops hostile or stereotypical feelings toward the host culture and fraternizes more with other sojourners. If the sojourner becomes more communicatively competent in the host language and is able to get around better in the new culture, then that person will begin the "recovery stage." Finally, the sojourner may reach the "adaptation stage" and be able to function in the new environment with minimal strain or anxiety (Oberg as cited in Church, 1982).

Gullahorn and Gullahorn (1963) introduce a six-stage W-curve model, with successive honeymoon, hostility, humorous, at-home, reentry culture shock, and re-socialization stages.

Adler (1975) has described the transition from one culture to another as a process in which the sojourner moves into a higher state of both cultural awareness and self-awareness. First is the "contact phase" which is that sojourners come into contact with the culture. Second is the "disintegration phase." It starts when an individual becomes overwhelmed by the new culture and the person disconnects him/herself from the new culture. Third is the "reintegration phase." It begins when the individual rejects the new culture. Fourth is the "autonomy phase" which begins when the individual can see both positive and negative aspects of the host culture. The final stage is the "independence phase" which starts when he/she feels comfortable with the host culture and can make choices and have meaningful experiences in the new culture. Adler (1975) also mentions that exposure to a new culture as an awakening that helps sojourners put into perspective their values and gains a broader understanding of their own culture as well as the new culture.

Brown (1992) uses four similar stages to describe the acculturation process. The first stage is identical to Oberg's honeymoon stage in which the individual experiences a period of initial excitement and euphoria. The second stage "emerges as individuals feel the intrusion of more and more cultural differences into their own images of self and security" (p. 81). Brown's description of this phase is consistent with Oberg's crisis stage. Brown (1992) claims that during this second stage individuals rely on and look for the support and companionship of fellow compatriots. As individuals begin solving some of the problems of acculturation, they enter a gradual stage of recovery. The fourth stage is similar to Adler's final stage. It

represents near or completes recovery and the acceptance of the new culture and self-confidence in the new person that has developed in this culture.

There is consistency across the literature that provides descriptive approach to illustrate the cultural adjustment process in stages or phases; however, the concept of using the U-curve to describe cultural adjustment has received considerable criticism. An examination of the literature that criticizes the U-curve hypothesis will help others to have a better understanding of the cultural adjustment process, and the limitations of the visual model.

Criticism of the U-curve

Lysgaard (1955) has stated the possibility that his U-curve model may actually reflect the individual's memory or perception of adjustment through a general attitude toward the host culture rather than real adjustment to the new culture. He quotes:

> A more serious possibility is that our measures of "adjustment" really do not refer to adjustment at all—what we called "adjustment" process may perhaps reflect some "personality" trait (or, at least, "verbal habit") in the respondents, manifesting itself in a general tendency to express "good" adjustment or "bad" adjustment, irrespective of the concrete experiences to which the different "adjustment" questions refer (Lysgaard, 1995, p. 48).

Church (1982), for example, in reviewing the literature on these developmental models, mentions that both U-curve and W-shape models appear to be too general and do not capture the dynamic interplay between sojourner's and host nationals' factors in the adjustment process. Church (1982) also gives one of the most complete reviews of evidence that either supports or fails to confirm the U-curve model. Although Church (1982) reviews 11 additional studies that provide at least minimal support for the U-curve model (Scott, 1956; Coelho, 1958; Morris, 1960;

Swell & Davidsen, 1961; Deutsch & Won, 1963; Davis 1963; Heath, 1970; Shepard, 1970; Davis, 1971; Greenblat, 1971; Chang 1973 as cited in Church, 1982), he has suggested that the recovery of positive feelings does not reach the original level of the early sojourn period.

In addition, Church (1982) reviews 5 other studies that did not confirm the U-curve model (Selby & Woods, 1966; Becler, 1968; Golden 1973 as cited in Church, 1982; Hull, 1978; Klineberg & Hull, 1979). According to Church (1982), these studies find that other factors may affect the positive or negative feelings an individual has about the host culture. For example, academic and social morale were found to rise and fall in accordance with periods of the academic year rather than in a U-curve pattern. Becker (as cited in Church, 1982) finds evidence that sojourners in the U.S. from Europe were more likely to experience a U-curve type adjustment than those from less developed countries. Such studies have led many scholars to conclude that the empirical support for the U-curve must be considered weak (Altback, Kelly & Lulat, 1985; Church, 1982), inconclusive, and overgeneralized (Church, 1982). Klineberg and Hull (1979) also comment that the U-curve pattern of adjustment is occasional rather than universal, since not all sojourners experience a period of depression when they are adjusting to a new environment. Church (1982) concludes that sojourner adjustment could not be accurately predicted, since there was little consistency and great contradiction across studies.

The Conceptualization and the Operationalization of Sojourner Adjustment

Many researchers have studied sojourner adjustment both conceptually and empirically and have suggested ways to address the shortcomings in sojourner

adjustment literature. Searle and Ward (1990), for example, point out that a lack of consistent definitions and key constructs in the literature makes it difficult for investigators to accurately examine, test, and report on sojourner adjustment. They state, "adaptation, acculturation, adjustment, and accommodation have been used interchangeably" (p. 450). Benson (1978) also has suggested that clearer definitions of sojourner adjustment would help advance the field.

Ady (1995) also adds that there is much confusion and divergence with the definition and concept of sojourner adjustment even in recently published studies. For instance, the terms "cultural or cross-cultural adjustment," "cultural or ethnic assimilation," "cultural adaptation," and "sojourner adjustment" are frequently used synonymous in the literature (Ady, 1995). This inconsistency has made it difficult for researchers to find a common way to explain sojourner adjustment.

Based on the review on sojourner adjustment, the term "sojourner" is conceptually viewed as an individual who travels or visits another country temporarily, just long enough to accomplish his/her overseas assignments (e.g., Ady, 1995; Brein & David, 1971; Church, 1982; Furnham & Bochner, 1986). Brein and David (1971) consider sojourners as tourists, students, trainees, business people, military personnel, technical assistants, missionaries, and Peace Corps volunteers.

Church (1982) has distinguished between sojourners and immigrants. He explains that sojourners are relatively short-term visitors to new cultures where permanent settlement is not their purpose of the sojourn. Immigrants, on the other hand, are viewed to make the host culture as their permanent settlement (Church, 1982).

Furnham and Bochner (1986) define "sojourn" as "a temporary stay at a new place (p. 112)." According to Furnham and Bochner (1986), "sojourner" usually means a traveler, and a "sojourn" is most often considered as an unspecified amount of time spent in a new and unfamiliar environment. The exact length of stay and the motive for travel are not specified (Furnham & Bochner, 1986).

According to Yin and Liese (1991), the term "adjustment" refers to an adaptive process occurring within sojourners whose overseas stay is not permanent but rather short-or mid-term, whose purpose for the overseas stay is an education or a degree in a given culture, and who are expected to return to their home culture after the completion of their overseas assignment. Other scholars (e.g., Ting-Toomey, 1999; Ward & Kennedy, 1993) also state that "adjustment" is considered as the short-term and medium-term adaptive process of those who are not planning to settle in a new culture, but instead expect to return to their home culture after their extended stay.

Ady (1995) also states 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 (p. 93)." Ady (1995) adds that sojourner adjustment is both a task and a process faced by those studying abroad, those on foreign assignment as part of their job responsibilities, and many others who experience extended stays in a culture different than their own.

Sojourner adjustment, therefore, is considered as different from other terms such as "cultural or cross-cultural adjustment," "cultural or ethnic assimilation," "cultural adaptation" which are frequently used synonyms (Ady, 1995).

Church (1982) also points out that terms such as "cultural or cross-cultural adjustment", "cultural or ethnic assimilation", "cultural adaptation" are ambiguous or suggest a more permanent assimilation to the host culture" (p. 540). According to Shaffer and Shoben (as cited in Anderson, 1994), "adjustment" is referred to "the reduction or satisfaction of (short-term) drives" (p. 300). Shaffer and Shoben (as cited in Anderson, 1994), on the other hand, define adaptation as "is that which is valuable for (long-term) individual or racial survival" (p. 300). They also indicate that both terms refer to the achievement of a bit between the person and the environment, although the objectives and time frames differ (as cited in Anderson, 1994).

Berry and Sam (1996) categorize groups that may experience acculturation by three factors: mobility, voluntariness, and permanence. Immigrants and sojourners, for example, are similar in the sense that both voluntarily come into contact with other cultures. However, in terms of mobility, immigrants are permanent migrants, and sojourners are temporary migrants. Academic sojourners, therefore, are classified as temporary migrants who come into contact with the host culture on a voluntary basis.

Other scholars have defined sojourner adjustment in various ways. Berry (1997), for example, states that sojourner adjustment is seen as an individual-based process, in contrast to acculturation, which involves groups of people moving from one cultural setting to another. Brein and David (1971) have also defined sojourner adjustment as effective interpersonal functioning dependent upon "the development of understanding between the sojourner and host" (p.224). According to Black and

Gregerson (1990), adjustment is defined as the degree of a person's psychological comfort with various aspects of a new setting.

For this study, sojourner adjustment is defined as "a function of the extent to which the sojourner judges he or she is meeting environmental demands and the extent to which the sojourner judges his or her needs are being met in the new environment" (Ady, 1995, p. 108). Ady also coins the terms "environment-centric adjustment" and "sojourner-centric adjustment" when he refers to these concepts.

Due to the lack of a consistent concept of sojourner adjustment, many variables have been used to measure adjustment (Ady, 1995). Searle and Ward (1990) cite that scholars use many variables to measure adjustment such as acceptance of the host culture, satisfaction, feelings of acceptance, and coping with everyday activities (Brislin as cited in Searle & Ward, 1990), mood states (Feinstein & Ward as cited in Searle & Ward, 1990), as well as acquisition of culturally appropriate behavior and skills (Bochner et al., 1980; Furnham & Bochner, 1986).

Ady (1995) categorizes measurements of sojourner adjustment to reduce the confusion of the multidimensional nature of sojourner adjustment into five areas: 1) general satisfaction, 2) process, 3) interaction, 4) psychopathology, and 5) competence.

Social Support: A Theoretical Perspective

When sojourners leave their countries, they tend to feel a deep sense of loss since they leave their families, friends, and sources of support behind. It is very challenging for them to establish comparable social support systems in the U.S. (Mallinckrodt & Leong, 1992 as cited in Yeh & Inose, 2003), and they may feel dissatisfied with their new social relationships in the U.S. Pedersen (1991) also explains that due to the loss of social support, sojourners might feel anxious, alienated, or even disoriented in the unfamiliar environment. The loss of social support or disruption in social ties has been associated with such pathologies as disease and depression, and deviant, abusive behavior to self and others (cited in Albrecht & Adelman, 1987). Other researchers also indicate that a loss of social support has a significant influence on the psychological well-being of sojourners (Hayes & Lin, 1994; Mallinckrodt & Leong, 1992; Pedersen, 1991; Sandhu, 1995 as cited in Yeh & Inose, 2003). Social support, therefore, is essential to the welfare of sojourners (Yeh & Inose, 2003).

There is a large amount of literature that supports the theory that social support has life-enhancing benefits and helps sojourners to adjust to a new culture. Cobb (1976), for example, states that social support buffers stress by providing the individual with emotional support and guidance. The author further indicates that social support provides an individual with three kinds of information: 1) that he/she is cared for and loved, 2) that he/she is esteemed and valued; and 3) that he/she belongs to a network of communication with mutual obligation.

Leavy (1983) defines social support as, "the availability of helping relationships and the quality of those relationships" (p. 5). Albrecht and Adelman (1987) also define social support as, "verbal and nonverbal communication between recipients and providers that reduces uncertainty about the situation, the self, the other, or the relationship, and functions to enhance a perception of personal control in one's life experience" (p. 19). This sense of control and certainty could be particularly important for people coming to a new environment. Searle and Ward (1990) also express that social support is considered as a buffer against the psychological effects of stress. According to Copeland and Novell (2002), the concept of social support as a buffer against stress and a positive associate of emotional well-being are well established.

A theoretical perspective on the effects of social support on sojourner adjustment was introduced by Adelman (1988). She has adopted the definition of culture shock described by Weissman and Furnham (1987) as stress reaction, where prominent physiological and physical rewards are generally uncertain and difficult to control or predict. Adelman also expresses that social support helps to alleviate the uncertainty associated with cultural adjustment by providing individual, group or organizational support in various phases of transition. In addition to decreasing uncertainty, Adelman discusses that social support serves to enhance perceived mastery or control over the environment, and that control is the key component to effective coping and adjustment.

In general, it is believed that "supported people are physically and emotionally healthier than non-supported people," (Shumaker & Brownell as cited in Copeland &

Novell, 2002, p. 22) and the social networks are significant in coping with uncertainty and change (Albrecht & Adelman, 1984). According to Albrecht and Adelman (1984), the personal network helps the individuals "to reduce uncertainty through the process of social comparison, the exchange of information for problem solving, and to meet needs for affiliation and affection" (p. 10). Of the many relational ties that people maintain at a given time, ties with "significant others" play a particularly crucial role in providing social support (Kim, 1987). Caplan (1974) also mentions that social support channeled through the personal network lessens stress by improving the "fit" between the person and the environment.

Brown, Brady, Lent, Wolfert, and Hall (1987) discuss that seeking help through social interaction appears to be a very effective and beneficial coping mechanism. Other studies (e.g., Lowenthal & Haven, 1968) have also provided evidence that the presence of a social network has an ameliorative effect on life satisfaction and general health.

A brief review of the literature indicates the benefits of social support are not limited to any particular age group or ethnicity (Ward & Kennedy, 1993). Research conducted in other parts of the world has yielded similar results. The benefits of social support appear to be universal (e.g., Daniels & Guppy, 1997; Lu, Shih, Lim, & Ju, 1997). A research conducted with Chinese samples indicated that higher levels of support were related to general well being and perceived happiness (Lu et al., 1997). A similar study conducted on Chinese adolescents has indicated that social support has a mitigating effect on added responsibilities of being an adult. The presence of a

friendship network can ease the transition and mitigate some of the stress faced by new students.

Berry, Kim, Minde, and Mok (1987 as cited in Searle & Ward, 1990) find that Korean immigrants with close Korean friends and those with access to support networks experienced less stress. The literature has suggested that the buffering of or stress preventive effects of social support are global and influence almost every aspect of life (Cohen & Willis, 1985).

Other researchers have shown that the presence of friends can counter psychological problems (e.g., Brachar, Canetti, Bonne, Kaplan De Nour, & Shalev, 1997). New friendship networks among the sojourners often become important sources of support (Copeland & Novell, 2002). Studies on social support emphasize the importance of recognizing the stress-related symptoms resulting from moving to a new environment. Caplan (1974) has defined social support systems as consisting of "continuing social aggregates that provide individuals with opportunities for feedback about themselves and for validations of their expectation of others." Furnham (1997) discusses that for sojourners, cultural adjustment support systems or friendship networks can provide an environment for social integration or social interaction to take place. Social support and social networks of sojourners can reduce stress and facilitate cultural adjustment by providing the individual with informational and moral support (Furnham, 1997).

Nature of Friendship

In most crisis situations people tend to seek out friends or relatives rather than professional help (Pilisuk & Parks, 1986; Wilcox & Birkel, 1983). In general, it is

believed that friendship is one of the most essential and rewarding forms of

relationships in life (Hartup, 1992; Bukowski, Newcomb, & Hartup, 1996). Outside

the family itself, friendship appears to be one relationship to which people attach

special importance personally and culturally (Allan, 1989). Not only do friends help

to provide individuals with their sense of identity, but they also confirm individuals'

social worth (Allan, 1989).

There are virtually as many definitions of friendship as there are social

scientists studying the topic (Fehr, 1996). Friendship is often defined in literature as a

voluntary, informal and personal relationship (Paine, 1970; McCall, 1970; Jerrome,

1984).

According to Allan (1989), the most obvious benefit of friendship is the

sociability and companionship that friends provide. He states that whatever the

particular form of relationship, being with friends, spending time with them, sharing

activities and pastimes, discussing issues of common concerns, and the like are valued

for their own sake.

A major theme in the social support literature on friendship is the provision of

emotional support, intimate confiding, and felt attachment (Allan, 1989). Whether

transient or enduring, support from friends is profoundly linked to individual sense of

belonging and social integration (Albrecht, 1987), an individual's ability to cope with

major life crises and transitions (Cobb, 1976), and an individual's overall sense of

self-worth (Adelman, Parks, & Albrecht, 1987). Besides providing sociability and

companionship, friendships also provide a good deal of personal support (Allan).

According to McAdams (as cited in Fehr, 1996), friendship gives the individual a

sense of belonging and having a reliable alliance, provides emotional stability, brings opportunities for communication about himself or herself, offers assistance, lends physical and emotional support, and gives reassurance of his or her values.

The most obvious and researched aspect of friendship development is self-disclosure and intimacy (Altman & Taylor, 1973; Leavinger & Snoek, 1972 as cited in Adelman, Parks, & Albrecht, 1987). As a relationship develops, the participants typically disclose more personal information, express more positive and negative feelings, and express praise and criticism more openly (Altman & Taylor, 1973; Huston & Burgess, 1979 as cited in Adelman et al., 1987).

An important feature of friendship is its emphasis on intimate communication and intimacy (Savin-Williams & Berndt, 1990). Through intimacy, friends share with each other personal thoughts and feelings, and thus become sensitive to needs and desires of others (Liu & Chen, 2003). Many researchers on friendship focus on intimacy as sharing private feelings and thoughts, being able to listen effectively, and caring for another person (McGill, 1985). McGill indicates that intimacy "suggests private and personal interaction, commitment, and sharing" (p. 9). Sillars and Scott (1983) point out the importance of communication by arguing that closeness requires "repeated interaction" and "high self-disclosure" (p. 154). Thompson and Walker (1989) describe intimacy as, "sharing one another's innermost life; expressing and listening to each other's feelings, thoughts, desires, doubts, joy, and fears; attending to, understanding, and accepting one another's true self" (p. 846). Fehr (1996) describes that the more intimate the relationship, the more clearly it manifested the various attributes of friendship. Wright (1985) finds that more intimate friends are

more likely to voluntarily commit time to one another. Intimate friends also are more

likely to accept one another as, "unique, genuine, and irreplaceable in the

relationship" (p. 45). Berndt (1986) also defines intimacy as sharing one's innermost

thoughts and feelings.

In a longitudinal study of friendship development, Hays (1984), for example,

finds that development was associated with increase in intimacy of behaviors

exchanged. At a more specific level, the depth dimension implies that the intimacy of

participants' conversations increases as their friendship develops (Altman & Taylor,

1973). Adelman et al. (1987) suggest that the depth dimension of friendship

development is reciprocally related to social support. As a relationship develops, the

opportunities to provide the more intimate forms of social support such as emotional

support increase and the participants' value of support increases; the development of

the relationship is spurned onward.

Other researchers have stressed reciprocity as an important consideration of

relational intimacy. Mills and Clark (1982), for example, address the importance of

reciprocity from the perspective of need attainment. They argue that in a truly

intimate relationship, both partners expect to have their needs met and they expect to

help their relational partner meet his or her needs, as well.

Other researchers have emphasized the importance of perceived

interdependence between relational pairs. Chelune, Robinson, and Kommer (1984),

for example, state that feelings of interdependence arise from favorable experiences

and stable expectations about the relationship. Validation is an important

consideration in the development of interdependence.

Liu and Chen (2003) discuss that self-disclosure may play a role in the development of self-understanding and social perspective-taking skills. They also mention that it has been reported that close relationships may make an important contribution to individual academic, emotional, and social adjustment (Liu & Chen, 2003).

