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**Social Network Site Use, Social Capital, and Acculturation:  
A Comparative Study of Facebook and Renren.com Use  
by Chinese International Students in the United States**

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**Social Network Site Use, Social Capital, and Acculturation:  
A Comparative Study of Facebook and Renren.com Use  
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**by**

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## **Abstract**

### **Social Network Site Use, Social Capital, and Acculturation: A Comparative Study of Facebook and Renren.com Use by Chinese International Students in the United States**

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Facebook is the dominant SNS for American students in the United States, and Renren.com is heavily used by Chinese students in China. Chinese international students in the United States are likely to use both the host and home SNSs to keep in touch with their friends in the host and home countries. The purpose of the study is to explore the similarities and differences between host and home SNS use among Chinese international students in the U.S. This study compares their use of Facebook and Renren.com with respect to intensity and patterns of use. It explores how these student sojourners in the U.S. use the two SNSs to build up and maintain their social networks and social capital and how their levels of acculturation to American host culture and maintenance of Chinese home culture are associated with their SNS use.

Quantitative data collected through a survey of 212 Chinese international students at the University of Texas at Austin was analyzed to address these research questions.

The findings suggest that Chinese international students use Renren.com more intensively than Facebook and prefer Renren.com to Facebook for the purposes of communication and information seeking. They are more likely to use Renren.com than Facebook to interact with Chinese friends whether in the U.S., in China, or in other parts of the world. The intensity of Facebook and Renren.com use were found to be positively associated with bridging social capital, but neither of the two is associated with bonding social capital. Only the intensity of Renren.com use was found to have a positive relationship with maintained social capital. Furthermore, the levels of acculturation to host culture are associated with the intensity of Facebook use, while the levels of maintenance to home culture are associated with the intensity of Renren.com use.

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## **Chapter 1: Introduction**

Over the past few years, social network sites (SNSs) have become popular because they “allow individuals to present themselves, articulate their social networks, and establish or maintain connections with others” (Ellison, Steinfield, & Lampe, 2007, p. 1). Since its inception in 2004, Facebook has penetrated its users' everyday lives more quickly and deeply than the many other SNSs that have emerged. In 2012, the site already had more than 900 million monthly active users, over half of which logged onto it in any given day (Facebook, 2012). While it originated in the United States, Facebook is also used in many other countries. Indeed, it offers more than 70 translations on the site, and about 70 percent of Facebook users reside outside the United States (Facebook, 2012). Because of the huge global influence of Facebook, many clone versions have emerged in other countries. Renren.com, established in 2006, is one of the most representative ones and has become the most popular SNS in China with 117 million registered users by 2010 (Renren.com, 2010). Among college students in the U.S., Facebook topped the SNS landscape (Anderson, 2009). As Facebook has been blocked in China by Chinese government since 2008, Renren.com is the most popular SNS among college students in China.

Facebook's effects on social relationships and social capital have received growing academic attention (Ellison et al., 2007; Lampe, Ellison, & Steinfield, 2006; Steinfield, Ellison, & Lampe, 2008; Valenzuela, Park, & Kee, 2009). Scholars have paid much attention to the relationship between the intensity or frequency of use and social capital. American college students are usually the study sample. Facebook has become both a basic tool for and a mirror of social interaction and network building among students (Debatin, Horn, & Hughes, 2009), maintaining pre-existing social relationships

and building up new connections. Thus, it plays a significant role in generating and maintaining individuals' social capital, i.e., the resources, actual or virtual, accumulated through social relationships (Coleman, 1988). Scholars have also spent much time on the study of different uses of Facebook, which satisfy various needs of its users, e.g. informational, recreational, communicative, and so on (Brandtzæg & Heim, 2009; Park, Kee & Valenzuela, 2009; Raacke & Bonds-Raacke, 2008; Valenzuela et al., 2009). This is partially due to the fact that the impact of Facebook use on social capital is contingent on the specific ways in which it is used in addition to frequency and duration of use (Valenzuela, et al., 2009).

However, very few studies have examined the use of SNS among sojourners, international students in the United States. As it is the dominant SNS for American students (Anderson, 2009), international students are likely to continue to use or adopt Facebook in order to build up new social networks and meet new people in the host country where Facebook is the main social networking tool. International students who come from countries where Facebook is not the main SNS most likely use the SNSs that were dominant in their own countries, perhaps in addition to Facebook, to maintain their social ties back home. Therefore, it is worth examining how international students use the social networking tools of both the U.S. and their home countries to build up and maintain their social ties, which are conducive to their social capital.

This study focuses on Chinese international students in the United States. As Renren.com is mainly used by these students in China before they come to the U.S. for education, this study compares the similarities and differences between Facebook and Renren.com use, specifically regarding the intensity and patterns of use by Chinese international students in the U.S. and their relationships with social network and social capital generation and maintenance as well as acculturation to host culture and

maintenance of home culture. It explores how they use the two sites to build up and maintain social relationships with Chinese in China, Chinese in the U.S. and Americans and other ethnic groups in the U.S., which generate and maintain different levels of social capital. It also explores how acculturation to the U.S. and maintenance of home culture impact their different uses of the two sites.

In 2011, the number of international students at colleges and universities in the United States increased by 5 percent to more than 0.7 million. The increased number of Chinese international students largely accounts for this growth, according to the Open Doors report (Institute of International Education, 2011). Chinese international students in the United States rose to a total of nearly 158 thousand, or nearly 22 percent of the total international student population, making China the leader in sending students to the U.S. These students stand as a noteworthy group not only because of their large population but also because of their linguistic and cultural differences compared to the predominant U.S. culture. For Asians, emphasis is heavily placed on collectivity, duty and obligation, deference, and dependence. For Westerners, the emphasis is on individualism, equality, rights and privileges, self-reliance, and self-assertion. The value orientations of the East and West are sharply polarized (Singelis, 1994; Hofstede, 1980). During the years when they are in the U.S., Chinese international students have gradually become accustomed to the dominant American culture and been constantly experiencing the process of acculturation. However, they preserve their home culture to a large extent while adapting to the mainstream society. Thus, the process of acculturation and maintenance of the home culture leads to the development of an intercultural identity (Adler, 1982; Kim, 1988), accommodating both Chinese and U.S. identities. The extent to which they have been acculturated is significantly correlated with their communication and social behavior in the new environment (Kim, 1988). As SNSs become one of the

most important tools students use to communicate and maintain relationships with each other, it is important to conduct research on how this noteworthy group of students in the U.S. with unique cultural identity uses SNSs to build up and maintain social capital. It is also important to know how acculturation to the host society and maintenance of home culture impact the different uses of the two SNSs by Chinese international students in the United States.

## **Chapter 2: Literature Review**

### **SOCIAL CAPITAL AND SNSs**

#### **Social Capital and Tie Strength**

Social capital broadly refers to the resources that are accumulated through relationships among people within a specific social context or network (Coleman, 1988; Lin, 2001; Putnam, 2000). Bourdieu and Wacquant (1992) define it as “the sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition” (p. 14). Social capital emphasizes the benefits that arise from one’s relationships with others and is typically perceived to be positive (Lin, 2001). For individuals, social capital allows a person to draw on resources in the form of useful information, personal relationships, or mutual trust and reciprocity from other members of the networks to which he or she belongs (Paxton, 1999). Individuals with more social capital are consequently more satisfied with their lives (Anheier, Stares, & Grenier, 2004) and have access to more information and opportunities (e.g., job openings) that are otherwise unavailable (Lin, 2001).

There are different types of social capital, which are related to different types of social ties. Granovetter (1973) characterizes two types of social ties: weak and strong. The strength of a tie is based on a combination of the amount of time spent by individuals on the tie, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterize the tie. Building on the work on tie strength, Putnam (2000) differentiates between two types of social capital, that of bridging social capital and bonding social capital. Bridging social capital is connected to weak ties, which refer to connections with diverse individuals who may provide useful information but not

emotional support. Bonding social capital is linked to strong ties, which refer to intimate relationships with family members or close friends (Putnam 2000; Williams 2006). This suggests that the strength of the respective social ties is able to predict the different types of accompanying social capital. Weak ties offer the benefit of bridging social capital because they allow individuals to bridge contact between their social networks. By connecting people from diverse backgrounds, weak ties broaden individuals' information and opportunities. Strong ties produce bonding social capital, as these ties are usually intimate and provide emotional support that is only based on those close social relationships (Putnam 2000; Williams 2006).

### **Social capital and SNS Use**

Although people often accumulate social capital as a result of their daily interactions with friends, coworkers, and strangers, it is also possible to make conscious investment in social interaction (Resnick, 2002). The motive to maintain and increase social interaction draws people to join SNSs. Previous studies also found that one of the main reasons for using SNSs is to increase socialization, keeping in contact with existing relationships and building up new connections (Brandtzæg & Heim, 2009; Kim, Shon & Choi, 2011; Raacke & Bonds-Raacke, 2008). As SNSs have become major communication tools for initiating and maintaining social interaction, many studies have begun to explore the relationship between the use of SNSs and the benefits of social capital (Burke, Marlow & Lento, 2010; Donath & boyd, 2004; Ellison et al., 2007; Steinfield et al., 2008; Valenzuela et al., 2009).

Donath and boyd (2004) were among the first to hypothesize that SNSs could increase weak ties more effectively than strong ties because the technology allows weak ties to be formed and maintained cheaply and easily. Lampe et al. (2006) did an



exploratory study on Facebook's "surveillance" function, which allows users to track other members in their community, thereby increasing large and diverse offline interaction. This type of surveillance is classified as social searching and social browsing. Social searchers use the site to learn more about people whom they initially meet offline, while social browsers use the site to find new people online with whom they may want to initiate an offline connection. Using Facebook to accomplish these two purposes falls in line with a person's willingness to increase and maintain their social capital (Lampe et al., 2006). In 2007, Ellison et al. tested the relationship between the use of Facebook and the formation and maintenance of social capital using survey data from a small sample of undergraduate students in the U.S. In order to have a more nuanced measure of how Facebook is used than the simple measure of frequency and duration of use, they created a new measure, intensity of use, to assess user engagement in Facebook activities. They measured the number of friends Facebook users had, the amount of time they spent on the site on a typical day, and the relative level of users' emotional connection to the site. Furthermore, based on Putnam's (2000) concepts of bridging social capital and bonding social capital, they (2007) conceptualized a third form of social capital—maintained social capital—which refers to social capital associated with acquaintances from a previously inhabited community as opposed to close ties. In their research, they found that there is a statistically positive relationship between the intensity of Facebook use and the three types of social capital. However, the intensity of Facebook use has a stronger connection to bridging and maintained social capital than to bonding social capital.

Since then, in the research on the relationship between Facebook use and social capital, the concept of intensity of Facebook use has been widely adopted. Steinfield et al. (2008) examined Facebook use and bridging social capital longitudinally and found that the intensity of use exerts a causal effect on levels of bridging social capital. Burke et

al. (2010) compared self-reported time spent on Facebook and friend number with actual ones and found that the intensity of use scales used in those self reports are valid. Using a sample of adult US Facebook users, they found that more active users of Facebook, especially those who have more friends on Facebook and those who have engaged in directed communication, reported higher levels of bridging and bonding social capital. Most of the research adopted the scales of measuring online and offline social capital created by Williams (2006). However, Valenzuela, Park and Kee (2009) expanded on the research to examine the relationship between Facebook use and other indicators of social capital, including life satisfaction, social trust, civic engagement, and political participation. They found that the positive and significant associations between intensity of Facebook and Facebook group use and social capital—a construct of the four indicators—are relatively small.

In terms of cultural influences on the use of SNSs, individualistic and collectivistic culture theory is used to conduct cross-cultural research. Members of an individualistic culture tend to consider themselves independent individuals who emphasize self-reliance, internal attributes, separateness, and distance from the in-groups (Singelis, 1994). In contrast, members of a collectivistic culture consider themselves as belonging to a larger group, emphasizing interdependence, value harmony, social norms, connectedness, and in-group memberships (Singelis, 1994). Individualistic cultures are more commonly observed in Western countries like the U.S. or Europe, while collectivistic cultures are more commonly observed in East Asian countries, such as China, Korea and Japan (Hofstede, 1980). Chu and Choi (2011) conducted a cross-cultural study on the relationship between SNS use and social capital by examining the similarities and differences in perceived social capital, tie strength, and trust between American and Chinese users. Their results show that Chinese users of their favorite

Chinese SNS gain a higher level of bridging and bonding social capital on SNSs than American users of their favorite American SNS. Chinese users also were found to maintain a greater ratio of strong ties on these sites than the American users. This could be explained by the difference between individualistic and collectivistic cultures.

Even though a lot of studies have investigated the relationship between SNS use and social capital, even in a cross-cultural context, little is known about SNS use among student sojourners. Chinese international students in the United States, who stand as a noteworthy group due to their large population and intercultural identity, are likely to use both the popular SNSs in America (Facebook) and China (Renren.com) at the same time to build up new connections and maintain relationships back home. Thus, it is important to compare their use of the two SNSs in terms of intensity of use and the association between intensity of SNS use and different forms of social capital—bridging, bonding, and maintained—among Chinese international students in the United States.

