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by

Lateki Lewis

December 2015

A CASE STUDY ACCULTURATION OF INTERNATIONAL UNDERGRADUATE  
STUDENTS FROM CHINA AT SORAYA UNIVERSITY

A Dissertation Presented to the  
Faculty of the College of Education  
University of Houston

In Partial Fulfillment  
of the Requirements for the Degree

Doctor of Education

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December 2015

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A CASE STUDY ACCULTURATION OF INTERNATIONAL UNDERGRADUATE  
STUDENTS FROM CHINA AT SORAYA UNIVERSITY

An Abstract  
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### Abstract

The purpose of this study was to examine the acculturation strategies of undergraduate, international students from China at a Southwest university. It applies John Berry's (1997) acculturation theoretical framework that identifies four acculturation strategies: assimilation, separation, integration and marginalization (Berry, 1997).

The objective of the mixed methods study was to examine the validity and consistency of Berry's acculturation framework in varying cultural contexts by considering 1) the relationship between acculturation of international students and length of stay 2) Does acculturation vary by gender? and 3) the impact of acculturation on academic performance. The sample included 50 international undergraduate students from China at a Southwest university. The analyses conducted utilized data from an online survey and qualitative data gathered through student interviews to provide insight into the quantitative data.

The results of the quantitative portion of the study concluded that there was no significant difference between the lengths of stay in the U.S. for participants surveyed. Second, acculturation did not vary significantly according to gender, and there was a weak, positive correlation between acculturation and a student's cumulative GPA that was not statistically supported. The qualitative, face-to-face interviews provided three themes 1) acculturation of international students and length of stay, 2) acculturation varies by gender and 3) impact of acculturation on academic performance. The findings

of this study suggest that additional attention needs to be paid to the ways in which the University supports to initial engagement with the campus.

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## **Chapter I**

### **Introduction**

The United States (U.S.) is the most popular choice for international students to study abroad with nearly one fifth of all international students globally, 600,000 students from over 200 nations (Choudaha & Chang, 2012; Chow, 2011; Obst & Forster, 2011). International students are present at most major universities in the U.S. (Bhandari, 2014). There has been an 8% growth of international students generally and a 10% increase in undergraduate students within the last year according the *Open Doors Report 2014* (Bhandari, 2014). The U.S. does not need a national recruitment strategy to obtain international students because international students already have a strong preference for American education. (Chow, 2011). Chow (2011) surveyed international students and found that the U.S. is perceived as having a high-quality college education system, is welcoming to international students, and has a variety of academic programs to meet their career interests (Chow, 2011).

There has been extensive research by U.S. government agencies relating to international students. The Institute of International Education (IIE) in conjunction with the U.S. Department of State's Bureau of Education and Cultural Affairs produces the annual *Open Doors Report* (Bhandari, 2014). The IIE interviewed 420 international college students from 2001 to 2004 regarding their decision to study in the U.S. (Obst &

Forster, 2011). The study found that the academic reputation of U.S. academic degrees is the primary reason that international students seek education in America (Obst & Forster, 2011). International students feel that their career options will be improved with a U.S. college degree (Obst & Forster, 2011). Surveyed students stated that they anticipated that the U.S. has a number of international student scholarships and good student support (Chow, 2011). The academic success of international students who complete their degree in the U.S. acts as a lure for prospective international students to study abroad in the U.S. (Qian & Chu, 2002). International students that come from countries where English is not their first language, however, may have difficulty in college for reasons other than effort or preparation; sociocultural stressors are a primary factor (Kaczmarek et al, 1994; Olivas & Li, 2006).

### **Sociocultural Concerns and Adjustment**

One aspect of the international students' experience that warrants attention is the adjustment period that all students encounter. Sociocultural concerns include international students' interaction with American culture. International students from vastly different cultures, like China, face sociocultural stressors such as cultural shock as a result of the contrast of their new environment. The term "culture shock" was defined by Oberg (1960) as "the anxiety caused by losing familiar signs and symbols of social intercourse" (p. 177). Symptoms of culture shock include feelings of helplessness; desire to be with those that share one's culture, delay or preference not to speak the language of the host culture, and an intense longing to return to one's home country (Oberg, 1960). Social isolation and alienation can occur if students do not adjust to the cultural norms of

the U.S. college campus. U.S. born college students usually return home to friends and family when school is out of session; however, international students may have difficulty leaving the U.S. to return to their families overseas.

International students must adapt to the U.S. educational system (Andrade & Evans, 2009). Successful students make friends within their culture, but also incorporate native English speakers to help them master the language and ease the transition (Andrade & Evans, 2009). International students may be hesitant to practice English frequently and may detach themselves from U.S. students, preferring to remain with those who speak their native language (Horwitz, Horwitz & Cope, 1986). The self-isolation of international students can lead to difficulty adjusting to U.S. culture and affect their communication in the classroom (Horwitz, Horwitz & Cope, 1986). Students must also learn to use faculty as a resource as well as student support services like counseling, the library, study groups and tutors (Andrade & Evans, 2009). The present study received feedback from international students at Soraya University<sup>1</sup>.

### **Soraya University**

International students are a growing student population at the Soraya University (SU). Soraya University was the focus of the present study. SU is among the most diverse major research universities in U.S. and provides an accurate examination of international students' adjustment to American culture. SU is an ideal institution to conduct a study because it has 3,520 non-immigrant students among its 40,746 total students according

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<sup>1</sup> Soraya University is a pseudonym.

to the International Students and Scholars Studies office (ISSS) (Soraya University ISSS, 2013). There are 2,146 graduate international students enrolled and 1,374 international undergraduates. International students are listed as non-immigrant by the International Student & Scholar Services (ISSS) because they are here on a temporary basis to complete their education (Soraya University ISSS, 2014). China is the second largest country of origin for non-immigrant students overall with 854 graduates and undergraduates at SU but are second largest in undergraduates (Soraya University ISSS, 2014). India is the largest at 906 students (Soraya University ISSS, 2014). There are a total of 161 Chinese students and the majority of the students are Engineering majors (Soraya University ISSS, 2014). Many of the remaining countries have significantly smaller amounts of students (Soraya University ISSS, 2014). Chinese undergraduate students were selected because they represent the second largest international student group overall and a growing undergraduate population. Data from a larger group provides a richer representation of the experiences of international student culture at SU.

### **Berry's Acculturation Theory**

Berry's acculturation theory provided a perspective on acculturation (Berry, 1984; Berry, 1990; Berry et al, 1989). Prior to Berry's model, traditional acculturation models viewed acculturation according to a uni-dimensional measurement by which the person adopts the values, beliefs, norms and behavior of the new culture while disregarding their native culture (Berry, 2001). Berry adopted a bi-dimensional model by which the person incorporates experiences available in both cultures (Berry, 2001). Berry's theory is based on two principles of immigrant populations: cultural maintenance and contact



participation (Berry, 2001). Cultural maintenance refers to maintenance of cultural identity (Berry, 2001). Contact participation occurs when the person seeks out contact with other groups and maintains daily interaction with the new society (Berry, 2001). A person can adopt more than one acculturation strategy in a social environment, such as school or social event, and have another strategy for interactions with family or friends of the same culture of origin (Berry, 1997). Berry based his research on immigrant workers. Berry's research has been used to discuss international students, primarily in dissertations such as Du (2012), Gu (2012), and Soriano (2009).

**Berry's acculturation strategies.** There are four acculturation strategies featured in Berry's acculturation framework: assimilation, separation, integration and marginalization (Berry, 1997). Assimilation involves incorporation into the new culture defining themselves as members of the new culture, American, instead of their culture of origin, Chinese (Berry, 1997). Separation occurs when a person is not interested in becoming part of the new culture and maintains cultural norms in the new country (Berry, 1997). Integration takes place when culture is maintained while actively participating in the host culture (Berry, 1997). Marginalization occurs when there is little possibility or interest by the person to become an active member of the culture (Berry, 1997). Marginalization may occur in groups that have been intentionally isolated from mainstream culture (Berry, 1997). In most cases, the person arriving in the new culture has a choice of acculturation strategy (Berry, 1997). Individuals do not experience acculturation the same way due to pre-existing personal factors such as gender, education, reason for moving to new culture (acculturation motive), cultural distance, length of stay, acculturation strategy and coping strategy (Du, 2012). A person prefers

one acculturation strategy to another depending on the context and time period, that is, the length of time spent in the host culture (Berry, 1997).

### **Purpose of the Study**

The original intent of American education was to acculturate not to educate people who were not American (Hyer, 1990). International college students have a challenging adjustment to college life in the U.S. They have to acclimate themselves to the culture of a significantly different environment. Acculturation strategies are significant because the strategy can predict important behaviors (Rudmin, 2009). The pathway chosen predicts behavior and affects whether the person decides to learn and perfect the language and whether the student will seek academic support. Acculturation may play an important role in their adjustment to college life.

The objective of the present study is to conduct comparative analyses to examine the validity and consistency of Berry's acculturation framework in varying cultural contexts by examining the hypotheses. Immigrant workers are very different than international college students in age and possibly education level. The current study hopes to add to the literature by exploring Berry's acculturation in a diverse university environment.

### **Research Questions and Hypotheses**

Research question 1: What is the current level of acculturation of international undergraduate students from China studying at a Soraya University?

- Hypothesis 1: There will be a direct relationship between the years in the U.S. and the level of acculturation. That is, the longer the student has been

in the U.S., the higher their level of acculturation to the U.S. culture will be.

Research question 2: Does acculturation vary significantly by gender?

- Hypothesis 2: Female international students from China are predicted to have a higher level of acculturation to U.S. culture than males from the same countries.

Research question 3: What is the impact of acculturation on academic performance at Soraya University (SU)?

- Hypothesis 3: There will be a direct relationship between acculturation to U.S. culture and academic performance. That is, higher levels of acculturation will be associated with higher self-reported GPA.

### **Definition of Terms**

The following definitions are provided to guide the reader in understanding the ways that the study will operationalize the terms.

**Acculturation.** Acculturation is a change in the culture of the group whereas psychological acculturation is the change in the psychology of the individual (Berry, 1997; Graves, 1967). Acculturation offers a choice that ranges from the decision to adapt fully in the culture or not to incorporate at all (Soriano, 2009).

**Acculturative stress.** Acculturative stress refers to the pressure of moving from the culture of origin to another culture (Berry, 2005).

**Adaptation.** Adaptation refers to the changes that occur in individuals or groups in response to the demands of their environment (Berry, 1997). Adaptation is a result of the process of acculturation and may be positive or negative (Soriano, 2009).

**Assimilation.** Assimilation occurs when non-dominant individuals do not maintain their cultural identity and seeks daily interaction with dominant cultures (Berry, 1997).

**Cultural maintenance.** Cultural maintenance is the extent to which native cultural identity and characteristics are considered important and maintenance strived for (Berry, 1997).

**Ethnic identity.** Ethnic identity refers to a person's sense of self as a member of an ethnic group (Phinney, 2003).

**Integration.** Integration happens when the individual is interested in maintaining his/her original culture while regularly interacting with others of the host culture (Berry, 1997)

**Marginalization.** Marginalization takes place when there is little possibility or interest in maintaining original culture and little interest in having relationships with others in their culture (Berry, 1997).

**Separation.** Separation occurs when individuals place value on holding onto their original culture, do not want to interact with other cultures and remove him/herself from the dominant culture. (Berry, 1997).

**Summary**

International students choose to study in the U.S. because of educational and employment opportunities. Upon arrival the students have to learn to adapt to U.S. culture by choosing an acculturation strategy. This study will contribute to the literature on Berry's (1997) theory of acculturation as applied by Gu (2009) to international undergraduate students. The research examined length of stay in the U.S., gender and academic performance in determining the acculturation strategy of the participants.

## **Chapter II**

### **Literature Review**

International students remain one of the most understudied and underserved groups of college students (Berry, 1997; Wang, Heppner, Fu, Zhao, Li & Chuang, 2012). Thirty-one percent of international students at U.S. universities are of Chinese descent (Bhandari, 2014). The undergraduate Chinese student population has grown tremendously in recent years (Bhandari, 2014). There are over 800,000 international students in U.S. higher education institutions. American schools need to do a better job integrating international students with domestic populations (Redden, 2014).

International students face unique challenges in comparison to other college students from the United States (U.S.). They have tangible losses, such as face-to-face contact with family and loved ones back home and intangible losses of self-efficacy, sense of belonging and knowledge of culture as they enter a new country (Berry, 1997; Zhang & Goodson, 2011). These losses often lead to acculturative stress and psychological symptoms (Berry, 1997; Zhang & Goodson, 2011). Acculturative stress refers to the generalized physiological and psychological state of the person impacted by stressors in the environment which causes a person to adapt through coping methods to return to a normal, more comfortable state of being (Berry et al, 1987). Acculturative stress occurs in the form of “lowered mental health status - specifically, confusion, anxiety and depression, feelings of marginality and alienation, heightened psychosomatic symptom level and identity confusion” (Berry et al, 1987). The risk of acculturative stress and

subsequent psychological problems can likely impact an international student's adjustment into U.S. universities.

This study explored the acculturation strategies of undergraduate Chinese international students at the Soraya University. International college students have a challenging adjustment to college life in the U.S. They have to acclimate themselves to the culture of a significantly different environment. Acculturation may play an important role in their adjustment to college life. Chinese students are the largest ethnic groups that choose to study abroad (Tang & Dion, 1999). Chinese students have often been the subject of research due to the vast cultural differences between China and the U.S. and the fact that they are the largest international group in U.S. colleges and universities (Bhandari, 2014). However, less is known about the acculturative stress they might experience and the potential subsequent mental health problems. International college students have similar issues of retention and departure as American students but have the added acculturative stress that makes their experiences more complex.

### **Higher Education and Acculturation**

Retention and departure from the university are issues involving international and U.S. students. Kuh and Love (2000) examined culture of origin in relation to the cultural milieu of their collegiate peer group to determine if integration, differentiation and/or fragmentation are factors in student departure (Kuh & Love, 2000). Kuh and Love (2000) examined culture of origin in relation to the cultural milieu of their collegiate peer group to determine if integration, differentiation and/or fragmentation are factors in student departure (Kuh & Love, 2000). The college experience and the importance of a college

degree are influenced by the values of the student's culture of origin (Kuh & Love, 2000). The international student must reach an understanding of the culture of immersion in order to understand their ability to successfully negotiate the institution's cultural milieu (Kuh & Love, 2000). The persistence is more likely when the student's culture of origin and cultures of immersion have similar ideas about education (Kuh & Love, 2000). International students must acculturate to the dominant culture or one or more cultural groups (Kuh & Love, 2000). The acculturation strategy of separation will increase acculturative stress and lower the chance the student will persist (Kuh & Love, 2000).

The student that decides to integrate or assimilate will persist due to the extensity and intensity of their sociocultural connections to the university and dominant culture (Kuh & Love, 2000). Students who belong to one or more cultural groups in the host culture are more likely to persist (Kuh & Love, 2000).

### **International Students and Higher Education**

Graduate international students who come to the U.S. have less acculturative stress because they learn American culture in their country (Berry et al, 1987). International undergraduate students, on the other hand, arrive in the U.S. with far less exposure to U.S. culture and norms, placing them at higher risk for acculturative stress. With increasing time in U.S. culture, academic stressors become less important but cultural stressors remain (Wang et al, 2012). The length of time Chinese international students have been in the U.S. has a regulating effect on acculturative adjustment (Wang et al, 2007). Graduate students will have less acculturative stress than undergraduates and upperclassmen will have less acculturative stress than freshman (Berry et al, 1987). A



longitudinal study found that international students' stress increased during their first three months and lessened six months later as they adjusted to the education system (Hechanova-Almpay et al, 2002).

### **Academic Experience**

The academic experience changes the international student's perspective of how to interpret stressors (Berry et al, 1987). Students who do not have high levels of acculturation to mainstream culture are expected to have academic difficulty (Lese & Robbins, 1994). Students who assimilate or integrate should be more successful academically than those who separate from U.S. culture (Ward & Rana-Deuba, 1999).