Sojourners' Friendship Networks

Many sojourners have traveled alone and have left their families, friends, and other sources of social support behind (Brislin, 1981). Those supportive relationships are no longer as accessible to the same extent for these sojourners (Brislin). Due to the separation from those supportive relationships when they arrive in the host country, it will be an overwhelmingly stressful and critical time for sojourners (Adelman, 1988). At the same time, sojourners are under a great amount of pressure to maintain and rehearse their national and cultural identity (Bochner, 1973). They are required to enter a markedly different culture, pursue an academic degree, and use English (which is mostly a second language for Japanese international students). They might interpret these demands as a challenge (positive) or as a frustration (negative); some such students complete their degrees and enjoy (or at least endure) their experience, while others never finish and return to their home country.

One of the problems that most sojourners encounter in a new environment is the necessity to establish whole-hearted and warm relationships such as friends (Brislin, 1981). When sojourners deal with a new environment, the benefit of having friends has been recognized and reported in the literature (e.g., Adelman, 1988; Albrecht & Adelman, 1984; Cobb, 1976; Kim, 1988). Friendship is further viewed as

one of the most effective social support to cope with loneliness, helplessness, and isolation (Schram & Lauver, 1988; Cobb, 1976). Adelman (1988) has suggested that receiving help from friends can give benefit to sojourners in many ways. For instance, it can enhance the perception of feeling more in control of unfamiliar or ambiguous situations. Boekestijn (1988), further, indicates that receiving information from friends help sojourners to evaluate or make appropriate decisions in unfamiliar culture, which, in turn, help to become independence that can restore their self-sufficiency. Kim (1988) also expresses that friends help societal information such as rules, regulations, news, referrals to community services, resources and advice. Moreover, this information and support will help sojourners reduce their fears, uncertainty and help them to have better sojourner adjustment in the new environment.

The literature stresses the importance of support systems provided through the friendship patterns formed by sojourners. Furukawa (as cited in Furnham, 2004) addresses the fact that friendship networks are protective against the typical problems encountered by sojourners. The finding suggested that the quality rather than the quantity of friendship is important.

Several studies have looked at friendship network patterns of sojourners (e.g., Bochner et al., 1985; Furnmam & Albinhai, 1985; Furnham & Bochner, 1982, 1986). It has been theorized that friendship networks of sojourners consist of the following three patterns: 1) a primary, "monocultural" (co-national) friendship network that consists of close friendships with other compatriots from similar cultural backgrounds, 2) a "bicultural" (host national) friendship network that consists of

social bonds between sojourners and host nationals whereby professional aspirations

and goals are pursued; and 3) a "multicultural" friendship network that consists of

individuals from diverse cultural groups for recreational activities (Furnham &

Bochner; 1982).

Monocultural (Co-national) Friendship Network

The primary network is monocultural, co-national (Bochner et al., 1976). It

consists of close friendships with other sojourning compatriots and provides the

support and an environment where groups can express their ethnic and cultural

heritages (Bochner et al.). Monocultural or co-national friendships are hypothesized

to provide social mores and a forum to rehearse and practice their culture (Bochner et

al.; Furnham and Bochner, 1986).

There are several studies that state sojourners gain emotional support from co-

nationals and the importance of having a co-national friendship network to cope with

a new culture setting. In Sykes and Eden's (1987) study, for example, co-nationals

are reported to be the most significant source of emotional support (as cited in Searle

& Ward, 1990). According to Bochner (1981), Furnham and Bochner (1982), for

sojourners threatened by the demands of the new culture, co-national support

networks can reaffirm the home values and decrease the possible homesickness and

disorientation that accompanies the adjustment process.

Bochner et al. (1977) also claim that co-national bonds are of vital importance

to international students. Pedersen (1991) also finds contact with co-nationals to be

an important factor in helping international students cope with cultural differences in

their new environment. According to Ting-Toomey (1999), for the newcomers,

established individuals from the same or a similar cultural background can serve as successful role models. They can also provide identity and affective support because they also have encountered similar "culture shock" experiences. Co-national friendship networks tend to be the most immediate and readily available (Pedersen, 1991). Ying and Liese (1990) also state that an individual sojourner who has a tight co-national support network tends to experience less anxiety than sojourners who lack co-national relationship.

Studies have revealed that in initial adaptation stages, an ethnic based social/friendship network is critical to newcomers in terms of identity-support and emotional-support functions. Similar ethnic friendship networks, especially those with linguistic ties in initial adaptation stages, ease strangers' adaptive stress and loneliness (Furnham & Bochner, 1986).

The majority of friendships formed by academic sojourners fall into the monocultural, or co-national, category. The literature indicates that an overwhelming majority of academic sojourners prefer to associate with friends from their own country (Bochner et al., 1976, 1977; Furnham & Bochner, 1986). The preference for monocultural relationships is supported by several studies. Bochner et al. (1976), for example, find that a foreign student's "best friend" was most likely to be of the same sex and from the same country. Bochner et al. asked 36 students at the University of Hawaii's East-West Center to list their "Five Best Friends," and has found that 44% of those students listed their best friends as being fellow nationals. 31% were other foreign students, and only 24% were host-Americans.

In a study incorporating 700 students from three universities across the U.S., Hull (1978) has found a similar pattern of international student friendships. 34.3% of the "best friends" reported were with fellow nationals, 34.1% with Americans, and 20.2% with other foreign students. (The total is less than 100% since other non-student categories were also used).

Jun (1984) also describes that Korean college students of immigrant parents are more likely to have Koreans than Americans as friends. Korean students had about nine Korean friends on the average, but just five American friends (Jun, 1984). In Jun's study, of most significance, this pattern held true even after the students had been in the United States for quite long time; length of "sojourn" did not correlate positively with the number of American friends. Cultural similarities must play as important a role as friendship patterns in predicting positive experiences abroad (Hull, 1978).

Data collected by Sandhu and Asrabadi (1994) reveals that international students in the U.S. often feel socially alienated. They have reasoned that it is a natural response of international students to seek out fellow countrymen during the cultural adjustment process (Sandhu & Asrabadi). This is partially because foreign students are unlikely to make special efforts to reach out to Americans, while American students "do not feel the need to go out of their way to socialize with the foreign students" (Sandhu & Asrabadi, p. 444). Sudweeks, Gudykunst, Ting-Toomey, and Nishida (1991) cite additional reasons for the lack of social intimacy between Japanese international students and North American students. Studying a small sample of Japanese and North American females, they find that cultural

differences were used to explain why friendships did not develop into moderate or high levels of intimacy (Sudweeks et al., 1990). Limited language and limited cultural knowledge were also found to be barriers (Sudweeks et al.).

Moreover, many sojourner students feel more uncomfortable to disclose personal problems with host-national members because explaining personal problems to acquaintances that speak a different language and have a different cultural background is considered to be anxiety provoking.

Hull (1978) discovers that foreign students whose "best friends" were co-nationals reported more discrimination against themselves. Hull also points out that students whose contacts with Americans were less frequent than they wished were more likely to be living with co-nationals and preferred returning home after the sojourn. Academic sojourners, unfortunately, tend not to make friends with host nationals automatically (Klineberg & Hull, 1979). Klineberg and Hull (1979) find out that there is often limited personal contact between academic sojourners and host nationals.

McCrone (1975) expresses that some academic sojourners are more likely to develop their own "ghetto" by associating as much as possible with their co-nationals. These students give comfort and psychological support to each other in facing adjustment difficulties (McCrone, 1975). McCrone also remarks that the huddling together of international students eventually created a narrow view among these international students about America.

The co-national friendship network is necessary for easing the process of sojourner adjustment, but could also hamper the process if an individual became too

reliant on the compatriot friendships. Although nurturing compatriot or "similar-others" cul-de-sacs may be critical to alleviating initial stress, dependence on these groups may create a "fortress effect" by insulating the newcomer from cultural change (Albrecht & Adelman, 1984).

From a review of literature, it is determined that co-national friendship is necessary and important to help sojourners provide aid in the form of material needs, information for the new culture, and emotional support.

Bicultural (Host National) Friendship Network

Bicultural (host national) relationships between sojourners and host nationals form the secondary friendship network (Bochner et al., 1976). Bochner (1981) reveals that academic sojourners' friendships with host a national functions "instrumentally to facilitate the academic and professional aspirations of the sojourner" (p. 22). Relationships with significant host nationals have the function of assisting sojourners with their professional or academic goals. Bicultural, host national friendships are postulated to facilitate international students academic and career goals (Bochner et al., 1976; Furnham and Bochner, 1986).

The bicultural (host national) network is important when it is considered in the context of "culture learning." Culture learning is referred as the situations where individuals share and learn about each other's culture (Bochner, 1986). Host national friends can provide an academic sojourner with an opportunity to learn about the salient aspects of the host culture. While interacting with the host national friends, the academic sojourners can obtain appropriate social skills and adjustment to the new environment (Furnham & Bochner, 1986).

Research indicates that academic sojourners who have host national friends experience fewer sojourner adjustment problems (Bochner, 1986; Bochner et al., 1976, 1977, 1978; 1985; Furnham & Bochner, 1986; Ward & Searle, 1990; Westwood & Barker, 1990). Adelman (1988) and Kim (1988) also emphasize that sojourners' friendships with members from the host nationals facilitate learning of the mainstream cultural norms. Facilitating contact between international students and the host national is crucial to the social and academic success of international students (Westwood and Barker, 1990). Kim (1997) also finds that for sojourners, communicative competence in the host culture is closely aligned with the development of interpersonal relationships with host nationals. She stresses that such contact can improve cognitive understanding about new linguistic systems, facilitate acquisition of "motivational and attitudinal orientation that is compatible with that of the host culture," and develop a new behavioral repertoire that is sensitive to host norms (Kim 1987, p. 196).

Westwood, Lawrance, and McBlane (as cited in Westwood & Barker, 1990) report several direct results for the host national: 1) increased cultural awareness and sensitivity, 2) established friendships and international link, 3) opportunities for future work, travel, or study abroad, 4) cross-cultural experience which may assist in subsequent career choices at home, and 5) an opportunity to manifest and develop a spirit of generosity and service in the global community.

Evidence indicates that if sojourners are carefully introduced into a new society by close, sympathetic host culture friends, they may encounter fewer problems than if they are left to fend for themselves (e.g., Furnham & Bochner 1982; Selltiz &

Cook, 1962). Selltiz and Cook (1962) also point out that sojourners who reported having at least one close friend who was a host member experience fewer difficulties than sojourners with no host culture friends. Direct contact with the host culture helps reduce the extent of problems experienced (Sellitz & Cook, 1962).

A study by Oehlkers (1991) of Japanese sojourners in the U.S. has also provided helpful co-relational evidence on the relationships between friendship with host national members and sojourner adjustment. He concludes that a sojourner who includes host national members in his/her friendship networks feels more comfortable in interacting with host nationals and feels more a part of the host culture. In particular, he stresses the importance of the reinforcement values of friendships with host nationals in promoting "belongingness." If the academic sojourner fails to make host national friends, then a vicious cycle may develop as academic sojourners have fewer opportunities to interact with host nationals and learn appropriate social skills, which continues by further isolating them (Bochner, 1986; Furnham & Bochner, 1986; Ward & Kennedy, 1993).

Furnham and Bochner (1982) underscore that failures and problems experienced by the sojourners need not be regarded as symptoms of some underlying pathology, but may be due to a lack of the necessary cultural skills and knowledge. Based on this theory, selected members of the host culture can be utilized to help the foreign student learn about the new culture and to become a resourceful person (Westwood & Barker, 1990).

There is a correlation between sojourners' satisfaction of sojourn experience and being friends with host nationals. Ting-Toomey (1999), for instance, reveals that

international students reported greater satisfaction with their host culture when they were befriended by host nationals (Ting-Toomey, 1999). The higher the quality of personal contact between the locals and sojourners, the more the sojourners experience adaptive satisfaction (Ting-Toomey, 1999).

According to Klineberg and Hull (1979), satisfaction with the foreign experience is closely related to whether the visiting international students felt they had made good friends in the host country. Bochner (1986) also points out that those sojourners who had made satisfactory social contact and established relationships with host nationals during their sojourn reported broader and more general satisfaction with their academic as well as their non-academic experiences.

In the studies of Ward and Kennedy (1993), they declare that the frequency and quality of personal contacts between host nationals and newcomers increase adaptive satisfaction and sojourner adjustment. The higher the quality of personal contact between the locals and the newcomers, the more the newcomers experience a better sojourner adjustment.

Many scholars have identified significant relationships between the amount of interaction with host nationals and the level of sojourner adjustment (e.g., Basu & Ames, 1970; Berry, Kim & Boski, 1987; Berry & Kostovcik, 1983; Furnham & Bochner, 1982; Hull, 1978).

Hull (1978) uses the frequency of interaction to determine the satisfaction of academic sojourners. In the study done by Hull (1978), those academic sojourners who were more satisfied with their frequency of contact with Americans were more likely to be found with host students, to report having made good friends, to report

less loneliness and homesickness, and to have more favorable sojourn attitudes in general. Academic sojourners who reported loneliness and homesickness very often were found to be isolated from Americans, as indexed by several contact variables cited in the study. In a study of a group of Malaysian students in Canada, Berry and Kostovcik (1983) also find that not spending a lot of free time with Canadians and not being close friends with a Canadian were both correlated with high levels of stress.

Empirical studies also have tested the hypothesis that increased interaction with host nationals would improve sojourner adjustment. Basu and Ames (1970) discover that support for the "association hypothesis" where more social interaction with host nationals is associated with more favorable attitudes toward the host; therefore greater interaction possibilities.

Gui and Awa (1992) also indicate that sojourners who frequently interact with host nationals are also more likely to develop proficiency quickly in the host's language as well as learn to have appropriate social contents, the two most important predictors for successful sojourner adjustment.

Friendships with hosts are crucial for learning the skills of a new culture (Searle & Ward, 1990). From this perspective, it is hypothesized that cross-cultural problems arise because sojourners have difficulty negotiating daily social encounters. Hosts are able to assist in social learning skills, although most foreigners are not familiar with the society and have few opportunities for learning the norms (Schild, 1962 as cited in Searle & Ward, 1990).

Furnham and Bochner (1986) conclude, overall, that the two most important factors implicated in the coping process of students at a foreign university were found

to be social contact with local people and prior foreign experience. Klineberg and his colleagues also find that previous travel on the part of the subjects was related with better coping skills, fewer difficulties, and more contact with host nationals during their sojourn (as cited in Bochner, 1986).

Many researchers have suggested that interacting with host nationals or having host national friends will help academic sojourners to have better sojourner adjustment. However, other studies have shown that a majority of the international students failed to establish intimate relations with host members and associated mainly with fellow nationals or other foreign students (Klinegerg & Hull, 1979). Allen & Higgins (1994) also point out that one of the problems that many sojourners have is that they have not experienced a warm welcome from host nationals.

From the review of literature, it concluded that host national friendships help sojourners support culture-learning and social skills in a new culture. On the other hand, in reality, not many sojourners make friends with host nationals.

Multicultural (Other Nationals) Friendship Network

Finally, a "multicultural network" consists of bonds with a non-compatriot foreign student (Bochner et al., 1976). Its main function is to provide recreational or relaxation companionship as well as mutual support based on a shared foreignness (Bochner et al.). The multicultural friendship is believed to serve the sojourner's entertainment needs (Bochner et al., 1976; Furnham and Bochner, 1986).

Multicultural friendship network tends to be small or nonexistent for most academic sojourners. Research indicates that few academic sojourners form bonds

with other people from different countries. The few friendships that happen tend to be superficial in nature (Bochner et al., 1976, 1977; Furnham & Bochner, 1986).

Summary of Literature Review

The literature review was divided into two sections: research on sojourner adjustment and friendships of sojourners.

The research on sojourner adjustment began by explaining culture shock, and sojourner's adjustment process in a new environment followed by the conceptualization and the operation of sojourner adjustment.

Even though much research has been done in sojourner adjustment, a consistent definition and measurement on sojourner adjustment are still lacking. Based on the review of literature, a sojourner is conceptually considered as an individual who stays in another country temporarily for a short-term to accomplish his/her overseas task. For this study, the definition of sojourner adjustment applies to the definition determined by Ady (1995), "...a relatively short-term, individually-and time-based process" (p. 98) and "...a function of the extent to which the sojourner judges he or she is meeting environment demands and the extent to which the sojourner judges his or her needs are being met in the new environment" (p. 108).

The second part of the review began with a theoretical perspective in social support. Social support has been reported as having life-enhancing benefits and helping sojourners to adjust to a new culture. The literature stresses the importance of support systems provided through friendships formed by sojourners. Based on the review of literature, the theory predicts that the well-being of sojourners depends on their having access to both friendship networks with co-nationals and host nationals

(Furnham, 2004). The source of support from co-national network is important because through it sojourners can maintain their culture of origin. At the same time, the source of support from host national network is important because they can learn social skills of their new culture (Furnham, 2004). The evidence, however, has suggested that most sojourners do not have host national friends.

CHAPTER 3
RESEARCH QUESTIONS AND DEFINITIONS OF KEY CONCEPTS

Research Questions

The present study explored the following research questions:

RQ1: What is the relationship between Japanese international students' friendship networks and their self-reported ability to meet their own needs (Sojourner-centric Adjustment)?

RQ 1a: What is the relationship between the frequency of interaction with Japanese friends and the subjects' self-reported ability to meet their own needs (Sojourner-centric Adjustment)?

RQ 1b: What is the relationship between the degree of intimacy with Japanese friends and the subjects' self-reported ability to meet their own needs (Sojourner-centric Adjustment)?

RQ 1c: What is the relationship between the frequency of interaction with non-Japanese friends and the subjects' self-reported ability to meet their own needs (Sojourner-centric Adjustment)?

RQ 1d: What is the relationship between the degree of intimacy with non-Japanese friends and the subjects' self-reported ability to meet their own needs (Sojourner-centric Adjustment)?

RQ 2: What is the relationship between Japanese international students' friendship networks and their self-reported ability to meet the requirements of the host environment (Environment-centric Adjustment)?

RQ 2a: What is the relationship between the frequency of interaction with

Japanese friends and the subjects' self-reported ability to meet the

requirements of the host environment (Environment-centric Adjustment)?

RQ 2b: What is the relationship between the degree of intimacy with Japanese

friends and the subjects' self-reported ability to meet their requirements of the

host environment (Environment-centric Adjustment)?

RQ 2c: What is the relationship between the frequency of interaction with

non-Japanese friends and the subjects' self-reported ability to meet the

requirements of the host environment (Environment-centric Adjustment)?

RQ 2d: What is the relationship between the degree of intimacy with non-

Japanese friends and the subjects' self-reported ability to meet the

requirements of the host environment (Environment-centric Adjustment)?

Definitions of Key Concepts

The Friendship Network

Conceptual Definition: Friendship network refers to whether the respondent's

friendship network is "monocultural (co-national)," "bicultural (host national)," or

"multicultural (other nationals)" (Bochner et al., 1976).

In this study, Japanese (monocultural or co-national) refers to a student or a

non-student who is a Japanese native speaker, born and raised in Japan.

Non-Japanese are referred to others (students or non-students) who were not

native Japanese speakers and were not raised in Japan.

1) The primary network is "monocultural (co-national)" (Bochner et al.). This

friendship network is the relationship between sojourners of the same culture. This

network provides the support and environment where groups can express their ethnic and cultural heritages (Bochner et al.). In this study, "monocultural (co-national)" friendship is defined as friendship with a Japanese national.

2) The secondary friendship network is a "bicultural (host national)" relationship between sojourners and host nationals (Bochner et al.). A secondary American network serves an "instrumental function" (Bochner et al.) for working through academic or university-related problems, course projects, help with English, and advice about what classes to take.