### **SOCIAL NETWORKS AND SNSs**

Social networks are defined as a set of nodes (i.e. persons or organizations) that are tied by one or more types of relations (Wasserman and Faust, 1994). Bochner, McLeod, and Lin (1977) developed a functional model of international students' friendship patterns, which were composed of three social networks: a mono-cultural network, a bi-cultural network, and a multi-cultural network. A primary mono-cultural network consisted of co-nationals, i.e. friends coming from the same country of origin. A secondary bi-cultural network was composed of host nationals, i.e. friends in the host country. A third multi-cultural network consisted of international friends from other countries. Many studies tested the results and showed that international students' primary social networks consisted of friends from their own country of origin or similar

geographic locations (Bochner, Hutnik, & Furnham, 1985; Furnham & Alibhai, 1985; Maundeni, 2001; Neri & Ville, 2008).

Overseas students in the United Kingdom were found to have more co-national friends than host-national friends when they were asked to list their three best friends in the UK and their preferred companions for various activities (Furnham & Alibhai, 1985). African international students in the UK were also found to have a social network which is mainly composed of friends who are also from Africa and have frequent contact with them (Maudeni, 2001). The co-national friends functioned as important emotional, informational, spiritual, and even financial support for these students in the process of cultural and academic adjustment. Neri & Ville (2008) studied international students in Australia and found that their primary social network members are those from the same country of origin, who are conducive to the improvement of their academic performance. However, some studies showed that international students have a higher proportion of host nationals in their social networks (Hendrickson, Rosen, & Aune, 2010). They explained that previous studies only asked participants to list their best friends or majority of friends, but their study allowed participants to list their whole friendship networks, which, as a result, included more host nationals who were weak tie friends. As the present study focuses on Chinese international students in the U.S., it is more important to study their social networks with regard to their geographic distribution and ethnicities than the strength of their ties, as suggested by the literature cited above.

SNSs serve as mirrors of individuals' social interaction and network building offline (Debatin et al., 2009). Several studies found that most of the student users used Facebook to maintain or strengthen relationships with existing offline connections rather than to meet new people online (boyd & Ellison, 2007; Ellison et al., 2007; Lampe et al., 2006; Steinfield et al., 2008; Subrahmanyam, Reich, Waechter, & Espinoza, 2008).

Subrahmanyam et al. (2008) further examined the overlap of frequent contact between offline and SNS social networks by asking participants to list the ten people with whom they interact the most offline and on SNSs. The results showed that 22% of the participants had 100% overlap between their offline and SNS friends who they contacted the most. On average, half of participants' most contacted friends offline were also the friends who they interact with the most on SNSs.

Based on the assumption that offline social networks might overlap on SNSs, the patterns of international students' social networks offline—in which co-national friends are their primary social network members—might be reflected to a large extent on SNSs as well. In addition, along with the development of communication technologies and the Internet, Chinese international students have been able to maintain their old social ties over long distance, both in China or in other countries. Therefore, it is possible that Chinese international students in the U.S. use Facebook to build up their relationships primarily with co-nationals (Chinese in the U.S.) and secondarily with host nationals (Americans) and multi-nationals (other ethnic ties in the U.S.), while they use Renren.com to maintain their relationships with Chinese in China, since Facebook has been blocked in China and very few people still use it.

Lin, Peng, Kim, Kim, and LaRose (2011) examined the impact of interaction with different groups of friends on Facebook, differentiated by nationalities, on social capital and social, emotional, and academic adjustment. The findings showed that interactions with friends from their home country and host country on Facebook are positively related to the levels of bridging social capital and social adjustment. Therefore, it is worthwhile to study the social network composition and frequency of contact with these social networks on SNSs due to the benefits of interacting with different groups of friends. Due to the lack of knowledge on international students' social networks on SNSs, this study

tries to fill this gap to explore the composition of Chinese international students' social networks on Facebook and Renren.com and who they usually interact with on the SNSs in addition to examining the relationship between intensity of SNS use and social capital.

#### **PURPOSES AND PATTERNS OF SNS USE**

As this research is designed as a comparative study of the use of Facebook and Renren.com, it is necessary to compare different purposes or patterns of use in addition to intensity of use. Even though the main function of SNSs is to facilitate communication and socialization, which helps people build up and maintain social networks, people also use SNSs for other functions, such as information-seeking, entertainment, and identity presentation.

Previous studies focused on the various purposes or patterns of Internet use, generally based on the uses and gratifications framework. As the audience is active and goal directed, an individual's media use is motivated by the various kinds of needs and gratifications sought by users (Katz, Haas, & Gurevitch, 1973; Katz, Blumler, & Gurevitch, 1974). Katz et al. (1973) offered a classic typology of the needs of media users: cognitive needs (for information and knowledge), affective needs (for pleasurable and emotional experiences), personal integrative needs (for personal status), social interactive needs (for contact with family, friends, and the world), and escapist needs (for diversion and tension release). McQuail (1994) also argued that there are four needs that motivate people to use various kinds of media: information, entertainment, social interaction, and personal identity. Unlike the traditional media, the Internet can potentially serve all of the functions and satisfy all the psychological needs and gratifications, so it appeals to a wide audience. This nature of the Internet has aroused the interest of the scholars in examining the various purposes for which people use the

Internet. For example, Norris and Jones (1998) extended the study of motives and purposes for using the Internet. They claimed that there are four types of Internet users: researchers, who use the Internet for email and information for work and school; consumers, who shop online and find information about travel, movies, and so on; expressives, who use the online bulletin boards and chat-rooms to discuss views and opinions; finally the party animals, who go online for games and entertainment.

Based on the framework of uses and gratifications on the Internet, Shah, Kwak, & Holbert (2001) differentiated four patterns of Internet use by factorizing the items measuring actual Internet use rather than those measuring motivational needs: product consumption, information exchange, financial management, and social recreation. Wellman, Haase, Witte, & Hampton (2001) focused on the items measuring actual Internet use as well and differentiated two patterns of Internet use, synchronous and asynchronous. Synchronous use referred to simultaneous social interaction, such as chatting, playing multiuser games, and so on, while asynchronous use referred to activities that do not require simultaneous social interaction, such as using email, surfing the Web, taking online courses, and so on. Furthermore, a lot of the studies found that patterns of Internet use are associated with social capital indicators (Boudoin, 2008; Shah, McLeod, & Yoon, 2001; Shah, Kwak, & Holbert, 2001; Wellman et al., 2001). Internet use for information exchange is positively related to civic participation and interpersonal trust (Shah, Kwak, & Holbert, 2001; Shah, McLeod, & Yoon, 2001), while Internet use for social recreation seems to be negatively related to these social capital indicators. In the study of Wellman et al. (2001), both synchronous and asynchronous Internet use had positive impacts on political participation. Thus, these researchers emphasize the need to study patterns of Internet use other than intensity of use.

Likewise, SNSs like Facebook can satisfy a variety of uses and gratifications

sought by Internet users. First, Facebook can fulfill the communicative and social interactive needs of users. Users can communicate and keep in contact with their friends through the “message” and “comment” functions. The “message” function is just like an instant messaging service. They can also easily and reciprocally comment on one another’s new posts and pictures. This is considered an efficient way to maintain their social networks in real life. Secondly, Facebook can satisfy the informational needs of users (see Valenzuela et al., 2009). Each time a user logs in, the "news feed" feature allows them to see each friend’s latest updates about their lives, the things they are interested in (movie reviews, book reviews, exhibitions, conferences, etc.), their new pictures, and so on. Therefore, users can not only easily get information about their past and current friends but also get information about things related to their own interests. Moreover, people can add organizations or employers as their Facebook friends or join Facebook “groups” based on common interests and activities. Thus, they can also get public employment information, entertainment information, and so on. Third, Facebook can satisfy users’ needs for pure entertainment and recreation (see Valenzuela et al., 2009). Since there are a lot of entertaining posts, articles, videos, posters, music, and links shared on Facebook, users can spend their time on the site purely enjoying themselves. Besides, there are a lot game applications integrated into the site, and a lot of users play those games. Fourth, Facebook helps with personal identity construction (see Valenzuela et al., 2009). Users can post about their lives and anything else that they want their friends to see on the “wall”, where Facebook friends can leave comments on the posts.

Many scholars have compared the different purposes for or patterns of using the SNSs. Raacke and Bonds-Raacke (2008) applied the uses and gratifications theories to explore the motivations and purposes for which people use and do not use Myspace and



Facebook. They found that most people use the SNSs to keep in contact with their old and current friends, which satisfy people's social interactive needs. The sites have also been used to a large extent to find information about old friends and learn about events, which fulfill users' informational needs. Brandtzæg and Heim (2009) conducted a qualitative study on SNS use in Norway. The results showed that the primary motivation for using SNSs is to seek new relations and make new friends, which is followed by the motivation to keep in contact with close friends and acquaintances as well as socialization. The other uses in order are information seeking, debating, time-killing, content sharing and consuming, fun, profile surfing, and so on. The results fit the four categories of uses and gratifications: social interaction (for contacting old, current and new friends), information (for information seeking, debating, and content sharing and consuming), and entertainment (for time-killing and fun). Park et al. (2009) also identified four categories of Facebook Group uses: social interaction with family and friends, information acquisition about campus and community, entertainment, and self-status seeking. In terms of cultural influence on SNS use, Kim et al. (2011) conducted a cross-cultural study of the motivations of Americans and Koreans. The results showed that American respondents had greater motivations for seeking entertainment on the SNS, while Korean respondents reported higher motivations for seeking information and social support. However, they showed similar levels of motivation to seek friends.

The study conducted by Burke et al. (2010) was the only one up to the present that focused on measuring actual SNS use features rather than the motivational needs of SNS use. They differentiated between two types of activities on SNSs: directed communication and consumption. The former pattern refers to text exchanges through wall posting, commenting and sending messages between users, use of the "like" feature, and photo tagging. The latter pattern refers to passively tracking friends' feed stories,

profiles and news on the site. They also found a positive relationship between directed communication and bonding social capital and a negative one between consumption and bridging social capital. However, their differentiation of the activities on SNSs seems to be based on conceptualization rather than factor analysis, which lends less validity to the results.

Although a number of studies examined either the motivations or patterns of SNS use based on the framework of uses and gratifications, little is known about the similarities and differences between the patterns of both host and home SNS use by student sojourners. Furthermore, as reviewed above, most of the studies focused on motivations for SNS use while only a few studies focused on patterns of SNS use. Therefore, it is significant to compare the patterns of use of both host and home SNS among student sojourners to fill this gap in the existing literature. This study will focus on investigating whether Chinese international students in the U.S. use the Facebook and Renren.com in certain patterns, for example, communication, information and/or entertainment.

## **ACCULTURATION AND SNSs**

As for what might impact the use of Facebook and Renren.com, especially on the intensity of use, we need to know the process of acculturation that Chinese international students have been experiencing since they came to the United States. The process and levels of acculturation of immigrants and sojourners have been determined by many studies to be associated with their media use behaviors.

### **Cross-cultural Adaptation or Acculturation**

Host country refers to the nation receiving immigrants and sojourners, and home country refers to their country of origin. When people move from their home country to

another host country for education, career, immigration, and so on, whether for the long term or short term, they must cope with a high level of uncertainty and unfamiliarity in the host society. In order to adapt to the new and unfamiliar cultural environment, they consciously and unconsciously undergo a process of cultural change by learning the host language, cultural values, and behavior customs, a process which is mainly theorized as acculturation or cross-cultural adaptation (Gordon, 1964; Kim, 1998). The classical definition of acculturation was coined by Redfield, Linton and Herskovits (1936): “acculturation comprehends those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact with subsequent changes in the original culture patterns of either or both groups” (p. 149). The main emphasis has been placed on immigrant groups. However, not all individuals participate to the same extent in the general process of acculturation being experienced by their group (Rose, 1956; Kim, 1988). Furthermore, the adaptation of short-term sojourners should also be considered in the general process of acculturation. Therefore, Kim proposed another term, “cross-cultural adaptation,” to refer to “the process of change over time that takes place within individuals who have completed their primary socialization process in one culture and then come into continuous, prolonged first-hand contact with a new and unfamiliar culture” (Kim, 1988, p. 37-38).

The process of acculturation involves the acquisition of the cultural traits of the host society and the maintenance of original ethnic cultural identity (Laroche, Kim and Hui, 1997; Laroche, Kim, Hui & Tomiuk, 1998). The traditional approach to understanding the process of acculturation focuses on individuals’ absorption into the host culture as an ultimate stage and final goal, which is spoken of mainly in terms of assimilation (Gordon, 1964; Ruiz; 1981). The unidimensional model of acculturation or assimilation carries the assumption that adaptation to the host society invariably leads to

a weakening or loss of one's original ethnic cultural identity (Gordon, 1964; Ruiz 1981; Phinney, 1990).

Scholars have since pointed out that assimilation is only one kind of cultural change that is involved in the acculturation process (Berry, 1997; Teske & Nelson, 1974). Berry (1997) identified four types or four strategies of acculturation: integration, assimilation, separation and marginalization. Integration means that individuals try to maintain their original culture while seeking to participate in cultural activities in the host society. A competitive bidimensional model of acculturation was proposed, which states that cultural change encompasses separate dimensions of maintenance of original culture and acculturation to the host society (Berry, 1997; Berry, Kim, Power, Young, & Bujaki, 1989; Laroche, Kim, Hui, & Joy, 1996; Mendoza, 1989). It also suggests that each culture should be measured independently.