**Social integration.** Tinto (1975) found social integration occurs at the institutional subculture level (Tinto, 1975). If the student becomes a part of the unique culture of the institution he/she will feel more a part of the community. Tinto discovered that the greater the level of academic integration, the higher the level of commitment to graduation (Tinto, 1975). Social integration is greatest when the student has a high level of commitment to the institution (Tinto, 1975). Social support is important to the academic achievement. Social support protects college students from academic stress (MacGeorge, Samter & Gillihan, 2005). International students receive less social support on campus. (Kramer, Prufer-Kramer, Stock, & Tshiananga, 2004).

**Academic stress.** Academic stress refers to the mental or emotional pressure due to college life resulting in depression and physical illness (DeDeyn, 2008). Research on academic stress in international students has been inconsistent. A study found that international female students that studied abroad for less than two years were less likely

to receive social support than domestic students (Kramer, Prufer-Kramer, Stock, & Tshiananga 2004). A study found that supportive communication (sympathy and affection) and informational support (academic information and advice) reduced depression caused by academic stress (MacGeorge, Samter, & Gillihan, 2005). However, other research, demonstrated international students have a minimal amount of academic stress (Brown, 1998).

**Academic stress by gender.** There are also differences in reactions to academic stress by gender. Women released their feelings and men decrease or ignore their emotions internally, accept the problem or attempt to fix the situation (Misra & Castillo, 2004). Both groups had psychological distress when they failed academically (Misra & Castillo, 2004). In a study comparing the academic stress of American students to that of international students, it was discovered that American students had higher levels of academic distress than international students (Misra & Castillo, 2004). A study sought to verify Misra and Castillo's study and found different results when socialization was considered (DeDeyn, 2008). Therefore, international students and their experiences with academic stress and acculturation continue to be discovered.

### **Chinese International Undergraduate College Students**

International students, like most new college students, have academic and social adjustments that cause stress and tension (Andrade & Evans, 2009). As international students become more comfortable in their social settings, they gain confidence that extends to the classroom (Andrade & Evans, 2009). Chinese international undergraduate students, like other international students, benefit from social interactions with the host

culture, other international students, faculty and college staff (Andrade & Evans, 2009). However, the concept of learning from social interactions in the classroom needs to be introduced to Chinese international students because co-curricular involvement is not a learning strategy in China (Andrade & Evans, 2009). These different approaches to the educational system can be a source of acculturative stress. Before discussing Berry's acculturation framework, let's first define the concept of adaptation.

### **Adaptation**

Adaptation refers to the changes that occur in individuals or groups in response to the demands of their environment (Berry, 1997). Changes can occur immediately or over a long period of time (Berry, 1997). Short-term changes are typically negative, while positive adaptation takes time (Berry, 1997). Berry uses the term "fit" to describe a smooth transition into the culture if the society is accepting of the acculturating person or group (Berry, 1997). If there is "fit" between the acculturating individual and the new society, adaptation is achieved (Berry, 1997). If the "fit" is not realized, the individual experiences conflict due to separation/segregation and marginalization, which lead to acculturative stress (Berry, 2003).

There are two types of adaptation: psychological and sociocultural (Berry, 1997). Psychological and sociocultural adaptation varies in relation to acculturation strategies (Ward & Rana-Deuba, 1999). Psychological adaptations can be internal (self-esteem and well-being) or sociocultural (relations to others in the new culture) (Berry, 2003). Psychological adaptation refers to a person or group that has positive psychological outcomes following acculturation, such as a clear sense of self and cultural identity,

sound mental health and a sense of personal satisfaction in the new cultural environment (Berry, 1997). Sociocultural adaptation refers to external outcomes that tie the person or group with their new cultural environment such as, the ability to handle daily stressors of work, family and school (Berry, 1997). Sociocultural considerations include length of time living in the new culture, ability to speak the dominant language of the new culture, distance from culture of origin and amount of contact with people of the host culture (Ward & Rana-Deuba, 1999). Sociocultural problems decrease over time, but psychological difficulties vary (Ward & Rana-Deuba, 1999).

### **History of Acculturation Research**

A discussion of the current views on acculturation must reflect on the history of the concept (Berry, 2003). Historically, in the U.S., immigrants and native cultures were discriminated against and forced to assimilate to the dominant culture (Rudmin, 2009). Acculturation was only thought of as assimilation, moving from a culture that was different from the new host culture to one of sameness (Rudmin, 2009). Many acculturation theorists use the terms assimilation and acculturation interchangeably today (Trimble, 2003). Acculturation/Assimilation was thought to cause personality disintegration and marginality to the non-dominant acculturated group in the studies during the 1920s by Bartlett (1923/1970), Miller (1924), and Park (1928) (cited in Rudmin, 2009). Mental health and the “emotional stress” of the acculturation process discussed by Kuhlen (1945) and coined as “acculturative stress” by Barnett et al (1954) continues to be well documented as a concern when people are introduced into a new culture that is different from their own (Rudmin, 2009). Although language is a major

aspect of acculturation, the literature on acculturation is disjointed on this topic (Rudmin, 2009).

Acculturation was once explained as unilateral, non-reversible and continuous (Trimble, 2003). Full acculturation occurs when the host culture has been fully internalized through the acculturation strategy assimilation (Trimble, 2003). In actuality, full acculturation takes generations to be fulfilled or may never occur (Trimble, 2003). Acculturation occurs when international students take portions of the host culture and incorporate them into their culture of origin (Trimble, 2003).

### **Acculturation**

Berry (2003) listed two philosophies that he used for his research: 1) Redfield, Linton and Herskovitz (1936) stated that acculturation occurs when groups of people of different cultures come in contact and acculturation causes changes in the original culture of both or either group and 2) The Social Science Research Council (1954) defined acculturation as cultural change in two or more separate cultural systems that may be a result of direct cultural transmission, which may be delayed, reactive or forced adaptation (Berry, 2003).

The first philosophy views acculturation as a portion of a larger concept of culture change due to intercultural contact that creates change in either or both groups (Berry, 2003). The second viewpoint states that acculturation change can be indirect (environmental), can be delayed (due to psychological reactions by the individual) or reactive (retaining more of the individual's original culture and therefore less of the dominant culture) (Berry, 2003). The two perspectives form the starting point from which

future conversations about acculturation have originated (Berry, 2003). A combination of these two views supplies the best definition of acculturation: understanding both cultures is required to understand the individual (Berry, 2003).

Acculturation is a change in the culture of the group whereas psychological acculturation is the change in the psychology of the individual (Berry, 1997; Graves, 1967). The distinction is important because not all people experience acculturation the same way (Berry, 2003; Furnham & Alibhai, 1986). Psychological acculturation occurs on an individual level and can vary from one individual to the next (Berry, 2003). These individuals find learning a new culture appropriate for the new environment (Berry, 1997). Learning new cultural behaviors requires cultural shedding (Berry, 1997). Cultural shedding is part of the acculturation process and involves unlearning norms of the former culture that do not fit in the new culture because the behavior may cause cultural conflict which may make the individual uncomfortable (Berry, 1992).

### **Berry's General Acculturation Framework**

Berry's acculturation model, which sees acculturation as bi-dimensional, will serve as the primary conceptual framework for the present study. Berry's acculturation framework allows for an understanding of how a non-dominant group, such as international students, and specifically Chinese undergraduates, adjust to a new environment while maintaining their culture. As seen above, there has been discussion and disagreement about what acculturation entails (Berry, 2003). A bi-dimensional view of acculturation posits that an individual coming from one culture (culture A) into another culture (culture B) can choose to remain more or less of A, independent of how

much the individual chooses to become more or less of B. Specific to the population of study for this proposed research, Berry's theory allows for variation in the person's desire to be more or less American regardless of whether they want to be more or less Chinese. One's desire to learn and incorporate the new culture is not dependent on their feelings about their own culture. Although a number of articles have been published about Berry's acculturation framework it has not been adequately researched empirically (Smith & Khawaja, 2010). Berry's (1970) initial theory of acculturation was based on integration of Australian Aborigines (Berry, 1970). In 1974, Berry examined Canadian ethnic communities and their cultural identities in terms of integration, assimilation, segregation (formerly called rejection), and marginality (formerly called deculturation) (Berry, 1974). Berry later extended his theory to represent immigrants and international students in the U.S. (Berry, 1980).

In 1984, Berry posed two important questions related to acculturation: "Is it considered to be of value to maintain one's own distinctive identity and cultural group characteristics?" and "Is it considered to be of value to maintain positive relations with my group and others within the society?" (Berry, 1984, p. 357). The applicable portion of Berry's theory discussed will be the four acculturation strategies. At the cultural level, researchers must understand the key characteristics of the original cultural groups before they come together, the reason that the cultures interact, the resulting cultural changes in the combined group and the psychological acculturation and adaptation that emerge as a result. Extensive ethnographic research is required to ascertain the changes to the cultures (Berry, 2003). The individual level requires sampling a population and learning about the people who are included in the acculturation process (Berry, 2003). Changes in the

individual can range from changing his/her patterns of speech, acceptable attire, common foods and expanding their cultural identity to include being American. These changes can also result in acculturative stress (Berry, 2003). Berry (1980, 1990) discusses four acculturation strategies and the relationship between acculturation and adaptation (Berry, 1990).

In 2006, Berry added an additional clarification of acculturating groups by differentiating between mobility and voluntariness of contact (Berry, 2006). Indigenous persons, refugees or those seeking asylum are considered to have had involuntary contact if they were victims of colonization (Berry, 2006). Voluntary contact refers to acculturation of people who relocate to another culture like immigrants, travelers and sojourners (e.g., international students) (Berry, 2006). Sojourners are classified as having temporary contact with the culture as distinguished from immigrants who intend to remain permanently; Berry included international students in the voluntary contact category (Berry, 1997).

**Acculturation strategies.** Berry examined the process that occurs when a person who was born into a certain culture moves to a culture that is substantially different (Berry, 1997). Culture is assumed to shape behavior and Berry inquired whether behavior changed according to the norms of the new setting (Berry, 1997). He considered the role of pre-arrival factors and post-arrival variables (length of time in different culture, perceived stressors, coping mechanisms, and social support) on acculturative adjustment over time (Berry, 1997). In society, there are dominant groups and minority or non-dominant groups (Berry, 1997). Non-dominant groups face acculturation and are expected to either assimilate or integrate into the dominant culture (Berry, 1997). There



are two issues present in acculturation: (1) cultural maintenance, or the extent to which cultural identity and characteristics are considered important and maintenance strived for; and (2) contact and participation which is the extent to which people decide to be involved with other cultural groups or remain separate (Berry, 1997).

As stated above, Berry's model posits four acculturation strategies of minority groups in a new culture: (1) assimilation, (2) separation, (3) integration, and (4) marginalization (Berry, 1997). Assimilation is displayed in non-dominant individuals who do not want to maintain their cultural identity and seek daily interaction with cultures (Berry, 1997). It is assumed to be the method taken by non-dominant people (immigrants) who were willing to give up their culture to become a part of the dominant society (Berry & Sabatier, 2011). An example of assimilation is when immigrants arrived at Ellis Island in the U.S. in the late 1800s, were expected to change their name, stop speaking their native language, join the American culture and leave their heritage behind. Another strategy is separation which occurs when individuals place a value on holding onto their original culture and do not want to interact with other cultures (Berry, 1997). A common example would be individuals who choose to live in an ethnic enclave, speak their native language every day and make little effort to learn the language of their new host culture, have friends and acquaintances only from their culture of origin and live every day immersed in their culture of origin, albeit in a new country. An academic example would be an international student who learns and studies in English, but has no intention of becoming part of the American culture and associates mostly with students from his/her own country.

The third strategy, integration, happens when the individual is interested in maintaining his/her original culture while regularly interacting with members of the host culture (Berry, 1997). Integration takes place in the U.S. when non-dominant groups interact with the dominant group on a daily basis and develop bicultural (and sometimes bilingual) skills and behaviors. Over time, these individuals gain the ability to move effortlessly between cultures and perform at a high level in both. Lastly, marginalization takes place when there is little possibility or interest in maintaining the original culture and little interest in having relationships with others in their new culture (Berry, 1997). Marginalization occurs in countries where cultural loss is enforced and the non-dominant group may not have the choice of selecting the method of acculturation (Berry, 1997). An example is radical groups that protest violently against the government – the participants may be part of the dominant group, but have views that isolate the protestor from dominant group and he/she also lives apart from society (Berry, 1997).

The acculturation strategy can also vary in different settings – a person may be more of a separatist with their family or friends who share the same ethnicity (e.g. speaking in Chinese, upholding traditional Taoist values) and display more integration or assimilation preferences with American friends or at school (e.g. speaking in English only, being opinionated, acting and thinking as an individual) (Berry, 1997).

Berry's theory has also been expanded by other theorists. Padilla (1980) examined two dimensions of attitude toward culture: (a) maintaining one's own culture and (b) seeking out and participating in other person's culture(s) (Padilla, 1980). Padilla & Perez (2003) explains the concept using the terms cultural awareness and ethnic loyalty (Padilla & Perez, 2003). According to the model, cultural awareness is "the implicit knowledge

that people have of their cultures of origin and their host cultures” (Padilla & Perez, 2003, p. 38). Ethnic loyalty assumes that the person is less acculturated because he/she chooses to maintain his/her own culture and scarcely participate in the host culture (Padilla & Perez, 2003). Berry used Padilla’s (1980) concepts in his theory and defined parallel or bi-dimensional conceptualization as the ability of a member of one culture to identify with another culture when he/she balances life in a society that does not understand his/her culture (Berry, 2003). Research on the assessment of acculturation attitudes are used to test the application of Berry’s framework on the two dimensional structure. Acculturation attitudes are the coping strategies taken by acculturating persons within the host culture (Berry & Sabatier, 2011).

**Acculturation strategy outcomes.** Berry’s four acculturation strategies: assimilation, integration, marginalization and separation can help explain the international students’ adjustment to U.S. educational institutions (Berry et al, 1989). The acculturation experience can vary based on the coping strategies with which the person enters the environment (Berry et al, 1987). Acculturation experience is based on education, age, gender and prior experiences with the host culture (Berry et al., 1987). If the person successfully adapts he/she has lower acculturative stress, but if he/she has difficulty coping, acculturative stress is higher (Berry et al, 1987). International students have a high acculturative stress level in comparison to immigrants, which may be a result of their youth or status as college students (Berry et al, 1987). Acculturative stress typically occurs in international students when they do not have supportive networks at the university or membership in supportive student groups (Berry et al, 1987).

Attitudes toward acculturation are significant indications of acculturative stress (Ward & Rana-Deuba, 1999). Acculturation has traditionally been researched for negative psychological outcomes (Ward & Rana-Deuba, 1999). Acculturative stress and difficulty adapting are affected by problems that exist within the person and within the society (Berry, 1997). Acculturative stress can be predicted by the person's attitude regarding acculturation (Ward & Rana-Deuba, 1999). Berry's research states that marginalization and separation are related to high levels of acculturative stress. He explains that integration results in lower levels of stress while assimilation results in moderate stress levels (Berry et al, 1987; Ward & Kennedy, 1994; Ward & Rana-Deuba, 1999). Ward and Rana-Deuba (1999) found that international persons who adopted integration as an acculturation strategy had better psychological well-being (Ward & Kennedy, 1994; Ward & Rana-Deuba, 1999). Those who took an assimilation route had a greater likelihood of sociocultural adaptation due to fewer social difficulties (Ward & Kennedy, 1994; Ward & Rana-Deuba, 1999). Berry suggests that acculturative stress may not be a negative factor and it can vary by individual, gender and education level (Berry, 1987).

Safdar et al (2003) states that immigrants and sojourners maintain their cultural heritage through in-group contact and join the host culture by out-group contact (Safdar et al, 2003). Therefore, the in-group contact of students who share a similar culture and history is as beneficial to the students as interacting with persons of the host culture.

### **The Role of Gender in Acculturation**

Although Chinese international students share a similar heritage, their experiences in the U.S. can vary based on gender. Migration research has traditionally focused on male immigrants (Yeoh et al, 2000). Berry's (1989) initial research found that women did not have different acculturation attitudes than men, but other researchers have that found variations (Berry, 1997; Aycan & Berry, 1996, Carballo. 1994).