3) The third friendship network is "multicultural" network consisted of bonds with other international students (Bochner et al., 1977). 'Multicultural" network serves a "recreational function" (Bochner et al.) via casual activities and events such as swimming, drinking, attending concerts, studying at the library, and going to picnics. These activities are predicted to be done with many different friends because they are a sort, which do not demand deep disclosure of personal convictions or views of the self.

For this study, "bicultural" (host national) and "multicultural" (other nationals) are considered as non-Japanese who are from other foreign countries or various ethnics in the U.S. since Hawai'i is very unique and culturally diverse.

Operational Definition: Friendship network patterns were measured by asking the respondent's five close friends' nationality whether Japanese from Japan or non-Japanese (host member or other nationals). Fill-in the blank was also provided to write the respondents' non-Japanese friends' specific ethnicity for the discussion purposes.

The question was the following: What is this close friend's nationality?

The Frequency of Interaction with Close Friends

Conceptual Definition: The number of times that the subjects interact with each of his or her close friends per week or per month.

Operational Definition: The subjects were asked to rate the frequency of interaction with the five close friends. The answers contained a 4=point interval scale ranging from 1= daily, 2= once a week, 3= once a month, and 4= less than once a month.

The question was the following: How often do you interact with this close friend?

The Degree of Intimacy with Close Friends

Conceptual Definition: Intimacy is referred as sharing one's innermost thoughts and feelings (Berndt, 1986). For this study, intimacy is referred to as how close they are with their friends.

Operational Definition: The subjects were asked to rate their degree of intimacy with their close friends. The question consisted of a 5-point-Likert type interval scale ranging from 1= Nothing, 2= A little, 3= Something, 4= Almost everything, and 5= Everything.

The question was the following: How much of your private feelings, thoughts, and things do you share with this close friend?

Sojourner Adjustment

Conceptual Definition: Sojourner adjustment is defined "as a function of the extent to which the sojourner judges he or she is meeting environmental demands and

the extent to which the sojourner judges his or her needs are being met in the new environment" (Ady, 1995, p. 108). Sojourner adjustment, therefore, examines two domains: 1) the ability of a sojourner to meet his/her own needs or desires (sojourner-centric adjustment), and 2) the ability of a sojourner to meet the requirements or expectations of the new environment (environment-centric adjustment) (Ady, 1995; in press; personal communication). (For example, question number 9 asked the respondents about finding food in their new environment. In the sojourner-centric adjustment, the ability of a sojourner to meet his/her own needs or desires means that the subject is able to find the food he/she desires to get. In the environment-centric adjustment, the ability of a sojourner to meet the requirements or expectations of the new environment means that the subject is able to find the food he/she requires to survive in the new environment.)

Operational Definition: The subjects were asked to answer according to the Sojourner Adjustment Scale (SAS). SAS presents 38 domains, which categorized into two contexts (sojourner-centric adjustment and environment-centric adjustment) of adjustment intended to allow the subjects to respond to variables that are reflected.

There were three additional questions inserted at the end of the questionnaire. However, these were used for explanation purpose not for the correlation analysis.

Sojourner-centric Adjustment

Conceptual Definition: A self-reported ability of a relatively short-term sojourner to meet individuals' own needs (modified from Ady's (1995) concept of "sojourner-centric").

Operational Definition: Sojourner-centric adjustment was measured by 38 questions arranged in a 5-point-Likert type interval scale ranging from 1= not true at all, 2= mostly not true, 3= neutral or don't know, 4= somewhat true, and 5= very true. Rather than computing a sum of 38 questions, a mean score was computed (sum of the 38 items divided by 38). The mean score represents a composite score of the items expressed in the same intuitive unites as the items (with 1= not true at all, 2= mostly not true, 3= neutral or don't know, 4= somewhat true, and 5= very true) that the subject can meet his/her own needs.

The question was the following: I am able to get or do what I want.

Environment-centric Adjustment

Conceptual Definition: A self-reported ability of a relatively short-term sojourner to meet the requirements of the host environment (modified from Ady's (1995) concept of "environment-centric").

Operational Definition: Environment-centric adjustment was measured by 38 questions arranged in a 5-point-Likert type interval scale ranging from 1= not true at all, 2= mostly not true, 3= neutral or don't know, 4= somewhat true, and 5= very true. Rather than computing a sum of 38 questions, a mean score was computed (sum of the 38 items divided by 38). The mean score represents a composite score of the items expressed in the same intuitive unites as the items (with 1= not true at all, 2= mostly not true, 3= neutral or don't know, 4= somewhat true, and 5= very true) that the subject can meet his/her own needs.

The question was the following: I am able to do what is required of me.

CHAPTER 4
DATA COLLECTION METHODS

The Setting

This study was conducted in the fall of 2004 at the University of Hawai'i at

Mānoa (UHM) campus. The exact number of Japanese international students was not

available when data were collected since the new SEVIS was still under the process

according to Linda Duckworth, the director of the International Student Services

(Personal Communication). There were 519 Japanese international students enrolled

at UHM in the spring of 2004 according to the recent available statistics from the

UHM International Student Services. However, the number of Japanese international

students was slightly different at the time this study was conducted.

Subjects

The respondents in this study consisted of 103 Japanese international students

who were attending the UHM in the fall of 2004. The subjects were all matriculated

students either in undergraduate or graduate programs in the UHM. They also had to

be of Japanese nationality, born and raised in Japan, and have graduated from a

regular high school in Japan rather than an international school in Japan. Eighty-

seven were undergraduate students and 16 were graduate students. The unit of

analysis and the unit of observation in this study was an individual Japanese

international student.

Sampling Procedure

The data for this study was collected through a self-administered survey. For

this study, snowball sampling was also utilized.

Each respondent referred me to other Japanese international students who attend UHM. This procedure was continued until the sample size became 103.

The study was started by asking my friends who were Japanese international undergraduate students and Japanese international graduate students attending UHM to participate. Those friends also referred other Japanese undergraduate students and Japanese graduate students attending UHM in the fall 2004. This procedure was continued until the sample size became 103.

One hundred ninety-three paper-based questionnaires were sent out to the study sample and 120 came back within three weeks. The return rate was 62%. However, 17 respondents did not have five close friends in Hawai'i. Therefore, 17 surveys were eliminated from this study.

An exemption from the University of Hawai'i Committee on Human Studies (IRB) was obtained on August 10, 2004.

The Questionnaire

The friendship patterns and the 38 domains of two contexts of sojourner adjustment were examined by the data from self-reported survey questionnaires. The questionnaire consisted of 61 questions categorized into three sections (see Appendix B): 1) the demographic information, 2) the friendship networks, and 3) the 38 domains of two contexts of the Sojourner Adjustment Scale (SAS).

The following sections describe the questionnaire, the measurement of friendship networks, and sojourner adjustment.

Questionnaire Section 1: Demographic Information (Question # 1-10)

The first part of the questionnaire included questions concerning several demographic variables. There are 10 multiple questions in this section. Those variables are 1) age, 2) gender, 3) marital status, 4) academic degree being pursued, 5) duration of staying in Oahu, Hawai'i, 6) previous sojourns abroad before coming to Hawai'i, 7) current residence, 8) ability of speaking English, 9) ability of understanding English, and 10) whether they have 5 close friends in Hawai'i or not.

Open-ended questions were also provided to specify more information in question numbers 3, 4, 6, and 7.

Questionnaire Section 2: Your Five (5) Close Friends in Hawai'i (Question # 10-17)

The second part, "Your Five (5) Close Friends in Hawai'i" asked the respondents to think of five actual people they consider their closest friends and to write down their initials and specific characteristics about each one. This data was categorized into two parts; whether the friend is Japanese (co-national) or non-Japanese (or host member).

According to Bochner et al., (1977), by asking the respondents explicitly for actual people, subjects would be more likely to list real rather than ideal people. By asking for initials only, the respondents would preserve the anonymity of their friends.

The characteristics of each friend included the friends' specific ethnicity, gender, age, language use of the subjects' friends, and more importantly to index variables related to the average of interaction with the friends, and the degree of intimacy.

Questionnaire Section 3: Sojourner Adjustment Scale

The subjects were asked Sojourner Adjustment Scale (SAS) introduced by Ady (in press). The SAS presents 38 domains, which are categorized into two contexts of adjustment. The two contexts are: 1) sojourners' perceived ability to meet their own needs (sojourner-centric adjustment), and 2) their perceived ability to meet the requirements of the new environment (environment-centric adjustment). These questions were arranged in a 5-point-Likert-type interval scale ranging from (1) very true to (5) not true at all. After responding to the two contexts of the 38 SAS domains, the subjects were asked three additional questions to assess their overall impression of sojourner adjustment.

Method for Testing Research Questions

This section briefly describes each research question and the method used for testing it. Correlation analysis was used to test for the relationships between four friendship variables (the frequency of interaction between Japanese friends and non-Japanese friends, the degree of intimacy between Japanese friends and non-Japanese friends), and two sojourner adjustment variables, which are sojourner-centric adjustment and environment-centric adjustment to answer the ten research questions for this present study. The statistical significance of $p < .05$ was set for this study.

The survey data were analyzed by using the Statistical Package for the Social Sciences version 12.0.

Research Question 1: What is the relationship between Japanese international students' friendship networks and their self-reported ability to meet their own needs or desires (Sojourner-centric Adjustment)?

To answer this research question, first, four sub questions were tested. Research question 1 was a summary of research question 1a, research question 1b, research question 1c, and research question 1d.

Research question 1a

The correlation between the frequency of interaction between Japanese friends and the subjects' self-reported ability to meet their own needs (sojourner-centric adjustment) were numeric variables. Therefore, a correlation analysis was performed to quantify the strength of association between these two variables.

Research question 1b

The correlation between the degree of intimacy with Japanese friends and the subjects' self-reported ability to meet their own needs (sojourner-centric adjustment) were numeric variables. Therefore, a correlation analysis was performed to quantify the strength of association between these two variables.

Research question 1c

The correlation between the frequency of interaction with non-Japanese friends and the subjects' self-reported ability to meet their own needs (sojourner-centric Adjustment) were numeric variables. Therefore, a correlation analysis was performed to quantify the strength of association between these two variables.

Research question 1d

The correlation between the degree of intimacy with Japanese friends and the

subjects' self-reported ability to meet their own needs (sojourner-centric adjustment)

were numeric variables. Therefore, a correlation analysis was performed to quantify

the strength of association between these two variables.

Research Question 2: What is the relationship between Japanese international
students' friendship networks and their self-reported ability to meet the
requirements of the host environment (Environment-centric Adjustment)?

To answer this question first, four sub questions were tested. The research

question 2 was the summary of the research question 2a, 2b, 2c and 2d

Research question 2a

The correlation between the frequency of interaction with Japanese friends and

the subjects' self-reported ability to meet the requirements of the host environment

(Environment-centric Adjustment) were numeric variables. Therefore, a correlation

analysis was performed to quantify the strength of association between these two

variables.

Research question 2b

The correlation between the degree of intimacy with Japanese friends and the

subjects' self-reported ability to meet the requirements of the host environment

(Environment-centric Adjustment) were numeric variables. Therefore, a correlation

analysis was performed to quantify the strength of association between these two

variables.

Research question 2c

The correlation between the frequency of interaction with non-Japanese friends and the subjects' self-reported ability to meet the requirements of the host environment (Environment-centric Adjustment) were numeric variables. Therefore, a correlation analysis was performed to quantify the strength of association between these two variables.

Research question 2d

The correlation between the degree of intimacy with non-Japanese friends and the subjects' self-reported ability to meet the requirements of the host environment (Environment-centric Adjustment) were numeric variables. Therefore, a correlation analysis was performed to quantify the strength of association between these two variables.

Other Variables

After the 10 research questions were tested, correlation analysis was also performed to find any other significant results in the respondents' 9 demographic information. The individual items, the domains number 3 (dealing with language), 11 (dealing with isolation), 12(maintaining friendship), 16 (male-female relationships), 17 (maintaining interpersonal relationships), 22 (understanding American culture), and 34 (dealing with my identity as an "outsider") were also selected from the Sojourner Adjustment Scale to test the correlations. Theses specific items were selected because there were more focused or related to the concept of friendship. A total of 7 domains from SAS and four friendship variables (the frequency of

interaction between Japanese friends and non-Japanese friends, the degree of intimacy between Japanese friends and non-Japanese friends) were measured.

CHAPTER 5
RESULTS

The result in this chapter is divided into three major segments. The first

segment presents the demographic information of the respondents. The second

segment describes the findings of the "5 Close Friends" data. The third section

reports on the testing research questions and a summary of the statistical findings.

The Statistical Package for Social Sciences version 12.0 was used for the

results of the survey data.

The Demographic Composition of the Study Sample

Of the 193 surveys distributed to Japanese international students, who are

currently attending the University of Hawai'i at Mānoa during the fall 2004 semester,

120 surveys were returned or a return rate of 62%. However, 17 respondents out of

the 120 did not have at least five close friends in Hawai'i. For this study, the 17

respondents who did not have at least five close friends in Hawai'i were excluded

from this study.

Table 1 shows the age of respondents (N = 103). Most of the respondents

were relatively young, as 79.6% reported being between 18 to 25 years old. 79.6%

were female and 20.4% were male (see Table 2). Almost all of the subjects were

single. The subjects reported that 98.1% were single and 1.9% were married (see

Table 3). Of all Japanese international students who participated in this study, 74.8%

were working toward their bachelor's degrees, 15.5% were working toward their

advanced degrees, and 9.7% were exchange students (see Table 4). Table 5 shows

that 33% of the Japanese international students have been living in Oahu, Hawai'i for

2 to 3 years, 22.3% have been living in Oahu, Hawai'i for 1 year to 2 years, 18.4%

had been living in Oahu, Hawai'i for 3 to 4 years, and 10.7% had been living in Oahu,

Hawai'i for less than one year. 51.5% of the respondents reported that they had

previous experience living abroad before coming to Hawai'i, and 48.5% reported that

they did not have any previous experience living abroad before coming to Hawai'i

(see Table 6). As for the respondents' current residence in Hawai'i either on or off

campus, most of them (96.1%) reported that they live off campus while only 3.6%

reported that they live on campus (see Table 7). Regarding the respondents' self-

reported ability to speak English, 36.9% of them reported their ability to speak

English was average, 23.3% of them reported their ability to speak English was poor,

22.3% of them reported their ability to speak English was above average, 12.6% of

them reported their ability to speak English was excellent, and 4.9% of them reported

their ability to speak English was very poor (see Table 8). Lastly, Table 9 shows the

respondents' self-reported ability to understand English. 45.6% of them reported their

ability to understand English was average, 29.1% of them reported above average,

12.6% of them reported poor, 10.7% of them reported excellent, and 1.9% of them

reported very poor. Table 1 through table 9 and Figure1 through Figure 9 shows the

demographic information of the subjects for this study.

Table 1. Age of Respondents (N=103)

Age	Number (%)
18-25	82 (79.6%)
26-35	20 (19.4%)
36-45	1 (1.0%)
Total	103 (100%)

Table 2. Gender of Respondents (N=103)

Gender	Number (%)
Male	21 (20.4%)
Female	82 (79.6%)
Total	103 (100%)

Table 3. Marital Status of Respondents (N=103)

Marital Status	Number (%)
Single	101 (98.1%)
Married	2 (1.9%)
Total	103 (100%)

Table 4. Respondents' Academic Degree Being Pursued (N =103)

Academic Degree	Number (%)
Exchange student	10 (9.7%)
Bachelor's degree	77 (74.8%)
Advanced degree	16 (15.5%)
Total	103 (100%)

Table 5. Respondents' Duration of Staying in Oahu, Hawai'i (N=103)

Duration	Number (%)
Less than 1 year	11 (10.7%)
1 year to 2 years	23 (22.3%)
2 years to 3 years	34 (33%)
3 years to 4 years	19 (18.4%)
5 years or more	16 (15.5%)
Total	103 (100%)

Table 6. Respondents' Previous Sojourn Experience before Coming to Hawai'i (N=103)

Previous Sojourn Experience	Number (%)
Yes	53 (51.5%)
No	50 (48.5%)
Total	103 (100%)

Table 7. Respondents' Current Residence in Hawai'i (N=103)

Current Residence	Number (%)
On campus	4 (3.9%)
Off campus	99 (96.1%)
Total	103 (100%)

Table 8. Respondents' Self-Reported Ability to Speak English (N=103)

Ability to Speak English	Number (%)
Very poor	5 (4.9%)
Poor	24 (23.3%)
Average	38 (36.9%)
Above average	23 (22.3%)
Excellent	13 (12.6%)
Total	103 (100%)

Table 9. Respondents' Self-Reported Ability to Understand English (N=103)

Ability to Understand English	Number (%)
Very poor	2 (1.9%)
Poor	13 (12.6%)
Average	47 (45.6%)
Above average	30 (29.1%)
Excellent	11 (10.7%)
Total	103 (100%)

Figure 1. Age of Respondents (N=103).
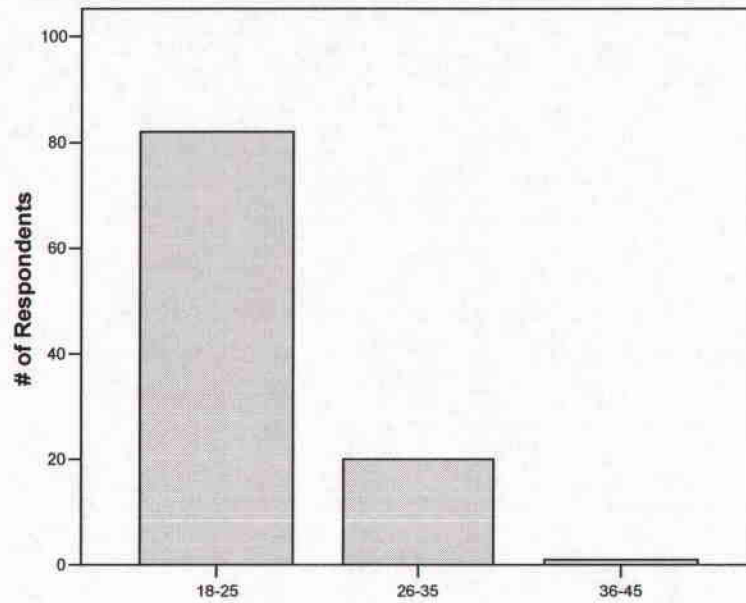
Figure 2. Gender of Respondents (N=103).