However, empirical results obtained up to the present indicate that neither model can be easily disregarded. Even though the bidimensional model recognizes the phenomenon that individuals maintain, albeit in varying degrees, their original culture while adapting to the host society, it is not necessary to differentiate the complete independence of acculturation to the host society from maintenance of home culture. Some studies on acculturation revealed a substantial negative correlation between acculturation to the host society and the maintenance of ethnic culture (Laroche, et al., 1997; Laroche et al, 1996). As people continuously adopt or learn the host cultural traits in the process of acculturation, the strength of their ethnic identification or identification with the culture of origin is likely to weaken.

The above discussions about acculturation are mainly based on immigrants. The ethnic cultural identity of sojourners may persist to a large extent because they experience fewer adaptive changes in their relatively short stay of one to several years,

compared to immigrants who stay much longer in the host society (Kim, 1988). However, as sojourners also continuously adopt or learn the cultural traits in the host society and become more proficient in the new culture, it is possible that the strength of their ethnic identification will weaken to some extent.

Cross-cultural adaptation or acculturation is a process instead of a stagnant status. The amount of exposure to and sources of learning about the new host culture vary by individuals and the circumstances of a move to another country. Therefore, the extent to which sojourners have been acculturated or adapted to the new environment varies by individuals. Laroche et al. (1997) notes four commonly cited dimensions of the acculturation process in their review of the acculturation literature: host society interaction frequency and depth compared to home society interaction, host language fluency and usage, culturally linked habits and customs, and host media utilization and preference. Thus, if a person is more acculturated, he or she will have a higher level of host language fluency and usage, will be more likely to participate in host social interaction, will acquire more host cultural habits and customs, and will be more likely to use host media. We could also use the four dimensions of acculturation to measure acculturation stages (Dato-on, 2000).

Berger and Calabrese's (1975) uncertainty reduction theory propose a series of axioms of communication behavior: "as the amount of verbal communication between strangers increases, the level of uncertainty for each interactant in the relationship will decrease" (p. 102); "similarities between persons reduce uncertainty, while dissimilarities produce increases in uncertainty" (p. 107); "high levels of uncertainty in a relationship cause decreases in the intimacy level of communication content" and "low levels of uncertainty produce high levels of intimacy" (p. 104). Thus, based on the uncertainty theory and the theory of acculturation, individuals who have been acculturated more to

American society will identify with American cultural values more than those who have been less acculturated, which will reduce the uncertainty between them and Americans. They are more able to communicate and interact with American friends and more likely to participate in host social communication activities. Individuals who acquire fewer American cultural elements are more inclined to interact with friends from their country of origin and participate in social communication within their ethnic communities (Ting-Toomy, 1981; Kim, 1988).

Similarly, in another dimension of the acculturation process—host language fluency and usage—if individuals have a higher level of host language competence, they are more able to participate in host social communication activities. If individuals lack host language knowledge and usage, they are more inclined to use their home language, which will increase their participation in ethnic social communication activities and decrease their host social activities (Kim, 1988).

Because interaction and communication on Facebook could be considered host social communication activities and that on Renren.com could be considered as social communication activities with sojourners' ethnic communities, Chinese international students' levels of acculturation to the host society and maintenance of home culture might influence the intensity of Facebook and Renren.com use. It is likely that the levels of host/home social interaction (home social interaction refers to student sojourners' interaction with people from their original culture in the U.S.), host/home language fluency and language usage, host cultural acceptance and home cultural elements, and host/home media usage could influence their Facebook and Renren.com use.

## **Acculturation and Media Use**

After coming to a host society, in order to adapt to the new environment successfully, immigrants and sojourners need to acculturate themselves to the host society in a variety of ways, behaviorally, perceptually, linguistically, and so on. The media, including traditional mass media (i.e., Radio, TV, newspapers and magazines) and the Internet, have played a significant role in satisfying their acculturation needs. Furthermore, the use of media might be highly correlated with immigrants and sojourners' levels of acculturation. Meanwhile, the levels of acculturation that are influenced not only by media use but also by interpersonal communication, personal characteristics, and demographic factors, might impact people's use of media as well. Thus, many studies have focused on how immigrants and sojourners' use of host, home and ethnic media influence or are influenced by their process and levels of acculturation to the host society and their maintenance of home culture. Host media refers to media in the host country, the content of which is usually produced in the host language and targets primarily the host nationals in the host country. Home media refers to media in the home country, the content of which is usually in the home language and targets the national population in the home country. Ethnic media refers to media in the host country, the content of which is primarily in home language and targets the immigrants and sojourners in the host country.

Hwang and He (1999) identified three acculturation needs of Chinese immigrants in the U.S.: English language skills, acquisition of information about host society, and knowledge of American culture, customs and habits. The three needs are in part satisfied by using English language mass media, and only the need for acquisition of information could be partially satisfied by using both English and Chinese language media. Yang, Wu, Zhu and Southwell (2004) found that the stronger the acculturation need of Chinese

international students in the U.S., the stronger they have acculturation motives for media use, and the more frequently they will use U.S.-based television and Internet content. The television programs most watched with acculturation motives are American and international news and comedies. Reece and Palmgreen (2000) examined the relationship between acculturation need and television viewing motives among Indian graduate student sojourners in the U.S. and found a strong positive relationship.

Host media's successful role in fulfilling immigrants' and sojourners' acculturation needs relies on the fact that they present not only current events in the host society but also knowledge of its values, norms and customs, which reduces immigrants' and sojourners' uncertainty about the host society and facilitates their acceptance of and integration into the new environment (Kim, 1988). Unlike host media, ethnic media's focus is more on ethnic cultures and ties to the home country than on the host culture, even though they also offer knowledge and information on the host country (Walker, 1999). Thus, when they use ethnic and home media, immigrants and sojourners are more likely to seek information about events back in the home country, which in turn helps alleviate the concerns that they have for the families and friends they left behind (Lee, 2004; Zhou & Cai, 2002).

Many scholars have found that immigrants' use of host media has a positive impact on their levels of acculturation to the host society (Chen, 2010; Hwang & He, 1999; Lee, 2005; Lee & Tse, 1994). Hwang and He (1999) examined the relationship between traditional mass media use and the levels of acculturation among Chinese immigrants in the United States. The results show that the more English language media Chinese immigrants use, the more acculturated they are compared to those who exclusively use Chinese language media. Lee and Tse (1994) found that Hong Kong immigrants in Canada with higher exposure to the traditional host media are more likely



to adopt the Canadian culture and identify themselves as Canadians during the process of acculturation when personal characteristics are controlled for. Lee (2005) examined the use of both traditional mass media and the Internet and found that the use of US-based media is positively related to the level of acculturation of Korean immigrants in the United States. Chen (2010) found that the use of the informational and communicative functions of the Internet has a positive impact on both sociocultural and psychological acculturation of Chinese immigrants in Singapore. Sociocultural acculturation is defined as social skills and ability to negotiate interactive aspects of the host culture while psychological acculturation refers to the psychological well-being and satisfaction gained in the host society (Searle & Ward, 1990; Ward & Kennedy, 1999).

Meanwhile, a number of scholars suggested that immigrants' use of ethnic and home media has a decidedly negative impact on their levels of acculturation to the host society and is associated with their identification with the ethnic and home culture (Chen, 2010; Lee, 2005; Lee & Tse 1994; Melkote & Liu, 2000; Walker, 1999). Walker (1999) found in the study of Haitian immigrants in Miami that traditional ethnic mass media use was positively associated with acculturation of immigrants in the early stages only when other host media was also used. However, other studies consistently found a negative effect of ethnic and home media use on levels of acculturation to the host society. Lee and Tse (1994) found a significant negative correlation between ethnic media use and adoption of Canadian culture. The more ethnic media Hong Kong immigrants in Canada use, the more they preserve the original Chinese culture. Melkote and Liu (2000) also found that the more heavily Chinese international students and scholars use Chinese language websites, the more likely they are to preserve their Chinese values and norms and the lower level of American acculturation they have. The same results were found by Chen (2010) in the study of Chinese immigrants in Singapore.

Although many scholars have studied how media use influences the process of acculturation, only a few studies have examined how media use is influenced *by* levels of acculturation (Peeters & D’Haenens, 2005; Lee, 2005). Peeters and D’Haenens (2005) found that better acculturated immigrants in the Netherlands use Dutch mass media and websites more often but do not spend less time on their home media. Lee (2005) showed that Korean immigrants in the U.S. with higher levels of host language fluency use host language media more often than home language ones.

With regard to the new social communication technology of SNSs, little research focuses on the relationship between their use and levels of acculturation. Lin, Peng, Kim, Kim, and LaRose (2011) explored the relationships between the communicative use of Facebook and social and emotional adjustment among international students in the United States. They found that the use of Facebook to interact with home country friends was positively related to social adjustment but not to emotional adjustment. The use of Facebook to interact with American friends was only marginally correlated with social adjustment.

Although many studies have examined the relationship between the process and levels of acculturation to host, home and ethnic media use, most of them focus on traditional media or the Internet in general with little attention to SNSs. This research tries to fill the void by focusing on both host and home SNS use among international student sojourners and explores the influence of the levels of acculturation to host society and maintenance of home culture on their SNS use.

## **RESEARCH QUESTIONS**

As demonstrated in the literature above, scholars have considerable knowledge of the relationship between Facebook use and social capital and the relationship between

general media use and the process and levels of acculturation to the host society. Nevertheless, little research is available comparing the use of host and home SNSs among international students in the United States and their relationships to social capital. There is also a lack of knowledge on how acculturation to the host society and maintenance of home culture influence SNS usage. As an attempt to address this void, this study tries to compare the use of Facebook (host SNS) and Renren.com (home SNS) among Chinese international students in the United States.

As seen in the existing literature, intensity of Facebook use is positively and significantly related to bridging social capital and maintained social capital (Ellison et al., 2007). In the cross-cultural context, Chinese people with individualistic cultures are found to gain higher levels of both bridging and bonding social capital on their Chinese SNS than American users on the US-based SNS (Chu & Choi, 2011). The study also shows that there is a positive relationship between the intensity of Chinese SNS use and both bridging and bonding social capital. However, there is a lack of knowledge on the relationships between the use of both host and home SNSs and various types of social capital among student sojourners in the United States. Thus, this study begins by comparing the relationships between Facebook and Renren.com use and bridging, bonding and maintained social capital among Chinese international students in the United States. Here in this study, maintained social capital is defined as previous acquaintances, friends or family members in China. Based on the previous findings, the following hypotheses and research question have been formulated:

RQ1: How does the intensity of use of Facebook and/or Renren.com influence the different kinds of social capital that Chinese international students in the U.S. gain or maintain from the SNSs?

H1a: The intensity of Facebook use by Chinese international students in the U.S. will be positively associated with bridging social capital.

H1b: The intensity of Renren.com use by Chinese international students in the U.S. will be positively associated with bridging social capital.

H1c: The relationship between the intensity of Facebook use and bridging social capital is stronger than that between the intensity of Renren.com use and bridging social capital.

H2a: The intensity of Facebook use of Chinese international students in the U.S. will be positively associated with bonding social capital.

H2b: The intensity of Renren.com use of Chinese international students in the U.S. will be positively associated with their bonding social capital.

H2c: The relationship between the intensity of Renren.com use and bonding social capital is stronger than that between the intensity of Facebook use and bonding social capital.

H3: The intensity of Renren.com use by Chinese international students in the U.S. will be positively associated with their maintained social capital.

Before coming to the U.S., Chinese international students mainly use Renren.com as their primary SNS to connect with their Chinese social ties either in China or in other parts of the world. After they come to the U.S., they are likely to adopt Facebook, the dominant SNS for American college students, to build up and maintain their relationships with American, Chinese, or other international students in the U.S. Nevertheless, they are very likely to use Renren.com to maintain their relationships with their old ties back in China and also with their new Chinese ties in the U.S. Previous studies showed that international students' primary social networks in the host country probably consist of people from the same country of origin (Bochner et al., 1985; Furnham & Alibhai, 1985;

Maundeni, 2001; Neri & Ville, 2008). As the pattern of social networks offline can be also reflected on SNSs (Debatin et al., 2009), it is important to examine what kind of social networks Chinese international students in the U.S. try to maintain on the two sites. I examine the issues related to social network patterns on Facebook and Renren.com as follows:

RQ2a: What is the social network composition on Facebook of Chinese international students in the U.S. in terms of nationality and ethnicity?

H4: Chinese international students in the U.S. have more Chinese friends than non-Chinese friends on Facebook.

RQ2b: Which social network do Chinese international students in the U.S. tend to interact with more frequently on Facebook and also on Renren.com with regard to the geographic distribution, nationalities, and ethnicities of their social networks?

H5a: Chinese international students in the U.S. are more likely to interact with Chinese friends in the U.S. than non-Chinese ones on Facebook.

H5b: Chinese international students in the U.S. are more likely to interact with Chinese friends wherever in China, in the U.S., or in other countries on Renren.com than on Facebook.