There are differences between men and women regarding how they adjust to the new culture. Psychological well-being was displayed in women in the form of pride toward their Chinese heritage (Tsai et al, 2001). Men felt proud of their ability to master English (Tsai et al, 2001). Students that have family conflicts regarding culture displayed higher levels of depression regardless of gender (Greenberger & Chen, 1996; Walton & Takeuchi, 2010). Women from ethnic minority groups in the U.S. face experiences that men and Caucasians have never experienced (Tang & Dion, 1999).

Yin discusses Asiacentric Feminist Theory to reflect experiences of women in non-Western cultures because western feminists view cultural traditions such as arranged marriages as inhumane (Yin, 2009). "The opposition of culture and feminism verbalized in Eurocentric feminist discourse forces non-Western women to choose between forging allies with White women to challenge their own cultural traditions and standing with their men to resist racist or imperialist domination" (Hooks, 1981 as cited by Yin, 2009, p. 76). Female Chinese international students in the U.S. may find that their educational accomplishments are in opposition to their status and opportunities of women in China (Tang & Dion, 1999). Their bicultural experiences may bring about conflict with their family in China based on their adoption of American culture (Tang & Dion, 1999).

In the book *Alpha Girls* (2006) by Dan Kindlon states that women that are no longer inhibited by traditional gender roles (Kindlon, 2006). Women have strong egos, leadership skill, are determined to succeed and motivated to outperform males (Kindlon, 2006). Historically, studies of international students have found that female international students have more adjustment problems than males due to conflict with traditional gender roles (Marville, 1981). Fong and Peskin (1969) found that female Chinese international students reported a higher level of conflict with role expectation than male students (Fong & Peskin, 1969). Traditional role expectations of Chinese international students included childbearing and rearing and excluded education (Fong & Peskin, 1969). Chinese female international students have found that their quest for education is not fully accepted by their culture of origin (Tang & Dion, 1999).

The effect of gender roles is two sided – it can be an acculturative stressor and also can be a strong motivator for adjustment (Lee, Park & Kim, 2009). Asian female international students adjust better to Western culture and gender roles than Asian male international students (Ying & Han, 2006). Asian males have difficulty adjusting to the U.S. because they maintain their traditional patriarchal views of gender roles (Tang & Dion, 1999; Ying, 2002).

### **Ethnic Identity**

Ethnic identity refers to a person's sense of self as a member of an ethnic group (Phinney, 2003). Ethnic identity is fluid and is modified over time (Phinney, 2003). The changes to ethnic identity over time are related to acculturation (Phinney, 2003). A change to ethnic identity as a result of acculturation involves identification of the culture

of origin and adaptation to the host culture (Berry & Sam, 1997; Phinney, 2003).

Acculturation should not be viewed solely as being more or less acculturated in terms of assimilation, but should also account for becoming bicultural (Phinney, 2003). For example, in the present study, Chinese international students may find that their ethnic identity changes over time in relation to the balance of their Chinese and American identity (Phinney, 2003).

Changes in ethnic identity are similar to Berry's acculturation strategies (Phinney, 2003). Bicultural identity is represented in Berry's acculturation strategies as integration. Bicultural identity should not be viewed as a midpoint between the culture of origin and the host identity, but rather identification with both culture (Phinney, 2003). Changes over time occur as the student adapts to new situations, demands and expectations of American culture (Phinney, 2003). Age at the time of immigration and length of time in the new culture are essential factors of acculturation (Phinney, 2003). Acculturative changes over time vary according to acculturation strategy, but include "language acquisition and loss, changing social networks and evolving cultural values" (Phinney, 2003, p. 64). Upon arrival in the U.S., an international student is labeled by his/her culture or origin, in this study, an international student from China (Phinney, 2003). The student may not initially label him/herself this way but may learn over time that this is how he/she is categorized in the U.S. and the student will eventually adopt his/her group membership (Phinney, 2003). In terms of acculturation strategy, a student that feels the need to maintain his/her Chinese ethnic identity and not adopt American values or culture has chosen to separate (Berry, 1997; Phinney, 2003). The person who assimilates decides to deny their Chinese ethnic identity in favor of becoming American (Berry, 1997).

**Language and social interaction.** Language and social interaction are important measures of acculturation and ethnic identity (Berry, 1997; Phinney, 2003). In-group peer interaction strengthens Chinese ethnic identity while more interaction with American culture and constant use of English language leads to a stronger American cultural identity (Phinney, 2003). That is, the more Chinese international students speak English, the less he/she is going to speak Mandarin and socially interact with students who speak his/her native language (Phinney, 2003).

**Age influence on ethnic identity.** Acculturation and ethnic identity can vary by age. Gurung and Mehta (1998) found that Asian young adults described themselves as bicultural while young adults and students in college labeled themselves as American (Gurung & Mehta, 1998). As stated earlier, ethnic identity is fluid – older persons become less assimilated and return to their culture of origin, while those who choose the separation acculturation strategy eventually become more integrated the longer they remain in the culture (Phinney, 2003). In a 1998 study of Chinese immigrants measuring their preference of “being American” (assimilation) or “being Chinese” (separation) there was a bi-polar relationship between both acculturation attitudes (integration) (Tsai, 1998). Immigrants that had been in the U.S. six years or less were more likely to choose integration than immigrants who had been in the U.S. six years or more and more likely than Chinese born in the U.S. (Tsai, 1998).

Moreover, the assimilated Chinese international student may receive negative feedback from elder family members who maintains their Chinese traditions and heritage and are against American values and culture (Phinney, 2003). The student may feel that his/her family is rejecting him/her as a person rather than their newly found American



identity. This is important because in Asian cultures the family is emphasized more than the individual. That is, your family's opinions are more important than maintaining your individual identity. American culture, however, is based on the concept of individualism. Thus, the assimilated person faces adverse reaction from their traditional friends and family and therefore will seek acceptance from their new American friends. Language and friendship are among the most powerful predictors of acculturation strategy in terms of ethnic identity (Phinney, 2003).

### **Measures of Acculturation**

Acculturation research has been troubled by measurement problems and is best understood in a historical context (Rudmin, 2009). Rudmin (2003) found that acculturation theorists are persistently unaware of prior related theories and continue to create new scales instead of utilizing and testing suitable existing scales (Rudmin, 2003). Acculturation research measures are disjointed and have at least seven types of question formats that have only begun to be tested (Rudmin, 2009). The first comprehensive self-report scale of acculturation was created by Elizabeth Howe Chief (1940), a Native American researcher examining attitudes, identity, beliefs and behaviors of assimilation and biculturalism of Native Americans (as cited by Rudmin, 2009). Chief's (1940) scale inspired Paul Campisi (1947) to interview immigrants followed by Weinstock's (1964) study of Hungarian immigrants in the U.S. and Szapocznik et al's (1978) Hispanic Acculturation Scale (as cited by Rudmin, 2009). Elizabeth Sommerlad (1968) created a Likert measure scale of the four acculturation strategies to research Australian Aborigines and Berry (1976) researched Canadian Indians (Rudmin, 2009). Berry and

contemporaries have measured acculturation and acculturative stress via research measurement strategies such as vignettes, assessments of attitudes regarding persons from host country and from country of origin (Dona & Berry, 1994; Ward & Rana-Deuba, 1999) and measurement of the four acculturation attitudes using separate subscales (Kim & Berry, 1985; Ward & Rana-Deuba, 1999). Ward and her colleagues have used the Acculturation Index, an eighteen item survey regarding public and private acculturation (language, family, political ideology) and ideas regarding ethnicity (Ward & Kennedy, 1994; Ward & Rana-Deuba, 1999).

An example of a scale of acculturation for Asian/Asian Americans is the Asian American Multidimensional Acculturation Scale (AAMAS) which measures acculturation in an orthogonal assessment of three cultural dimensions of four specific acculturation domains (Chung, 2006). The AAMAS multi-dimensional approach includes the orthogonal assessment of the Culture of Origin (AAMAS-CO) and to European American culture (AAMAS-EA) and includes a pan-ethnic Asian American cultural dimension (AAMAS-AA) that examines shared Asian American identity and culture (Chung, 2006).

The most commonly used scale in relation to Asian Americans is the Suinn-Lew Asian Self-Identity Acculturation scale (SL-ASIA) (Miller & Speight, 2006; Suinn et al., 1992). The SL-ASIA has been successfully used with Asian Americans of all ages (Miller & Speight, 2009). The SL-ASIA was modeled after The Acculturation Rating Scale for Mexican Americans, ARSMA-II, a successful Hispanic assessment scale in 1987. The SL-ASIA was validated in 1992 in relation with Asian American college students (Suinn et al, 1992). In 1995, SL-ASIA was administered to Asian Americans and

Asians living in Singapore to determine the influence levels of acculturation and provide validation of the scale cross-culturally (Suinn et al, 1995). The 1995 study found that Singapore Asians had a higher level of Asian identity and Asian Americans identified more with Western culture (Suinn et al, 1995). The SL-ASIA is based on a uni-linear concept of acculturation that associates an increased adherence to mainstream culture with a reduction in the retention of a person's culture of origin (Miller & Speight, 2009). The SL-ASIA allows the respondent to rate him/herself as "very Asian," "bicultural," or "very anglicized" (Miller & Speight, 2009). This measure is also tailored towards Asian Americans, not international students.

Critics of the SL-ASIA argue that is used to assess both international Asian students and Asian Americans, which are two distinct groups that are not properly discussed by the literature (Gu, 2007). Gu (2007) criticized SL-ASIA because it does not examine feelings of participants who feel lost in the host and native culture (Gu, 2007). Gu also stated that the SL-ASIA has several items that do not relate to international Asian students since the questions refer to generational status (Gu, 2007). SL-ASIA item number six is provided as an example: "What was the ethnic origin of the friends and peers you had, as a child up to age 6?" and were the friends "almost exclusively Asians, Asian Americans" or "almost exclusively Anglos"? item number twelve inquires about generational status (Gu, 2007, p.15). Also, Gu points out that acculturation instruments such as SL-ASIA focus on behavior such as language use and food adjustment instead of value acculturation that may take longer to incorporate (Gu, 2007).

There is not a standardized assessment of measuring the acculturation of international students from Asian countries. Researchers have joined the fray and created

their own assessments. Gu (2007) created the Acculturation Scale for Asian International Students (AS AIS). The AS AIS was created because there were no scales that measured acculturation in international students from China (Gu, 2007). The scale that was used for the current study is Gu's because it applied directly to Chinese international students and to Berry's four measures of acculturation as a bi-cultural scale that determines a person's preference of culture. Gu validated her scale for her dissertation research.

### **Summary**

Applying Berry's acculturation strategies in relation to the experiences of Chinese international undergraduate students at SU can help us better understand the experiences and adjustment of these students in the U.S. and at SU. The more we understand international students and their acculturation to U.S. institutions the more we can implement international student involvement and interactions with domestic students, the better we can respond to reduce acculturative stress and increase their successful adjustment. This in turn will lead to academic success. Universities must improve their strategies for bringing international and domestic students together, academically and socially (Redden, 2014). Astin's theory of involvement and Allport's "contact hypothesis", state that exposure to different cultures can reduce prejudice, particularly when there is a common goal (Redden, 2014).

Helping international Chinese undergraduate students adjust and succeed academically is also important because enrolled international students share their experiences with prospective international students in China. The students become ambassadors and inform prospective students that their adjustment to life in the U.S. was

supported by SU staff, faculty and administrators who empathized with their struggles as international students. Every student needs a proper support network, which begins with strategic implementation for international students at the administrative level. As a Tier One institution SU should base its international student retention structure on a theoretical framework specific to the SU demographic.

## **Chapter III**

### **Methods**

International college students typically have difficulty adjusting to college in the U.S. They must acclimate themselves to the culture of a different environment. They are at times expected to blend into the culture seamlessly and intuitively pick up on unspoken cultural norms and social practices. Acculturation plays an important role in their adjustment. The purpose of this chapter is to describe the procedures for answering and testing the following research questions and explain the mixed methodology used in this study. The mixed methods design allowed the researcher to understand the experiences of international undergraduate students from China at Soraya University (SU).

#### **Research Method Appropriateness**

A mixed method approach was the best strategy to research acculturation and adjustment of undergraduate, international students from China. The qualitative research method was used to document actual stories of international students. The qualitative research method included information about individual and academic experiences in the U.S. The quantitative research component provided general information and the qualitative portion included information about individual experiences of undergraduate, international students from China at SU. The students provided descriptive answers to the research questions.

## Quantitative Research Design

The goal of the research study was to discover how acculturation affects international students from China studying the U.S. based on gender, academic performance and time spent in the U.S.

## Research Questions

- **Research question 1:** What is the current level of acculturation of international undergraduate students from China studying at a Soraya University. ?
  - *Hypothesis 1:* There will be a direct relationship between the years in the U.S. and the level of acculturation. That is, the longer the student has been in the U.S., the higher their level of acculturation to the U.S. culture will be.
- **Research question 2:** Does acculturation vary significantly by gender?
  - *Hypothesis 2:* Female international students from China are predicted to have a higher level of acculturation than males from the same countries.
- **Research question 3:** What is the impact of acculturation on academic performance at Soraya University (SU)?
  - *Hypothesis 3:* There will be a direct relationship between acculturation and academic performance. That is, higher levels of acculturation will be associated with higher self-reported GPA.

## Participants and Setting

**Participants.** The study participants were required to be at least 18 years or older to participate, attend SU as a full-time or part-time international undergraduate student,

born and educated in China currently visiting the U.S. on an international visa. There are 173 eligible participants of this study from China according to the International Student & Scholar Services Office (ISSSO) website (ISSSO, 2015). Twenty-six undergraduate Chinese students live on campus (ISSSO, 2015). There is no information available on time (years/months) spent in the US or the number undergraduate, international students from China, classified by gender on the ISSSO website.

**Setting.** The proposed quantitative study surveyed international undergraduate students from China attending Soraya University (SU) in the summer of 2015. Soraya University is a university with a strong international community. SU is among the Top 25 institutions with greatest international enrollment in the United States. SU was founded in 1927 in the southwest United States. SU is a Tier-One research university with students across the U.S. and from over 137 nations. Soraya University recruits internationally and has nearly 40,000 students and close to 300 undergraduate and graduate programs (SU, 2015).

### **Techniques and Procedures**

This study used questions as the basis of the interviews, existing documentation, data analysis, and a recording device to collect research findings. The proposed study employed survey methodology and qualitative interviews to test the proposed hypotheses. The researcher recruited international, undergraduate, SU students from China to participate in the study. The quantitative survey questions were only available online on the Survey Monkey survey collection website. The participants completed the survey via the Survey Monkey website. The Survey Monkey website collected the data and provided



a tally of the number of participants that have completed the study. The data were retained and were analyzed using SPSS 23. Survey results were made available in the researcher's dissertation.

A single quantitative survey was provided to each recruitment group. The survey was only available online and in English only. Potential participants were recruited using three methods. The researcher recruited students with the assistance of SU International Student & Scholar Services Office (ISSSO) and the Center for Asian American Studies. The ISSSO and the Center for Asian American Studies sent the recruitment email to students from China. The students opened the recruitment email and they were directed to the Survey Monkey online survey website.

The second recruitment strategy was through SONA. SONA is research software used by the university to conduct online surveys. The SU SONA System allows students to take SU surveys for possible extra credit at their professor's discretion. SONA allowed the survey to be directed to the target audience by setting parameters that ensured that only international students from China were allowed to participate. The student completed the survey and the surveys were stored in the SONA database. The researcher waited until the surveys had been completed to interpret the information. The information was transferred to SPSS by the researcher.

The third recruitment strategy was through the Student Organizations at SU. The two student organizations on campus are the Chinese Student Association and The Chinese Students & Scholars Association (CSSA). The CSSA was the group that participated in both the survey and face-to-face interview. The student organizations provided the recruitment email to its membership and the students were directed to the

Survey Monkey online survey through the link in the recruitment email. It was the same survey presented to the students on SONA and provided to those recruited by ISSSO and the Asian American Studies Office. The student organizations added the survey on Facebook. The student organization suggested that Facebook may supplement the responses to the email. The information on Facebook was identical to the recruitment email. Facebook and the recruitment email directed participants to Survey Monkey.