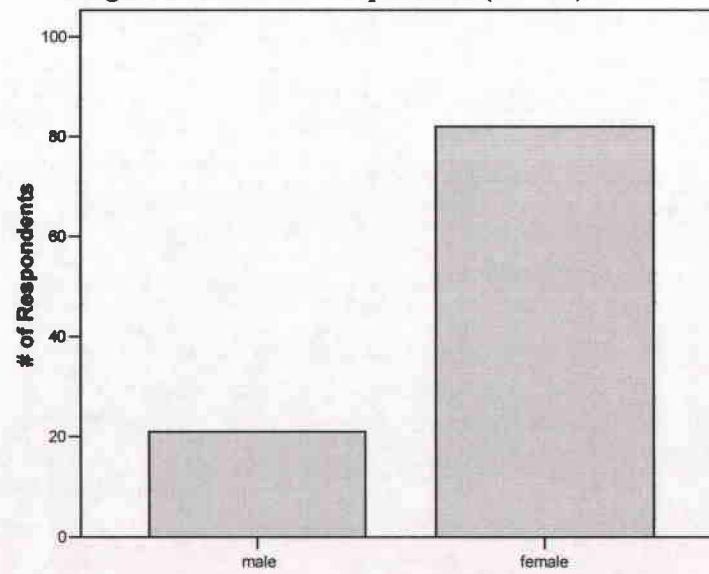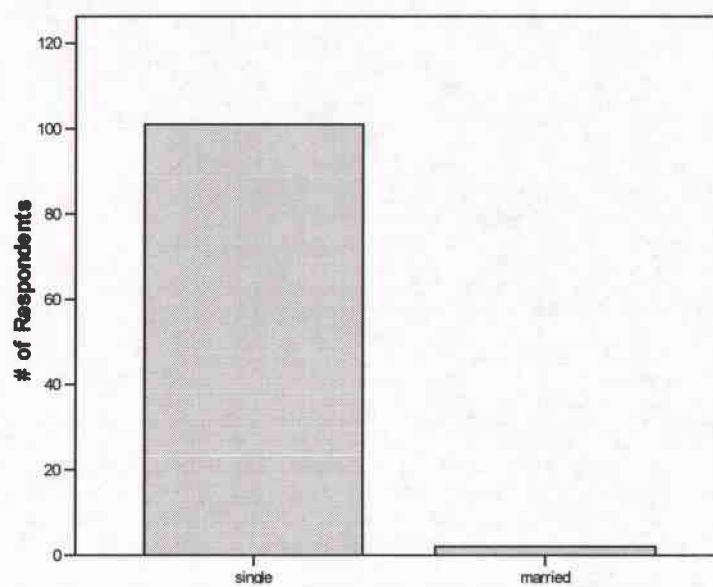Figure 3. Marital Status of Respondents (N = 103).

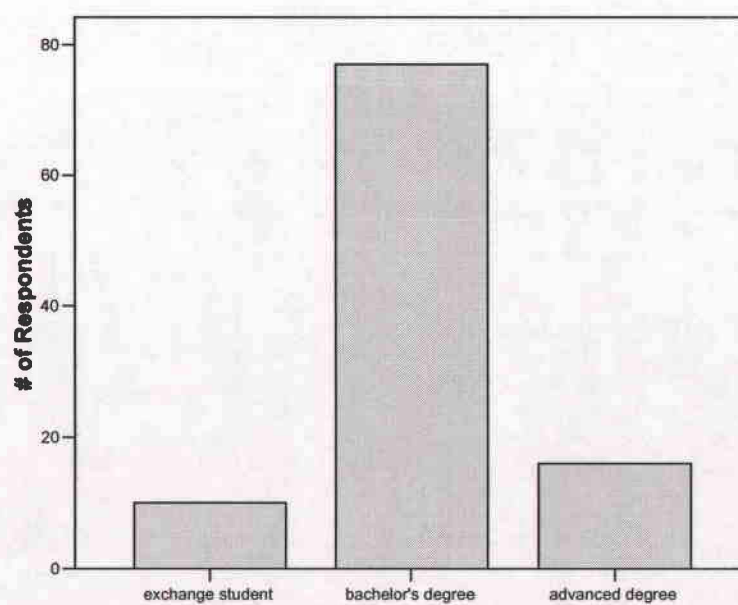Figure 4. Respondents' Academic Degree Being Pursued (N=103).

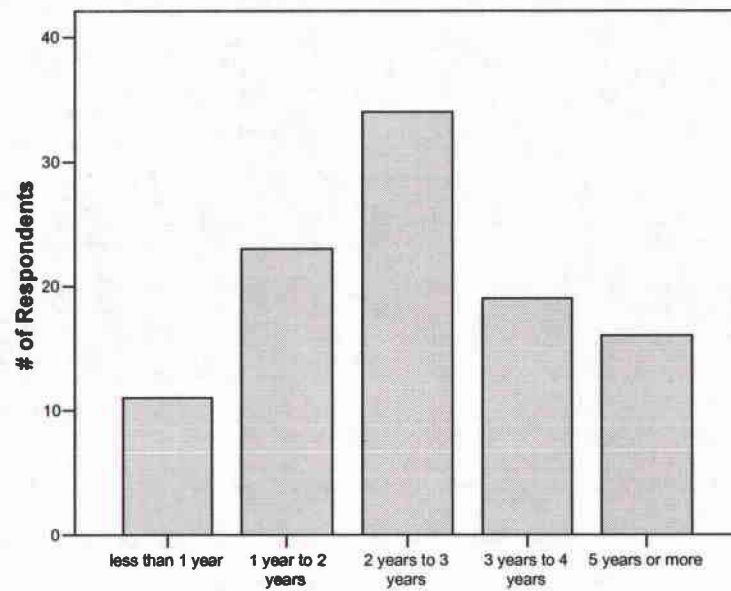Figure 5. Respondents' Duration of Staying in Oahu, Hawai'i (N=103).

Figure 6. Previous Sojourns' Experience before Coming to Hawai'i (N=103).
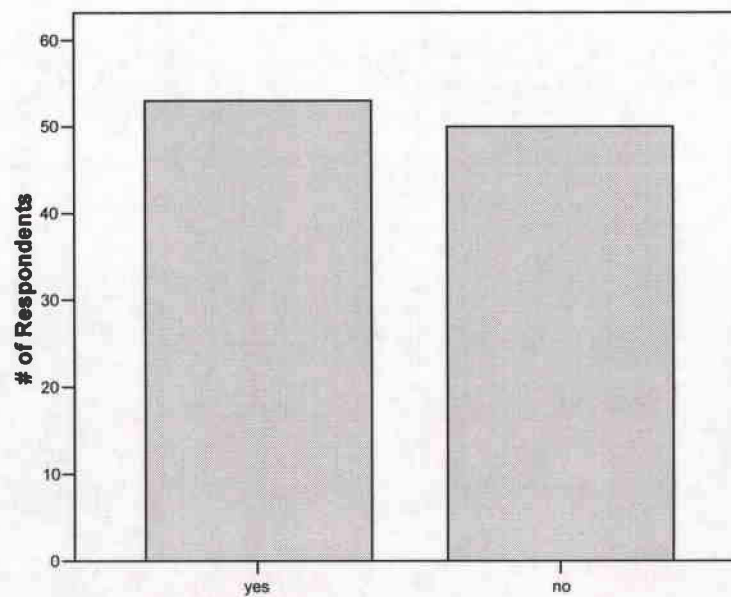
Figure 7. Respondents' Current Residence in Hawai'I (N=103).
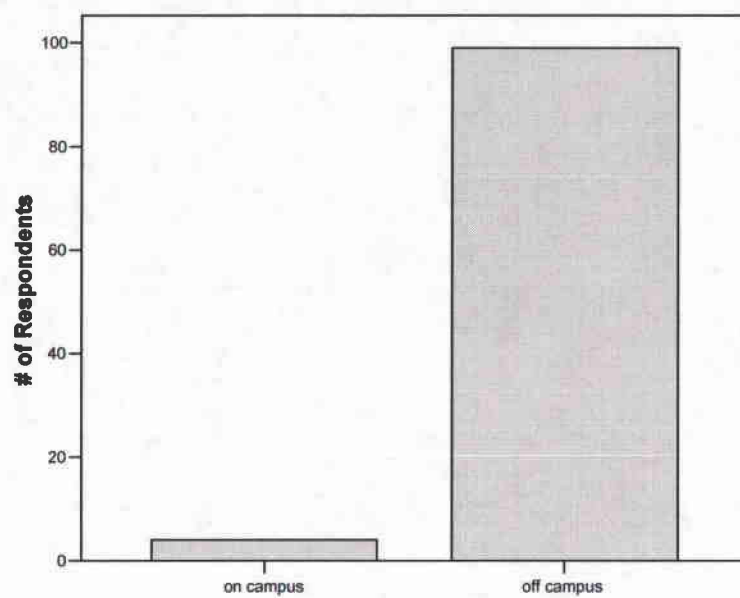
Figure 8. Respondents' Self-reported Ability to Speak English (N=103).
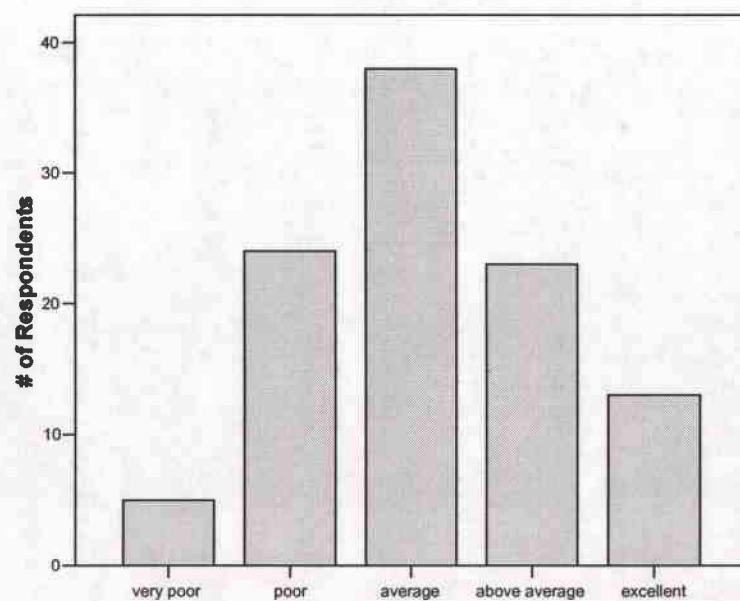
Figure 9. Respondents' Self-reported Ability to Understand English (N=103).
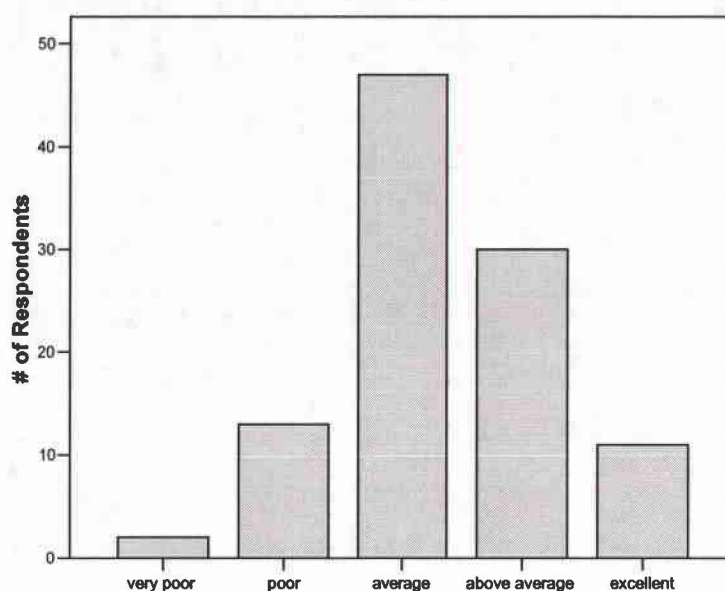
The 5 Close Friends' Data

This section reports information on the respondents' friends' nationality and ethnicity. Even though in this present study non-Japanese friends are considered people from various countries and backgrounds, the respondents were asked to specify their friends' ethnicity for discussion purposes. Of the 515 close friends reported by the 103 Japanese international students surveyed, 174 were non-Japanese. 80.4% were American, 12.6% were friends from East Asia including China, Korea, and Taiwan, and 3.4% were friends from Europe. The other 341 were Japanese friends from Japan. The following table and figures (Table 10, Figure 10, and Figure 11) show the composition of the non-Japanese by their nationality, ethnicity and number of Japanese and non-Japanese friends.

The majority of respondents had more than three of their five closest friends in Hawaii as being Japanese friends (see Table 11). 30.1% of them had four of their five

closest friends in Hawaii as being Japanese friends, 23.3% of them had all five of

their five closest friends in Hawaii as being Japanese friends and 20.4% of them had

three of their five closest friends in Hawaii as being Japanese friends in their

friendship networks. On the other hand, the majority of respondents had less than

three of their five closest friends in Hawai'i as being non-Japanese friends (see Table

12). 30.1% of them had one of their five closest friends in Hawaii as being non-

Japanese, 23.3% of them did not have any of their five closest friends in Hawaii as

being non-Japanese, and 20.4% of them had two of their five closest friends in Hawaii

as being non-Japanese friends in their friendship networks.

Table 10. Composition of Non-Japanese Individuals by Country of Origin

	Total by Ethnicity	Total by Region Number (%)
North American		
Caucasian	52	
Japanese-American	54	
Korean-American	8	
Chinese-American	11	140 (80.4%)
Filipino-American	5	
Vietnamese-American	1	
Mixed	9	
South America		
Mexican	1	1 (0.6%)
Europe		
German	1	
Italian	2	6 (3.4%)
Spanish	1	
Swiss	2	
East Asia		
Chinese	13	
Korean	7	22 (12.6%)
Taiwanese	2	
Southeast Asia		
Cambodian	1	
Malaysian	1	4 (2.4%)
Thailand	1	
Vietnamese	1	
Pacific Island		1 (0.6%)
Samoan	1	

Figure 10. Number of Japanese Friends.
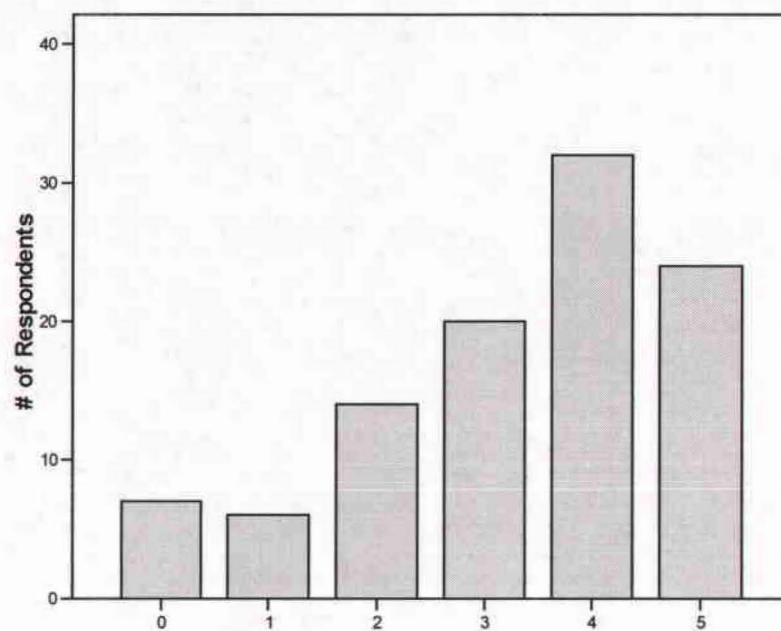
Figure 11. Number of Non-Japanese Friends.
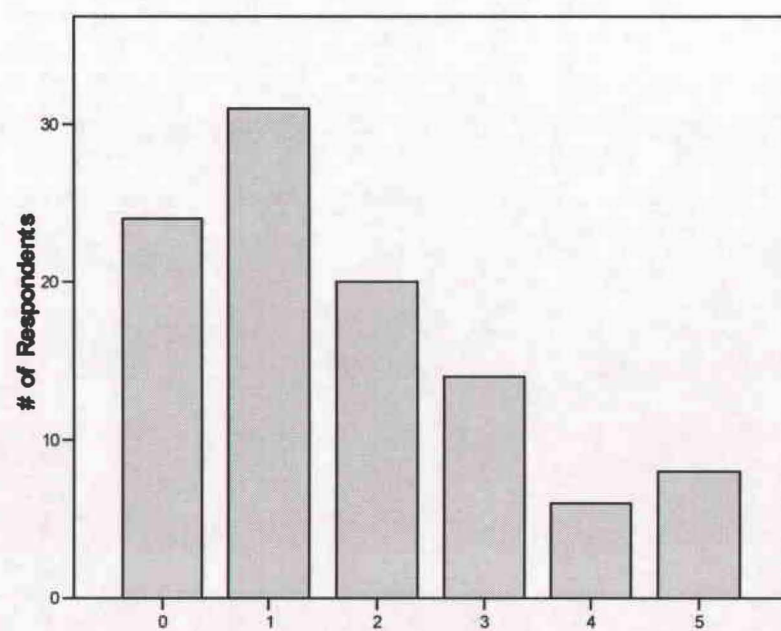
Table 11. Number of Japanese Friends

Number of Friends Out of 5	Number of Respondents
0	7 (6.8%)
1	6 (5.8%)
2	14 (13.6%)
3	21 (20.4%)
4	31(30.1%)
5	24 (23.3%)
Total	103 (100%)

Table 12. Number of Non-Japanese friends

Number of Friends Out of 5	Number of Respondents
0	24 (23.3%)
1	31 (30.1%)
2	21 (20.4%)
3	13 (12.6%)
4	8 (7.8%)
5	6 (5.8%)
Total	103 (100%)

The frequency analysis indicates that Japanese international students, on average, interacted with their Japanese friends a little more than once a week ($X_{bar} = 3.1$) and interacted with non-Japanese friends a little more than once a month ($X_{bar} = 2.38$). For the self-reported degree of intimacy, the frequency analysis shows that Japanese international students have a higher degree of intimacy with their Japanese friends ($X_{bar} = 3.48$) than friends who are non-Japanese ($X_{bar} = 2.67$). Table 13 and Table 14 show the composition of the frequency and the degree of intimacy of Japanese international students with Japanese friends and non-Japanese friends.

Table 13. Composition of the Frequency of Interaction with Japanese Friends and Non-Japanese Friends

		The Frequency of Interaction with Japanese Friends	The Frequency of Interaction with Non-Japanese Friends
N	Valid	103	103
	Missing	0	0
Mean		3.10	2.38
Median		3.50	3.00
SD		1.09	1.48
Minimum		0.00	0.00
Maximum		4.00	4.00

Table 14. Composition of the Degree of Intimacy with Japanese Friends and Non-Japanese Friends

|		The Degree of Intimacy with Japanese Friends	The Degree of Intimacy with Non-Japanese Friends
N	Valid	103	103
	Missing	0	0
Mean		3.48	2.67
Median		3.60	3.00
Std. Deviation		1.11	1.63
Minimum		0.00	0.00
Maximum		5.00	5.00

The Composition of Sojourner Adjustment Variables

The results of the distribution for sojourner-centric adjustment and environment-centric adjustment indicated that the most frequent answers were "somewhat true" and "very true." Table 15 and Figure 12 show the distribution of 38 questions in the sojourner-centric adjustment, asked, as "I am able to meet my own needs or do what I want."