As stated above, people use SNSs for various purposes and needs: communication, information, entertainment, personal identity construction, social support, and so on. There might also be different use behaviors on SNSs related to different motivations, which might in turn be related to different types of social capital that users gain from SNSs. Thus, besides studying solely the intensity of SNS use, it is significant to study how people actually use SNSs in various ways. Although most of the studies have focused more on the different motivations for using SNSs based on the uses and gratifications framework, this study focuses more on the actual patterns of SNS use.

They might be communicative, informational and entertainment-related patterns. The following research question has been formulated:

RQ3a: Are there certain patterns of use on Facebook and Renren.com among Chinese international students in the U.S.?

RQ3b: How do patterns of use compare with one another on Facebook and also on Renren.com? Is there a difference among the patterns of use on each site?

RQ3c: How does each pattern of use on Facebook compare to that on Renren.com? Is there a difference in each pattern of use between the two SNSs?

As Chinese international students have been constantly experiencing the process of cross-cultural adaptation or acculturation, their acculturation to the host society and maintenance of home culture varies by individual. The extent of their acculturation to host culture and maintenance of home culture is likely to influence the intensity of their use of Facebook and Renren.com. This study focuses only on how acculturation to host culture and maintenance of home culture influence Chinese international students' use of SNSs but not on how the latter influences the former. This is because the research studies only two SNS platforms but not overall SNS use or general media use. As acculturation and maintenance of home culture is a relatively slow process, the single effect of the two platforms might not be that pronounced. However, as indicated earlier, levels of acculturation are influenced not only by media use but also by interpersonal communication, personal characteristics and demographic factors that might impact people's use of host and ethnic media as well. Therefore, I investigate how acculturation to host culture and maintenance of home culture influence the intensity of Facebook and Renren.com use. I adopt three dimensions of acculturation—host language fluency and usage, host media use and preference, and host social interaction—to measure the levels of acculturation. Comparatively, I try to adopt the home counterparts, home language

usage, home media use and preference, and social interaction among Chinese communities in the U.S. to measure the maintenance of ties to the home culture. I raise hypotheses related to the relationships between the factors of acculturation/home culture maintenance and the intensity of Facebook and Renren.com use as follows:

RQ4a: How does the level of acculturation to American host culture influence the intensity of Facebook use among Chinese international students?

H6a: Chinese international students in the U.S. who are more dedicated to using English are more likely to use Facebook intensively.

H6b: Chinese international students in the U.S. who are more interested in using American media in English are more likely to use Facebook intensively.

H6c: Chinese international students in the U.S. who are more eager to build up American social networks are more likely to use Facebook intensively.

RQ4b: How does the level of maintenance of Chinese home culture influence the intensity of Renren.com use among Chinese international students?

H7a: Chinese international students in the U.S. who are more used to using Chinese are more likely to use Renren.com intensively.

H7b: Chinese international students in the U.S. who are more interested in using Chinese media in Chinese are more likely to use Renren.com intensively.

H7c: Chinese international students in the U.S. who are more interested in Chinese friends in the U.S. than American friends are more likely to use Renren.com intensively.

## **Chapter 3: Methodology**

### **SAMPLING**

This study uses a quantitative method to examine the relationship between the intensity of SNS use and social capital, the impact of social ties on the SNSs, SNS use patterns, and the influence of acculturation and maintenance of home culture on SNS use among Chinese international students in the United States. As the study focuses on Chinese international students in the United States, an online survey was conducted at The University of Texas at Austin, which has a large population of Chinese international students with diverse academic backgrounds. The study population or universe of possible respondents was all of the 854 current Chinese international students at The University of Texas at Austin

This online survey reached all of the Chinese international students through waves of waves of sending out a link to the questionnaire. First, an invitation to participate with a detailed description of the study and a link to the online survey was put in the Newsletter of the International Student & Scholar Services (ISSS) at The University of Texas at Austin and sent to all the Chinese international students through email by the International Office. Only ten Chinese international students at the university participated in the survey. Second, a request with information about incentives for participation and the link to the online survey was put in the Newsletter of the Chinese Student and Scholar Association (CSSA) at UT Austin and in its online forum and sent to all of its student members through email by the association. I stated clearly in the request that only current Chinese international students at The University of Texas are qualified to participate in the survey and have a chance to win a prize, and the results show that no other unqualified members participated in this survey. Third, an email list of almost all the current Chinese international students was collected through a search of the



University Directory, where students' email addresses and names are shown. The email list was compiled using lists of Chinese international students provided by CSSA and by searching the 100 most popular last names of Chinese people. During the search, students from other parts of the world rather than China with similar last names to Chinese international students were excluded by checking their names and email addresses on SNSs and Google search. All of the students on the email list were sent an invitation with a detailed description of the study and the survey, information about confidentiality and incentives for participation, and an individual link to the online survey based on each email address. Three follow-up reminder emails were sent to those who had not responded. In order to increase the response rate, participants who completed the survey were compensated by being entered in a drawing for cash prizes: first prize is \$100 (1 subject), second prize is \$50 (2 subjects), third prize is \$20 (3 subjects), and fourth prize is \$10 (4 subjects). Flyers advertising the survey were also handed out in many different academic, entertainment, and church activities in order to promote participation in the online survey by a variety of Chinese international students at the university.

The survey was hosted on Survey Monkey ([www.surveymonkey.com](http://www.surveymonkey.com)), an online survey hosting site. Between May 1, 2012 and June 1, 2012, a total of 212 participants completed the online survey, generating a response rate of 24.8% among the total of 854 Chinese international students at The University of Texas at Austin. As this study focuses on SNSs usage and the influence of American acculturation and maintenance of Chinese home culture on SNS usage, qualified participants have to use either of the two SNSs (Facebook and Renren.com) and have stayed in the U.S. for at least ten months in order to have enough time to know American culture. One participant who did not use either of the two SNSs (Facebook and Renren.com) and one who has only stayed in the U.S. for

half a year was excluded from the sample. The final sample size was 210 Chinese international students at UT Austin.

The limitation of this sampling method is that the sample is not random. The reason that this study did not use a random sampling method but chose to collect responses from the overall population of Chinese international students at UT Austin is because of the relatively small size of the study population. If the study had used a random sampling method, the sampling frame based on the study population of 854 students would be too small to obtain a large enough sample size in the end. Furthermore, the study is an exploratory study comparing the use of host and home country SNSs by Chinese international students and examining how the acculturation and maintenance of home culture influence their use of the sites. Due to this, the convenience sample obtained from all the Chinese international students at UT Austin is acceptable at the current stage. Therefore, this study used a convenience sample instead of a random sample.

#### **DESCRIPTIONS OF SAMPLE**

The sample was composed of 210 current Chinese international students at The University of Texas at Austin who have been in the U.S. for at least 10 months. The sample consisted of 49.5% males and 50.5% females with an average age of 24 years old, ranging from 19 to 44 years old. About 21% of the participants were undergraduate students, and the rest were graduate students. They were from a diversity of schools and colleges: School of Engineering (40%), School of Natural Sciences (19%), Business (10%), College of Liberal Arts (7.1%), Communication (5.7%), Education (3.8%), School of Law (2.9%), and so on. The participants have stayed in the U.S. for varied lengths of time with a mean of about 3.5 years, ranging from 1 to 26 years. One third of

the participants had family members or relatives in the U.S. In terms of their future plans to return to China or stay in the U.S. for personal development, 10% of the participants said they want to return to China soon, and half of them planned to ultimately go back to China even though they also wanted to stay in the U.S. first for several years. Less than one fourth of the participants wanted to stay in the U.S. for immigration purposes. Among the 210 participants, 204 students (97.1%) had a Facebook account while only 180 students (85.7%) had a Renren.com account; 174 (82.9%) students had both SNS accounts; 30 (14.3%) students had only a Facebook account, while only 6 (2.9%) students had only a Renren.com account.

Table 3.1: Descriptive Statistics for the Sample

	Mean or % (N)	S.D.
Gender		
Male	49.5% (104)	
Female	50.5% (106)	
Age	24.4	3.42
Educational Level		
Undergraduate Students	21.4% (45)	
Graduate Students	78.6% (165)	
Year in the U.S.	3.32	3.677
People who have family members or relatives in the U.S.	32.9% (69)	
Future Plan		
Go back to China soon	9.5% (20)	
Stay in the U.S. first and will go back to China ultimately	51.4% (108)	
Stay in the U.S. for immigration purpose	23.3% (49)	
Facebook Members	97.1% (204)	
Renren.com Members	85.7% (180)	
People who have both Facebook and Renren.com accounts	82.9% (174)	
People who only have a Facebook account	14.3% (30)	
People who only have a Renren.com account	2.9% (6)	

## **MEASURES**

The online survey questionnaire was originally created in English. It was translated into Chinese and back translated into English by two trained bilingual Chinese individuals. It was also pre-tested by ten Chinese international students at different levels of English proficiency in order to ensure valid responses without language barriers. The questionnaire consists of four sections. In the first section, Facebook and Renren.com usage was measured by items covering frequency of use of the SNSs, time spent on the SNSs, number of SNS friends, Facebook friends' nationalities and ethnicities, frequency of interactions with friends on the SNSs, usage of various SNS features, and purposes for using the SNSs. The second section consists of measures of various types of social capital. In the third section, American acculturation and maintenance of home culture were measured by groups of items covering American/Chinese language usage, English language proficiency, American/Chinese social interaction, and American/Chinese media usage. The last section contains demographic questions about age, gender, year in the U.S., educational level, which college and school participants are from, family members in the U.S., and future plans for going back to China or staying in the U.S. Gender was measured by a scale in which 0 refers to male and 1 refers to female. Educational level was measured by a scale in which current undergraduate student is 0 and graduate student is 1. Field of study was measured by liberal arts-related fields being 0 and science-related fields being 1. Science-related schools included Schools of Engineering, Geosciences, and Architecture, and Colleges of Natural Sciences and Pharmacy. Liberal Arts, Social Sciences, and Professional Schools were defined in this study as liberal arts-related, including the Colleges of Liberal Arts, Fine Arts, Communication, Education, and the Schools of Information, Law, Public Affairs, Social Work, and Undergraduate Studies.

## **Frequency of Use**

The frequency of Facebook and Renren.com use was assessed by requiring participants to answer how often they have used the SNSs in the past 30 days on the following scale: 1 = never, 2 = less often, 3 = monthly, 4 = weekly, and 5 = daily. About 49.02% of the 204 Facebook users used Facebook daily while about 78.89% of the 180 Renren.com users used Renren.com daily.

## **Intensity of Facebook use and Intensity of Renren.com use**

Intensity of Facebook use and intensity of Renren.com use were measured using 7 items from the intensity scale created by Ellison et al. (2007). The measure includes two open-ended questions about the extent to which participants were actively engaged in Facebook/Renren.com activities, including amount of time spent on the SNSs on a typical day and number of SNS friends. It also includes five attitudinal questions about the extent to which the SNSs were integrated into the participants' daily activities and the extent to which they are emotionally connected to the SNSs. The attitudinal questions asked whether participants agree or disagree with the following items using a 5 point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree): The SNS is part of my everyday activity; I am proud to tell people I am on the SNS; I feel out of touch when I haven't logged onto the SNS; I feel I am part of the SNS community; I would be sorry if the SNS shut down. The items of time spent and number of friends were first transformed via logarithm. Then the two items with the five attitudinal items were standardized due to their different scales and averaged to create an intensity of SNS use scale: intensity of Facebook use (Cronbach's  $\alpha = 0.875$ , Mean = 0.00, S.D. = 0.756) and intensity of Renren.com use (Cronbach's  $\alpha = 0.893$ , Mean = 0.00, S.D. = 0.781) (see Table 3.2).

Table 3.2: Descriptive Statistics for Intensity of Facebook Use and for Intensity of Renren.com Use

	Mean	S.D.
<b>Intensity of Facebook use</b> <b>(Cronbach's <math>\alpha</math> =0.875)</b>	0.00	0.756
On a typical day, about how much time do you spend on Facebook? (minutes)	37.46	63.704
About how many total Facebook friends do you have?	199.03	225.422
Facebook is part of my everyday activity.	2.82	1.29
I am proud to tell people I am on Facebook.	2.99	0.988
I feel out of touch when I haven't logged onto Facebook for a day.	2.65	1.232
I feel I am part of the Facebook community.	2.82	1.092
I would be sorry if Facebook shut down.	3.38	1.187
<b>Intensity of Renren.com use</b> <b>(Cronbach's <math>\alpha</math> =0.893)</b>	0.00	0.781
On a typical day, about how much time do you spend on Renren.com? (minutes)	75.29	72.716
About how many total Renren.com friends do you have?	400.99	279.476
Renren.com is part of my everyday activity.	3.91	1.117
I am proud to tell people I am on Renren.com.	3.37	1.078
I feel out of touch when I haven't logged onto Renren.com for a day.	3.62	1.145
I feel I am part of the Renren.com community.	3.58	1.056
I would be sorry if Renren.com shut down.	3.92	0.956

### **Social Capital**

The measures of bridging, bonding, and maintained social capital were adapted from scales first created by Williams (2006) and updated with new items by Ellison et al. (2007). The wording was changed to reflect the context of the present study. All of the social capital items were measured using a 5 point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) and factor analyzed to ensure that the items reflect three distinct types of social capital (see Table 3.3).

#### ***Bridging social capital***

Bridging social capital refers to social capital that is connected to weak ties which have diverse backgrounds and help broaden individuals' information and opportunities.