The Survey Monkey online survey used Gu's (2008) Acculturation Scale for Asian International Students (ASAIS) questionnaire as the source of the quantitative survey questions used for this research. The survey was available to participants in recruitment emails directing them to the online survey collection website called Survey Monkey. The survey is currently loaded onto Survey Monkey,

The student opened the researcher's internet webpage on Survey Monkey embedded in the email message from the researcher. A draft of the proposed recruitment email can be found in Appendix B and participant consent form in Appendix A. The student read the consent form upon opening the website. The student was instructed that upon opening the website to the study he/she had agreed to participate. After reading and agreeing to consent by entering the study, there was a secondary agreement once the student clicked the "next" button to continue to the first page of the survey on Survey Monkey. The participant read the Anonymous Research information on the first page of the online survey. The information detailed the participant's rights and purpose to the study. The demographic information was presented on the last page of the survey. Participants provided the following demographic information: gender, length of time in the U.S., and self-reported GPA. Students provided their first name and last initial as a

means to connect responses to the qualitative questions later in the study. Names are kept confidential and only known by the researcher and faculty advisors. However, pseudonyms will be published to identify responses of individual students.

**Researcher.** The researcher has worked at Soraya University for over 12 years and is familiar with acculturation of college students in the host culture. The researcher does not have formal experience with acculturation of international students from Asian cultures but has consulted Dr. Yali Zou, her dissertation co-chair to further her knowledge of relevant issues presented by the research.

### **Quantitative Instrument**

The quantitative instrument is the Acculturation Scale Asian International Students (AS AIS). The AS AIS examined the acculturation strategies of international students in particular where other studies consider Asian Americans and American Born Chinese (ABC) in general. Gu's AS AIS applied directly to Chinese international students and to Berry's (1997) four measures of acculturation as a bi-cultural scale that determines a person's preference of culture. Gu developed her instrument based on Berry's theory and used a focus group to validate her questions. The focus group was conducted in Chinese and translated into English (Gu, 2008). Three Asian female international counseling psychology doctoral students examined the focus group data and sorted the questions by students having difficulties living the U.S. and also examined their comments about adjusting to life in America (Gu, 2008). Gu administered her instrument in English only because international students are required to enter the institution with

English language proficiency (Gu, 2008). In the current study, the survey used the ASAIS in English only.

### **Acculturation Scale for Asian International Students (ASAIS)**

The Acculturation Scale for Asian International Students (ASAIS) was developed by Gu (2008) to measure Berry's acculturation strategies. The study interviewed participants via email for an online survey. The initial study, using the 49 item scale, surveyed 259 undergraduate and graduate international students and of those 259 students, 100 students completed the entire questionnaire: "India (n=39), China (n=35), Taiwan (n=18), Korea (n=13), and Japan (n=2); 1 from other Asian country and 2 did not indicate where his/her country of origin" (Gu & Pistole, 2008, p.6).

**ASAIS subscales.** Gu (2008) initially created a 49-item scale but found that there were only 33 items that were significant after she administered the scale in a small pilot study (Gu, 2008). Items are answered on a seven point Likert type scale ranging from "1"(strongly disagree) to "7" (strongly agree) and can be found in Appendix F (Gu, 2008). A higher score indicates participant agrees with the statement at a greater level and with a certain acculturation attitude (Gu, 2008). Examples of the questions are grouped as follows:

#### **Assimilation**

"I prefer American values more than Asian values"

"I am happier now that I am in the U.S."

### **Integration**

“I am able to make good friends with persons from my own and American culture”

“I have been academically successful in the U. S. and my own country”

### **Separation**

“I prefer to be friends of people from my own country when I am in the U.S.”

“I would raise my children in traditional Asian ways if I were a parent”

### **Marginalization**

“I do not ask Americans or people from my own country for help”

“I often feel like an outsider” (Gu, 2008, p. 51-52).

The 33-item ASAIS internal consistency yielded “good reliability on each of the subscales and indicated that each of the subscales measure a single uni-dimensional construct” (Gu, 2008, p. 60). Convergent validity of the ASAIS was based in relation to The Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA) (Suinn et al, 1992). “For convergent validity (H2), Pearson correlations computed on the ASAIS subscales, Integration, Assimilation, Separation, and Marginalization, and 21-53 item SL-ASIA (Suinn et al., 1992) revealed moderate associations for Integration,  $r = .36$ ,  $p < .01$ ; Assimilation,  $r = .42$ ,  $p < .01$ ; and Separation,  $r = -.44$ ,  $p < .01$ . The ASAIS Marginalization was not significantly associated with the SL-ASIA,  $r = .14$ ,  $p > .05$ ” (Gu, 2008, p. 52-53). Gu (2008) examined construct validity using the SL-ASIA because it is the most commonly used scale in relation to Asian Americans (Miller & Speight, 2006; Suinn et al., 1992). The SL-ASIA had been successfully used with Asian Americans of

all ages (Miller & Speight, 2009). The SL-ASIA was modeled after The Acculturation Rating Scale for Mexican Americans, ARSMA, and a successful Hispanic assessment scale in 1987 and validated in 1992 in relation to Asian American college students (Suinn et al, 1992). In 1995, SL-ASIA was administered to Asian Americans and Asians living in Singapore to determine the influence levels of acculturation and provide validation of the scale cross-culturally (Suinn et al, 1995). The 1995 study found that Singapore Asians had a higher level of Asian identity and Asian Americans identified more with Western culture (Suinn et al, 1995). The SL-ASIA was based on a uni-linear concept of acculturation that associated an increased adherence to mainstream culture with a reduction in the retention of a person's culture of origin (Miller & Speight, 2009). The SL-ASIA allowed the respondent to rate him/herself as "very Asian," "bicultural," or "very anglicized" (Miller & Speight, 2009). This measure was also tailored towards Asian Americans, not international students.

The AS AIS has acceptable "internal consistency, two week test-retest reliability, convergent validity, and discriminant validity, but had lower marginalization test-retest reliability" (Gu & Pistole, 2008). Gu (2008) conducted "test-retest reliability for the 33-item AS AIS factors was moderate to high: .66 for Separation, .70 for Integration, and .83 for Assimilation but low at .33 for Marginalization. The low marginalization may have been due to confusion or being unclear about their status and providing conflicting responses (Gu & Pistole, 2008). Also, Cronbach alpha internal consistency analyses were conducted on the subscales of the 33-item AS AIS: Integration = .83, Assimilation = .82, Separation = .83 and Marginalization = .89 (Gu, 2008, p. 52).

In Gu's (2008) study, her Research Question 2 inquired about the "natural groupings of Asian international students in terms of their acculturation status" (Gu, 2008 p. 32). The cluster analysis results of the 49 item ASAIS found that participants formed four groups: "Integration-oriented group: n=20; feeling mastery living in two cultures; Assimilation-oriented group: n=33; trying hard to assimilate to the U.S. culture; Separation-oriented group: n=31; maintaining the original culture heritage and spending less effort in getting to know the host culture and people; Marginalization-oriented group: n=16; feeling lost and rejected and not being supported by either the host or original cultures while living in the U.S." (Gu, 2008, p. 53; Gu & Pistole, 2008, p.15). The above groupings were derived by Gu (2008) using Berry's assimilation literature, they reflect the groupings of Berry's acculturation construct.

### **Data Analysis for Gu's ASAIS**

Data analysis for the ASAIS included Gu's method of adding the scores from the items for each subscale to obtain a total for the subscale and then dividing the sum by the number of items to receive a mean subscale score. The mean subscale score indicated the participant's acculturation group (Gu, 2008). The acculturation group in the present study was determined by Gu's scoring technique using the mean subscale score. Gu's dissertation did not provide information on cut-off scoring for group inclusion or how to interpret the mean score.

**Research Question 1:** What is the current level of acculturation of international undergraduate students from China studying at a Soraya University?

**Hypothesis 1:** There will be a direct relationship between the length of time in the U.S. and the level of acculturation. That is, the longer the student has been in the U.S., the higher their level of acculturation to the U.S. culture will be.

For hypothesis 1, an Independent Sample *t* Test at the bivariate level was used. Length of time in the U.S., measured by years in the U.S. was a continuous variable by acculturation score. The acculturation group was determined by Gu's scoring technique using the mean subscale score.

**Research Question 2:** Does acculturation vary significantly by gender?

**Hypothesis 2:** Female international students from China are predicted to have a higher level of acculturation than males from the same countries.

A Chi-square test was used for Research Question 2 and Hypothesis 2. The Chi-square test sought association of acculturation according to gender.

**Research Question 3:** What is the impact of acculturation on academic performance at Soraya University (SU)?

**Hypothesis 3:** There will be a direct relationship between acculturation and academic performance. That is, higher levels of acculturation will be associated with higher self-reported GPA.

A correlation was used for Research Question 3 and Hypothesis 3. The primary IV of acculturation strategies was based on the four acculturation groups. The student's GPA ranged from 3.62 to 4.0 cumulative and served as the dependent variable. The qualitative research enhanced the information gained from the study. Details about the qualitative study are provided below.



## Qualitative Research Design

**Design appropriateness.** The current study used case research method. Case study method addresses contextual conditions that maybe important to the phenomenon of the study (Yin, 2003). The case study inquired about the international student's overall, retrospective view of his/her life as a student at SU. Case studies received information from participants and data regarding people and events in the study. Case study research seeks to understand the issue or problem as a specific example of the phenomenon (Creswell, 2007). Case study examines an issue in one or more cases within a setting or context (Creswell, 2007). Case study is not a methodology, but decision of what to study (Creswell, 2007). This type of research observes a case through detailed accounts, data collection and multiple sources such as interviews, observation, use of audiovisual materials and reports (Creswell, 2007).

Yin (2003) defines case study as an empirical inquiry that examines a contemporary phenomenon within real life usually where there are no clear boundaries between the phenomenon and the context (Yin, 2003). Case study research should be used to cover contextual conditions (Yin, 2003). Case study inquiry is appropriate when there are more variables than data points (Yin, 2003). This approach relies on multiple sources of evidence causing the data to converge in a triangulating manner (Yin, 2003). It is beneficial to have a theory to guide data collection and analysis (Yin, 2003).

Yin (2003) distinguishes case study strategy from other forms of qualitative research because while case study follows ethnographic methods by satisfying two conditions: (a) the use of face-to-face, detailed observation by the researcher and (b) avoidance of prior commitment of a theoretical model (e.g. grounded theory) case study

is not limited to these parameters (Yin, 2003). Case study research is used to explain real life situations that would not be sufficiently explained by a survey or experiment (Yin, 2003). This research is used to describe interventions in the context of real life and/or to provide descriptions of certain topics in an evaluation, explore situations that have no clear singular outcome or as a meta-evaluation (Yin, 2003).

Steps for case study research include the appropriateness of the research problem, use of multiple sources of data, and interpretation of the meaning presented by the data collected (Stake as cited in Creswell, 2007, p.74). There are five components of case study design: questions, proposition, and units of analysis, relating the data to the proposition and interpreting the findings (Yin, 2003). Embedded analysis of the case is more appropriate because the international student's interaction with academics is only a partial view of his/her purpose at the institution (Creswell, 2007). Embedded analysis also provided detailed description of the case including history of the case, chronology of events or a day-by-day account of activity (Yin, 2003). After the research it provides "uncontested data" that may explore analysis of special key issues which aid in understanding the case (Creswell, 2007).

The qualitative portion of this study enhanced the information gathered from survey research. The qualitative research method documented the actual stories of Asian international undergraduate students their adjustment to SU. The qualitative case study research method provided insight into the international student's experiences in context rather than in relation to a specific variable. The responses of students were more descriptive than quantitative surveys because it sought to discover instead of confirm (Creswell, 2007).

## **Research Design**

The qualitative instrument used in the present study is the questionnaire/interview guide. The qualitative interviews were conducted after the quantitative survey was administered to look for themes and questions that may exist after examination of quantitative survey data and to supplement the quantitative research questions below. The qualitative face-to-face interviews provided for a richer understanding of why students who were surveyed gravitated to a particular acculturation group. The qualitative student interviews allowed the researcher to have additional information to draw conclusions. The qualitative documents are Demographic Questionnaire is included in Appendix C, the Interview Script in Appendix D and the Informed Consent form in Appendix E.

## **Participants and Setting**

**Participants.** The participants for the qualitative portion of the study, six volunteers took the quantitative survey. Students who participated in the face-to-face interviews were asked in the recruitment email to contact the researcher at her email address upon completion of the quantitative survey. The six participants were based on available volunteers not on country of origin.

**Setting.** The setting for the face-to-face interviews was the Center for Asian American Studies. The Center for Asian American is located centrally on campus and is accessible to students. The face-to-face interviews were conducted in a small group in the conference room to maintain privacy and confidentiality.

## **Techniques and Procedures**

The participants were interviewed using the Interview Script located in Appendix D below. The interview was recorded with the participant's permission. Handwritten notes were taken to capture non-verbal cues such as gestures and facial expressions if present. The interview lasted approximately one hour for each of the six participants. The interviews took place within two weeks of the quantitative survey administration based on participant availability. The notes and interview recordings will be stored in Dr. Cathy Horn's office upon completion of the study.

## **Qualitative Instrument**

The Qualitative Instrument is the Interview Script. The Interview Script inquired about the participant's background, decision to study in the U.S., experiences in the U.S., questions about their heritage and transition to life and school in the U.S. The questions are open ended-questions that allow the participant to answer freely without the confines of a survey question.

### **Examples of questions in the Interview Script include:**

What does it mean to be from your ethnicity? How would you summarize it for someone like me that is not of the same heritage?

How do you think that Americans perceive students from your culture?

How your culture similar or different from being American?

How would you classify yourself? Chinese? Or American? Or Chinese-American?

Neither?

Are you intending to return to your homeland after you graduate?

Have your ideas of gender roles for males and females changed since you arrived in the U.S.?

Do you speak English or your native language more frequently?

Do you feel you have control of your academic situation in the U.S.?

### **Data Analysis**

Research methods and techniques used are triangulation, patterns, member checking, and use of multiple realities and perspectives. Triangulation was used when the participant provided information about their experience as an undergraduate, international student in the face-to-face interview and responses were compared to their answer on the online survey. Also the respondent's answers were compared to other online and face-to-face participants.

### **Summary**

The research conducted included quantitative methodology in the form of a survey. The qualitative face-to-face interviews provided for a richer understanding of why students who were surveyed gravitated to a particular acculturation group. The qualitative student interviews allowed the researcher to have additional information to further understand the quantitative data. Using information gained from the mixed methodology provided a more detailed account of the experiences of international undergraduate students from China.

## **Chapter IV**

### **Findings**

This chapter provides results of a mixed methodology approach to measure international students' adjustment at Soraya University (SU). The current research study explores acculturation groups in terms of gender, academic performance and time spent in the U.S. The data collection strategies conducted included an online survey and qualitative data through student interviews to provide insight into the quantitative data. The quantitative data was examined using an Independent sample *t* Test at the bivariate level to consider if time in the U.S. impacts acculturation. The Chi-square test was used to determine if acculturation group varies by gender. Lastly, a correlation provided an examination of acculturation group and academic performance measured by self-reported GPA. This study also provides analyses of student interviews to enrich the quantitative data. First, the quantitative findings will be discussed and then the qualitative data.

Table 1 provides demographic data of survey participants who completed all questions on the online survey. In general, the study participants for the online survey were nearly equally divided among gender. The participants were female ( $n=19$ , 51%) and male ( $n=18$ , 49%); the majority of the students.

#### **Quantitative Sample Characteristics**

The instrument used in the quantitative portion of the present study is the Acculturation Scale Asian International Students (ASAIS) developed by Gu (2008) to measure Berry's acculturation strategies. Gu's ASAIS applies directly to Chinese

international students and to Berry's (1997) four measures of acculturation as a bi-cultural scale that determines a person's preference of culture (Berry, 1997). The four measures of the ASAIS are Integration, Assimilation, Separation and Marginalization. The three hypotheses presented in relation to acculturation are length of stay in U.S., gender, and academic success measured by higher GPA are analyzed below.

Results relating to length of time (in month) in the U.S. Hypothesis 1 stated that there would be a direct relationship between length of time in the U.S. and level of acculturation. Hypothesis 1 postulated that the longer a student has been in the U.S. the more likely they would belong to the high acculturation group (Integration or Assimilation group) they will report. A person with low acculturation would be focused on maintaining their cultural practices and language (Organista, Marin & Chun, 2010).