Table 15. Results of Sojourner-Centric Adjustment

Question	1 Not true at all N (%)	2 Mostly not true N (%)	3 Neutral or don't know N (%)	4 Somewhat true N (%)	5 Very true N (%)
1. Ways of eating and drinking	5 (4.9)	4 (3.9)	11 (10.7)	51 (49.5)	32 (31.1)
2. Maintaining my physical health	2 (1.9)	6 (5.8)	14 (13.6)	45 (43.7)	36 (35.0)
3. Dealing with language	2 (1.9)	16 (15.5)	24 (23.3)	31 (30.1)	30 (29.1)
4. Finding the food I want	5 (4.9)	10 (9.7)	23 (22.3)	36 (35.0)	29 (28.2)
5. Get access to Transportation	12 (11.7)	13 (12.6)	17 (16.5)	27 (26.2)	34 (33.0)
6. Entertainment	5 (4.9)	8 (7.8)	21 (20.4)	39 (37.9)	30 (29.1)
7. Using Etiquette properly	5 (4.9)	4 (3.9)	30 (29.1)	39 (37.9)	25 (24.3)
8. Education	3 (2.9)	8 (7.8)	8 (7.8)	47 (45.6)	37 (35.9)
9. Work	16 (15.5)	13 (12.6)	31 (30.1)	24 (23.3)	19 (18.4)
10. Climate/Weather	4 (3.9)	8 (7.8)	19 (18.4)	38 (36.9)	34 (33.0)
11. Dealing with isolation	3 (2.9)	11 (10.7)	37 (35.9)	33 (32.0)	19 (18.4)
12. Maintaining friendship	--	9 (8.7)	18 (17.5)	36 (35.0)	40 (38.8)
13. Dress/Clothing	2 (1.9)	17 (16.5)	15 (14.6)	32 (31.1)	37 (35.9)
14. Understand Verbal communication	1 (1.0)	5 (4.9)	23 (22.3)	52 (50.5)	22 (21.4)
15. Understand Nonverbal communication	2 (1.9)	10 (9.7)	26 (25.2%)	43 (41.7)	22 (21.4)
16. Male-female relationships	3 (2.9)	8 (7.8)	30 (29.1)	36 (35.0)	26 (25.2)
17. Maintain interpersonal relationships	2 (1.9)	2 (1.9)	27 (26.2)	54 (52.4)	18 (17.5)
18. Get access to media	--	5 (4.9)	30 (29.1)	42 (40.8)	26 (25.2)
19. Sex	8 (7.8)	6 (5.8)	50 (48.5)	26 (25.2)	13 (12.6)
20. Use of time	3 (2.9)	14 (13.6)	34 (33.0)	29 (28.2)	23 (22.3)
21. Dealing with crowdedness	1 (1.0)	8 (7.8)	45 (43.7)	30 (29.1)	19 (18. 4)
22. Understanding American culture	1 (1.0)	5 (4.9)	18 (17.5)	55 (53.4)	24 (23.3)
23. Dealing with my emotions	1 (1.0)	10 (9.7)	23 (22.3)	41 (39.8)	28 (27.2)
24. Cleanliness	4 (3.9)	4 (3.9)	27 (26.2)	39 (37.9)	29 (28.2)
25. Maintaining privacy	2 (1.9)	5 (4.9)	31 (30.1)	31 (30.1)	34 (33.0)
26. Living space	5 (4.9)	2 (1.9)	28 (27.2)	38 (36.9)	30 (29.1)

27. Understand politics	8 (7.8)	23 (22.3)	42 (40.8)	21 (20.4)	9 (8.7)
28. Spiritual life	9 (8.7)	14 (13.6)	49 (47.6)	16 (15.5)	15 (14.6)
29. Maintain personal hygiene	--	8 (7.8)	42 (40.8)	26 (25.2)	27 (26.2)
30. Dealing with cost of living	3 (2.9)	13 (12.6)	35 (34.0)	27 (26.2)	25 (24.3)
31. Dealing with morals, ethics and values in host culture	2 (1.9)	7 (6.8)	38 (36.9)	39 (37.9)	17 (16.5)
32. Maintain family relationships	3 (2.9)	3 (2.9)	21 (20.4)	35 (34.0)	41 (39.8)
33. Material goods	2 (1.9%)	11 (10.7)	28 (27.2)	42 (40.8)	20 (19.4)
34. Dealing with my identity as an "outsider"	4 (3.9)	6 (5.8)	31 (30.1)	39 (37.9)	23 (22.3)
35. Dealing with the "man-made" environment	2 (1.9)	7 (6.8)	46 (44.7)	28 (27.2)	20 (19.4)
36. Obey laws and law enforcement	--	7 (6.8)	28 (27.2)	35 (34.0)	33 (32.0)
37. Dealing with money and currency transactions	1 (1.0)	4 (3.9)	28 (27.2)	32 (31.1)	38 (36.9)
38. Maintaining my personal growth	--	--	14 (13.6)	50 (48.5)	39 (37.9)

Figure 12. Mean and Curve of Distribution of Sojourner-Centric.

Mean = 3.7292
Std. Dev. = 0.52788
N = 103
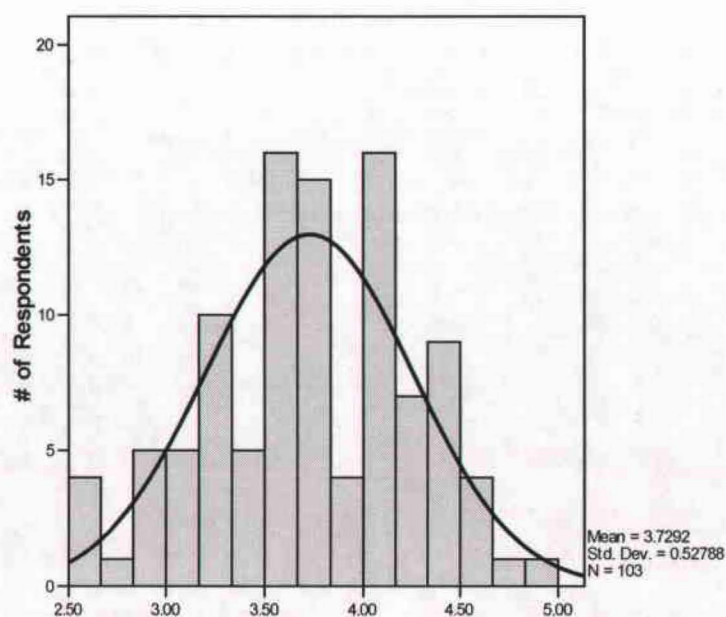
The following Table 16 and Figure 13 show the distribution of 38 questions in the environment-centric adjustment.

Table 16. Results of Environment-Centric Adjustment

Questions	1 Not true at all N (%)	2 Mostly not true N (%)	3 Neutral or don't know N (%)	4 Somewhat true N (%)	5 Very true N (%)
1.Ways of eating and drinking	2 (1.9)	5 (4.9)	19 (18.4)	38 (36.9)	39 (37.9)
2. Maintaining my physical health	4 (3.9)	8 (7.8)	14 (13.6)	48 (46.6)	29 (28.2)
3. Dealing with language	8 (7.8)	14 (13.6)	30 (29.1)	30 (29.1)	21 (20.4)
4. Finding the food I want	--	13 (12.6)	29(28.2)	38 (36.9)	23 (22.3)
5. Get access to Transportation	3 (2.9)	15(14.6)	23 (22.3)	38 (36.9)	24 (23.3)
6. Entertainment	5 (4.9)	11 (10.7)	27 (26.2)	40 (38.8)	20 (19.4)
7. Using Etiquette properly	--	10 (9.7)	27 (26.2)	45 (43.7)	21 (20.4)
8. Education	5 (4.9)	4 (3.9)	31 (30.1)	31 (30.1)	32 (31.1)
9. Work	14 (13.6)	11 (10.7)	34 (33.0)	21 (20.4)	23 (22.3)
10. Climate/Weather	5 (4.9)	11 (10.7)	27 (26.2)	28 (27.2)	32 (31.1)
11. Dealing with isolation	4 (3.9)	9 (8.7)	31 (30.1)	30 (29.1)	29 (28.2)
12. Maintaining friendship	7 (6.8)	4 (3.9)	20 (19.4)	45 (43.7)	27 (26.2)
13. Dress/Clothing	6 (5.8)	3 (2.9)	23 (22.3)	42 (40.8)	29 (28.2)
14. Understand Verbal communication	5 (4.9)	8 (7.8)	28 (27.2)	41 (39.8)	21 (20.4)
15. Understand Nonverbal communication	4 (3.9)	10 (9.7)	33 (32.0)	38 (36.9)	18 (17.5)
16. Male-female relationships	2 (1.9)	13 (12.6)	37 (35.9)	35 (34.0)	16 (15.5)
17. Maintain interpersonal relationships	1 (1.0)	12 (11.7)	31 (30.1)	46 (44.7)	13 (12.6)
18. Get access to media	3 (2.9)	8 (7.8)	33 (32.0)	33 (32.0)	26 (25.2)
19. Sex	10 (9.7)	11 (10.7)	49 (47.6)	19 (18.4)	14 (13.6)
20. Use of time	1 (1.0)	18 (17.5)	38 (36.9)	28 (27.2)	18 (17.5)
21. Dealing with crowdedness	--	11 (10.7)	48 (46.6)	21 (20.4)	23 (22.3)
22. Understanding American culture	--	6 (5.8)	29 (28.2)	41 (39.8)	27 (26.2)
23. Dealing with my emotions	1 (1.0)	8 (7.8)	34 (33.0)	39 (37.9)	21 (20.4)
24. Cleanliness	3 (2.9)	10 (9.7)	25 (24.3)	38 (36.9)	27 (26.2)

25. Maintaining privacy	3 (2.9)	8 (7.8)	25 (24.3)	37 (35.9)	30 (29.1)
26. Living space	2 (1.9)	7 (6.8)	25 (24.3)	39 (37.9)	30 (29.1)
27. Understand politics	12 (11.7)	18 (17.5)	48 (46.6)	16 (15.5)	9 (8.7)
28. Spiritual life	10 (9.7)	14 (13.6)	43 (41.7)	23 (22.3)	13 (12.6)
29. Maintain personal hygiene	--	9 (8.7)	39 (37.9)	29 (28.2)	26 (25.2)
30. Dealing with cost of living	6 (5.8)	12 (11.7)	22 (21.4)	40 (38.8)	23 (22.3)
31. Dealing with morals, ethics and values in host culture	1 (1.0)	7 (6.8)	36 (35.0)	45 (43.7)	14 (13.6)
32. Maintain family relationships	4 (3.9)	9 (8.7)	22 (21.4)	29 (28.2)	39 (37.9)
33. Material goods	1 (1.0)	15 (14.6)	33 (32.0)	33 (32.0)	21 (20.4)
34. Dealing with my identity as an "outsider"	--	13 (12.6)	43 (41.7)	23 (22.3)	24 (23.3)
35. Dealing with the "man-made" environment	2 (1.9)	7 (6.8)	43 (41.7)	33 (32.0)	18 (17.5)
36. Obey laws and law enforcement	1 (1.0)	4 (3.9)	31 (30.1)	27 (26.2)	40 (38.8)
37. Dealing with money and currency transactions	--	9 (8.7)	30 (29.1)	35 (34.0)	29 (28.2)
38. Maintaining my personal growth	--	2 (1.9)	25 (24.3)	46 (44.7)	30 (29.1)

Figure 13. Mean and Curve of Distribution of Environment-centric Adjustment.

Mean = 3.6331
Std. Dev = 0.5678
N = 103
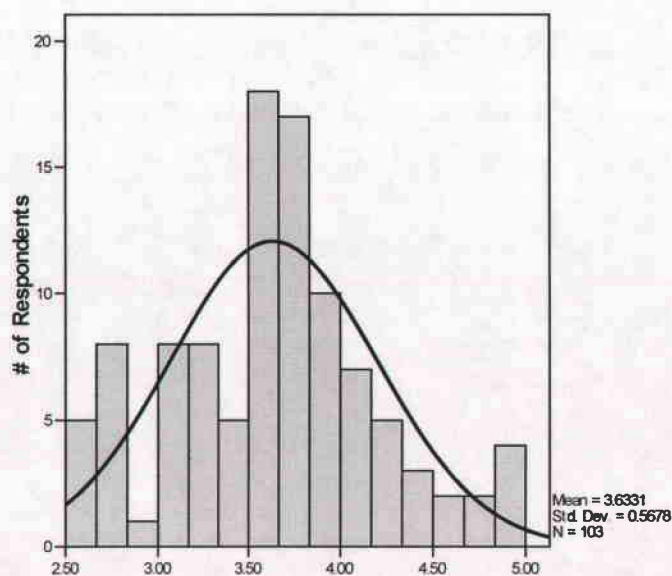
The frequency analysis exposes that the results of the 38 domains in both sojourner-centric and environment-centric contexts were all clustered in the middle. The majority of the respondents were roughly from 3.25 to 4.5 in sojourner-centric adjustment (see Figure 12). In the environment-centric adjustment, the correspondence was mostly even but peaked from 3.5 to 4.0 and had low responses from 4.25 to 5.0 (see Figure 13). From Figure 12 and Figure 13, as a result, Japanese international students were in between "neutral and don't know" to "somewhat true". This indicated that the respondents were relatively not well adjusted and were not truly able to meet their own needs or desires and not able to meet the requirements of the host environment. The two composite scores of sojourner-centric and environment-centric were illustrated in Table 17 below.

Table 17. Statistics of Sojourner-centric Adjustment and Environment-centric Adjustment

		Sojourner-centric Adjustment	Environment-centric Adjustment
N	Valid	103	103
	Missing	0	0
Mean		3.73	3.63
Median		3.74	3.63
Std. Deviation		0.53	0.57
Minimum		2.55	2.58
Maximum		5.00	5.00

The rank of the mean of the 38 domains from the two contexts (sojourner-centric adjustment and environment-centric adjustment) is displayed below (see Table 18). The ranked order from the highest score to the lowest scores shows that the three common domains that were among the highest score in both sojourner-centric

adjustment and environment-centric adjustment were "maintaining my personal

growth," "maintaining family relationships," and "maintaining my physical health."

**Table 18. The Rank of Means of Sojourner-centric Adjustment and
Environment-centric Adjustment**

Sojourner-Centric	Mean	Environment-Centric	Mean
Maintaining my personal growth	4.24	Ways of eating and drinking	4.04
Maintain family relationships	4.05	Maintaining my personal growth	4.01
Maintaining friendship	4.04	Obey laws and law enforcement	3.98
Education	4.04	Maintain family relationships	3.87
Maintaining my physical health	4.04	Maintaining my physical health	3.87
Dealing with money and currency transactions	3.99	Understanding American culture	3.86
Ways of eating and drinking	3.98	Living space	3.85
Understanding American culture	3.93	Dress/Clothing	3.83
Obey laws and law enforcement	3.92	Dealing with money and currency transactions	3.82
Maintaining privacy	3.87	Maintaining privacy	3.81
Climate/Weather	3.87	Maintaining friendship	3.79
Get access to media	3.86	Education	3.79
Understand Verbal communication	3.86	Using Etiquette properly	3.75
Cleanliness	3.83	Cleanliness	3.74
Dealing with my emotions	3.83	Maintain personal hygiene	3.7
Dress/Clothing	3.83	Climate/Weather	3.69
Maintain interpersonal relationships	3.82	Get access to media	3.69
Entertainment	3.79	Dealing with my emotions	3.69
Using Etiquette properly	3.73	Finding the food I want	3.69
Male-female relationships	3.72	Dealing with isolation	3.69
Finding the food I want	3.72	Understand Verbal communication	3.63
Understand Nonverbal communication	3.71	Get access to Transportation	3.63
Maintain personal hygiene	3.7	Dealing with morals, ethics and values in host culture	3.62
Dealing with my identity as an "outsider"	3.69	Dealing with cost of living	3.6
Dealing with language	3.69	Entertainment	3.57
Material goods	3.65	Maintain interpersonal relationships	3.56

Dealing with morals, ethics and values in host culture	3.6	Dealing with my identity as an "outsider"	3.56
Dealing with cost of living	3.56	Material goods	3.56
Dealing with crowdedness	3.56	Dealing with the "man-made" environment	3.56
Get access to Transportation	3.56	Understand Nonverbal communication	3.54
Dealing with the "man-made" environment	3.55	Dealing with crowdedness	3.54
Use of time	3.53	Male-female relationships	3.49
Dealing with isolation	3.52	Dealing with language	3.46
Living space	3.38	Use of time	3.43
Sex	3.29	Work	3.27
Work	3.17	Sex	3.16
Spiritual life	3.14	Spiritual life	3.15
Understand politics	3	Understand politics	2.92

Table 19 shows the assessment of the overall impression of sojourner adjustment. Overall, most of the Japanese international students reported their adjustment as "neutral or don't know" or "somewhat well" in all three areas.

Table 19. Sojourner Adjustment Overall

Question	1 Not well at all	2 Not so well	3 Neutral or don't know	4 Somewhat well	5 Very well
How well would you say you are able to function, generally speaking, in this culture/environment?	2 (1.9%)	9 (8.7%)	35 (34.0%)	33 (32.0%)	24 (23.3%)
How well would you say you are able, generally speaking, to meet your own needs/desires?	4 (3.9%)	10 (9.7%)	25 (24.3%)	44 (42.7%)	20 (19.4%)
How well would you say you are able, generally speaking, to meet the requirements of this culture/environment?	3 (2.9%)	10 (9.7%)	25 (24.3%)	47 (45.6%)	18 (17.5%)

Reliability Analysis of Sojourner Adjustment Scale

The Cronbach's alpha was used to measure the internal consistency based on

the average inter-item correlation, as well as testing whether the measures of the

Sojourner Adjustment Scale were stable.

In this present study, the reliability for the 38 domains in sojourner-centric

was alpha = .927 and the 38 domains in environment-centric was alpha = .943. This

suggests that the items in both domains measured the same underlying constructs.

Testing Research Questions and Statistical Results

Testing Research Question 1

RQ1: What is the relationship between Japanese international students' friendship
networks and their self-reported ability to meet their own needs (Sojourner-centric
Adjustment)?

Research question 1 was answered by answering the four sub questions.

**RQ1a: What is the relationship between the frequency of interaction with
Japanese friends and the subjects' self-reported ability to meet their own needs
(Sojourner-centric Adjustment)?**

The relationship between the frequency of interaction with Japanese friends

and the ability of Japanese students to meet their own needs (Sojourner-centric

Adjustment), was measured by using Person's r correlation analysis (see Table 20).

The significant level was set at $p < .05$.

**Table 20. Result of Correlation Analysis between the Frequency of Interaction
with Japanese Friends and Sojourner-centric Adjustment**

Variables Correlated		Correlation Analysis
Variable X	Variable Y	
The Frequency of Interaction with Japanese Friends (X_{bar} = 3.1, S.D = 1.1)	Sojourner-centric Adjustment (X_{bar} = 3.7, S.D = 0.5)	Pearson's r = -.131 P = .186 N = 103

The relationship between these two variables was not close to being statistically significant since the p (.186) value was much greater than .05. This finding concluded that the frequency of interaction with Japanese was not related to the ability of Japanese students to meet their own needs.

RQ 1b: What is the relationship between the degree of intimacy with Japanese friends and the subjects' self-reported ability to meet their own needs (Sojourner-centric Adjustment)?

The relationship between the degree of intimacy with Japanese friends and the ability of Japanese students to meet their own needs was tested by Person's r correlation analysis (see Table 21). The significant level was set at $p < .05$.

Table 21. Result of Correlation Analysis between the Degree of Intimacy with Japanese Friends and of Sojourner-centric Adjustment

Variables Correlated		Correlation Analysis
Variable X	Variable Y	
The Degree of Intimacy with Japanese Friends ($Xbar = 3.5$, S.D $= 1.1$)	Sojourner-centric Adjustment ($Xbar = 3.7$, S.D $= 0.5$)	Pearson's r $= .009$ $p = .927$ N $= 103$

The relationship between these two variables was not close to being statistically significant because the p (.927) value was much greater than .05. This result revealed that the degree of intimacy with Japanese friends was not related to the ability of Japanese students to meet their own needs.

RQ 1c: What is the relationship between the frequency of interaction with non-Japanese friends and the subjects' self-reported ability to meet their own needs (Sojourner-centric Adjustment)?

The relationship between the frequency of interaction with non-Japanese and

the ability of Japanese students to meet their own needs was tested by using Person's

r correlation analysis (see Table 22). The significant level was set at $p < .05$.

Table 22. Result of Correlation Analysis between the Frequency of Interaction with Non-Japanese and Sojourner-centric Adjustment

Variables Correlated		Correlation Analysis
Variable X	Variable Y	
The Frequency of Interaction with Non-Japanese Friends (Xbar = 2.4, S.D = 1.5)	Sojourner-centric Adjustment (Xbar = 3.7, S.D = 0.5)	Pearson's r = .043 p = .667 N = 103

The relationship between these two variables was not close to being

statistically significant because the p (.667) value was much greater than .05. This

result concluded that the frequency of interaction with non-Japanese friends was not

related to the ability of Japanese students to meet their own needs in a new culture.