In this study, the measure assesses bridging social capital in the UT Austin context through the following adapted items: I feel I am part of the UT Austin community; I am interested in what goes on at UT Austin; Interacting with people at UT Austin makes me want to try new things; I am willing to spend time to support general UT Austin activities; At UT Austin, I come into contact with new people all the time; Interacting with people at UT Austin reminds me that everyone in the world is connected. The items were averaged to create a new scale of bridging social capital (Cronbach's  $\alpha = 0.84$ , Mean = 3.71, S.D. = 0.58).

### ***Bonding social capital***

Bonding social capital refers to social capital that is associated with strong ties which have similar backgrounds and provide emotional support. In this study, the measure assesses bonding social capital in the UT Austin context through the following adapted items: There are several people at UT Austin I trust to solve my problems; If I need an emergency loan of \$100, I know several people at UT Austin I can turn to; There are several people at UT Austin I can turn to for advice about making important decisions; There are several people I feel comfortable talking to at UT Austin about intimate personal problems; I do not know people at UT Austin well enough to get them to do anything important. The items were also averaged to create a new scale of bonding social capital (Cronbach's  $\alpha = 0.81$ , Mean = 3.89, S.D. = 0.63).

### ***Maintained social capital***

In this study, maintained social capital refers to social capital that is associated with the previous social ties that Chinese international students have in China. Participants rated the extent to which they agree or disagree with the following items: I'd be able to find out about events in China from some friends living there; If I needed to, I

could ask some friends in China to do a small favor for me; I'd be able to stay with some friends in China if traveling back to China; I'd be able to find information about a job or internship from some friends in China; It would be easy to find people to come to my friend reunion party in China. The items were also averaged to create a new scale of maintained social capital (Cronbach's  $\alpha = 0.88$ , Mean = 4.03 S.D. = 0.69).

Table 3.3: Factor Analysis Results for Bridging, Bonding, and Maintained Social Capital  
Factor Loadings

Individual Items and Scales	Mean	S.D.	Maintained Social Capital	Bridging Social Capital	Bonding Social Capital
<b>Bridging Social Capital (Cronbach's <math>\alpha = 0.84</math>)</b>	<b>3.71</b>	<b>0.58</b>			
I feel I am part of the UT Austin community.	3.82	0.74	.006	<b>.688</b>	.289
I am interested in what goes on at UT Austin.	3.98	0.56	.100	<b>.756</b>	.090
Interacting with people at UT Austin makes me want to try new things.	3.77	0.72	.167	<b>.708</b>	.278
I am willing to spend time to support general UT Austin activities; At UT Austin.	3.77	0.73	.063	<b>.793</b>	.078
At UT Austin, I come into contact with new people all the time.	3.33	0.91	-.051	<b>.698</b>	.187
Interacting with people at UT Austin reminds me that everyone in the world is connected.	3.61	0.89	.147	<b>.672</b>	.177
<b>Bonding Social Capital (Cronbach's <math>\alpha = 0.81</math>)</b>	<b>3.89</b>	<b>0.63</b>			
There are several people at UT Austin I trust to solve my problems.	3.93	0.79	.162	.291	<b>.715</b>
If I needed an emergency loan of \$100, I know several people at UT Austin I can turn to.	4.00	0.84	.284	.009	<b>.725</b>



Table 3.3 (continued)

There are several people at UT Austin I can turn to for advice about making important decisions.	3.92	0.80	.048	.221	<b>.805</b>
There are several people I feel comfortable talking to at UT Austin about intimate personal problems.	3.74	0.88	.044	.209	<b>.786</b>
I do not know people at UT Austin well enough to get them to do anything important.	3.86	0.86	-.008	.246	<b>.551</b>
<b>Maintained Social Capital (Cronbach's <math>\alpha = 0.88</math>)</b>	<b>4.03</b>	<b>0.69</b>			
I'd be able to find about events in China from some friends living there.	4.08	0.77	<b>.812</b>	.064	.091
If I needed to, I could ask some friends in China to do a small favor for me.	4.14	0.79	<b>.868</b>	.049	.179
I'd be able to stay with some friends in China if traveling back to China.	4.09	0.81	<b>.831</b>	.042	.130
I'd be able to find information about a job or internship from some friends in China.	3.07	0.93	<b>.718</b>	.147	-.036
It would be easy to find people to come to my friend reunion party in China.	4.05	0.89	<b>.859</b>	.055	.113
Eigenvalues			5.312	2.917	1.610
% of Variance			33.201	18.230	10.059

### **Acculturation to American host culture and maintenance of Chinese home culture**

Acculturation to American host culture can be reflected in three dimensions: voluntary English language use and English language proficiency, American social interaction in the U.S., and American media use. The maintenance of Chinese home culture can be reflected in its counterparts in the three dimensions: voluntary Chinese language use, Chinese social interaction in the U.S., and Chinese media use. All of the

culture items except English language proficiency used a 5 point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), and participants rated the extent to which they agree or disagree with the items. The items for American/Chinese social interactions in the U.S. and American/Chinese media use were factor analyzed to ensure that they did reflect the distinct dimensions of acculturation and maintenance of home culture (see Table 3.4).

### ***Voluntary English language use and Voluntary Chinese language use***

Based on the scales used by Cuellar, Arnold, and Maldonado (1995), I first tried to use three items to measure English language use behavior: I often speak English at school; I often speak English at work; I often speak English off school and work. The counterparts of Chinese use in the three contexts are also used to measure Chinese language use behavior. However, the results found that the Cronbach's  $\alpha$  was not high enough to combine the three items to create an English language use scale. It was the same with the Chinese language use scale. The reason might be that in the school and working context in the U.S., people are required to speak English most of the time and might not have a chance to speak Chinese. Therefore, the first two items in the measure of language use would not show much variability. Only away from school and work would people have a choice in the language they want to use. Therefore, the extent to which participants rated the item "I often speak English off school and work" was used to measure voluntary English language use (Mean = 3.07, S.D. =1.23) and the counterpart "I often speak Chinese off school and work" was used to measure voluntary Chinese language use (Mean = 3.84, S.D. = 1.08).

### ***English language proficiency***

The measure contains four dimensions of English language proficiency: reading, listening, speaking, and writing. All of the items were measured by 4 levels of proficiency: 1 = poor, 2 = fair, 3 = good, and 4 = excellent. The scale were created by taking an average of the four items (Cronbach's  $\alpha = 0.84$ , Mean = 3.90, S.D. = 0.59).

### ***American social interaction and Chinese social interaction***

The measures for American and Chinese social interactions are paired and adapted from the scales used by Laroche, Kim, and Hui (1997) with wording changed to reflect the context of the study and one new item. The 4 items are: I like to go to places where I can be with Americans (Chinese); Most of my closest friends are Americans (Chinese); I have a lot of American (Chinese) friends in the U.S; I feel comfortable dealing with Americans (Chinese). The 4 items for each measure were averaged to create a social interaction scale: American social interaction (Cronbach's  $\alpha = 0.76$ , Mean = 3.12, S.D. = 0.66) and Chinese social interaction (Cronbach's  $\alpha = 0.75$ , Mean = 3.76, S.D. = 0.60).

### ***American media use and Chinese media use***

The measures for American and Chinese media use are paired and are self-created. The 4 items are: I often watch American (Chinese) TV programs; I often read news through news media from the U.S. in English (from China in Chinese); I often listen to American (Chinese) music; I often browse American (Chinese) websites for fun. The 4 items for each measure were averaged to create a media use scale: American media use (Cronbach's  $\alpha = 0.75$ , Mean = 3.38, S.D. = 0.80) and Chinese media use (Cronbach's  $\alpha = 0.75$ , Mean = 3.46, S.D. = 0.77).

Table 3.4: Factor Analysis Results for American/Chinese Social Interaction and American/Chinese Media Use

Individual Items and Scales	Mean	S.D.	Factor Loadings			
			Chinese Social Interaction	American Social Interaction	Chinese Media Use	American Media Use
<b>American Social Interaction</b> (Cronbach's $\alpha = 0.76$ )	<b>3.12</b>	<b>0.66</b>				
I like to go to places where I can be with Americans.	3.52	0.78	.017	<b>.648</b>	-.051	.257
Most of my closest friends are Americans.	2.36	0.93	-.399	<b>.682</b>	.031	.155
I have a lot of American friends in the U.S.	2.97	0.98	-.087	<b>.816</b>	-.051	.241
I feel comfortable dealing with Americans.	3.63	0.74	.088	<b>.657</b>	-.141	.287
<b>Chinese Social Interaction</b> (Cronbach's $\alpha = 0.75$ )	<b>3.76</b>	<b>0.60</b>				
I like to go to places where I can be with Chinese.	3.61	0.72	<b>.652</b>	.134	.332	-.153
Most of my closest friends are Chinese.	3.60	0.98	<b>.707</b>	-.331	.042	-.088
I have a lot of Chinese friends in the U.S.	3.88	0.77	<b>.781</b>	-.018	.157	.092
I feel comfortable dealing with Chinese.	3.94	0.68	<b>.772</b>	-.022	.175	.073
<b>American Media Use</b> (Cronbach's $\alpha = 0.75$ )	<b>3.38</b>	<b>0.80</b>				
I often watch American TV programs.	3.20	1.12	-.138	.175	.047	<b>.670</b>

Table 3.4 (continued)

I often read news through news media from the U.S. in English.	3.47	0.99	-.013	.333	-.037	<b>.693</b>
I often listen to American music.	3.48	1.05	-.011	.146	-.015	<b>.734</b>
I often browse American websites for fun.	3.36	1.05	.153	.225	-.073	<b>.772</b>
<b>Chinese Media Use (Cronbach's <math>\alpha</math> = 0.75)</b>	<b>3.46</b>	<b>0.77</b>				
I often watch Chinese TV programs.	2.93	1.14	.013	.152	<b>.695</b>	-.153
I often read news through news media from China in Chinese.	3.51	1.03	.140	-.125	<b>.770</b>	.005
I often listen to Chinese music.	3.60	0.95	.220	-.079	<b>.749</b>	.036
I often browse Chinese websites for fun.	3.81	0.93	.241	-.204	<b>.737</b>	.062
Eigenvalues			4.088	2.954	1.548	1.044
% of Variance			25.549	18.462	9.673	6.524

## **Chapter 4: Intensity of SNS Use and Social Capital**

As expected from a review of the relevant literature, Facebook usage was positively associated with bridging, bonding and maintained social capital (Ellison et al., 2007). The use of Facebook was measured via the concept of intensity of use, which combines the measurement of users' number of Facebook friends, amount of time spent on the site, and levels of users' emotional connection to the site. Their maintained social capital referred to social capital associated with acquaintances from the previously inhabited community as opposed to close ties (here in this study defined as acquaintances, friends or family members in China). Several other studies also found the use of SNSs had a positive impact on people's social capital (Steinfeld et al., 2010; Valenzuel et al., 2009) and even compared the relationships cross-culturally (Chu & Choi, 2011). However, little is known about how immigrants and sojourners' use of the SNSs from the home and host countries is associated with various types of social capital. Therefore, the first research question is about how intensity of Facebook and/or Renren.com use impacts bridging, bonding, and maintained social capital. It determines which of the two, intensity of Facebook use and intensity of Renren.com use, has a higher level of impact on bridging, bonding, and maintained social capital. In this study, maintained social capital is defined as social capital related to previous social ties back in China. Even though Facebook has been blocked in China since 2008 and very few people there kept on using Facebook, there are still some people who could use Facebook through other means. However, I will focus on the influence of intensity of Renren.com use on maintained social capital, and only a hypothesis of the relationship between Renren.com intensity and maintained social capital is raised. Thus, the following hypotheses will be tested:

H1a: The intensity of Facebook use by Chinese international students in the U.S. will be positively associated with bridging social capital.

H1b: The intensity of Renren.com use by Chinese international students in the U.S. will be positively associated with bridging social capital.

H1c: The relationship between the intensity of Facebook use and bridging social capital is stronger than that between the intensity of Renren.com use and bridging social capital.

H2a: The intensity of Facebook use by Chinese international students in the U.S. will be positively associated with bonding social capital.

H2b: The intensity of Renren.com use by Chinese international students in the U.S. will be positively associated with bonding social capital.

H2c: The relationship between the intensity of Renren.com use and bonding social capital is stronger than that between the intensity of Facebook use and bonding social capital.

H3: The intensity of Renren.com use by Chinese international students in the U.S. will be positively associated with maintained social capital.

## **FINDINGS**

Prior to proceeding with the formal tests of the hypotheses, descriptive statistics were used to compare participants' Facebook and Renren.com usage in terms of frequency of use, amount of time spent on the SNSs, and network size. About 49.02% of the 204 Facebook users used Facebook daily, while about 78.89% of the 180 Renren.com users used Renren.com daily. Participants spent 37 minutes on average on Facebook on a typical day, while they spent twice as much time (75 minutes) on Renren.com. The

students have an average of 200 friends on their Facebook friend lists while they have an average of 401 friends on their Renren.com friend lists.