In Gu (2008) study items are answered on a seven point Likert type scale ranging from "1"(strongly disagree) to "7" (strongly agree) (Gu, 2008). A higher score indicates participant agrees with the statement at a greater level and with a certain acculturation attitude (Gu, 2008). The cluster analysis results of the 49 item ASAIS found that participants formed four groups: "Integration-oriented group: n=20; feeling mastery living in two cultures; Assimilation-oriented group: n=33; trying hard to assimilate to the U.S. culture; Separation-oriented group: n=31; maintaining the original culture heritage and spending less effort in getting to know the host culture and people; Marginalization-oriented group: n=16; feeling lost and rejected and not being supported by either the host or original cultures while living in the U.S." (Gu, 2008, p. 53; Gu & Pistole, 2008, p.15).

The above groupings were derived by Gu (2008) using Berry's assimilation literature, they reflect the groupings of Berry's acculturation construct. "Creating the 2x2

matrix of acculturation categories requires classifying individual as high or low on receiving-culture acquisition and on heritage-culture retention” (Schwartz et al, 2010, p.4). “The primary methods of classifying individuals as high or low in categories have involved using a priori values, such as sample means (e.g. Giang & Wittig, 2006) or midpoint on the range of possible scores (e.g. Coatsworth et al, 2005), as cut points” (Schwartz et al, 2010, p.4).

The ASAIS groups were categorized as high acculturation and low acculturation for this study. The groups were combined because Integration and Assimilation (high acculturation) and Separation and Marginalization (low acculturation) because prior research have used the 2x2 matrix of acculturation (Schwartz et al, 2010). Data analysis for the ASAIS includes Gu’s method of adding the scores from the items for each subscale to obtain a total for the subscale and then dividing the sum by the number of items to receive a mean subscale score. Students were placed into an acculturation group based on their scores. The present study followed the same method in categorizing participants in groups based on their response to survey items.

Hypothesis 1 used the *t*-test for analysis. The *t*-test examines the null hypothesis using the population mean when the standard deviation of the population mean is unknown and the sample standard deviation is used to estimate (Frankford-Nachmias & Leon-Guerrero, 2015). An independent-samples *t*-test was conducted to compare the length of stay in the U.S measured in months and the student’s level of acculturation based on the high and low acculturation grouping described above.

Among undergraduate, international students from China at Soraya University, Hypothesis 1 was not supported. There is no difference between length of stay between



the low acculturation group and the high acculturation group with regard to their length of stay (in months)  $t(36)=-.405$ ,  $p=.688$ . The low acculturation group had a length of stay of  $M=50.7$ ,  $s=40.5$  and the high group had length of stay of  $M=45.4$ ,  $s=23.6$ . Table 1 below provides the group statistics for the  $t$ -test.

Table 1

*Group Statistics t-test*

Length of Stay	Acculturation	
	Low	High
N	27	11
Mean	50.67	45.36
Std. Deviation	40.48	23.59
Std. Error Mean	7.78	7.11

Table 2

*Independent Samples t-test*

Levene's Test	t	df	Sig (2 tailed)	F	Sig.
.176	.677	.405	36		.688

**Results relating to gender.** The second hypothesis examined the level of acculturation in relation and the student's gender using a Chi-square test. Hypothesis 2 inquired about acculturation and gender. The acculturation levels are based on Berry (1997) acculturation framework grouping of assimilation, separation, integration and marginalization (Berry, 1997). The prediction was that female international students from China would have higher acculturation levels than males. Hypothesis 2 was not supported by the data. There is no significant association in gender regarding reported acculturation. The results are not significant,  $X^2(3, n= 37) = 4.243, p=.236$ . Table 3 provides the results of the Chi-Square test.

Table 3

<i>Chi-Square Tests</i>			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.243 <sup>a</sup>	3	.236
Likelihood Ratio	4.408	3	.221
Linear-by-Linear Association	2.273	1	.132
N of Valid Cases	37		

The results of the Chi-square test indicate that the gender groups are statistically the same when it comes to their reported acculturation. The proportion of women who reported separation, coded 2, were 68.4% of females and represent 65% of the separation group. A greater percent of females were in the separation group than males. The findings

were greater than the hypothesized expectation that females would have a higher percentage of participants in the high acculturation group (integration or assimilation). Females were less likely to choose an integration acculturation strategy. The data reflected 20% of females selected questions about Integration and 33% of females favored assimilation. Male and female students scored highest on the acculturation levels of separation.

### **Results relating to academic performance**

The third hypothesis used a Point-biserial correlation coefficient was computed to assess the relationship between the student's academic average measured by self-reported cumulative GPA in relation to Acculturation group. The acculturation levels are based on Berry (1997) acculturation framework grouping of assimilation, separation, integration and marginalization (Berry, 1997). Hypothesis 3 stated that there would be a direct relationship between acculturation and academic performance. The student's self-reported GPA provided academic performance. Hypothesis 3 was also not supported. The GPA of the participants did not have high variance. The researcher separated the GPA into high and low GPA groups. The average GPA of the participants was 3.62. The two GPA group consisted of the high group  $GPA \geq 3.63$  and the low group  $GPA \leq 3.62$ .

There was no relationship between GPA and acculturation  $r(37) = .053, p = .379$ . The results are not significant. The correlation statistics is too close to 0. The relationship is positive, so as GPA goes up Acculturation goes up very slightly  $r = .053, r^2 = .3\%$ . The two variables share .3% common variance. The Coefficient of Determination (CoD) tells

us how much of one variable can be explained by the knowledge of the 2<sup>nd</sup> variable (Frankford-Nachmias & Leon-Guerrero, 2015).

### **Qualitative Interview Data and Data Analysis**

There were six international students interviewed in the qualitative portion of the study, Amber, Judy, George, Kevin, Tom and Bowen. The transcriptions from the interviews were organized into categories and then coded into themes. The three themes that emerged from the interviews were the research questions of the quantitative portion of the study (1) length of stay, (2) acculturation and gender (3) education. Exploration of each theme will be provided in detail below.

### **Interview Questions**

The interview questions were created to reflect themes of the quantitative instrument, the Acculturation Scale Asian International Students (AS AIS). The AS AIS is based on Berry (1997) four acculturation strategies: Assimilation, Integration, Marginalization, and Separation.

### **Examples of questions in the Interview Script include:**

#### **Length of stay interview questions:**

- How much time IN TOTAL have you spent in the U. S.? Include the time you have been here for your studies, but also any previous time you spent in the U. S. studying, traveling, working, or for any other reason. Please give your response in MONTHS.
- Were you in the U. S. before beginning your undergraduate courses?

- If so when?
- For what reason?
- Where is “home” for you?
- Are you intending to return to your homeland after you graduate?

**Academic performance interview questions:**

- Do you enjoy school?
- What is your major? How many years have you been at the university?
- How has it been to start school in a new country?
- In what ways have your academic experiences in the U. S. been similar to those in your country?
- In what ways have your academic experiences in the U. S. been different than those in your country?
- Do you feel you have control of your academic situation in the U. S.?
- What obstacles have you overcome adjusting to life in the U.S.?

**Gender interview questions**

- Have your ideas of gender roles of males and females changed since you arrived in the U.S.?
- Have your family noticed changes in your behavior since you have studied in the U.S.?
- Do you have a significant other (boyfriend, girlfriend, life partner)?
- How does your experience in the U.S. impact the way you feel about yourself?

## Themes

The transcriptions of the interviews were organized into categories by themes presented and noted by student quotations. Three themes emerged: length of stay in the U.S., acculturation and gender, and education.

**Length of stay.** Length of stay in the U.S. was a self-reported measure on the demographics questionnaire. Bowen has spent the least amount of months in the U.S. at 42 months, Tom arrived in America 48 months ago, George and Kevin came separately 60 months ago, Amber and her family moved 66 months ago and Judy has been in the U.S. the longest at 72 months. Judy's family moved here 10 years (120 months) before she arrived at SU. As in the quantitative study, length of time in the U.S. is an important measure of gaging adjustment to life in the U.S.

Judy and Tom moved with their family to the U.S. prior to attending Soraya University. Tom's father came to the U.S. to pursue a law school degree in 1999-2000 and then the family moved back to China. Tom remained in China and completed school there and moved back to the U.S. to pursue his college degree. Judy's family moved while she was in High School. Judy completed High School in the U.S.

Each of the six participants interviewed consider themselves Chinese, not Chinese-American, or American, even though most have been in the U.S. 5 years (60 months). The students' perception of home was not changed by the amount of time they have been in the U.S. Amber said "Houston is temporary home." The participants consider China home and all go home as often as they can afford, usually in the summer. Judy said "China, my grandparents still live there, they [sic], I lived with them over 17 years, so it is my first home" Tom agreed "China, I was educated and growed [sic] up

there, so I got used to the culture there, so when I first come it was okay with me but I still feel like China was my home.” The students said they are uncertain about returning to China after graduation. George said “it depends on job opportunities” and Bowen agreed. Kevin would prefer to remain in the U.S. if he can get a work visa. Amber is still undecided.

Length of stay in an educational environment is related to the bonds that students form through student involvement. Factors like joining a student group on campus determined if students remained at the institution or returned home (Astin, 1984). Length of stay is related to Berry’s concepts of integration and separation. The student finding those who have similar backgrounds and interests aids integration of an international student into the university culture. Separation occurs as well if the student decides he/she prefers to remain primarily with those of their own ethnic culture. Another factor in the separation acculturation strategy in this study is the importance of finding employment opportunities. The dilemma is that the participants have to find employment before their F-1 student visa expires and are not aware of the services of the Soraya University (SU) Career Services office. The Career Services office and ISSSO should be proactive in creating career fairs and employment opportunities for international students. There should be career fairs for companies specifically looking for international applicants because some companies may not be able to hire an international student due to U.S. Department of Labor stipulations. International students at a typical university career fair may face rejection due to international status not qualification.

Students can benefit from the experience of other international students who are members of an ethnic student group. Each of the participants emphasized the importance

of student groups. The consensus was that international student groups on campus are lifelines to students entering the U.S. for college. Tom stated he received help when he first came to the U.S. from “One of the chairs of the Chinese Student and Scholars student organization.” “During summer I volunteer to pick the new students up before when new student orientation is here and some of the students have relatives here so they don’t have problems getting there but others are, maybe like me when I first come here, I know nothing here but by sharing our experience and sharing resources helps a lot.” Judy is not a member of the International Student group but is a member of the professional organization. Amber is not a member of a student group. Kevin was a member of Chinese Students and Scholars three years ago. Two of the participants have been officers in the student group previously and the other is still a member.

## **Gender**

Acculturation strategies are reflected as well based on the participant’s perception of gender roles. Tom said that cultural identity is not an issue for male Chinese students in America “You are adults so it is hard to change, my family doesn’t notice different.” In reference to the question about dating preferences, Tom said he is open to dating outside his culture “It depends, the food is the same for Chinese, and with non-Chinese I do not want to eat pizza every day. It is okay sometimes but that would be a problem.” “But right now I don’t have a specific girl but just enjoying the college life.” Kevin stated that he “does not feel limited in who (sic) I date.” George said “I came to the U.S. as a young person, I making better decisions now” “At first, I only cared about having fun but now I think about the future.”



The females in the study adopted Berry (1997) Separation view. Judy said “when I came here I was already 18 so I had an idea of marrying Chinese.” Amber stated “I never discussed with my Mom, but I know she has concerns about me getting a boyfriend from another country because how can they communicate with them, that is the biggest issue.” Amber said “I don’t think my family sees a difference when I go home because I try to act normally.” “And, I am very relaxed at home, my Mom says you need to pick up your things and clean the house and I say I am on vacation, I don’t live here.” Amber said her Mom says “Can’t you lose weight? You need to do exercise and I say I just got here.” “I tell her that all I can eat is in college is hamburgers.”

Amber said that she has changed “my dressing style” then looked at the men in the interview as they gave her a knowing look and Amber said “What?!” and everyone laughed. The researcher interpreted their non-verbal reaction as an agreement that she changed her dressing style significantly since coming to the U.S. She continued saying that “In China, the dress is very traditional and we cover every important part of our body but in here it is open and free and I really enjoy it here”! “When I went to purchasing a swimsuit here I was always looking for a one piece swimsuit but everyone here wears bikinis but if you wear a bikini in China people will look at you like you are weird.” The researcher asked if there is any comment Judy had about being a woman in the U.S. and Judy gave the example of “Ear piercing when I write home to my Chinese friend they say you are getting bad, you are bad.” “My parents were okay with it though.”

The women in the study were concerned about what their parents and friends thought about their behavior. The men were not. The men were open to express themselves in the U.S. and to find themselves in the new cultural environment by dating

outside their culture. The women understood that the expectation of their family was that they would marry and date Chinese, even when it was not openly discussed.

**Academic performance.** Acculturative stress is lessened in students who have a high level of formal education or who do well academically (Schwartz et al, 2010).

Students in the present study had an easy transition to school in America because they had the basic skills required to do well academically. The participants in each group provided similar experiences about education in the United States.

Amber, Bowen, George, Kevin, Judy and Tom enrolled in language classes upon arrival in the U.S. Their length of stay in the U.S., similar to those in the quantitative study, is greater than the months enrolled at Soraya University. Amber arrived in the U.S. in 2010 to begin language study to learn to read, speak and write in English. As stated in Chapter 2, international students must be able to pass an English proficiency exam before enrolling in most colleges or universities in the U.S. The student is required to assimilate academically to U.S. culture by learning English prior to enrolling in college. Kevin also stated he arrived in the U.S. and began intensive English courses a year before attending college. Bowen came to American in December 2011 to learn English and enrolled in college to maintain his F-1 status.

International students are required to be able to write, speak and communicate in English. Each of the participants has taken English language classes over the course of months before entering college and has taken a proficiency exam before admitted.

Tom explained “I can’t understand English in the classroom as well. American accents, Mexican accents, European accents, but because there are a lot of Indian students in the Engineering departments I am better with Indian accents but not

with the others. The English we learned back in China was standard British English instead of American English so when you change your accent we can't understand you."

Bowen stated "When I came here I couldn't talk. [sic] My biggest problem was language. I can read and write but ..." Others quietly agree – Kevin nods, George smiles. Amber said when referring to friends from other countries that are international students also "they speak English very well and it kinda hard for me."

Amber explains how there were problems they were not prepared for in the U.S. The group agreed that transportation, food, language, eating style were obstacles. "We don't have cars when we first arrived to America" When asked how she was able to travel in Houston without a car "Try to make more friends because it is the only way to get information from about how things work here." Tom had a different experience. "Not a problem because there is, um, [sic], like, [sic] a Chinese community here and they helped me a lot." "I was in the U.S. two years before I started here so I was kinda [sic] used to the culture here." When asked when he arrived in the U.S. previously he said "back in 1988-2000" and the researcher read his interview demographics form and asked if he left the U.S. in 2000 and came back later on and Tom agreed by saying "Yes."

Judy explained that her transition to the U.S. was different than Tom in relation to adjustment and transportation "When I first came here I went to High School here so I kept going to High School here so then I was on school bus it took two hours to home" "I took a whole summer to work part time job for the money to get a car." "First, I had money to buy a bicycle." "I rode a bike around." Amber said "she had to make more

friends because it is the only source to get information from, like about how it works, you know, yeah, and to take us places for things like food.”

The participants were asked about how the experiences in the U.S. compare to China. Amber stated that “School (pause) in China (pause) more connection between classmates and friends. Learn as a group. Same people in class every day. Every year. One teacher.” “U.S. learning is independent. Graded on your own work more [sic].” “But here everyone just goes to class and after class everyone goes their own way.” Judy in group two had a similar statement about the Chinese class environment “Homework, every class, every day, in China you are in the same class all day, same teacher, same classmates. Tom stated a difference between school here and in China “is your classmates because here we just register for class but they are not real classmates like back in China because take all the classes the same and here you see them once and never met again.”

When group 2 was asked about their academic experience starting school in another country

Tom replied “Well, it wasn’t that hard since the fundamental education back in China is tougher than here.” “So, the problem for new students is getting used to the style of language because the professors can come from all countries in the world.” “And then, to get used to group work because back in China there is also projects, projects [sic] but now we have to deal with team effort and not all of the team members are that good to work with.” “That was the problem when I first got here but now, fortunately now, the team members are not that bad.” “They do their job and we can talk to each other.” “I never met a team member like my friend Matt, he’ll do anything and he’ll just let you finish it.”