RQ 1d: What is the relationship between the degree of intimacy with non-Japanese friends and the subjects' self-reported ability to meet their own needs or desires (Sojourner-centric Adjustment)?

The relationship between the degree of intimacy with non-Japanese and the

ability of Japanese students to meet their own needs was tested by using Person's r

correlation analysis (see Table 23). The significant level was set at $p < .05$.

Table 23. Result of Correlation Analysis between the Degree of Intimacy with Non-Japanese Friends and Sojourner-centric Adjustment

Variables Correlated		Correlation Analysis
Variable X	Variable Y	
The Degree of Intimacy with Non-Japanese Friends (Xbar = 2.7, S.D = 1.6)	Sojourner-centric Adjustment (Xbar = 3.7, S.D = 0.5)	Pearson's r = .206 p = .036 N = 103

This result concluded that there was a statistically significant relationship between the degree of the intimacy with non-Japanese friends and sojourner-centric since the p (.036) value was lower than .05. This finding revealed that the degree of intimacy with non-Japanese friends was significantly related to the ability of Japanese students to meet their own needs.

Summary for Research Question 1

There was no correlation between the frequency of interaction with Japanese friends and the subjects' self-reported ability to meet their own needs or desires (Sojourner-centric Adjustment). There was also no correlation between the degree of intimacy with Japanese friends and the subjects' self-reported ability to meet their own needs or desires (Sojourner-centric Adjustment). There was also no correlation between the frequency of interaction with non-Japanese friends and the subjects' self-reported ability to meet their own needs or desires (Sojourner-centric Adjustment). However, there was a correlation between the degree of intimacy with non-Japanese friends and the subjects' self-reported ability to meet their own needs or desires (Sojourner-centric Adjustment).

These findings will be discussed in chapter 6.

Testing Research Question 2

RQ 2: What is the relationship between Japanese international students' friendship networks and their self-reported ability to meet the requirements of the host environment (Environment-centric Adjustment)?

The research question 2 was answered by answering the four sub questions.

RQ 2a: What is the relationship between the frequency of interaction with Japanese friends and the subjects' self-reported ability to meet the requirements of the host environment (Environment-centric Adjustment)?

The relationship between the frequency of interaction with Japanese friends

and the self-reported ability of Japanese students to meet the requirements of the host

environment (Environment-centric Adjustment) was measured by using Person's *r*

correlation analysis (see Table 24). The significant level was set at $p < .05$.

Table 24. Result of Correlation Analysis between the Frequency of Interaction with Japanese Friends and Environment-centric Adjustment

Variables Correlated		Correlation Analysis
Variable X	Variable Y	
The Frequency of Interaction with Japanese Friends (Xbar = 3.1, S.D = 1.1)	Environment-centric Adjustment (Xbar = 3.6, S.D = 0.6)	Pearson's r = -.112 p = .258 N = 103

The relationship between these two variables was not close to being

statistically significant since the *p* (.258) value was much greater than .05. This

finding concluded that the frequency of interaction with Japanese was not related to

the self-reported ability of Japanese students to meet the requirements of the host

environment.

RQ 2b: What is the relationship between the degree of intimacy with Japanese friends and the subjects' self-reported ability to meet their requirements of the host environment (Environment-centric Adjustment)?

The relationship between the degree of intimacy with Japanese friends and the

self-reported ability of Japanese students to meet the requirements of the host

environment (Environment-centric Adjustment) was measured by using Person's *r*

correlation analysis (See Table 25). The significant level was set at $p < .05$.

Table 25. Result of Correlation Analysis between the Degree of Intimacy with Japanese Friends and Environment-centric Adjustment

Variables Correlated		Correlation Analysis
Variable X	Variable Y	
The Degree of Intimacy with Japanese Friends (Xbar = 3.5, S.D = 1.1)	Environment-centric Adjustment (Xbar = 3.6, S.D = 0.6)	Pearson's r = .080 p = .424 N = 103

The relationship between these two variables was not close to being

statistically significant since the p (.362) value was much greater than .05. This

finding concluded that the degree of intimacy with Japanese was not related to the

self-reported ability of Japanese students to meet the requirements of the host

environment.

RQ 2c: What is the relationship between the frequency of interaction with non-Japanese friends and the subjects' self-reported ability to meet the requirements of the host environment (Environment-centric Adjustment)?

The relationship between the frequency of interaction with non-Japanese

friends and the self-reported ability of Japanese students to meet the requirements of

the host environment (Environment-centric Adjustment) was measured by using

Person's r correlation analysis (see Table 26). The significant level was set at p < .05.

Table 26. Result of Correlation Analysis between the Frequency of Interaction with Non-Japanese Friends and Environment-centric Adjustment

Variables Correlated		Correlation Analysis
Variable X	Variable Y	
The Frequency of Interaction with Non-Japanese Friends (Xbar = 2.4, S.D = 1.5)	Environment-centric Adjustment (Xbar = 3.6, S.D = 0.6)	Pearson's r = .170 **p = .086** N = 103

Correlation analysis suggests a mild positive correlation between the

frequency of interaction with non-Japanese friends and environment-centric since the

p (.086) value was almost close to .05. This finding indicated that the frequency of

interaction with Japanese was only mildly related positively to the self-reported

ability of Japanese students to meet the requirements of the host environment.

RQ 2d: What is the relationship between the degree of intimacy with non-Japanese friends and the subjects' self-reported ability to meet their requirements of the host environment (Environment-centric Adjustment)?

The relationship between the degree of intimacy with non-Japanese and the

self-reported ability of Japanese students to meet the requirements of the host

environment (Environment-centric Adjustment) was tested by using Person's r

correlation analysis (see Table 27). The significant level was set at $p < .05$.

Table 27. Result of Correlation Analysis between the Degree of Intimacy with Non-Japanese Friends and Environment-centric Adjustment

Variables Correlated		Correlation Analysis
Variable X	Variable Y	
The Degree of Intimacy with Non-Japanese Friends (Xbar = 2.7, S.D = 1.6)	Environment-centric Adjustment (Xbar = 3.6, S.D = 0.6)	Pearson's r = .365 **p = .001** N = 103

This result concluded that there was a statistically significant relationship

between the degree of intimacy with non-Japanese friends and environment-centric

adjustment since the p (.001) value was lower than .05. This finding revealed that the

degree of intimacy with non-Japanese friends was significantly related in a positive

direction to the ability of Japanese students to meet the requirements of the host environment.

Summary for Research Question 2

There was no correlation between the frequency of interaction with Japanese friends and the subjects' self-reported ability to meet the requirements of the host environment (Environment-centric Adjustment). There was also no correlation between the degree of intimacy with Japanese friends and the subjects' self-reported ability to meet the requirements of the host environment (Environment-centric Adjustment). There was only a mild relation in a positive direction to the frequency of interaction with non-Japanese friends and the subjects' self-reported ability to meet the requirements of the host environment (Environment-centric Adjustment). However, there was a positive correlation between the degree of intimacy with non-Japanese friends and the subjects' self-reported ability to meet the requirements of the host environment (Environment-centric Adjustment).

These findings will be discussed in chapter 6.

The Significant Results from Research Questions

There was a positive correlation between the degree of intimacy with non-Japanese friends and the subjects' self-reported ability to meet their own needs (sojourner-centric adjustment). There was a mild correlation in a positive direction to the frequency of interaction with non-Japanese friends and the subjects' self-reported ability to meet the requirements of the host environment (environment-centric adjustment). There was a strong positive correlation between the degree of intimacy

with non-Japanese friends and the subjects' self-reported ability to meet the

requirements of the host environment (environment-centric adjustment).

Results of Individual Domains in the Sojourner Adjustment Scale

The domain numbers, 3 (dealing with language), 11 (dealing with isolation),

12(maintaining friendship), 16 (male-female relationships), 17 (maintaining

interpersonal relationships), 22 (understanding American culture), and 34 (dealing

with my identity as an "outsider") were selected from the Sojourner Adjustment Scale

to test the correlations (see Table 28 to Table 35). Theses specific domains were

selected because these were more focused or related to the concept of friendship. The

significant level was set at $p < .05$.

Table 28. Results of Correlation Analysis between the Frequency of Interaction with Japanese Friends and Individual Domains (#3, #11, #12, #16, #17, #22, and #34) in Sojourner-centric Adjustment

Variables Correlated		Correlation Analysis
Variable X	Variable Ys	
	#3, Dealing with Language	$p = .553$
The Frequency of	#11, Dealing with Isolation	$p = .468$
Interaction with	#12, Maintaining Friendship	$p = .939$
Japanese Friends	#16, Male-female Relationship	$p = .222$
(Xbar = 3.1, S.D = 1.1)	#17, Maintaining Interpersonal Relationship	$p = .468$
	#22, Understanding American Culture	$p = .134$
	#34, Dealing with my Identity as an "outsider"	$p = .880$

Table 28 shows the correlation analysis between the mean of the frequency

with Japanese friends and each variable. There were no statistically significant

relations between these variables.

Table 29. Results of Correlation Analysis between the Degree of Intimacy with Japanese Friends and Individual Domains (#3, #11, #12, #16, #17, #22, and #34) in Sojourner-centric Adjustment

Variables Correlated		Correlation Analysis
Variable X	Variable Ys	
The Degree of Intimacy with Japanese Friends (Xbar = 3.5, S.D = 1.1)	#3, Dealing with Language	$p = .238$
	#11, Dealing with Isolation	$p = .714$
	#12, Maintaining Friendship	$p = .911$
	#16, Male-female Relationship	$p = .933$
	#17, Maintaining Interpersonal Relationship	$p = .629$
	#22, Understanding American Culture	$\boldsymbol{p = .033}$
	#34, Dealing with my Identity as an "outsider"	$p = .961$

Table 29 shows the correlation analysis between the degree of intimacy with Japanese friends and each item from the sojourner-centric adjustment. There was only one statistically significant result. The relationship between the degree of intimacy with Japanese friends and understanding American culture was statistically significant since the p (.033) value was lower than .05.

Table 30. Results of Correlation Analysis between The Frequency of Interaction with Non-Japanese Friends and Individual Domains (#3, #11, #12, #16, #17, #22, and #34) in Sojourner-centric Adjustment

Variables Correlated		Correlation Analysis
Variable X	Variable Ys	
The Frequency of Interaction with Non-Japanese Friends (Xbar = 2.4, S.D = 1.5)	#3, Dealing with Language	$p = .123$
	#11, Dealing with Isolation	$\boldsymbol{p = .058}$
	#12, Maintaining Friendship	$p = .905$
	#16, Male-female Relationship	$p = .474$
	#17, Maintaining Interpersonal Relationship	$p = .626$
	#22, Understanding American Culture	$p = .244$
	#34, Dealing with my Identity as an "outsider"	$p = .958$

Table 30 shows the correlation analysis between the frequency of interaction

with non-Japanese friends and each domain from the sojourner-centric adjustment.

There was only one mildly statistically significant result. This finding indicated that

the frequency of interaction with non-Japanese friends was mildly related positively

to their ability to deal with isolation since the *p* (.058) value was almost close to .05.

Table 31. Results of Correlation Analysis between the Degree of Intimacy with Non-Japanese Friends and Individual Domains (#3, #11, #12, #16, #17, #22, and #34) in Sojourner-centric Adjustment

Variables Correlated		Correlation Analysis
Variable X	Variable Ys	
	#3, Dealing with Language	*p* = **.059**
The Degree of	#11, Dealing with Isolation	*p* = **.003**
Intimacy with Non-	#12, Maintaining Friendship	*p* = .910
Japanese Friends	#16, Male-female Relationship	*p* = .970
(Xbar = 2.7, S.D = 1.6)	#17, Maintaining Interpersonal Relationship	*p* = .655
	#22, Understanding American Culture	*p* = .732
	#34, Dealing with my Identity as an "outsider"	*p* = .230

Table 31 shows the correlation analysis between the degree of intimacy with

non-Japanese friends and each domain from the sojourner-centric adjustment. There

was one mildly statistically significant result. The relationship between the degree of

intimacy with non-Japanese friends and dealing with language was mildly statistically

significant since the *p* (.059) value was almost close to .05. The relationship between

the degree of intimacy with non-Japanese friends and dealing with isolation was

statistically significant since the *p* (.003) value was lower than .05.

Table 32. Results of Correlation Analysis between the Frequency of Interaction with Japanese Friends and Individual Domains (#3, #11, #12, #16, #17, #22, and #34) in Environment-centric Adjustment

Variables Correlated		Correlation Analysis
Variable X	Variable Ys	
The Frequency of Interaction with Japanese Friends (Xbar = 3.1, S.D = 1.1)	#3, Dealing with Language	$p = .971$
	#11, Dealing with Isolation	$p = .788$
	#12, Maintaining Friendship	$\boldsymbol{p = .073}$
	#16, Male-female Relationship	$p = .124$
	#17, Maintaining Interpersonal Relationship	$p = .687$
	#22, Understanding American Culture	$\boldsymbol{p = .080}$
	#34, Dealing with my Identity as an "outsider"	$p = .176$

Table 32 shows the correlation analysis between the frequency of interaction with non-Japanese friends and each variable. There were no statistically significant relations between the frequency of interaction with Japanese and dealing with language. There were also no statistically significant relations between the frequency of interaction with Japanese and dealing with isolation. There were no statistically significant relations between mean of the frequency of interaction with Japanese and male-female relationship. There were no statistically significant relations between the frequency of interaction with Japanese and maintaining interpersonal relationship. There were no statistically significant relations between the frequency of interaction with Japanese and dealing with my identity as an "outsider." However, there was a suggestion of a mild positive correlation between the frequency of interaction with Japanese and maintaining friendship since the p (.073) value was almost close to .05, and the frequency of interaction with Japanese friends and understanding American culture the p (.080) value was almost close to .05.

Table 33. Results of Correlation Analysis between the Degree of Intimacy with Japanese Friends and Individual Domains (#3, #11, #12, #16, #17, #22, and #34) in Environment-centric Adjustment

Variables Correlated		Correlation Analysis
Variable X	Variable Ys	
The Degree of Intimacy with Japanese Friends (Xbar = 3.5, S.D = 1.1)	#3, Dealing with Language	$p = .963$
	#11, Dealing with Isolation	$p = .246$
	#12, Maintaining Friendship	$p = .198$
	#16, Male-female Relationship	$p = .841$
	#17, Maintaining Interpersonal Relationship	$p = .770$
	#22, Understanding American Culture	$p = .446$
	#34, Dealing with my Identity as an "outsider"	$p = .542$

Table 33 shows that there was no relationship between these variables.

Table 34. Results of Correlation Analysis between the Frequency of Interaction with Non-Japanese Friends and Individual Domains (#3, #11, #12, #16, #17, #22, and #34) in Environment-centric Adjustment

Variables Correlated		Correlation Analysis
Variable X	Variable Y	
The Frequency of Interaction with Non-Japanese Friends (Xbar = 2.4, S.D = 1.5)	#3, Dealing with Language	$p = .008$
	#11, Dealing with Isolation	$p = .564$
	#12, Maintaining Friendship	$p = .328$
	#16, Male-female Relationship	$p = .449$
	#17, Maintaining Interpersonal Relationship	$p = .029$
	#22, Understanding American Culture	$p = .051$
	#34, Dealing with my Identity as an "outsider"	$p = .118$

Table 34 shows the correlation analysis between the frequency of interaction

with non-Japanese friends and each variable. There were three statistically significant

relations between these variables. There was a statistically significant relationship

between the frequency of interaction with non-Japanese and dealing with language

since p (.008) was lower than .05. There was also a statistically significant

relationship between the frequency of interaction with non-Japanese and maintaining

interpersonal relationships since p (.029) was lower than .05. There was also a

statistically significant relationship between the frequency of interaction with non-

Japanese friends and understanding American culture since p (.051) was almost close

to .05.

Table 35. Results of Correlation Analysis between the Degree of Intimacy with Non-Japanese Friends and Individual Domains (#3, #11, #12, #16, #17, #22, and #34) in Environment-centric

Variables Correlated		Correlation Analysis
Variable X	Variable Ys	
	#3, Dealing with Language	$p = .001$
The Degree of	#11, Dealing with Isolation	$p = .079$
Intimacy with Non-	#12, Maintaining Friendship	$p = .502$
Japanese Friends	#16, Male-female Relationship	$p = .044$
(Xbar = 2.7, S.D = 1.6)	#17, Maintaining Interpersonal Relationship	$p = .001$
	#22, Understanding American Culture	$p = .013$
	#34, Dealing with my Identity as an "outsider"	$p = .001$

Table 35 shows the correlation analysis between the degree of intimacy with

non-Japanese friends and each variable. There were 6 statistically significant

relations between these variables.

There was a statistically significant relationship between the degree of

intimacy with non-Japanese friends and dealing with language since p (.001) was

lower than .05. There was a suggestion of a mild positive correlation between the

degree of intimacy with non-Japanese friends and dealing with isolation since the p

(.079) value was almost close to .05.

There was also a statistically significant relationship between the degree of intimacy with non-Japanese friends and male-female relationship since p (.044) was lower than .05. There was a statistically significant relationship between the degree of intimacy with non-Japanese friends and maintaining interpersonal relationship since p (.001) was lower than .05. There was a statistically significant relationship between the degree of intimacy with non-Japanese friends and understanding American culture since p (.013) was lower than .05. There was a statistically significant relationship between the degree of intimacy with non-Japanese friends and dealing with my identity as an "outsider" since p (.001) was lower than .05.

Summary of the Significant Correlation Analysis in Individual Domains

The relationship between the degree of intimacy with Japanese friends and understanding the American culture in sojourner-centric adjustment was statistically significant since the p (.033) value was lower than .05.

The relationship between the degree of intimacy with non-Japanese friends and dealing with isolation in sojourner-centric adjustment was statistically significant since the p (.003) value was lower than .05. The relationship between the degree of intimacy with non-Japanese friends and dealing with language was mildly statistically significant since the p (.059) value was almost close to .05

There was a suggestion of a mild positive correlation between the frequency of interaction with Japanese and maintaining friendship in environment-centric since the p (.073) value was almost close to .05, and in the frequency of interaction with Japanese friends and understanding the American culture in environment-centric adjustment, the p (.080) value was almost close to .05.

There was a statistically significant relationship between the frequency of interaction with non-Japanese friends and dealing with language in environment-centric adjustment since p (.008) was lower than .05. There was also a statistically significant relationship between the frequency of interaction with non-Japanese friends and maintaining interpersonal relationships in environment-centric adjustment since p (.029) was lower than .05. There was also a statistically significant relationship between the frequency of interaction with non-Japanese friends and understanding American culture in environment-centric adjustment since p (.051) was almost close to .05. There was a statistically significant relationship between the degree of intimacy with non-Japanese and dealing with language in environment-centric adjustment since p (.001) was lower than .05. There was also a statistically significant relationship between the degree of intimacy with non-Japanese friends and male-female relationship in environment-centric adjustment since p (.044) was lower than .05. There was a statistically significant relationship between the degree of intimacy with non-Japanese friends and maintaining interpersonal relationship in environment-centric adjustment since p (.001) was lower than .05. There was a statistically significant relationship between the degree of intimacy with non-Japanese friends and understanding the American culture in environment-centric adjustment since p (.013) was lower than .05. There was a statistically significant relationship between the degree of intimacy with non-Japanese friends and dealing with my identity as an "outsider" in environment-centric adjustment since p (.001) was lower than .05.