As noted in the sample description, there were 30 participants who only used Facebook, while there were 6 participants who only used Renren.com. However, there were 174 participants who used both Facebook and Renren.com together. The study tests whether there are significant differences in SNS use in terms of frequency of use, amount of time spent, and network size among those who only used Facebook, those who only used Renren.com, and those who used both. As the number of participants who used Renren.com only was too small, the study first only tested the difference for Facebook use with regard to the three aspects between those who only used Facebook and who used both Facebook and Renren.com. As there were only two groups of people, three independent samples t-tests were used (see Table 4.1). The time and network size variables were taken the logarithm transformation to meet the normality assumption. The results showed that there was not a significant difference in frequency of use ( $t(202) = 1.571, p = .118$ ) and network size ( $t(202) = 1.277, p = .203$ ) between the two groups of participants. However, participants who only used Facebook spent significantly more time on a typical day on the site ( $M = 1.549, S.D. = .503$ ) compared to those who used both Facebook and Renren.com ( $M = 1.258, S.D. = .462$ ) ( $t(202) = 3.146, p = .002$ ).

Table 4.1: Independent Samples T-tests for Frequency of Use, Amount of Time Spent, and Network Size on Facebook

	Mean		S.D.		<i>t</i>	<i>p</i>
	User who only use Facebook	User who use both Facebook and Renren.com	User who only use Facebook	User who use both Facebook and Renren.com		
Frequency <sup>a</sup>	4.10	3.67	1.242	1.420	1.571	.118
Time (log)	1.549	1.258	.503	.462	3.146	.002**



Table 4.1 (continued)

Network Size (log)	2.17	2.05	.623	.474	1.277	.203
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Notes: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$  (N = 204)

<sup>a</sup> Frequency of use was measured in a scale from 1 (never) to 5 (daily).

Second, paired samples t-tests were conducted to compare frequency of use, amount of time spent on the SNSs, and network size among the participants who have both Facebook and Renren.com accounts (see Table 4.2). The sample size was reduced to 174. The results showed that participants used Renren.com (M = 4.56) more frequently than Facebook (M = 3.67) ( $t(173) = -6.84, p = .000$ ). In terms of the average time spent on the two SNSs respectively on a typical day, participants spent over twice as much time on Renren.com (about 75 minutes) as on Facebook (about 33 minutes), a difference which was statistically significant ( $t(173) = -6.58, p = .000$ ). The results also showed that participants had significantly more social ties on Renren.com than on Facebook ( $t(173) = -8.93, p = .000$ ). The average number of social ties people had on Renren.com was 406 while that on Facebook was only about 186. This can be interpreted to mean that even though Chinese international students have been staying in the U.S. for a certain amount of time, they kept on using their home country SNS much more heavily than the host country SNS.

Table 4.2: Paired Samples T-tests for Frequency of Use, Amount of Time Spent, and Network Size between Facebook and Renren.com

	Mean		S.D.		<i>t</i>	<i>p</i>
	Facebook	Renren.com	Facebook	Renren.com		
Frequency <sup>a</sup>	3.67	4.56	1.42	1.02	-6.84	.000***
Time	32.56	74.96	59.20	73.35	-6.58	.000***
Network Size	185.60	406.22	217.19	281.71	-8.93	.000***

Notes: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$  (N = 174)

<sup>a</sup> Frequency of use was measured in a scale from 1 (never) to 5 (daily).

The tests above showed that there were significant differences between frequency of use, amount of time spent on the two SNSs, and participants' social network sizes on the two sites, the latter two of which are the key components of the concept of intensity of use. Thus, we can see by these measures that intensity of use was much greater for Renren.com than for Facebook among Chinese students who used both.

Next, regression analyses were conducted to test the hypotheses of the first research question, which relates intensity of use to social capital. Demographic variables such as gender, years in the U.S., undergraduate or graduate student, and fields of study, were controlled to examine whether intensity of Facebook and/or Renren.com use has an impact on bridging, bonding, and maintained social capital over other demographic variables. Field of study was included as a control variable because it is likely to influence the intensity of Facebook and Renren.com use. International students in Liberal Arts-related schools generally have more American classmates and fewer fellow international students compared to science-related international students. Thus, they are likely to have more American friends on Facebook, which might encourage them to interact with them more frequently as well.

First, the relationships between the intensity of Facebook and/or Renren.com use and bridging social capital were tested (see Table 4.3). Demographic variables were entered first as a block in the regression followed by the block of intensity of Facebook use in model 1. In regression model 2, intensity of Renren.com use was entered as a block following the block of demographic variables. In regression model 3, intensity of Facebook use and intensity of Renren.com use were entered together as a block. As shown in Table 4.3, in regression model 1, the total variance in bridging social capital predicted by the model was 17.5% ( $F(5, 203) = 9.267, p = .000$ ). The results showed that intensity of Facebook use had a statistically significant positive relationship with bridging

social capital, controlling for only demographic variables ( $\beta = .367, p = .000$ ). The total variance in bridging social capital predicted by regression model 2 was 14.1% ( $F(5, 179) = 6.858, p = .000$ ). There was also a statistically significant positive relationship between intensity of Renren.com use and bridging and bonding social capital, controlling for only demographic variables ( $\beta = .305, p = .000$ ). In regression model 3, the total variance explained by demographic variables, intensity of Facebook use and intensity of Renren.com use was 20.8% ( $F(6, 173) = 8.566, p = .000$ ), much higher compared to the previous two models with only one variable of intensity use. After controlling for demographic variables and Renren.com intensity, intensity of Facebook use was still significantly related to bridging social capital in a positive way ( $\beta = .299, p = .000$ ). Comparatively, after controlling for demographic variables and Facebook use intensity, intensity of Renren.com use also contributed significantly to bridging social capital ( $\beta = .227, p = .003$ ). The results also showed that Facebook intensity of use had a stronger and more significant impact on bridging social capital compared to Renren.com intensity of use, thus supporting hypothesis 1c. Therefore, in all three models (1, 2 or 3), the hypotheses 1a and 1b were supported. Few demographic factors matter in the three models, although Chinese undergraduate students in the U.S. had a higher level of bridging social capital than graduate students ( $\beta = -.283, p = .000$ , in model 1;  $\beta = -.258, p = .002$ , in model 2;  $\beta = -.261, p = .002$ , in model 3). That is both significant and interesting since Chinese undergraduate students in the U.S. are seemingly more likely to interact with American fellow students than graduate students who may be interacting with much smaller groups of people in their classes and labs.

Table 4.3: Regressions Predicting Bridging Social Capital

	Model1: Control Factors, Facebook Intensity (N = 204)		Model2: Control Factors, Renren.com Intensity (N = 180)		Model3: Control Factors, Facebook Intensity, and Renren.com Intensity (N = 174)	
	Bridging Social Capital		Bridging Social Capital		Bridging Social Capital	
	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$
Gender (Female)	-.053	-.731	-.021	-.270	-.036	-.455
Year in the U.S.	-.096	-1.351	.004	.055	-.002	-.023
Education (Graduate)	-.283	-3.812***	-.258	-3.215**	-.261	-3.209**
Field of Study (Science)	-.060	-.833	-.065	-.806	.057	-.698
Adjusted R <sup>2</sup>	.062		.058		.054	
Facebook Intensity	.367	5.327***	-	-	.299	3.902***
Renren.com Intensity	-	-	.305	4.229***	.227	3.077**
Adjusted R <sup>2</sup> Change	.062		.058		.054	
Adjusted R <sup>2</sup> Total	.175		.141		.208	

Notes: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Second, relationships between the intensity of Facebook and/or Renren.com use with bonding social capital were tested (see Table 4.4). Furthermore, the same three models and the same regression methods were used. As shown in Table 4.4, all of the three regression models did not significantly predict bonding social capital (Adjusted R<sup>2</sup> = .001, F(5, 203) = 1.058,  $p = .385$ , in model 1; Adjusted R<sup>2</sup> = .020, F(5, 179) = 1.732,  $p = .130$ , in model 2; Adjusted R<sup>2</sup> = .012, F(6, 173) = 1.348,  $p = .239$ , in model 3). All of the demographic variables, intensity of Facebook use, and intensity of Renren.com use were not statistically significant predictors of bonding social capital in the three models. Thus, Hypotheses 2a, 2b, and 2c were not supported. It seems that both social network sites are more likely to be used for bridging than bonding social capital in terms of their use for creating or maintaining social relationships.

Table 4.4: Regressions Predicting Bonding Social Capital

	Model1: Control Factors, Facebook Intensity (N = 204)		Model2: Control Factors, Renren.com Intensity (N = 180)		Model3: Control Factors, Facebook Intensity, and Renren.com Intensity (N = 174)	
	Bonding Social Capital		Bonding Social Capital		Bonding Social Capital	
	$\beta$	<i>t</i>	$\beta$	<i>t</i>	$\beta$	<i>t</i>
Gender (Female)	.061	.807	.133	1.667	.117	1.425
Year in the U.S.	-.011	-.144	.111	1.443	.119	1.522
Education (Graduate)	-.085	-1.106	-.050	-.614	-.053	-.635
Field of Study (Science)	.001	.016	.065	.789	.057	.687
Adjusted R <sup>2</sup>	-.007		.013		.011	
Facebook Intensity	.124	1.642	-	-	.035	.403
Renren.com Intensity	-	-	.114	1.480	.100	1.210
Adjusted R <sup>2</sup> Change	.008		.007		.001	
Adjusted R <sup>2</sup> Total	.001		.020		.012	

Notes: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Third, relationships between intensity of Facebook use and/or intensity of Renren.com use and maintained social capital were tested (see Table 4.5). The same three models and the same regression methods were used. In regression model 1, the total variance in maintained social capital explained by the model was 30.6% ( $F(5, 203) = 19.081, p = .000$ ). The explanatory power of the intensity of Facebook use was not statistically significant. However, demographic variables such as year in the U.S. and the UT College and School where participants were from significantly contributed to maintained social capital ( $\beta = -.518, p = .000$ ;  $\beta = -.172, p = .006$ ). The less time participants stayed in the U.S., the higher their maintained social capital. Participants in the Liberal Arts-related schools had more maintained social capital than science-related students. In model 2, the total variance explained by the model was 9% ( $F(5, 179) =$

4.493,  $p = .001$ ). Intensity of Renren.com use was moderately and significantly related to maintained social capital ( $\beta = .174$ ,  $p = .020$ ), controlling for demographic variables. Year in the U.S. and School variables contributed significantly as well. In model 3, the total variance explained by the model was 7.4% ( $F(6, 173) = 3.307$ ,  $p = .004$ ). After controlling for the Facebook intensity variable together with demographic variables, intensity of Renren.com use still contributed significantly to the prediction at the .05 level of significance ( $\beta = .163$ ,  $p = .042$ ). Therefore, in the models, intensity of Renren.com use was positively related to maintained social capital, while intensity of Facebook did not have an impact. This might be because Facebook has been blocked by the Chinese government since 2008.

Table 4.5: Regressions Predicting Maintained Social Capital

	Model1: Control Factors, Facebook Intensity (N = 204)		Model2: Control Factors, Renren.com Intensity (N = 180)		Model3: Control Factors, Facebook Intensity, and Renren.com Intensity (N = 174)	
	Maintained Social Capital		Maintained Social Capital		Maintained Social Capital	
	$\beta$	t	$\beta$	t	$\beta$	t
Gender (Female)	.045	.717	.143	1.839	.124	1.554
Year in the U.S.	-.518	-8.494***	-.160	-2.136*	-.167	-2.188*
Education (Graduate)	.088	1.386	.064	.800	.069	.848
Field of Study (Science)	-.172	-2.753**	-.180	-2.251*	-.176	-2.163*
Adjusted R <sup>2</sup>	.306		.065		.060	
Facebook Intensity	.077	1.219	-	-	.000	.003
Renren.com Intensity	-	-	.174	2.347*	.163	2.053*
Adjusted R <sup>2</sup> Change	.002		.024		.014	
Adjusted R <sup>2</sup> Total	.308		.089		.074	

Notes: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

## **DISCUSSION**

Previous studies regarding SNS use and social capital mainly focus on American users or comparisons between American users and users in other countries. This study extends the literature by focusing on Chinese international students in the U.S., a noteworthy group because of its large population and its linguistic and cultural differences compared to the predominant U.S. culture. As shown in the findings above, most of the Chinese international students used both Facebook and Renren.com. However, the number of students who had Facebook accounts was a little larger than that of students who had Renren.com accounts. This might be explained by the fact that Facebook is the dominant SNS used by American students (Anderson, 2009), so international students tend to adopt or continue to use Facebook to build up their relationships with host nationals and to better adjust themselves into the host society.

As for the intensity of use, Chinese international students in the U.S. who used both Facebook and Renren.com used the latter much more intensively than the former. They used Renren.com almost every day while they used Facebook weekly. They spent much more time (75 minutes on average) and had a significantly larger number of friends (406 friends on average) on Renren.com than on Facebook (33 minutes and 186 friends on average). These findings are consistent with previous work that shows that Facebook is not the primary SNS for all international students in the U.S. (Lin et al, 2010). The differences between Facebook and Renren.com usage are most likely due to the fact that Chinese international students have spent most of their lifetime up to the present in China, and their overall social network consists mainly of Chinese people. Before they came to the U.S., they probably had already used Renren.com as a tool to maintain their relationships with their friends for several years. Therefore, after they came to the U.S., they have continued using their home SNS, Renren.com, out of habit and also as a way to

keep in touch with their old social ties back in China. Even though they are very likely to have an account on Facebook, the dominant host SNS in the U.S., to build up their relationships with host nationals, Chinese international students still tend to use Renren.com, the home SNS, much more intensively in their daily lives.