Judy said “school is different in China because they study and do homework and study more and don’t have free time whereas here you can go shopping or be with friends.” “Homework, every class, every day, in China you are in the same class all day, same teacher, same classmates.”

Tom said that “college here, because I didn’t go to college in China, is similar, even though in China you have to study a lot but anywhere if you want to learn something you have to contribute the time to yourself, like and this both the same back and China and here, in college even though you may not learn a lot for example, the homework but you really learn is based on the time you spend.”

“The difference, back in here, you have more chance, there is more opportunity to internship, but back in China, you did not have a chance to do an internship.”

“Here you work to pay tuition and get experience but back in China we did not do.” When asked if it was free to go to college in China , Tom replied “No, but it is cheaper, especially in the place that you live.”

### **Academic performance in the U.S.**

The researcher asked about interacting with Americans, Tom said “Yeah, I guess we do because we have to.” When asked if they had American friends or if most were Chinese Tom answered “Of course I have American friends but I still feel more comfortable around Chinese.” Judy stated “when I say something I worry that they don’t understand.” Tom provided the following answer about language preference “I can speak both English and Mandarin but with Chinese people I prefer to speak Mandarin for friends.” Amber said her friends in the U.S. “most are from class, we have a lot of group

work, we do a lot of topics like food, like finding a good restaurant, some of them are from Vietnam, and a couple from back home, Asian people, and actually some are international too but they speak English very well and it kinda [sic] hard for me.” Each of the participants stated that the majority of their friends are from China and they prefer to speak Mandarin, particularly with friends.

The researcher asked participants to compare the social environment of life in the U.S. to China. Amber stated “You always have lots and family and friends around, and when you feel down you always have someone to talk to you. But when you are here you kind of feel, sometimes you feel lonely.” When asked if she is close to anyone in America if she can go to them when lonely she said “Some of them I do but a lot of them no.” Kevin said he misses his time spent with parents.

Amber explained a social cultural difference “I don’t know about here but in China, if you are going to move in with your boyfriend it would be a big issue. We are more traditional. Your family and you don’t tell your family and your Mom and Dad find out” George interjects “You have to call the police” and laughs. The other men in Amber’s interview, Bowen and Kevin, laugh knowingly also. Amber continues, rolling her eyes because they interrupted her and ended by saying “it is very serious” in reference to living with a boyfriend scenario. Amber and the men interviewed are friends and they teased her about this question and her answer about changing her style of dress. When asked how living in the U.S. affect how the participant feels about him/herself Tom said “Being in the U.S. the thing I learned most, besides academics, from social, finding apartments, dealing with insurance companies, going to the hospital, groceries is decided by myself.” “It is the kind of things you cannot learn living with your parents,

that is the one thing I learned living in the U.S.” Kevin said he was “more confident, because living away you are on your own.”

There was a question posed about what has helped the participant interact better with people in the U.S. Amber “Watching T.V. I like the Desperate Housewives and Friends, the teacher in my language class told me to watch T.V. to learn cultural traditions, like when you go to eat at like Thanksgiving or Christmas.” The group agreed that television programs also helped with learning the English language. George said that “We need to talk to more American speakers because we can’t learn speaking to ourselves.”

Each of the six participants lived in large cities in China. Specifically, Amber was born in Chongqing and Bowen from Shenyang. The participants shared the idea of studying in a large city in the U.S., Houston, because of their upbringing in a large city. Bowen said “I chose Houston randomly.” The others said they had friends and classmates in China that studied in the U.S. and had received positive feedback about studying in Houston. Amber stated she “decided to move to the city because I had a friend here and because a professional basketball player, Yao Ming, came to Houston from China.” Amber continues to explain why she chose Soraya University “I did not apply to the local private school (Jenkins College)” The participants were aware of the large number of Chinese international students already in Houston. Kevin and Tom had extended family members that lived in Houston before their arrival. Kevin was attracted to Soraya University because it was “a large university and I did not want to move to Canada.” Judy said “My parents are here also.” “My family is here 10 years before I arrived.”

Amber, Bowen, George, Kevin, Judy and Tom each stated that the quality of Education in the U.S. was the deciding factor of studying in the U.S. The field of academic study that they are pursuing in Houston is not available at institutions in their native country or is more prestigious in the U.S. Kevin, Judy and Tom are Petroleum Engineering students. Bowen is a Chemical Engineering student. Amber is a Business major and George is seeking a degree in Technology Supply Chain Management and Logistics.

Kevin said he came to the U.S. to study because the “quality of education is higher in the U.S. than Chinese.” “More variety of majors [sic].” “Better opportunity for jobs [sic].” George added “U.S. education is more valuable when you go back to China.” “Especially if you learn American culture” [sic] “It is more valuable in China to have an American background in your field of study.” Bowen said “Education was better in U.S.” Judy and Tom were interviewed separately from the first group. Tom said he selected Soraya University for three reasons “SU is more diverse compared to other universities, second is Houston because Houston has weather is similar to my hometown it is not really that cold, more chance to research and apply theory, not just studying it and that really helps for study” [sic] “Houston is more a industrialized city [sic].”

Judy said “Here you have more chance here and also my parents is here there are not many Chinese people so therefore there is not that many Chinese people so therefore it makes my English improve faster” [sic]. Judy said she lives away from her family but they are in New York. “The environment here is totally cheaper than in New York, I lived in New York for like one year when I started here and later I moved here it was cheaper but I don’t really have a lot of friends to speak in Chinese.



## Summary of Findings

Hypothesis 1 found that there was no significant difference between the length of stay and acculturation. Students in the low acculturation group had been in the U.S. longer. There was a large standard deviation in the high acculturation group. The results of the  $t$  test were opposite of the predictions of the low acculturation group. Students who have lived in the U.S. for a longer period of time cannot be assumed to have high acculturation.

Hypothesis 2 was also not significant; the acculturation grouping is similar according to gender. It was predicted that females would have higher acculturation scores but scored higher on the low acculturation score of Separation and the men favored Assimilation, a high acculturation group.

Hypothesis 3 had a weak, positive correlation that was not supported. GPA has a tiny relationship to Acculturation. The GPA tells you only .3% about acculturation and knowing the level of acculturation tells you only .3% about the person's GPA. Overall, there was a weak, positive correlation between self-reported cumulative GPA and Acculturation group that was not supported.

The face-to-face interviews provided important information for college administrators. The participants felt uncertain about their future. Following graduation from Soraya University the international students will be required to return home if they have not secured employment in the United States. The F-1 student visas provide temporary stay in the U.S. for educational purposes only. If the student is admitted into graduate school they may apply for an extension and remain until they complete their additional degree, secure employment with the appropriate work visa or apply for

citizenship. The university would be well advised to provide international students with employment options because many international students are proficient in engineering, science, and math. If they return home for employment their talent will be lost to the U.S.

The mixed method study found that international students at Soraya University favor a separation acculturation strategy. One reason for this strategy is the temporary nature of their stay in the U.S. due to their student visa and employment status. The student does not want to become integrated into the American culture because there is a chance he/she will have to return home. Each of the interviewed students was uncertain about their future for this reason. He/she felt more comfortable with Chinese students and limited interaction with Americans to group projects in class. The ISSSO office should not be the sole interaction that students have with the university. The university should promote opportunities for international students to interact with American students and faculty outside the classroom. Currently, the ISSSO office provides an International Week that allows American students to understand international cultures. There is also an International Friendship Program that matches students to area families for once a month visits. The purpose is to expose them to American culture by visiting American homes and engaging in activities like the Rodeo and the 4<sup>th</sup> of July fireworks.

The researcher suggests an American Student Mentor Program and Faculty/Industry Mentor Program to allow the student to make important connections in the U.S. The American Student Mentor Program would provide a big brother/big sister to international students that would spend a few hours once a week for during the student's initial year at the institution. This program will also benefit the American student by enriching their educational experience to include foreign culture. The faculty/industry

mentor will provide a professional connection to students who are interesting in teaching or are interested in working in American industry. This connection can lead to an internship and/or future employment for the international student. The programs expose the international student to American culture and allow them to build connections to the U.S.

## **Conclusion**

University Career Services and the ISSSO should work together to create greater opportunities for international students to find U.S. employment. Participants in this study are currently seeking long term-employment on their own. The students will be forced to return home if he/she does have a job secured by graduation. Mock interviews for international students should be specialized to this unique student population. Potential employers may misinterpret gestures, eye contact, cultural nuances and language difficulties. International students should be aided to represent themselves in the best light. The longer length of stay in the U.S. typically remedies initial feelings of cultural awkwardness but may not allow the student to feel comfortable in professional interviews. Hiring or training an international career counselor would not be a burden on the university and would make a difference to students. International students feel they are admitted and forgotten by the university. The students have high GPAs and graduate on time due to personal motivation and F-1 visa requirements but have few employment opportunities after graduation. Students may have success applying to graduate programs but will be faced again with finding employment to remain in the U.S. Graduate student career services should also be tailored to international students.

## **Chapter V**

### **Discussion**

#### **Introduction and Overview**

The objective of the present study was to examine international students' level of acculturation by length of stay in U.S., gender and by academic performance.

Specifically, this study sought to answer the following research questions: 1) What is the current level of acculturation of international undergraduate students from China studying at a Soraya University? 2) Does acculturation vary significantly by gender? 3) What is the impact of acculturation on academic performance at Soraya University (SU)?

The current study used mixed methodology to measure international students' adjustment at Soraya University (SU). The research explored acculturation groups in terms of gender, academic performance and time spent in the U.S. The analyses conducted utilized data from an online survey and qualitative data gathered through student interviews to provide insight into the quantitative data. The quantitative data were examined using an Independent sample *t*-test at the bivariate level to consider whether time in the U.S. associated with acculturation. The Chi-Square Test was used to determine whether acculturation group varies by gender. Lastly, a correlation provided an examination of acculturation group and academic performance measured by self-reported GPA. Demographic information was also collected from the students to establish gender, length of stay, and cumulative GPA. This study provided qualitative student interviews to enrich the quantitative data. The transcriptions from the interviews were organized into categories and then grouped into themes.

The results of the quantitative portion of the study concluded that there was no significant difference between the lengths of stay in the U.S. for participants surveyed. Second, acculturation did not vary significantly according to gender, and there was a weak, positive correlation between acculturation and a student's cumulative GPA that was not supported.

The qualitative, face-to-face interviews provided three themes 1) acculturation of international students and length of stay, 2) acculturation varies by gender and 3) impact of acculturation on academic performance. This chapter will discuss the significant findings regarding acculturation and its relationship to length of stay (months in the U. S.), gender and cumulative GPA. Acculturation occurs when a person prefers one acculturation strategy over another depending on context and time period, that is, the length of time spent in the host culture (Berry, 1997). The themes suggested that no significance regarding between the acculturation and the length of stay, gender and academic performance.

### **Acculturation of International Students and Length of Stay in the U.S.**

The rationale of research question 1 inquiring about the current level of acculturation of international undergraduate students in relation to length of stay was to gain insight into the experiences and views of international students through interview and survey methodology. The results of the quantitative research yielded insignificant results. The qualitative results revealed that international students greatly depend on the international community at the institution to inform them of culture, provide transportation and give social support. The interviews found that the majority of students

were in the low acculturation group (separation). The qualitative findings suggested that the majority of the student have low acculturation as they proudly maintain their identity and preference for their Chinese culture. The low acculturation preference also explains their lack of acculturative stress. Acculturative stress typically occurs in international students when they do not have supportive networks at the university or membership in supportive student groups (Berry et al, 1987).

With increasing time in U.S. culture, academic stressors become less important but cultural stressors remain (Wang et al, 2012). The length of time Chinese international students have been in the U.S. has a regulating effect on acculturative adjustment (Wang et al, 2007). Hypothesis 1 based on Berry's research states that marginalization and separation are related to high levels of acculturative stress and integration results in lower levels of stress while assimilation results in moderate stress levels (Berry et al, 1987; Ward & Kennedy, 1994; Ward & Rana-Deuba, 1999). The results were different than the literature. The separation group did not state that they experienced acculturative stress. In opposition to the research presented by Phinney (2003) the qualitative interviews yielded that cultural identity is not an issue. The students interviewed enrolled in language classes upon arrival in the U.S. Their length of stay in the U.S., similar to those in the quantitative study, is greater than the months enrolled at Soraya University. The students' time in the U.S. ranged from 42 months to 120 months.

### **Does Acculturation Vary By Gender?**

Hypothesis 2 examined the level of acculturation in relation to the student's gender. The literature is mixed on this issue. Dao et al. (2007), and Yan and Berliner

(2011) found no difference in acculturation while Lee et al. (2009) found Asian females adjust better than males. Hypothesis 2 predicted that female international students from China would have higher acculturation levels than males. Hypothesis 2 was not supported by the data or the interviews and support Dao et al. (2007) and Yan and Berliner's (2011) findings. The gender groups were statistically the same when it comes to their reported acculturation. Students scored highest on the acculturation levels of separation and assimilation. Women favored separation. Men scored higher, closer to assimilation but this observed difference was not statistically significant. Prior research suggested that female Chinese international students in the U.S. may find that their educational accomplishments are in opposition to their status and opportunities of women in China (Tang & Dion, 1999). There were studies that found that Asian women who became liberated in America and would adopt U.S. culture in opposition to tradition. Women's bicultural experiences may bring about conflict with their family in China based on their adoption of American culture (Tang & Dion, 1999).

### **Impact of Acculturation on Academic Performance**

Hypothesis 3 was created based on literature, such as (Myers-Walls et al., 2008) that assumed that Chinese international students would have more acculturative stress due to the great difference between Asian and American cultures. Hypothesis 3 was not supported because there was not enough variance between the self-reported GPA. The researcher separated the quantitative data GPA into high and low GPA groups in order to address this issue. The average GPA was 3.62. The high group had a GPA  $\geq 3.63$  and the low group had a GPA of  $\leq 3.62$ . There was no relationship between GPA and

acculturation  $v(36) = .053, p=.379$ . Overall, there was a weak, positive correlation between self-reported cumulative GPA and acculturation group that was not supported.

Similarly in the qualitative interviews, the students were high achieving students: three students are Petroleum Engineering students. A student is majoring in Chemical Engineering. Another student is a Business major and one student is seeking a degree in Technology Supply Chain Management and Logistics. The students came to America because of the quality of education, value of U.S. degree in China and the variety of majors offered. The consensus was that fundamentals of math and logic are the same although American education involves less group cohesion as a result of students not remaining with the same classmates semester by semester as they had in China.

Although language is a major aspect of acculturation, the literature on acculturation is fragmented on this topic (Rudmin, 2009). Language is a barrier in the classroom and in networking with Americans (Rudmin, 2009). International students are required to be able to write, speak and communicate in English. Each of the participants has taken English language classes over the course of months before entering college and has taken a proficiency exam before being admitted. Although the interviewed students have spent more than 3 years enrolled at Soraya University and more months in language acquisition classes prior to enrollment, they struggle and avoid conversations in class and in person in English. The uncomfortable relationship with language does not affect their academic performance because they have the basic skills and determination to succeed.

The literature states that acculturative stress may be an issue in international students in the U.S. who do not seek out social interactions with American students and faculty (Andrade & Evans, 2009). The qualitative interviews in the present study reveal



that acculturative stress was avoided by involvement with other Chinese students and Americans students in their classes. The ease in the academic endeavors of the international undergraduate students in this study is demonstrated in the mean cumulative GPA of 3.62 in the quantitative group and the similar GPA of the qualitative group. This similarity rendered the acculturation grouping useless because all of the students in each group are high achieving.

### **Limitations**

This study has several limitations due to the small sample size and the lack of power in Hypothesis 1. This study may not be generalizable to other institutions nor to all Chinese students. Soraya University is diverse and has groups of international students. International students at other universities in different regions may be more isolated and experience more acculturative stress.

The focus of the research was on students from China but students from other Asian countries like Japan and India may have different experience. Therefore, this study may not be generalizable to all Asian international students. It is also not generalizable to all international students at Soraya University. International students from other countries and ethnicities may have similar or different experiences.