Other Correlation Analyses

Correlation Analysis of Sojourner-centric Adjustment and Environment-centric Adjustment

There was a statistically significant relationship between the sojourner-centric

adjustment and the environment-centric adjustment since p (.001) was lower than .05

(see Table 36).

Table 36. Correlation Analysis of Sojourner-centric Adjustment and Environment-centric Adjustment

Variables Correlated		Correlation Analysis
Variable X	Variable Y	
Sojourner-centric Adjustment (X_{bar} = 3.7, S.D = 0.5)	Environment-centric Adjustment (X_{bar} = 3.6, S.D = 0.6)	Pearson's r = .759 **p = .001** N = 103

Correlation Analysis of the Respondents Self-reported Ability to Speak and Understand English

Although none of the major research questions dealt with how the

demographic variables influenced sojourner adjustment, it has been important to

report the significant relationships between some variables. There were statistically

significant relationships between the respondents' self-reported ability to speak

English and sojourner-centric adjustment and environment-centric adjustment, and the

relationship between the respondents' self-reported ability to understand English (see

Table 37 and Table 38).

Table 37. Results of Correlation Analysis of Respondents' Self-reported Ability to Speak English, Sojourner-centric Adjustment and Environment-centric Adjustment

Variables Correlated		Correlation Analysis
Variable Xs	Variable Ys	
Respondents' Self-reported Ability to Speak English	Sojourner-centric Adjustment	Pearson's r = .219 $p = .026$
	Environment-centric Adjustment	Pearson's r = .319 $p = .001$

Table 37 shows that there was a statistically significant relationship between the respondents' self-reported ability to speak English and sojourner-centric adjustment since p (.026) was lower than .05. There was also statistically significant relationship between the respondents' self-reported ability to speak English and environment-centric adjustment since p (.001) was lower than .05.

Table 38. Results of Correlation Analysis of Respondents' Self-reported Ability to Understand English, Sojourner-centric Adjustment and Environment-centric Adjustment

Variables Correlated		Correlation Analysis
Variable Xs	Variable Ys	
Respondents' Self-reported Ability to Understand English	Sojourner-centric Adjustment	Pearson's r = .292 $p = .003$
	Environment-centric Adjustment	Pearson's r = .362 $p = .001$

Table 38 shows that there was a statistically significant relationship between the respondents' self-reported ability to understand English and sojourner-centric adjustment since p (.003) was lower than .05. There was also a statistically

significant relationship between the respondents' self-reported ability to understand English and environment-centric adjustment since p (.001) was lower than .05.

Summary of the Significant Correlation Analysis of the Respondents' Self-reported Ability to Speak and Understand English and Sojourner Adjustment

Person's r correlation analysis concluded that there were statistically significant relationships between the respondents' ability to speak and understand English and sojourner adjustment (sojourner-centric adjustment and environment-centric adjustment).

There was a statistically significant relationship between the respondents' self-reported ability to understand English and sojourner-centric adjustment since p (.003) was lower than .05. There was also a statistically significant relationship between respondents' self-reported ability to understand English and environment-centric adjustment since p (.001) was lower than .05.

There was a statistically significant relationship between the respondents' self-reported ability to speak English and sojourner-centric adjustment since p (.026) was lower than .05. There was also a statistically significant relationship between the respondents' self-reported ability to speak English and environment-centric adjustment since p (.001) was lower than .05.

Friendship with Host National and Sojourner Adjustment of Japanese International Students

For this study, bicultural (host national) friendship and multicultural (other nationals) friendship were considered as one group labeled as non-Japanese friends. However, the Pearson's r correlation analysis was performed again to clarify, which friendship (American national or other nationals) has a greater influence on sojourner

adjustment of Japanese international students. Therefore, correlation analysis was run

to retest the relationship between the friendship variables (the frequency of interaction

with American national friends and the degree of intimacy with American national

friends) and sojourner adjustment variables (sojourner-centric adjustment and

environment-centric) using Americans as host national (see Table 39). The

significant level was also set at $p < .05$.

Table 39. Results of Correlation Analysis of Friendship with American National and Sojourner Adjustment of Japanese International Students

Variables Correlated		Correlation Analysis
Variable Xs	Variable Ys	
The Frequency of Interaction with American National Friends ($X_{bar} = 2.1$, S.D = 1.6)	Sojourner-centric Adjustment ($X_{bar} = 3.7$, S.D = 0.5)	Pearson's r = .064 $p = .518$ N = 103
	Environment-centric Adjustment ($X_{bar} = 3.6$, S.D = 0.6)	Pearson's r = .205 **$p = .038$** N = 103
The Degree of Intimacy with American National Friends ($X_{bar} = 2.4$, S.D = 1.8)	Sojourner-centric Adjustment ($X_{bar} = 3.7$, S.D = 0.5)	Pearson's r = .154 $p = .120$ N = 103
	Environment-centric Adjustment ($X_{bar} = 3.6$, S.D = 0.6)	Pearson's r = .314 **$p = .001$** N = 103

This result concluded that there was a statistically significant relationship

between the frequency of interaction with American national friends and

environments-centric adjustment since the p (.038) value was lower than .05 (see

Table 39). This result also revealed that there was a statistically significant

relationship between the degree of intimacy with American national friends and

environment-centric adjustment since the p (.001) value was lower than .05.

However, the relationship between the frequency of interaction with American

national friends and sojourner-centric adjustment was not close to being statistically

significant since the p (.518) value was much greater than .05. This finding

concluded that the frequency of interaction with American national friends was not

related to the self-reported ability of Japanese students to meet their own needs.

The relationship between the degree of intimacy with American national

friends and sojourner-centric adjustment was not close to being statistically significant

since the p (.120) value was much greater than .05. This finding also concluded that

the degree of intimacy with American national friends was not related to the self-

reported ability of Japanese students to meet their needs.

Friendship with Other Nationals and Sojourner Adjustment of Japanese International Students

The Pearson's r correlation analysis was performed to retest the relationship

between the friendship variables (the frequency of interaction with other national

friends and the degree of intimacy with other national friends) and sojourner

adjustment variables, which were sojourner-centric adjustment and environment-

centric adjustment (see Table 40). The significant level was also set at $p < .05$.

Table 40. Results of Correlation Analysis of Friendship with Other Nationals and Sojourner Adjustment

Variables Correlated		Correlation Analysis
Variable Xs	Variable Ys	
The Frequency of Interaction with Other National Friends (X_{bar} = 0.8 , S.D = 1.5)	Sojourner-centric Adjustment (X_{bar} = 3.7, S.D = 0.5)	Pearson's r = .151 p = .127 N = 103
	Environment-centric Adjustment (X_{bar} = 3.6, S.D = 0.6)	Pearson's r = .042 p = .673 N = 103
The Degree of Intimacy with Other National Friends (X_{bar} = 0.9, S.D = 1.6)	Sojourner-centric Adjustment (X_{bar} = 3.7, S.D = 0.5)	Pearson's r = .167 p = .092 N = 103
	Environment-centric Adjustment (X_{bar} = 3.6, S.D = 0.6)	Pearson's r = .095 p = .337 N = 103

This result revealed that there was no statistically significant relationship between the frequency of interaction with other national friends and sojourner-centric adjustment since the p (.127) value was much greater than .05. This result also showed that there was no statistically significant relationship between the frequency of interaction with other national friends and environment-centric adjustment since the p (.673) value was much greater than .05.

This result also suggested that there was no statistically significant relationship between the degree of intimacy with other national friends and sojourner-centric adjustment since the p (.092) value was a little greater than .05. This result also described that there was no statistically significant relationship between the degree of

intimacy with other national friends and environment-centric adjustment since the p (.337) value was much greater than .05.

These findings concluded that the frequency of interaction with other national friends was not related to the self-reported ability of Japanese students to meet their needs and the requirements of the host environment. These findings also concluded that the degree of intimacy with other national friends was not related to their self-reported ability of Japanese students to meet their needs and the requirements of the host environment.

CHAPTER 6
DISCUSSION

This chapter expands and explains the results in Chapter 5. This study examined the friendship networks of Japanese international students with friends from Japan, friends from the host national, and friends from other countries (assessed by frequency of interaction and degree of intimacy) and the sojourner adjustment (assessed by two domains, sojourner-centric adjustment and environment-centric adjustment).

The results from this study depicted that Japanese international students at the University of Hawai'i at Mānoa, overall, reported to adjust relatively in the middle to relatively well in both meeting one's own needs ($X_{bar} = 3.7$ on a scale of 1 = "not true at all" to 5 = ""very true") and meeting the requirements of the host environment ($X_{bar} = 3.6$ on a scale of 1 = "not true at all" to 5 = ""very true") (see Figure 12, Figure 13, and Table 17).

Research Questions

As a result, their adjustment ability was not strongly related to how frequently or how intimately they interact with their close Japanese friends (see Table 20, Table 21, Table 24, and Table 25). However, their adjustment ability in the host environment was related to how intimately their friendships were with non-Japanese friends (see Table 23, Table 26, and Table 27). Therefore, the assumption that the degree of intimacy with non-Japanese would facilitate sojourner-centric adjustment (the ability to meet their own needs) and environment-centric adjustment (the ability to meet the requirements of the host environment) was supported in this study. These

findings would apply to the finding suggested by Furukawa (as cited in Furnham, 2004) that the quality rather than the quantity of friendship is important for sojourners.

On the other hand, the assumption that the frequency and degree of intimacy with Japanese friends would facilitate sojourner-centric adjustment and environment-centric adjustments was not supported in this study. The assumption that the frequency of interaction with non-Japanese would facilitate sojourner-centric adjustment and environment-centric adjustment was also not supported by this study.

Some of the findings from this study did not apply to other previous studies on academic sojourners, which said that having friends with co-nationals would help academic sojourners adjust to the new culture. However, the results from this study would support other scholars who suggested that having friends with host national members in sojourn students' friendship networks would help them experience successful sojourner adjustment.

This study revealed that Japanese international students maintained three friendship networks: a well-developed co-national friendship network (66.2%), a less developed co-national friendship network (27.2%), and friendship with other nationals (6.6%). This composition appeared to support a study of academic sojourners' friendship network done by Bochner et al. (1977), which indicated that academic sojourners' friendship networks consist of three friendship networks, "monocultural" (co-national), "bicultural" (host national), and "multicultural" (other nationals). Sandhu and Asrabadi (1994) have indicated that international students seek out fellow countrymen during the sojourner adjustment process. This is a similar

tendency found in this study. From the students surveyed, 66.2% of their friends were Japanese while 27.2% of friends were American and only 6.6% of friends were from other countries. It would be easier for Japanese international students to make and maintain friends with others from Japan because they share a similar language, cultural norms and values, and accessibility of other Japanese due to the large population of Japanese nationals in Hawai'i. Pedersen (1991) has concluded that co-national friendship networks tend to be the most immediate and readily available.

The mean score of frequency of interaction between Japanese students with other Japanese friends was 3.5 (see Table 20), and the mean score of frequency of interaction between non-Japanese friends was 2.4 (see Table 22). This indicated that Japanese students interact more with their Japanese friends than their non-Japanese friends. Roughly, Japanese international students interact with their Japanese friends about once weekly and they interact with non-Japanese a little more then once a month (on a scale of 4 = daily, 3 = once a week, 2 = once a month, and 1 = less than once a month).

This applied to the statement noted by Klineberg and Hull (1979) that there is often limited personal contact between foreign students and host nationals.

Klinegerg and Hull (1979) also witness that a majority of the international students failed to establish intimate relationships with host members. This also applied to this present study. The mean score of degree of intimacy with Japanese friends was 3.5 while the mean score of degree of intimacy with non-Japanese friends was 2.7 (see Table 21 and Table 23). This indicated that Japanese international students mostly share their private feelings and thoughts with their Japanese friends

while they share less of their private feelings and thoughts with non-Japanese friends than Japanese friends.

Many sojourner students may feel more uncomfortable to disclose personal problems with host-national members because explaining personal problems due to the lack of ability to speak English and the difference in cultural background can become a barrier.

Individual Domains from the Sojourner Adjustment Scale

This present study also investigated the relationships between some of the domains from the Sojourn Adjustment Scale (SAS) introduced by Ady (1995) and four variables (the frequency of interaction with close Japanese friends and close non-Japanese friends, and the degree of intimacy with close Japanese friends and close non-Japanese friends). Some items from the SAS specifically focused on the relationships with friends.

The relationship between the degree of intimacy with Japanese friends and their ability to understand the American culture were positively related (see Table 29). This implied that when Japanese international students have a more intimate friendship with fellow Japanese friends, they would have a greater ability to understand the American culture. It may be that when they have an intimate friendship, they will be able to disclose their problems in terms of understanding the American culture. Also other Japanese friends who have experienced similar types of problems with the American culture may be able to facilitate them in their own language.

The frequency of interaction with non-Japanese friends had a mildly positive relationship with their ability to deal with isolation (see Table 30). When they interact with more non-Japanese friends, they have a greater ability to deal with isolation. When Japanese international students interact with more host nationals, they may feel that they are a part of the host national group. Therefore, they may feel less isolation than those who do not have intimate friendships with host nationals.

The degree of intimacy with non-Japanese friends was mildly related in a positive direction to their ability to meet the requirements of the host environment (environment-centric) in terms of dealing with language (see Table 31). When they have more intimate friendships with non-Japanese friends, they are more likely to meet the requirement of the host environment in terms of language. When Japanese international students have intimate relationships with non-Japanese friends, they have to communicate with English to express or disclose their feelings and thoughts. Without communicating English with non-Japanese friends, intimate friendship will not be developed.

The degree of intimacy with non-Japanese friends was positively related to their ability to meet the requirements of the host environment (environment-centric) in terms of dealing with isolation (see Table 31). In Hull's (1978) study, academic sojourners who have made good friends reported that they had less loneliness and were less homesick. Japanese international students may be able to feel that they belong to a part of the new culture when they have more intimate close host friends.

There was a suggestion of a mild positive correlation between the frequency of interaction with Japanese and their ability to meet the requirements of the host

environment in terms of maintaining friendship (see Table 32). Since Japanese international students maintain well developed friendships with Japanese friends in Hawai'i, they are able to make and maintain friends who are from Japan.

There was a suggestion of a mild positive correlation between the frequency of interaction with Japanese friends and their ability to meet requirements of the host environment in terms of understanding the American culture (see Table 32). When Japanese international students interact more with Japanese friends, they have a greater ability to meet the requirements in terms of understanding the American culture.

There was also a statistically significant relationship between the frequency of interaction with non-Japanese friends and their ability to meet the requirements of the host country in terms of dealing with language (see Table 34). There was also a statistically significant relationship between the frequency of interaction with non-Japanese friends and their ability to meet the requirements in terms of maintaining interpersonal relationship (see Table 34). There was also a statistically significant relationship between the frequency of interaction with non-Japanese friends and their ability to meet the requirements in terms of dealing with the American culture (see Table 34).

These findings would imply that when Japanese international students interact more with non-Japanese students, they have a greater ability to deal with language and understanding the American culture that were required in the host environment. These findings might be applied to other researchers' findings. Empirical studies (e.g., Basu & Ames, 1970) have tested the hypothesis that increased interaction with

host nationals would improve a sojourner's adjustment. Host national friendships

help sojourners support culture-learning, social skills, and language-learning. Gui and

Awa (1992) also have indicated that sojourners who frequently interact with host

nationals are also more likely to develop quicker proficiency in the host's language as

well as learn to act appropriately in social contents, the two most important predictors

for successful sojourner adjustment.

There was an also statistically significant relationship between the degree of

intimacy with non-Japanese and their ability to meet the requirements of the host in

terms of dealing with language in environment-centric adjustment, male-female

relationships, maintaining interpersonal relationships, understanding the American

culture, and dealing with their identity as "outsiders" (see Table 35). Basically, when

more Japanese international students have intimate friendships with non-Japanese

friends, they are more likely to have the ability to meet the requirements of language,

male-female relationships, maintaining interpersonal relationships, understanding the

American culture, and dealing with their identity as "outsiders." When they have

more intimate relationships with non-Japanese friends, they are more likely to have

better sojourner adjustment.

The Respondents' Ability to Speak and Understand English

Although none of the major research questions dealt with how the

demographic variables influenced sojourner adjustment, it was important to report and

analyze some of the significant findings in order to better understand sojourner

adjustment.

This present study illustrated statistically significant relationships between respondents' self-reported ability to speak and understand English, and the respondents' ability to meet their own needs or desires (Sojourner-centric Adjustment). The respondents' ability to meet the requirements of the host environment (Environment-centric Adjustment) was tested by using Persons r correlation analysis (see Table 37 and Table 38).

These findings revealed that the ability to speak and understand English were important factors to influence sojourner adjustment. Many researchers have discussed that a sojourners' ability to effectively communicate in English is a factor that will greatly facilitate Japanese international students' sojourner adjustment. Language problems are the roots of many hardships for sojourners.

Other Findings

There was a difference in the number of Japanese and non-Japanese friends among males and females. Male Japanese international students had more close friends with Japanese than do female Japanese students (see Table 41 and Table 42). 47.6 % of Japanese males had all five of their five closest friends as being Japanese while women had more non-Japanese friends than the men.

Table 41. Crosstabulation of Gender of Respondents and the Number of Japanese Friends

Number of Japanese Friends (Out of %)		Gender of Respondents		Total
		male	female	
0	Count	0	7	7
	% within Gender of Respondents	.0%	8.5%	6.8%
1	Count	0	6	6
	% within Gender of Respondents	.0%	7.3%	5.8%

		Respondents		
2	Count	1	13	14
	% within Gender of Respondents	4.8%	15.9%	13.6%
3	Count	2	19	21
	% within Gender of Respondents	9.5%	23.2%	20.4%
4	Count	8	23	31
	% within Gender of Respondents	38.1%	28.0%	30.1%
5	Count	10	14	24
	% within Gender of Respondents	47.6%	17.1%	23.3%
Total	Count	21	82	103
	% within Gender of Respondents	100.0%	100.0%	100.0%

Table 42. Cross Tabulation of Gender of Respondents and Number of Non-Japanese Friends

Number of Non-Japanese Friends (Out of Five)		Gender of Respondents		Total
		male	female	
0	Count	10	14	24
	% within Gender of Respondents	47.6%	17.1%	23.3%
1	Count	8	23	31
	% within Gender of Respondents	38.1%	28.0%	30.1%
2	Count	2	19	21
	% within Gender of Respondents	9.5%	23.2%	20.4%
3	Count	1	12	13
	% within Gender of Respondents	4.8%	14.6%	12.6%
4	Count	0	8	8
	% within Gender of Respondents	.0%	9.8%	7.8%
5	Count	0	6	6
	% within Gender of Respondents	.0%	7.3%	5.8%
Total	Count	21	82	103
	% within Gender of Respondents	100.0%	100.0%	100.0%

Comments from Respondents

There were some suggestions from the respondents. This is a summary of comments from the respondents.

There were three additional blank questionnaires in section 3. Some respondents inserted some variables. Six of the respondents indicated "part-time job" on the Sojourner Adjustment Scale. Japanese international students in the U.S. are not allowed to work off campus unless they have special working permits or internships. Normally, in Japan, most of the college students have part-time jobs while they are attending schools. However, they cannot get the jobs that they want here. Therefore, it would explain the reason why the majority of Japanese international students had low scores on work on both sojourner-centric adjustment and environment-centric adjustment (see Table 15 and Table 16).

Five subjects also indicated an additional item, "maintaining good GPA" on the Sojourner Adjustment Scale. Since the college or university education in the United States is stricter than Japanese college education, some students are concerned about their GPA in the new culture and different educational system.