The first research question examined the relationships between intensity of Facebook and Renren.com use and three forms of social capital—bridging, bonding, and maintained—among Chinese international students in the United States. Bridging and bonding social capital are set in the context of UT Austin. Maintained social capital in this study is defined as social capital related to old social ties in China, such as acquaintances, friends and family members, and is different from the one developed by Ellison et al. (2007) in their previous study. Some of the results provide evidence consistent with previous research (Burke et al. 2010; Ellison et al., 2007; Lin et al., 2011; Steinfield et al., 2008), showing that intensity of SNS use both for Facebook and Renren.com had a significantly positive relationship with Chinese international students' bridging social capital after controlling for demographic variables. The findings imply that Facebook and Renren.com are good tools for Chinese international students to form and maintain weak tie friendships that are established in the U.S. and gain the benefits of increasing opportunities for contact with various groups of people and having access to diverse information, which are not provided by strong tie relationships (Putnam, 2000). In this study, the intensity of Facebook use had a slightly stronger relationship with bridging social capital compared to the intensity of Renren.com use. One possible explanation might be that only on Facebook can Chinese international students interact with their American friends, who function as an important source of information about the host culture and society (Kim, 1988). However, they can communicate with Chinese friends in the U.S. on both Facebook and Renren.com. Therefore, both the SNSs can help



Chinese international students accumulate and maintain bridging social capital, while Facebook's impact is slightly stronger than Renren.com.

It is surprising to see that neither intensity of Facebook use nor intensity of Renren.com use predicted bonding social capital after controlling for demographic variables. Even though previous studies found that Facebook is much less useful for maintaining or creating bonding social capital than bridging social capital, they suggested that Facebook plays a significant role in helping users maintain pre-existing close relationships that are associated with bonding social capital (Ellison et al., 2007). A study also shows that Chinese SNS users also gain a higher level of bonding social capital through their use of SNSs than American users (Chu & Choi, 2011). The inconsistency with the findings of the previous research that showed SNS use to be related to bonding social capital for American users (Burke et al., 2010; Ellison et al., 2007), for Chinese SNS users (Chu & Choi, 2011), and also for international student users (Lin et al., 2011) might be due to the fact that the Chinese international students spent much less time in the U.S. They might not have enough time to develop that many close relationships with their friends here compared to in China. They might also need to get better used to the individualistic culture in the U.S., which is opposite to their own collectivistic culture, so they tend not to spend that much time on SNSs developing online companionship and maintaining intimate relationships. They may tend to maintain their strong tie relationships through other online communication technologies like QQ, the most popular instant messenger among Chinese people (Chu & Choi, 2010), and in other ways offline.

Finally, only the intensity of Renren.com use had a positive impact on maintained social capital, which assessed the extent to which Chinese international students could rely on old social ties in China to provide useful information, to do small favors, and to provide emotional support. This is most likely due to the fact that Facebook has been

blocked in China since 2008, and very few Chinese people keep on using it. Thus, after they came to the U.S., Chinese international students might only rely on Renren.com rather than Facebook to keep in touch with their old social ties in China that are associated with maintained social capital. However, the regression model using the intensity of Renren.com use alone or together with the intensity of Facebook use to predict maintained social capital accounted for much less of the variation for the dependent variable compared to bridging social capital. Even though it is significant for maintained social capital, Renren.com use has much less impact on maintained social capital than on bridging social capital. One possible explanation might be that even though online communication technologies play an important role in facilitating communication over long distance, geographic distance still constrains communication among people in different countries and matters to individuals' social networks and maintenance of social capital to a large extent (Hampton & Wellman, 2001; Chen & Wellman, 2009). Online interaction on the SNS can supplement but cannot substitute face-to-face and telephone interaction, which remain indispensable for the formation and maintenance of social capital (Chen & Wellman, 2009; Wellman et al., 2001; Mok, Wellman, & Carrasco, 2009). Thus, the long distance between the U.S. and China constrains the impact of Chinese international students' use of Renren.com on gaining maintained social capital, even though the findings still imply the importance of Renren.com use to maintained social capital. Another interesting result is that the length of stay in the U.S. predicted decreased levels of maintained social capital among Chinese international students, which could also be explained by the possibility that a long-term lack of offline interaction would constrain the maintenance of social networks over the long distance between two countries, which in turn decreases the levels of maintained social capital.

## **Chapter 5: Social Networks on SNSs**

As shown in the previous chapter, both intensity of Facebook use and intensity of Renren.com use contributed significantly to the bridging social capital of Chinese international students in the U.S. Intensity of Renren.com use had a significant relationship with maintained social capital as well. As various forms of social capital are related to different social ties, which generate different social networks, it is important to study the social network composition of the SNSs. Different social networks on the SNSs were identified by geographic locations, nationalities, and ethnicities in this study. As Chinese international students in the U.S. have friends of different nationalities and ethnicities and in different geographic locations, it is important to study how they maintain or change their relationships with these different social networks on Facebook. As Chinese international students in the U.S. are able to interact with Chinese friends in the U.S., in China, and in other countries on both Facebook and Renren.com, this study also tries to explore the differences among their interactions with these three social networks on the two sites. Many studies show that co-nationals, i.e. friends in the host country from the same country of origin, are the primary social networks of international students, rather than host nationals (Bochner, Hutnik, & Furnham, 1985; Furnham & Alibhai, 1985; Maundeni, 2001; Neri & Ville, 2008). Therefore, I explore whether these friendship patterns offline are shown online on the SNSs. Three hypotheses were raised:

H4: Chinese international students in the U.S. have more Chinese friends than non-Chinese friends on Facebook.

H5a: Chinese international students in the U.S. are more likely to interact with Chinese friends in the U.S. than non-Chinese ones on Facebook.

H5b: Chinese international students in the U.S. are more likely to interact with Chinese friends whether in China, in the U.S., or in other countries on Renren.com than on Facebook.

## **FINDINGS**

In the questionnaire, I asked participants to select the percentage of Chinese, other Asian, American and other friends on their Facebook on the following scale: 0% = 0, >0% - 20% = 1, >20% - 40% = 2, >40% - 60% = 3, >60% - 80% = 4, and >80% - 100% = 5. Three paired samples t-tests were used to compare the percentage of Chinese friends with that of other Asian, American and other ethnic friends on Facebook (H4). As shown in Table 5.1, the percentage of Chinese friends ( $M = 3.28$ ) of Chinese international students on Facebook was much higher than that of other Asian friends (Mean = 1.12) ( $t(203) = 19.712, p = .000$ ). Similar differences were found in the comparison of the percentage of Chinese friends to that of American ( $M = 1.70$ ) ( $t(203) = 10.964, p = .000$ ) and other ethnic friends ( $M = .75$ ) ( $t(203) = 22.955, p = .000$ ). Thus, H4 was supported. A frequency table is also presented here to show the social network distribution of Chinese international students in the U.S. on Facebook (see Table 5.2). It shows that more than 52.5% of Chinese international students have over 60% Chinese friends on Facebook, while more than 55% of them have less than 20% other Asian, American, and other ethnic friends respectively.

Table 5.1: Paired Samples T-tests for Social Network Composition on Facebook

	Mean		S.D.		<i>t</i>	<i>p</i>
Percentage of Friends <sup>a</sup>	Chinese	Other Asians	Chinese	Other Asians		
	3.28	1.12	1.282	.804	19.712	.000***
Percentage of Friends <sup>a</sup>	Chinese	Americans	Chinese	Americans		
	3.28	1.70	1.282	1.052	10.964	.000***
Percentage of Friends <sup>a</sup>	Chinese	Others	Chinese	Others		
	3.28	0.75	1.282	.722	22.955	.000***

Notes: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

<sup>a</sup> Percentage of friends was measured in a scale of 0-5 where 0 means 0% and 5 means >80% - 100%.

Table 5.2: Frequency Table of Social Network Composition on Facebook

	0%	>0%- 20%	>20%- 40%	>40%- 60%	>60%- 80%	>80%- 100%
Chinese	1.5%	10.8%	14.2%	21.1%	36.3%	16.2%
Other Asians	14.2%	69.6%	9.3%	3.9%	2.9%	0%
Americans	2.0%	55.9%	22.1%	13.2%	3.9%	2.9%
Others	35.8%	56.9%	4.4%	2.5%	0.5%	0%

As for Research Question 2b, participants were asked to select how often they interact with different groups of people on Facebook (see Table 5.3) with a scale of never being 1, less often being 2, monthly being 3, weekly being 4, and daily being 5. As Renren.com was a Chinese SNS used by the Chinese, only the frequency of interacting with Chinese in China, in the U.S., and in other countries on Renren.com was assessed. A principal components factor analysis with varimax rotation was used first to see whether Chinese and non-Chinese contacts were differentiated on Facebook. The result did show the difference, as Chinese contacts were loaded on one factor in the factor analysis and non-Chinese contacts, including other Asian, American and other contacts went to another factor. As a result, a measure of the frequency of interacting with non-Chinese contacts ( $M = 2.33$ ,  $S.D. = .957$ ) was created by taking an average of the six items: other

Asians, White Americans, Asian Americans, African Americans, Latin Americans, and others in the U.S.

Table 5.3: Factor Analysis Results for Frequency of Contact on Facebook

	Mean	S.D.	Factor Loadings	
			Non-Chinese	Chinese
Chinese in the U.S.	3.24	1.126	.468	<b>.514</b>
Chinese in China	2.01	.993	.065	<b>.857</b>
Chinese in other countries	2.17	.970	.201	<b>.742</b>
<b>Non-Chinese in the U.S.</b>	<b>2.33</b>	<b>.957</b>		
<b>(Cronbach's <math>\alpha = .904</math>)</b>				
Other Asians in the US	2.57	1.220	<b>.824</b>	.199
White Americans in the US	2.80	1.237	<b>.827</b>	.089
Asian Americans in the US	2.59	1.243	<b>.880</b>	.140
African Americans in the US	1.98	1.092	<b>.815</b>	.207
Latin Americans in the US	2.14	1.171	<b>.785</b>	.217
Others in the US	1.89	1.008	<b>.641</b>	.290
Eigenvalues			4.700	
% of Variance			52.226	

Paired Samples t-tests were used to compare how often participants interact with Chinese friends vs. non-Chinese ones in the U.S., Chinese in China, and Chinese in other countries on Facebook. As shown in Table 5.4, participants interacted with Chinese in the U.S. ( $M = 3.24$ ,  $S.D. = 1.126$ ) much more frequently than non-Chinese in the U.S. ( $M = 2.33$ ,  $S.D. = .993$ ) ( $t(203) = 12.630$ ,  $p = .000$ ), which supported H5a. The results also showed that participants interacted with Chinese in China less often on average ( $M = 2.01$ ,  $S.D. = .933$ ), the frequency of which was much lower than that of interacting with Chinese in the U.S. This is probably because very few people in China can use Facebook since it has been blocked since 2008. Therefore, Chinese international students might not be able to use Facebook to maintain their relationships with old friends in China.

Table 5.4: Paired Samples T-tests for Frequency of Contact on Facebook

	Mean		S.D.		<i>t</i>	<i>p</i>
Frequency of Contact <sup>a</sup>	Chinese (US)	Non-Chinese (US)	Chinese (US)	Non-Chinese (US)	12.630	.000***
Frequency of Contact <sup>a</sup>	Chinese (US)	Chinese (China)	Chinese (US)	Chinese (China)	14.906	.000***
Frequency of Contact <sup>a</sup>	Chinese (US)	Chinese (Other countries)	Chinese (US)	Chinese (Other countries)	12.618	.000***

Notes: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

<sup>a</sup>Frequency of contact was measured in a scale from 1 (never) to 5 (daily).

H5b was also tested by paired samples t-tests, which compared how frequently participants interact with Chinese in the U.S., in China, and in other countries on Facebook and on Renren.com. As shown in Table 5.5, participants communicated with their Chinese friends whether in the U.S., China, and other countries more frequently on Renren.com than on Facebook. The difference between the two platforms was extremely large for interaction with Chinese in China and in other countries. For example, participants interacted with Chinese in China almost weekly on average on Renren.com ( $M = 3.97$ ,  $S.D. = .117$ ) but much less often on Facebook ( $M = 2.01$ ,  $S.D. = .979$ ) ( $t(173) = -18.183$ ,  $p = .000$ ). However, the difference between how often they interacted with Chinese in the U.S. on Facebook ( $M = 3.20$ ,  $S.D. = 1.107$ ) and on Renren.com ( $M = 3.94$ ,  $S.D. = 1.152$ ) was significant but not that large ( $t(173) = -7.088$ ,  $p = .000$ ). Therefore, H5b was supported as well.

Table 5.5: Paired Samples T-tests for Frequency of Contact between Facebook and Renren.com

Frequency of Contact <sup>a</sup>	Mean		S.D.		<i>t</i>	<i>p</i>
	Facebook	Renren.com	Facebook	Renren.com		
Chinese (US)	3.20	3.94	1.107	1.152	-7.088	.000***
Chinese (China)	2.01	3.97	.979	.117	-18.183	.000***
Chinese (Others)	2.20	3.28	.942	1.301	-10.602	.000***

Notes: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

<sup>a</sup>Frequency of contact was measured in a scale from 1 (never) to 5 (daily).