The study was conducted in a group setting due to student availability. The timing of this study in summer 2015 resulted in a smaller sample size than if the online survey and the interviews were conducted in fall. The students were interviewed in a group setting and there was one vocal member in each of the two interview group sessions. The vocal member answered most of the questions and the others agreed and/or added

comments. There were no disagreements in the group. The interviewees were familiar with each other prior to the interview that may or may not have been a liability. Their prior connection was helpful to the interviewer because my contacts invited others and there was group cohesion. The group conversation put the reserved group members at ease to communicate their experiences.

Also, the participation of only the Chinese Student and Scholars student group may have limited the results and caused sample bias. Due to the interviewee separation acculturation strategy, an ethnic outsider may not have found participants without the assistance of contacts. Although this study had limitations, it will start a conversation with the Soraya University administration, staff, and students regarding the international student experience. It emphasizes the importance of student groups in reducing acculturative stress in incoming international students.

### **Implications for practice**

This study will add to the literature involving Chinese international students at diverse universities in the U.S. Perhaps language is a barrier that needs to be addressed outside the required language proficiency exam. The students are proficient but uncomfortable using English and the university should provide more opportunities to practice in a safe, non-judgmental learning environment. Also, transportation for newly arriving students should be budgeted for through student organization fees, student grants or fees collected through international admission for shuttle service from the airport. The current method of international student groups assisting in transporting the new students to campus is costly and creates an unnecessary financial burden on the student groups.

The reason international students in the mixed method study selected the separation acculturation strategy maybe that the students have not had enough exposure to American culture and do not have career connections assist with future U.S. employment. Although the international students in the present study had strong GPAs student success should not solely be measured according to academic success. The university should also address career goals by providing career advisors that specialize in the placement of international students. International students' tuition cost is typically twice as expensive as American students' tuition costs. International students deserve adequate assistance in meeting their employment goals. The goal of this research was to understand the experiences of international students at Soraya University and to create awareness of the needs of this unique, growing population.

### **Implication for future research**

Future research could explore only freshman international students who arrive in International Student Orientation and provide a longitudinal study of when or if acculturation changes. Mixed method research should be used, and a wide variety of students should be interviewed. A focus group should be used in future research to discover student preferences in grouping and research questions. In each of the mixed method studies there were questions that seemed obvious to participants in both groups and did not elicit a response.

Future research should also compare GPAs of non-Asian international groups such as Mexican or Latino to determine if acculturation will have a strong, positive

correlation. Another survey should also be conducted with a larger sample during fall or spring semesters to determine if the results will change.

## **Conclusion**

International students are an increasing part of our student population. Most colleges and universities are not prepared for the challenges these undergraduate students face and may not provide needed resources in terms of transportation and food preparation options. Although these students form communities amongst themselves and perform well academically they struggle with language. The students avoid or limit cultural exchange outside of the classroom due to language issues and familiarity and comfort with their group of origin. American students are missing the experience of interacting with students from another culture and learning another language. The international students are not networking with Americans who may have connections to employment or can help navigate student services like academic tutoring, academic advising or career fairs. Many of the students interviewed are likely to remain in the U.S. after graduation if offered employment. It follows that as the international student population continues to increase the number of international workers in the U.S. will do so as well. Acculturation occurs differently in each person. Neither length of stay nor gender was found to be significant, nor was there correlation in terms of cumulative GPA and acculturation.

Undergraduate, international students are the present and the future of American universities. International students are enrolled in graduate schools fields that are less popular to American students like science, math, engineering and technology.

International scholars are teaching American students in U.S. colleges and universities.

International student fees are higher than American students and contribute greatly to college budgets. Understanding their needs and allowing them to bring their own culture to the classroom will enrich American students and improve communication and cultural skills of internationals.

## References

- Andrade, M. S., & Evans, N. W. (2009). International students: Strengthening a *critical resource*. Lanham: Rowan & Littlefield Education.
- Aykan, Z, Berry, J. W. (1996). Impact of employment-related experiences on immigrants' psychological well-being and adaptation to Canada. *Canadian Journal of Behavioural Science* 28(3), 240-251.
- Berry, J. W. (1970). Marginality, stress and identification in an acculturated aboriginal community. *Journal of Cross-cultural Psychology*, 1, 239–252.
- Berry, J. W. (1974). Psychological aspects of cultural pluralism: Unity and identity reconsidered. *Topics in Culture Learning*, 2, 17–22.
- Berry, J. W. (1980). Acculturation as varieties of adaptation. In A. Padilla (Ed.), *Acculturation: Theory, models and finding* (pp. 9-25). Boulder: Westview.
- Berry, J. W. (1984). Multicultural policy in Canada: A social psychological analysis. *Canadian Journal of Behavioural Science/Revue Canadienne Des Sciences Du Comportement*, 16(4), 353-370. doi:10.1037/h0080859.
- Berry, J. W. (1990). Psychology of acculturation: Understanding individuals moving between cultures. In R. Brislin (Ed.), *Applied cross-cultural psychology* (pp. 232–253). Newbury Park: Sage.
- Berry, J. W. (1992). Acculturation and adaptation in a new society. *International Migration*, 20(1), 69-85.

- Berry, J.W. (1997). Immigration, acculturation and adaptation. *Applied Psychology: An International Review*, 46(1), 5-68. Cambridge: Cambridge University Press.
- Berry, J. W. (2001). A psychology of immigration. *Journal of Social Issues*, 57, 625–631.
- Berry, J. W. (2003). Conceptual approaches to acculturation. In K. Chun, P. Balls-Organista, & G. Marin (Eds.), *Acculturation* (pp. 3–37). Washington: APA Press.
- Berry, J. W. (2005). Acculturation: Living successfully in two cultures. *International Journal of Intercultural Relations*, 29, 697–712.
- Berry, J.W. (2006). Contexts of acculturation. In D. L. Sam & J.W. Berry (Eds.), *The Cambridge handbook of acculturation psychology* (pp. 27–42). Cambridge: Cambridge University Press.
- Berry, J.W., Kim, U., Minde, T., & Mok, D. (1987). Comparative studies of acculturative stress. *International Migration Review*, 21(3), p. 491-511.
- Berry, J. W., Kim, U., Power, S., Young, M., & Bujaki, M. (1989). Acculturation attitudes in plural societies. *Applied Psychology: An International Review*, 38, 185–206
- Berry, J. W., & Sabatier, C. (2011). Variations in the assessment of acculturation attitudes: Their relationship with psychological wellbeing. *International Journal of Intercultural Relations*, 35, 658-669.
- Berry, J. W., & Sam, D. L. (2003). Accuracy in scientific discourse. *Scandinavian Journal of Psychology*, 44, 65–68.

- Bhandari, R. (2014, November). Open Doors report on international educational exchange. Lecture conducted from National Press Club, Washington, D.C.
- Carballo, M. (1994). Scientific consultation on the social and health impact of migration: Priorities for research. Geneva: International Organization for Migration.
- Choudaha, R. and Chang, L., Trends in International Student Mobility (February 1, 2012). *World Education News & Reviews*, 25(2), February 2012.
- Chow, P. (2011). What international students think about higher education: Attitudes and perceptions of prospective students in Africa, Asia, Europe and Latin America. Institute of International Education Retrieved on October 19, 2013 from <http://www.iie.org/en/Research-and-Publications/Publications-and-Reports/IIE-Bookstore/What-International-Students-Think-About-U.S.-Higher-Education>.
- Chung (2006). Acculturation scales: Asian American Multidimensional Acculturation Scale. In Jackson, Y. (Ed.), *Encyclopedia of Multicultural Psychology*. Washington, DC: Sage Publications (pp. 14-15).
- Dao, T., Lee, D., & Chang, H. (2007). Acculturation level, perceived English fluency, perceived social support level, and depression among Taiwanese international students. *College Student Journal*, 41, 287-295.
- DeDeyn, R. (2008). A comparison of academic stress among Australian and international students. *UW-L Journal of Undergraduate Research XI* (2008).
- Du, Y. "Acculturation, social connectedness, and subjective well-being among Chinese



international students: A test of Berry's acculturation framework" (2012).

Graduate Theses and Dissertations. Paper 12834.

Frankford-Nachmias, C. & Leon-Guerrero, A. (2015). *Social statistics for a diverse society* (7<sup>th</sup> ed.). Washington, DC: Sage Publications.

Graves, T. (1967). Psychological acculturation in a tri-ethnic community. *South-Western Journal of Anthropology*, 23, 337-350.

Greenberger, E., & Chen, C. (1996). Perceived family relationships and depressed mood in early and late adolescence: A comparison of European and Asian American. *Developmental Psychology*, 32, 707-716.

Gu, S. F. (2007). An acculturation scale for Asian international students: Development and validation. (Order No. 3344000, Purdue University). ProQuest Dissertations and Theses, 118-n/a. Retrieved from <http://search.proquest.com.ezproxy.lib.uh.edu/docview/304842634?accountid=7107>. (304842634).

Gu, S-F., & Pistole, M. C. (2008, March). An Acculturation Scale for Asian International Students Development and Validation. Poster presented at the International Counseling Psychology Conference, Chicago, Illinois.

Gurung, R. & Mehta, V. (1998, August). Minority health care providers: Relating identity, acculturation and beliefs. Paper presented at the meeting of the American Psychological Association, San Francisco.

Hooks, B. (1981). *Ain't I a woman?: Black women and feminism*. Boston, MA: South End Press.

Horwitz, E. K, Horwitz, M. B. & Cope, J. (1986) Foreign language classroom anxiety.

In E. K. Horwitz & D. J. Young, (Eds.), *Language Anxiety: From Theory and Research to Classroom Implications*. (pp. 27-39). Englewood Cliffs, NJ: Prentice Hall.

Heppner, P. P., Park, H., Wei, M. (2006). Acculturation stress. In Jackson, Y. (Ed.), *Encyclopedia of Multicultural Psychology*. Washington, DC: Sage Publications (p. 19).

Hyer, S. (1990). One house, one voice, one heart: Native American education at the Santa Fe Indian School. Santa Fe: Museum of New Mexico Press.

International Students and Scholars Office (ISSSO). (2015) Soraya University

Kaczmarek, P. G., Matlock, G., Merta, R., Ames, M. H. & Ross, M. (1994). An assessment of international college student adjustment. *International Journal for the Advancement of Counseling* 17, 241-247.

Kim, U., & Berry, J. W. (1992). Acculturation attitudes of Korean immigrants in Toronto. In I. Reyes-Lagunes & Y. H. Poortinga (Eds.) *From a different perspective: Studies of behavior across cultures* (pp. 93-105). Lisse, Netherland: Swets & Zeitlinger.

Kramer, A., Prufer-Kramer, L., Stock, C., Tshiananga, J. T. (2004). Differences in health determinants between international and domestic students at a German University. *Journal of American College Health*, 53(2), 127-132.

Kuh, G. D. & Love, P. G (2000). A cultural perspective on student departure. In J. Braxton (Ed.) *Reworking the student departure puzzle: New theory and research on college student retention* (pp. 196-212). Nashville, TN: Vanderbilt University Press.

- Lee, S-A., Park, H. & Kim, W. (2009). Gender differences in international students' adjustment. *College Student Journal*, 43(4), 1217-1227.
- Lese, K. P., & Robbins, S. B. (1994). Relationship between goal attributes and the academic achievement of southeast Asian adolescent refugees. *Journal of Counseling Psychology*, 41(1), 45-52.
- MacGeorge, E. L., Samter, W., & Gilliam, S. J. (2005). Academic stress, supportive communication, and health. A version of this paper was presented at the 2005 International Communication Association convention in New York City, Communication Education, 54(4), 365-372.
- Mertler, C. A., & Vannatta, R. A. (2005). *Advantaged and multivariate statistical methods: Practical application and interpretation*. Third Edition. Pyrczak Publication, CA.
- Miller, M. & Speight, S. L. (2006). Acculturation scales: Suinn-Lew Asian Self-Identity Acculturation Scale. In Jackson, Y. (Ed.), *Encyclopedia of Multicultural Psychology*. Washington, DC: Sage Publications (pp. 18-19).
- Myers-Walls, J., Frias, L. Kwon, K-A., Ko, M.J., & Lu, T. (2008). Living life in two worlds: Acculturative stress among Asian international graduate student parents and spouses. *Journal of Comparative Family Studies*, 42, 455-478.
- Oberg, K. (1960). Culture shock: adjustment to new cultural environments. *Practical Anthropology* 7, 177-182.
- Obst, D. & Forster, J. (2011). Perceptions of European higher education in third countries: Outcomes of a study by the Academic Cooperation Association (ACA).

Institute of International Education. Retrieved October 4, 2013 from  
<http://ec.europa.eu/education/programmes/mundus./doc/U.S.pdf>.

Olivas, M. & Li, C. (2006). Understanding stressors of international students in higher education: What college counselors and personnel need to know. *Journal of Instructional Psychology* 33(3), 217-222.

Padilla, A. (1980). The role of cultural awareness and ethnic loyalty in acculturation. In A. Padilla (Ed.), *Acculturation* (pp. 47-84). Boulder, CO: Westview.

Padilla, A. & Perez, W. (2003). Acculturation, social identity, and social cognition: A new perspective. *Hispanic Journal of Behavioral Sciences*, 25(1), 35-55.

Phinney, J. (2003). Ethnic identity and acculturation. In K. M. Chun, P. Balls Organista, G. Marín, (Eds.); *Acculturation: Advances in theory, measurement, and applied research*. pp. 63-81. Washington, DC, U.S.: American Psychological Association.

Qian, N., & Chu, T. K. (2002). *Chinese students encounter America*. Seattle: University of Washington Press.

Redden, E. (2014, February). Integrating international students. Inside Higher Education. Retrieved March 1, 2014 from <http://insidehighered.com>.

Rudmin, F. W. (2003b). Critical history of the acculturation psychology of Assimilation, Separation, Integration, and Marginalization. *Review of General Psychology*, 7, 3-37.

Rudmin, F. W. (2009). Constructs, measurements and model of acculturation and acculturative stress. *International Journal of Intercultural relations*, 33, 106-123.

Safdar, S. & Lay, C. (2003). The relations of immigrant-specific and non-specific daily

- hassles to distress controlling for psychological adjustment and cultural competence. *Journal of Applied Social Psychology: An International Review*, 52(4), 555-579.
- Smith, R. A. & Khawaja, N. G. (2010). A review of the acculturation experience of international students. *International Journal of Intercultural Relations* 35, 699-713.
- Soriano, T. J. (2009). Testing two models of acculturation and well-being in Asian college students. (Order No. 1470999, San Jose State University). ProQuest Dissertations and Theses, 70. Retrieved from <http://search.proquest.com.ezproxy.lib.uh.edu/docview/305183114?accountid=7107>. (305183114).
- Suinn, R. M., Ahuna, C., & Khoo, G. (1992). The Suinn-Lew Asian Self-Identity Acculturation Scale: Concurrent and factorial validation. *Educational and Psychological Measurement*, 52, 1041-1046.
- Suinn, R. M., Khoo, G., Ahuna, C. (1995). The Suinn-Lew Asian Self-Identity Scale: Cross-cultural information. *Journal of Multicultural Counseling and Development*, 23, 139-148.
- Tang, T. N. & Dion, K. L. (1999). Gender and acculturation in relation to traditionalism: Perceptions of self and parents among Chinese students. *Sex Roles*, 41(112), p. 17-29.
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 65 (Winter): 89-125.
- Trimble, J. (2003) Introduction: Social change and acculturation. In K. M. Chun, P. Balls Organista, G. Marín, (Eds.); *Acculturation: Advances in theory*,

*measurement, and applied research*. pp. 63-81. Washington, DC, U.S.: American Psychological Association.

Tsai, J. (1998, November). The meaning of “being Chinese” and of “being American”:

Variation among Chinese American young adults. Paper presented at the conference on the Conceptual, Methodological, and Practice Issue in the Mental Health Assessment of Asian Americans, University of California, Davis.

Tsai, J. L., Ying, Y., & Lee, P. A. (2001). Cultural predictors of self-esteem: a study of Chinese American female and male young adults. *Cultural Diversity and Ethnic Minority Psychology*, 7(3), 284-297.

Yan, K., & Berliner, D. (2011). An examination of individual level factors in stress and coping processes: Perceptive of Chinese international students in the United States. *Journal of College Student Development*, 52, 523-542.