This is a quote from a subject, "Some of the questions are confusing and not clear. I wanted more definition or explanation on 'meet your own needs' and 'requirements.' I needed some examples, especially when a researcher is not present."

Summary

Overall, Japanese international students at the University of Hawai'i at Mānoa are moderately adjusted to the new environment.

In the research questions, there were significant relationships between the mean of the degree of intimacy with non-Japanese and sojourner adjustment. This finding revealed that the Japanese international students' ability to meet their own needs (Sojourner-centric Adjustment) and their ability to meet the requirements of the host environment (Environment-centric Adjustment) were positively related to how intimately they have friendships with non-Japanese friends. The more intimate relationships they have with non-Japanese friends, the higher the sojourner adjustment was found in this study.

From the results, Japanese international students click more with Japanese friends, but ironically, the frequency of interaction and the degree of intimacy with Japanese friends would have little effect on their sojourner adjustment.

It is true that it is very challenging and hard for Japanese international students to develop friendships with non-Japanese due to the different language, and different cultural background, but having close friends among non-Japanese friends would facilitate sojourner adjustment.

It is important for Japanese international students to not only have non-Japanese friends but also to have high intimacy friendships with them, especially with their American hosts. The degree of intimacy with the host national would be the important key to experience successful sojourner adjustment for Japanese international students.

CHAPTER 7
LIMITATIONS AND RECOMMENDATIONS

Limitations

There are several limitations of this study. First, the most obvious limitation

was the number of friends the respondents were asked to report on. The respondents

were asked to write down their best friends. However, the number of friends that they

could write down was limited up to five. There might be some respondents who had

larger friendship networks.

The second limitation was that most of the participants were female students

(79.6%) in this study. There might be a different outcome if there were more male

students in this study since gender differences exist in friendship formation (Fehr,

1996).

The third limitation was that the population was limited to the Japanese

international students attending the University of Hawai'i at Mānoa; therefore, one

cannot safely generalize the results of this study to all other colleges and universities.

Due to this limitation (focusing on one university), this study did not deal with such

situational factors as the size of the educational institutions and communities, which

provided opportunities for international students to interact with Americans. Future

research on sojourner adjustment should be extended to include more diverse samples

such as diplomats, volunteers, business people, dependent spouses, and children to

test for the generalizability of results.

The fourth limitation was the unit of analysis and unit of observation, which

was limited to only one nationality (Japanese). Therefore, the generalization of the

findings to other international students living cross culturally is unclear. Also the result of this study may not apply to other Japanese international students who are studying in the U.S. Mainland due to the diverse cultures in Hawai'i. Japanese international students have a greater access to Japanese media, foods, and Japanese culture in Hawai'i.

The fifth limitation was the failure to gather the data on sojourner adjustment from the 17 subjects who reported that they did not have five close friends. It would be a good comparison between those isolates and the subjects of this present study on sojourner adjustment to see whether there is any correlation between them. Some people may adjust more naturally due to having traits that allow them to adjust without any friend in a new culture.

The sixth limitation was that the concept of "close" friendship will vary from person to person, culture to culture, and male to female.

The seventh limitation was that the subjects were gathered through snowball sampling. Therefore, the results of this study might not be a true representation of the whole population.

The eighth limitation was that the questionnaire was not translated into Japanese. Therefore, the results might be influenced by the respondents' ability to understand English. Some respondents might have a more difficult time answering the questionnaire, or did not fully understand the questions.

The last limitation of the present study was related to its reliance of a self-reported questionnaire methodology to assess respondents' sojourner adjustment. The study data could be derived from subjective reports, and might be subject to reporting

bias. Therefore, the results of this study might be subjective because respondents might use their own judgment to assess their ability to meet their own needs and their ability to meet the requirements in the host culture.

Recommendations

The longitudinal study is generally thought of as the preferred method. In this design, the same students (panel) are studied over time. Because of the limitations of time, the cross-sectional (one-shot) was designed for this present study. In the cross-sectional design, characteristics of students at different stages of his/her stay in Hawai'i are observed.

In a study based on data collected at only one time, the problem of causality remains unsolved. For instance, if one finds that the subjects who interact with non-Japanese more frequently are more higher mean of sojourner adjustment than are those who interact less with non-Japanese, it will be hard to determine what is cause and what is effect. A longitudinal study can help to answer such questions.

The Sojourner Adjustment Scale (SAS) is relatively new and has not been utilized by other researchers. Therefore, to replicate another study on other internationals will be recommended to test the reliability of the scales in various sojourners. Further testing and replication will increase the accuracy and validity of this scale. In addition, there were some ambiguous items in SAS. Therefore, redefining or rephrasing some of the items is recommended.

Another recommendation is to investigate the formation of friendship networks of sojourners such as analysis on factors and motivations for formation of friendships.

APPENDIX A
CONSENT FORM
Agreement to participate in a study on: Friendship Networks and
Sojourner Adjustment of Japanese International Students in Oahu, Hawai'i

Noriko Kadowaki
1561 Kanunu St. #502
Honolulu, Hawai'i 96814
Phone: (808) 944-6719/ Email: nkadowak@hawaii.edu

I, _____, on _____ 2004, hereby consent to
participation as a subject in the above named research project, conducted by Noriko
Kadowaki, a component of a thesis for a master degree at the University of Hawai'i at
Mānoa. My consent is given of my own free choice without undue inducement and
after the following things have been explained to me.

The main purpose of this study is to examine how Japanese international
students' friendship networks between Japanese, Americans and other nationalities
relate to their ability to adjust to the American culture. It will take about 20 minutes
to complete the questionnaire. There will be approximately 100 participants in this
research project. Your participation may be no direct benefit to you, but your
participation will be very important in helping teachers, advisors, counselors, and
administrators to understand the role of friendship networks on sojourner adjustment
of Japanese international students. Moreover, other fellow Japanese students who are
preparing for, or are now attending educational institutions in the U.S. may benefit
from this study. The findings from this study will help them to be a better preparation
for their cross-cultural transition.

The investigator believes that there is little or no risk to participate in this
research. However, you can withdraw your consent to participate in this study at any
time if you feel uncomfortable or threatened.

Your participation in this research will be confidential to the extent allowed by
law. Do not write your name on the questionnaire. To protect your confidentiality,
this sheet will be collected separately from the questionnaire, and will not be attached
to it. All of the information you provide will remain anonymous. Participation is also
completely voluntary.

If you have any questions regarding this research project, please contact the
researcher, Noriko Kadowaki, at 944-6719 or at nkadowak@hawaii.edu.

"I certify that I have read and that I understand the foregoing, that I have been given
satisfactory answers to my inquires concerning project procedures and other matters,
and that I have been advised that I am free to withdraw my consent and to discontinue

participation in the project at any time without prejudice. I herewith give my consent to participate in the project with the understanding that such consent does not waive any of my legal right, not does it release the principal investigator or the institution or any employee or agent thereof from liability for negligence."

_____   _____
Signature of participant   Date

If you have any questions regarding your rights as a research participant, please contact the IRB (UH Committee on Human Studies) at (808)539-3955.

APPENDIX B
JAPANESE INTERNATIONAL STUDENTS' FRIENDSHIP NETWORK AND
SOJOURNER ADJUSTMENT QUESTIONNAIRE

Thank you for being willing to participate in this study. Please find a quiet place where you can spend about 20 minutes to carefully complete this questionnaire.

Section 1   Demographic Information

Please tell me about yourself.

1. How old are you?
   - ❏ 18-25
   - ❏ 26-35
   - ❏ 36-45
   - ❏ 46-older

2. What is your gender?
   - ❏ Male
   - ❏ Female

3. What is your marital status?
   - ❏ Single
   - ❏ Married
   - ❏ Other (   )

4. What is your academic status or what degree are you working on at your university?
   - ❏ Exchange student
   - ❏ Bachelor's Degree
   - ❏ Advanced Degree (Master's and PhD)
   - ❏ Other (   )

5. How long have you been in Oahu, Hawai'i?
   - ❏ Less than 1 year
   - ❏ 1 year to 2 years
   - ❏ 2 years to 3 years
   - ❏ 3 years to 4 years
   - ❏ Over 4 years

Please continue to the next page...thank you!

6. Have you ever experienced living abroad before coming to Hawai'i?

☐ Yes

☐ No

Which country? _____
How long? _____

7. Where do you live now?
   ☐ On campus
   ☐ Off campus
   ☐ Other (   )

8. What is your ability to speak English?
   ☐ Very poor
   ☐ Poor
   ☐ Average
   ☐ Above average
   ☐ Excellent

9. What is your ability to understand English?
   ☐ Very poor
   ☐ Poor
   ☐ Average
   ☐ Above average
   ☐ Excellent

10. Do you have 5 close friends in Hawai'i?
    ☐ Yes

    ☐ No

If no: please stop here. This is the end of the questionnaire.
Thank you for your participation!

Please continue to the next page...thank you!

Section 2   Friendship Network   **Your Five (5) Close Friends in Hawai'i**

Please think of all the people you know here in Hawai'i. Select five (5) actual people who you would consider your close friends. Place their initials in the boxes below and then provide the appropriate information. Fill in the boxes for one friend before going on to the next. An example is provided in the first column.

Characteristics of Friend

Questions	Example	Your friend's information	Your friend's Information	Your friend's information	Your friend's information	Your friend's information
1. Who are your close friends? (Please write down 5 your close friends' initial at most.)	T. K.					
2. What is this close friend's nationality (Please also specify the ethnicity.)	☐ Japanese (from Japan) ☑ Non-Japanese (Please specify: Japanese-American)	☐ Japanese (from Japan) ☐ Non-Japanese (Please specify:)	☐ Japanese (from Japan) ☐ Non-Japanese (Please specify:)	☐ Japanese (from Japan) ☐ Non-Japanese (Please specify:)	☐ Japanese (from Japan) ☐ Non-Japanese (Please specify:)	☐ Japanese (from Japan) ☐ Non-Japanese (Please specify:)
3. What is this close friend's gender?	☐ Male ☑ Female	☐ Male ☐ Female	☐ Male ☐ Female	☐ Male ☐ Female	☐ Male ☐ Female	☐ Male ☐ Female
4. How old is this close friend?	(25 years old)	(years old)	(years old)	(years old)	(years old)	(years old)
5. Which language do you speak when you interact with this close friend?	☑ English ☐ Japanese ☐ Other ( )	☐ English ☐ Japanese ☐ Other ( )	☐ English ☐ Japanese ☐ Other ( )	☐ English ☐ Japanese ☐ Other ( )	☐ English ☐ Japanese ☐ Other ( )	☐ English ☐ Japanese ☐ Other ( )

Please continue to the next page...thank you!

6. How often do you interact with this close friend?	❏ Daily ☑ Once a week ❏ Once a month ❏ Less than once a month	❏ Daily ❏ Once a week ❏ Once a month ❏ Less than once a month	❏ Daily ❏ Once a week ❏ Once a month ❏ Less than once a month	❏ Daily ❏ Once a week ❏ Once a month ❏ Less than once a month	❏ Daily ❏ Once a week ❏ Once a month ❏ Less than once a month	❏ Daily ❏ Once a week ❏ Once a month ❏ Less than once a month
7. How much of your private feelings, thoughts, and things do you share with this close friend?	❏ Nothing ❏ A little ❏ Something ☑ Almost everything ❏ Everything	❏ Nothing ❏ A little ❏ Something ❏ Almost everything ❏ Everything	❏ Nothing ❏ A little ❏ Something ❏ Almost everything ❏ Everything	❏ Nothing ❏ A little ❏ Something ❏ Almost everything ❏ Everything	❏ Nothing ❏ A little ❏ Something ❏ Almost everything ❏ Everything	❏ Nothing ❏ A little ❏ Something ❏ Almost everything ❏ Everything

Please continue to the next page...thank you!

Section 3   Sojourner Adjustment

When people travel to and live in a culture or environment different from their own, they are faced with the two challenges of (1) meeting their own needs and desires and (2) meeting the needs and expectations of the new environment.

Listed below are some different areas of life in which you have had to (1) acquire things and act according to **your** needs and (2) do things or act in ways **required of you by people or situations around you**.

React to each one by checking the box, which most closely describes your ability at the present time to (1) **satisfy your needs/desires** [in the left column] and (2) **meet the needs/expectations of the culture in which you now find yourself** [in the right column].

5	4	3	2	1
Very true	Somewhat true	Neutral or Don't know	Mostly not true	Not true at all

(1) **I am able to get or do what I want**   (2) **I am able to do what is required of me**

	I am able to get or do what I want	I am able to do what is required of me
1. Ways of eating and drinking	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all
2. Maintaining my physical health	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all
3. Dealing with Language	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all
4. Finding the food I want	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all
5. Get access to Transportation	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all
6. Entertainment	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all
7. Using Etiquette properly	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all

Please continue to the next page...thank you!

5	4	3	2	1
Very true	Somewhat true	Neutral or Don't know	Mostly not true	Not true at all

(1) I am able to get or do what I want   **(2) I am able to do what is required of me**

	(1) 5 4 3 2 1	(2) 5 4 3 2 1
8. Education	Very True □□□□□ Not true at all	Very True □□□□□ Not true at all
9. Work	Very True □□□□□ Not true at all	Very True □□□□□ Not true at all
10. Climate/ Weather	Very True □□□□□ Not true at all	Very True □□□□□ Not true at all
11. Dealing with isolation	Very True □□□□□ Not true at all	Very True □□□□□ Not true at all
12. Maintaining friendship	Very True □□□□□ Not true at all	Very True □□□□□ Not true at all
13. Dress/ Clothing	Very True □□□□□ Not true at all	Very True □□□□□ Not true at all
14. Understand Verbal communication	Very True □□□□□ Not true at all	Very True □□□□□ Not true at all
15. Understand Nonverbal communication	Very True □□□□□ Not true at all	Very True □□□□□ Not true at all
16. Male-female relationships	Very True □□□□□ Not true at all	Very True □□□□□ Not true at all

Please continue to the next page...thank you!

5	4	3	2	1
Very true	Somewhat true	Neutral or Don't know	Mostly not true	Not true at all

(1) **I am able to get or do what I want.**   **(2)** **I am able to do what is required of me.**

17.
Maintain interpersonal relationships

Very True [5] [4] [3] [2] [1] Not true at all   Very True [5] [4] [3] [2] [1] Not true at all

18.
Get access to media

Very True [5] [4] [3] [2] [1] Not true at all   Very True [5] [4] [3] [2] [1] Not true at all

19.
Sex

Very True [5] [4] [3] [2] [1] Not true at all   Very True [5] [4] [3] [2] [1] Not true at all

20.
Use of time

Very True [5] [4] [3] [2] [1] Not true at all   Very True [5] [4] [3] [2] [1] Not true at all

21.
Dealing with crowdedness

Very True [5] [4] [3] [2] [1] Not true at all   Very True [5] [4] [3] [2] [1] Not true at all

22.
Understanding American culture

Very True [5] [4] [3] [2] [1] Not true at all   Very True [5] [4] [3] [2] [1] Not true at all

23.
Dealing with my emotions

Very True [5] [4] [3] [2] [1] Not true at all   Very True [5] [4] [3] [2] [1] Not true at all

24.
Cleanliness

Very True [5] [4] [3] [2] [1] Not true at all   Very True [5] [4] [3] [2] [1] Not true at all

25.
Maintaining privacy

Very True [5] [4] [3] [2] [1] Not true at all   Very True [5] [4] [3] [2] [1] Not true at all

26.
Living space

Very True [5] [4] [3] [2] [1] Not true at all   Very True [5] [4] [3] [2] [1] Not true at all

Please continue to the next page...thank you!

5	4	3	2	1
Very true	Somewhat true	Neutral or Don't know	Mostly not true	Not true at all

(1) I am able to get or do what I want **(2) I am able to do what is required of me**

	(1) I am able to get or do what I want	(2) I am able to do what is required of me
27. Understand politics	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all
28. Spiritual life	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all
29. Maintain personal hygiene	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all
30. Dealing with cost of living	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all
31. Dealing with morals, ethics and values in host culture	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all
32. Maintain family relationships	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all
33. Material goods	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all
34. Dealing with my identity as an "outsider"	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all
35. Dealing with the "man-made" environment	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all

Please continue to the next page...thank you!

5	4	3	2	1
Very true	Somewhat true	Neutral or Don't know	Mostly not true	Not true at all

(1) **I am able to get or do what I want**　　　(2) **I am able to do what is required of me**

	(1)	(2)
36. Obey laws and law enforcement	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all
37. Dealing with money and currency transactions	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all
38. Maintaining my personal growth	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all
39. Other... [write it in below] _____	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all
40. Other... [write it in below] _____	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all
41. Other... [write it in below] _____	Very True 5 4 3 2 1 Not true at all	Very True 5 4 3 2 1 Not true at all

Please continue to the next page...thank you!

How well would you say you are able to function, **generally speaking,** in this culture/environment?
[check one box]

Very Well ☐☐☐☐☐ Not well at all

How well would you say you are able, generally speaking, to **meet your own needs/desires**?
[check one box]

Very Well ☐☐☐☐☐ Not well at all

How well would you say you are able, generally speaking, to **meet the requirements of this culture/environment**? [check one box]

Very Well ☐☐☐☐☐ Not well at all

Thank you very much for your patient cooperation!

APPENDIX C
CODE BOOK

SECTION 1 DEMOGRAPHIC INFORMATION			
VARIABLE CODE	QUESTION NUMBER	VARIABLE DESCRIPTION	CODES
AGE	1	Age of Respondents	1= 18-25 2= 26-35 3= 36-45 4= 46-older
GENDER	2	Gender of Respondents	1= male 2= female
MARITAL	3	Marital Status of Respondents	1= married 2= single 3= other
DEGREE	4	Respondents' Academic Degree being Pursued	1= exchange student 2= bachelor's degree 3= advanced degree 4= other
DURATION	5	Respondents' Duration of Staying in Oahu, Hawai'i	1= less than one year 2= 1 year to 2 years 3= 2 years to 3 years 4= 3 years to 4 years 5= 5 years or more
ABROAD	6	Respondents' Previous Sojourn Experience before coming to Hawai'i	1= yes 2= no
RESIDENC	7	Respondents; Current Residence in Hawai'i	1= on campus 2= off campus 3= other
SPEAKENG	8	Respondents' Self-reported Ability to Speak English	1= very poor 2= poor 3= average 4= above average 5= excellent
UNDERENG	9	Respondents' Self-reported Ability Understand English	1= very poor 2= poor 3= average 4= above average 5= excellent

SECTION 2 YOUR FIVE (5) BEST FRIEDNS IN HAWAIʻI

NATIONIP 1-5	2	Close Friends' Nationality	1= Japanese (from Japan) 2= Non-Japanese
FGENDER	3	Gender of Close Friend	1= male 2= female
FAGE	4	Age of Close Friend	1= 18-25 2= 26-35 3= 36-45 4= 46-older
FLANGUA	5	Language Use with Close Friends	1= English 2= Japanese 3= Other
MEANFRJA MEANFRNJ	6	Mean of Frequency of Interaction with Close Friend	1= less than once a month 2= once a month 3= once a week 4= daily
MEANITJA MEANITNJ	7	Mean of Degree of Intimacy with Close Friend	1= nothing 2= a little 3= something 4= almost everything 5= everything

SECTION 3 SOJOURNER ADJUSMENT

MEANSOC	1	React to each on by checking the box which most closely describes your ability at the present time to satisfy your needs/desires	1= not true at all 2= mostly not true 3= neutral or don't know 4= somewhat true 5= very true
MEANENC	2	React to each one by checking the box which most describes your ability at the present time to meet the requirements/ expectations of the new environment	1= not true at all 2= mostly not true 3= neutral or don't know 4= somewhat true 5= very true

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