Yeoh, B. Huang, S. “Home” and “away”: foreign domestic workers and negotiations of diasporic identity in Singapore. *Environment and Planning* 31(7), 1149-67.

Yin, J. (2009). Negotiating the center: Towards an Asiacentric feminist communication theory. *Journal of Multicultural Discourses*, 4(1), 75-88.

Ying, Y.W. & Han, M. (2006). The contribution of personality, acculturative stressors, and affiliation to adjustment: A longitudinal study of Taiwanese students in the United States. *International Journal of Intercultural Relations*, 30, 623-635.

Walton, E., Takeuchi, D. T. (2010). Family structure, family processes, and well-being among Asian Americans: Considering gender and nativity. *Journal of Family Issues*, 31, 301-332.

Wang, K. T., Heppner, P. P., Fu, C., Zhao, R., Feihan, L. & Chuang, C. C. (2012).

Profiles of acculturative adjustment patterns among Chinese international students. *Journal of Counseling Psychology* 59(3), 424-436.

Ward, C., & Kennedy, A. (1994). Acculturation strategies, psychological adjustment and socio-cultural competence during cross-cultural transitions. *International Journal of Intercultural Relations*, 18, 329–343.

Ward, C. & Rana-Deuba, A. (1999). Acculturation and adaptation revisited. *Journal of Cross-Cultural Psychology*, 30(4), 422-442.

Zhang, J., & Goodson, P. (2011). Predictors of international students' psychosocial adjustment to life in the United States: A systematic review. *International Journal of Intercultural Relations*, 35, 139-162.

## Appendix A

### Anonymous Research Consent Form



## ANONYMOUS RESEARCH CONSENT FORM

### PROJECT TITLE:

Acculturation of International Students. You are being invited to participate in a research project conducted by Lateki Lewis from the College of Education at University of Houston. This project is part of my doctoral dissertation. The project is being conducted under the supervision of Dr. Catherine Horn.

### NON-PARTICIPATION STATEMENT

Taking part in the research project is voluntary and you may refuse to take part or withdraw at any time without penalty or loss of benefits to which you are otherwise entitled. You may also refuse to answer any research-related questions that make you uncomfortable. If you are a student, a decision to participate or not to participate or to withdraw your participation will have no effect on your standing with the university or the SU International Student & Scholar Services Office (ISSSO).

### PURPOSE OF THE STUDY

The purpose is to document the acculturation experiences of international undergraduate students from China attending Soraya University. Acculturation involves the transition to American culture and educational environment. This is the only survey associated with the project.

## PROCEDURES

You will be one of approximately 173 participants invited to take part in this project. You will be asked to answer survey questions about your acculturation experience at SU via website provided on Survey Monkey. The survey website will be included in the recruitment email or on the SONA website if you are taking the survey for extra credit in your class. The survey questions will take approximately 30 minutes to answer.

## CONFIDENTIALITY

Every effort will be made to maintain confidentiality. Survey information will be stored in a secure location and only the research team will be able to access your responses. Your name will be recorded with your first name and last initial. Please do not provide your complete name.

## RISKS/DISCOMFORTS

There are no foreseeable risks or discomforts associated with participation in this study.

## BENEFITS

While you will not directly benefit from participation, your participation may help investigators better understand international undergraduate students from China.

## ALTERNATIVES

Participation in this project is voluntary and the only alternative to this project is non-participation.

## INCENTIVES/REMUNERATION

If you participate in the survey through the SONA system you will only receive extra credit for your course at your professor's discretion. The researcher will not provide or advocate for credit for your course.

## PUBLICATION STATEMENT

The results of this study may be published in scientific journals, professional publications, or educational presentations; however, no individual subject will be identified. If you have any questions about this study and your participation, please contact the please contact the researcher, Lateki Lewis at 713-743-0838 or email [LDLewis@uh.edu](mailto:LDLewis@uh.edu) or my advisors, Dr. Cathy Horn, 713-743-5032 or [clhorn2@uh.edu](mailto:clhorn2@uh.edu) or Dr. Yali Zou, 713-743-4982 at [yzou@uh.edu](mailto:yzou@uh.edu). ANY QUESTIONS REGARDING YOUR RIGHTS AS A RESEARCH SUBJECT MAY BE ADDRESSED TO UH HUMAN SUBJECTS DIVISION.

## CONSENT TO PARTICIPATE

I have read (or have had read to me) the contents of this consent form and have been encouraged to ask questions. I have received answers to my questions to my satisfaction.

I give my consent to participate in this study, and have been provided with a copy of this form for my records and in case I have questions as the research progresses.

By entering the survey, I am providing my consent to participate in this study.

Principal Investigator's Name: Lateki Lewis

## Appendix B

### Recruitment Email

Subject: Dissertation Study

Dear Student,

I am a doctoral student in the University of Houston's Educational department. My name is Lateki Lewis and I am researching acculturation experiences in international undergraduate students from China with my advisors Drs. Cathy Horn and Yali Zou of the UH Education department. Please refer to the website to a survey below that is part of my research for my doctoral dissertation. The survey involves completion of brief questionnaires that will take approximately 30 minutes to complete. There is also a qualitative portion of the study which includes face-to-face interviews. If you would like to participate in the face-to-face interviews please contact me at [LDLewis@uh.edu](mailto:LDLewis@uh.edu).

Please complete the survey before contacting the researcher about the face-to-face interview because the survey will be interpreted along with the face-to-face interview.

You will be asked to provide brief demographic information such as age, months in the U.S., and major. The potential benefit to you for participating is that you will be able to reflect on your experiences at SU and inform others of how you have transitioned. This study is voluntary and the information provided does not affect your status as an international student. The information obtained in this study will not be provided to ISSSO and there are no consequences for not taking the survey.

If you have any questions about this study and your participation, please contact the researcher, Lateki Lewis at 713-743-0838 or email [LDLewis@uh.edu](mailto:LDLewis@uh.edu) or my advisors, Dr.

Cathy Horn, 713-743-5032 or clhorn2@uh.edu or Dr. Yali Zou, 713-743-4982 at yzou@uh.edu. This project has been reviewed by the Committee for the Protection of Human Subjects. If you have any questions about your rights as a research participant you may contact their office. Click here to begin the survey:

<https://www.surveymonkey.com/s/AcculturationStrategy>.

Your participation is greatly appreciated!

## Appendix C

### Demographic Questionnaire



## DEMOGRAPHIC QUESTIONNAIRE

First name and last initial \_\_\_\_\_

1.      Male    Female
2.      How old are you?
3.      Where were you born?
4.      Do you have any children? If so, how many children do you have?
5.      How many months have you been in the U.S.?
6.      Have you been in the U.S. before beginning your undergraduate courses?
  - a.        If so when?
  - b.        For what reason?
7.      What degree are you seeking at this university?
8.      What is your classification (years) in college? Freshman? Sophomore? Junior? Senior?
9.      How would your current academic environment?
  - a.        I am the only international student in the environment
  - b.        People are mostly from the U.S.
  - c.        There is an equal combination of people from the U.S. and from other countries
  - d.        People are mostly from countries other than the U.S.
  - e.        Everyone is from a country other than the U.S.

10. How would you describe your current housing arrangement?
- a. I am the only international student in the environment
  - b. People are mostly from the U.S.
  - c. There is an equal combination of people from the U.S. and from other countries
  - d. People are mostly from countries other than the U.S.
  - e. Everyone is from a country other than the U.S.
11. How would you describe your current social environment?
- a. I am the only international student in the environment
  - b. People are mostly from the U.S.
  - c. There is an equal combination of people from the U.S. and from other countries
  - d. People are mostly from countries other than the U.S.
  - e. Everyone is from a country other than the U.S.

## Appendix D

### Interview Script

## SEMI-STRUCTURED INTERVIEW GUIDE

### Length of stay in U.S.

1. Tell me about your decision to study in the U.S.? What are some of the reason why you made the decision?
2. Tell me about your decision to select this institution? What did you know about the institution before you made your decision?
3. Where is “home” for you? Tell me what you remember about home—what do you miss the most? How has it been for you to be in the U.S. without (that which you miss the most)?

### Education

4. Tell me about your experiences in the U.S. to date. For example, how has it been to start school in a new country? How would you describe the way you have adapted to being away from home?
5. In what ways have your experiences in the U.S been similar to those in your country?
  - a. Academically? Socially?
6. In what ways have your experiences in the U.S. been different than in your country?
7. Do you feel you have control of your academic situation in the U.S.?
8. Do you enjoy school?
9. How does your experience in the U.S. impact the way you feel about yourself?

10. What has helped you become better at interacting with people in the U.S.
11. What would help you improve your interaction with people in the U.S.?
12. What obstacles have you overcome in adjusting to life in the U.S.?
13. Did you rely on other international students as resources when you arrived in the  
on campus?
14. Are you a member of any student groups on campus? If so, which one?

#### Gender differences

15. Have you experienced changes in the way you think about some things, like  
cultural values or cultural issues, since coming to the U.S.? Tell me about these  
changes.
16. Is your family aware of these changes, have they noticed them? If so, how has  
your family dealt with these changes?
17. When people ask you “where are you from” or “what are you”, what do you say?
18. Do you speak English or your native primary language more frequently?
19. Are you friends with any international students?
20. What is the ethnic makeup of your friends? Are they mostly Chinese or American  
or some other combination?
21. Do you have a significant other (boyfriend, girlfriend, life partner)? If so, what is  
the person’s ethnicity?

## Appendix E

### Informed Consent

## UNIVERSITY OF HOUSTON

### CONSENT TO PARTICIPATE IN RESEARCH

#### PROJECT TITLE:

Acculturation of International Students.

You are being invited to participate in a research project conducted by Lateki Lewis from the College of Education at the University of Houston. This project is part of my doctoral dissertation. The project is being conducted under the supervision of Dr. Catherine Horn.

#### NON-PARTICIPATION STATEMENT

Taking part in the research project is voluntary and you may refuse to take part or withdraw at any time without penalty or loss of benefits to which you are otherwise entitled. You may also refuse to answer any research-related questions that make you uncomfortable. If you are a student, a decision to participate or not participate or to withdraw your participation will have no effect on your standing with the university or the SU International Student & Scholar Services Office (ISSSO).

#### PURPOSE OF THE STUDY

The purpose of the study is to document the acculturation experiences of international undergraduate students from China attending Soraya University. Acculturation involves the transition to American culture and educational environment. The study is a two part mixed methods study. The first part is a quantitative study and the second half is qualitative research. Participants are not required to complete both sections of the study.

## PROCEDURES

You will be one of approximately 173 subjects invited to take part in the quantitative survey interview project. The second portion of the study will include voluntary interviews to gain further insight into the personal experiences of students featured in the study. The qualitative face-to-face interviews will consist of six students and will occur in the Center for Asian American Studies. The voluntary one-time, one-hour, in depth interview will occur in person. Interviews will be auto-recorded and written down by the researcher.

## CONFIDENTIALITY

Every effort will be made to maintain the confidentiality of your participation in this project. Each subject's name will be paired with a code number by the principal investigator. This code number will appear on all written materials. The list pairing the subject's name to the assigned code number will be kept separate from all research materials and will be available only to the principal investigator. Confidentiality will be maintained within legal limits.

## RISKS/DISCOMFORTS

There are no foreseeable risks or discomforts associated with participation in this study.

## BENEFITS

While you will not directly benefit from participation, your participation may help investigators better understand international undergraduate students from China.



## ALTERNATIVES

Participation in this project is voluntary and the only alternative to this project is non-participation.

## INCENTIVES/REMUNERATION

If you participate in the survey through the SONA system you will only receive extra credit for your course at your professor's discretion. The investigator will not provide or advocate for credit for your course.

## PUBLICATION STATEMENT

The results of this study may be published in scientific journals, professional publications, or educational presentations; however, no individual subject will be identified. If you have any questions about this study and your participation, please contact the researchers, Lateki Lewis at 713-743-0838 or email [LDLewis@uh.edu](mailto:LDLewis@uh.edu) or my advisors, Dr. Cathy Horn, 713-743-5032 or [clhorn2@uh.edu](mailto:clhorn2@uh.edu) or Dr. Yali Zou, 713-743-4982 at [yzou@uh.edu](mailto:yzou@uh.edu). ANY QUESTIONS REGARDING YOUR RIGHTS AS A RESEARCH SUBJECT MAY BE ADDRESSED TO THE UNIVERSITY OF HOUSTON COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS (713-743-9204).

## AGREEMENT FOR THE USE OF AUDIO RECORDING

If you consent to take part in this qualitative face-to face study, please indicate whether you agree to be audio/video taped during the study by checking the appropriate box below. If you agree, please also indicate whether the audio/video tapes can be used for publication/presentations.

I agree to be audio taped during the interview.

I agree that the audio tape(s) can be used in publication/presentations.

I do not agree that the audio tape(s) can be used in publication/presentations.

I do not agree to be audio taped during the interview.

If you do not agree to be audio taped then your answers will be written by the interviewer.

#### **SUBJECT RIGHTS**

1. I understand that informed consent is required of all persons participating in this project.
2. I have been told that I may refuse to participate or to stop my participation in this project at any time before or during the project. I may also refuse to answer any question.
3. Any risks and/or discomforts have been explained to me, as have any potential benefits.
4. I understand the protections in place to safeguard any personally identifiable information related to my participation.

5. I understand that, if I have any questions, I may contact the researcher, Lateki Lewis, at 713-743-0838 or LDLewis@uh.edu. I may also contact my faculty sponsors Dr. Cathy Horn, 713-743-5032 or clhorn2@uh.edu or Dr. Yali Zou, 713-743-4982 at yzou@uh.edu

6. Any questions regarding my rights as a research subject may be addressed to the University of Houston Committee for the Protection of Human Subjects (713-743-9204). All research projects that are carried out by Investigators at the University of Houston are governed by requirements of the University and the federal government.

#### SIGNATURES

I have read (or have had read to me) the contents of this consent form and have been encouraged to ask questions. I have received answers to my questions to my satisfaction. I give my consent to participate in this study, and have been provided with a copy of this form for my records and in case I have questions as the research progresses.

Study Participant (print name):

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Signature of Study Subject: \_\_\_\_\_

Date: \_\_\_\_\_

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I have read this form to the subject and/or the subject has read this form. An explanation of the research was provided and questions from the subject were solicited and answered to the subject's satisfaction. In my judgment, the subject has demonstrated comprehension of the information.

Principal Investigator (print name): Lateki Lewis

Signature of Principal Investigator: \_\_\_\_\_

Date: \_\_\_\_\_

## Appendix F

### Gu's (2008) ASAIS subscales

The ASAIS 33-item scale questions are grouped as follows:

*Assimilation*

“I hang around more with Americans than with people from my own country”

“I find myself thinking more like an American”

“I prefer American values more than Asian values”

“I see myself as being more able to succeed in American society”

“I want to become American in the way I think, talk, and act”

“I want to be treated as an American”

“I see myself being helped and supported more by American people than by those from my own country”

“I am happier now that I am in the U.S.”

*Integration*

“I am good writing in both my own language and English”

“I communicate effectively in both my own language and English”

“I am good at listening comprehension, for both my own language and English”

“I am able to make good friends with persons from my own and American culture”

“I have been academically successful in the U. S. and my own country”

*Separation*

“I prefer to be friends of people from my own country when I am in the U.S.”

“I feel Asian values are far more acceptable than American values (e.g., one should be humble instead of boasting)”

“I am a very traditional Asian person despite living in the U.S.”

“I prefer Asian-style living environments”

“I pursue support from my family or people from my country rather than rely on American peers”

“I prefer a roommate from my own country or any other Asian international student if I need to have one”

“I would raise my children in traditional Asian ways if I were a parent”

“I wish I was living in my own country”

### *Marginalization*

“I feel that I do not belong to either Asian or American cultures”

“I do not identify myself as Asian or an American”

“I dislike making friends with both Asians and Americans”

“I dislike both Asian and American academic/school systems”

“I don’t endorse either Asian or American values”

“I am lost in both Asian and American culture”

“I am not understood by people from my own country or the U.S.”

“I am not supported by either Asians or Americans”

“I see nothing good for me happening in either Asian or American societies”

“I feel like I am rejected by both Asian international students and Americans”

“I do not ask Americans or people from my own country for help”

“I often feel like an outsider” (Gu, 2008, p. 51-52).