## DISCUSSION

Previous research focuses on the study of the offline social network formation of international students (Bochner et al., 1985; Furnham & Alibhai, 1985; Hendrickson et al., 2010; Maundeni, 2001; Neri & Ville, 2008) or the strength of individuals' social ties on the SNSs (Ellison et al., 2007; Chu & Choi, 2011). This study extends the literature by focusing on Chinese international students' social network composition on Facebook regarding the geographic distribution, nationalities and ethnicities, and their frequency of contact with these differentiated social networks on both Facebook and Renren.com, the host and home SNSs. In terms of social network composition on Facebook, this research did show that Chinese international students had more Chinese friends than non-Chinese friends in the U.S on the site. This online friendship pattern is similar to the offline pattern shown in the previous study, which indicated that the primary social networks of international students consisted of friends from their own country of origin (Bochner et al., 1985; Furnham & Alibhai, 1985; Maundeni, 2001; Neri & Ville, 2008). Furthermore, the present study showed that Chinese international students interacted with their Chinese friends in the U.S. on Facebook much more frequently than non-Chinese friends, including American and other ethnic friends. This is likely due to the fact that their major social networks are co-nationals, and they are inclined to interact with them. These co-



national friendships may serve to attenuate the stress that international students often experience in the cultural adaptation process (Kim, 1988) and in school and provide emotional, informational, spiritual, and financial support (Maundeni, 2001). Through interacting with co-national friends who are experiencing the same emotions, international students can share and enhance their understanding of the new culture in the host society as well (Woolf, 2007). As social network sites function as a great tool to supplement social interaction offline, interaction with friends from the home country has a positive relationship to international students' social and academic adjustment as well as bridging social capital (Lin et al., 2011). Therefore, these benefits make Chinese international students more likely to spend time with one another both offline and online.

Furthermore, this study compared the frequency of contact on Facebook and on Renren.com to see whether participants preferred one platform over the other to communicate with Chinese in the U.S., Chinese in China, and Chinese in other countries. Overall, Chinese international students are more likely to use Renren.com to interact with their Chinese friends whether in the U.S., in China, or in other countries. One possible explanation of this finding can be attributed to the fact that Renren.com is a Chinese-based SNS, so Chinese people can use it without any language or cultural barriers. Moreover, since Facebook has been blocked and few people are able to use it in China, Renren.com is the only way for most of the students to keep in touch with their friends back in China, which results in relatively less use of Facebook for contacting Chinese in China. However, it is important to notice that the difference between contacting Chinese in the U.S. on Facebook and Renren.com is not that pronounced, so participants still frequently use Facebook to interact with their Chinese friends in the U.S. This might be because there are still many students who want to participate in the activities on Facebook, which might help them acculturate to the host society.

## **Chapter 6: Patterns of SNS Use**

In Research Question 1, intensity of Facebook use and intensity of Renren.com use were assessed. There was an obvious difference in the frequency of use, amount of time spent, and network size on the two sites. Then, I further compared patterns of use between the two sites. As stated in the literature review earlier, people use SNS for various purposes and needs: communication, information, entertainment, personal identity construction, social support, and so on (Brandtzæg & Heim, 2009; Kim et al., 2011; see Valenzuela, et al., 2009). There are also different use behaviors related to these motivations and needs, which form certain patterns of use. Therefore, Research Question 3 assessed first whether there are certain patterns of use among Chinese international students on Facebook and Renren.com and then how the patterns of use compare with one another on the two platforms.

### **FINDINGS**

In the questionnaire, participants were asked to rate how frequently they used popular features and behaved in certain ways on Facebook and Renren.com respectively. The following scale was used: never = 1, less often = 2, a few times a month = 3, a few times a week = 4, about once a day = 5, a few times a day = 6, and a few times an hour = 7. A principle components factor analysis with varimax rotation of the items was conducted first in order to see which use features or SNS platforms matter to participants' SNS use behaviors. As shown in Table 6.1, most of the behavioral items on Facebook were in one factor, and most of those on Renren.com belonged to another factor. This showed that it was the SNS platform that mattered to participants in their use of different SNSs. Some participants tended to do most things on Facebook while others tended to do

them on Renren.com. The item “read news feed for job information” seemed to be the only behavior on which the SNS platform does not have an impact.

Table 6.1: Factor Analysis Results for Items of Use Behaviors on Facebook and Renren.com

Individual Items and Scales	Mean	S.D.	Factor Loadings		
			Facebook	Renren.com	
Comment or “like” friends’ status, posts or photos (F)	3.61	1.590	<b>.797</b>	.055	.119
Post on friends' wall (F)	3.02	1.312	<b>.811</b>	.199	.104
Message or chat with friends (F)	3.13	1.368	<b>.828</b>	.110	.085
Update your own status about your life (F)	2.84	1.294	<b>.851</b>	.240	-.066
Post articles, videos and links (F)	2.53	1.354	<b>.800</b>	.229	-.067
Upload photos (F)	2.61	1.147	<b>.816</b>	.259	-.076
Browse news feed for fun (F)	3.25	1.755	<b>.727</b>	-.003	.467
Read news feed for information about politics, society, and entertainment (F)	3.12	1.701	<b>.709</b>	-.010	.522
Read news feed for job information (F)	2.41	1.467	.530	.112	<b>.591</b>
Read news feed for information about campus events (F)	2.99	1.575	<b>.736</b>	.079	.454
Comment or “like” friends’ status, posts or photos (R)	4.28	1.597	.098	<b>.762</b>	.231
Post on friends' wall (R)	3.99	1.488	.126	<b>.825</b>	.215
Message or chat with friends (R)	3.98	1.458	.141	<b>.769</b>	.292
Update your own status about your life (R)	3.66	1.457	.208	<b>.850</b>	.010
Post articles, videos and links (R)	3.33	1.495	.224	<b>.801</b>	.057
Upload photos (R)	3.28	1.297	.298	<b>.798</b>	.057
Browse news feed for fun (R)	4.64	1.737	-.047	<b>.605</b>	.501
Read news feed for information about politics, society, and entertainment (R)	4.48	1.779	-.038	<b>.601</b>	.584
Read news feed for job information (R)	2.84	1.814	.130	.429	<b>.626</b>
Read news feed for information about campus events (R)	3.49	1.883	.054	.506	<b>.675</b>
Eigenvalues			8.737	3.840	
% of Variance			43.686	19.202	

Next, the items of use behaviors on Facebook and Renren.com respectively were factor analyzed with varimax rotation to see whether they form certain patterns of use through principle components factor analyses with varimax rotation. As shown in Table 6.2 and Table 6.3, the first factor of Facebook or Renren.com use behaviors consisted of using communication features and self-presentation features. Using communication features can be considered as a behavior of direct communication, while using self-presentation features can be considered as a behavior of indirect communication. Users could promote communication with their SNS friends by sharing personal life events, articles, videos or photos. Therefore, the first pattern of use on Facebook or on Renren.com is communication (Cronbach's  $\alpha = .919$ ,  $M = 3.00$ ,  $S.D. = 1.158$ ; Cronbach's  $\alpha = .918$ ,  $M = 3.73$ ,  $S.D. = 1.235$ ). The second factor of Facebook or Renren.com use behaviors consisted of browsing the news feed for fun and reading the news feed for various forms of information. Even when people browse news feeds simply for fun, they are obtaining information purposefully. Thus, the second pattern of use on Facebook or on Renren.com is information (Cronbach's  $\alpha = .889$ ,  $M = 2.93$ ,  $S.D. = 1.414$ ; Cronbach's  $\alpha = .854$ ,  $M = 3.84$ ,  $S.D. = 1.495$ ). The factor analysis results did answer Research Question 3a by showing that there are certain patterns of use on Facebook and Renren.com, i.e. for communication and information. All of the scales of patterns of use were created by taking an average of the relative items.

Table 6.2: Factor Analysis Results for Patterns of Use on Facebook

	Mean	S.D.	Factor Loadings	
			Communi- cation	Information
<b>Facebook Use for Communication (Cronbach's <math>\alpha = .919</math>)</b>	<b>3.00</b>	<b>1.158</b>		
Comment or "like" friends' status, posts or photos (F)	3.61	1.590	<b>.725</b>	.396
Post on friends' wall (F)	3.02	1.312	<b>.741</b>	.406

Table 6.2 (continued)

Message or chat with friends (F)	3.13	1.368	<b>.693</b>	.452
Update your own status about your life (F)	2.84	1.294	<b>.840</b>	.292
Post articles, videos and links (F)	2.53	1.354	<b>.814</b>	.275
Upload photos (F)	2.61	1.147	<b>.840</b>	.220
<b>Facebook Use for Information (Cronbach's <math>\alpha = .889</math>)</b>	<b>2.93</b>	<b>1.414</b>		
Browse news feed for fun (F)	3.25	1.755	.428	<b>.769</b>
Read news feed for information about politics, society, and entertainment (F)	3.12	1.701	.359	<b>.807</b>
Read news feed for job information (F)	2.41	1.467	.179	<b>.793</b>
Read news feed for information about campus events (F)	2.99	1.575	.378	<b>.808</b>
Eigenvalues			6.343	1.032
% of Variance			63.432	10.317

Table 6.3: Factor Analysis Results for Patterns of Use on Renren.com

	Mean	S.D.	Factor Loadings	
			Communi- cation	Information
<b>Renren.com Use for Communication (Cronbach's <math>\alpha = .918</math>)</b>	<b>3.73</b>	<b>1.235</b>		
Comment or "like" friends' status, posts or photos (R)	3.61	1.590	<b>.673</b>	.428
Post on friends' wall (R)	3.02	1.312	<b>.754</b>	.425
Message or chat with friends (R)	3.13	1.368	<b>.696</b>	.465
Update your own status about your life (R)	2.84	1.294	<b>.860</b>	.231
Post articles, videos and links (R)	2.53	1.354	<b>.803</b>	.264
Upload photos (R)	2.61	1.147	<b>.832</b>	.237
<b>Renren.com Use for Information (Cronbach's <math>\alpha = .854</math>)</b>	<b>3.84</b>	<b>1.495</b>		
Browse news feed for fun (R)	3.25	1.755	.324	<b>.755</b>
Read news feed for information about politics, society, and entertainment (R)	3.12	1.701	.291	<b>.831</b>
Read news feed for job information (R)	2.41	1.467	.284	<b>.688</b>
Read news feed for information about campus events (R)	2.99	1.575	.260	<b>.830</b>
Eigenvalues			6.014	1.086
% of Variance			60.145	71.009

After patterns of use for communication and information were generated, I first compared these patterns on Facebook between participants who only used Facebook (N = 30) and those who used both Facebook and Renren.com (N = 174) through two independent samples t-tests (see Table 6.4). The results showed no significant difference between the two groups for use of the SNS for communication or information. Both of the two groups of participants used Facebook for communication and information several times a month; the frequency was not high.

Table 6.4: Independent Samples T-tests for Patterns of Facebook Use between Facebook Only Users and Facebook plus Renren.com Users

	Mean		S.D.		<i>t</i>	<i>p</i>
	User who only use Facebook	User who use both Facebook and Renren.com	User who only use Facebook	User who use both Facebook and Renren.com		
Communication	3.228	2.957	1.246	1.141	1.184	.238
Information	2.858	2.945	1.378	1.424	-3.110	.756

Notes: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Second, I compared use for communication and use for information on Facebook (N = 204) and then on Renren.com (N = 180) through two paired samples t-tests to answer RQ 3b. As shown in Table 6.5, the difference between use for communication and use for information on Facebook was not statistically significant, and neither was it significant on Renren.com. Thus, it did not show the difference between the patterns of use for each site anticipated in Research Question 3b. Participants were probably more likely to use the SNSs for both communication and information to roughly the same extent since there seem to be no statistically significant differences.

Table 6.5: Paired Samples T-tests for Patterns of Facebook Use and Renren.com Use

	Mean		S.D.		<i>t</i>	<i>p</i>
	Communica- tion	Information	Communica- tion	Information		
Facebook (N = 204)	2.997	2.933	1.158	1.141	.931	.353
Renren.com (N = 180)	3.731	3.842	1.235	1.495	-3.110	.756

Notes: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Third, the two SNSs were compared to one another in terms of usage for communication and usage for information through two paired samples t-tests (see Table 6.6). There were statistically significant results. In terms of the use pattern for communication, participants used Facebook only several times a month ( $M = 2.957$ ,  $S.D. = 1.141$ ) while they used Renren.com several times a week ( $M = 3.754$ ,  $S.D. = 1.238$ ); the difference was statistically significant ( $t(173) = -6.84$ ,  $p = .000$ ). Similarly, the frequency of use for seeking information on Renren.com ( $M = 3.862$ ,  $S.D. = 1.424$ ) was much higher than that on Facebook ( $M = 2.945$ ,  $S.D. = 1.508$ ) ( $t(173) = -6.58$ ,  $p = .000$ ). Thus, the differences in the two patterns of use between the two SNSs anticipated in RQ3c were shown here. Participants were more likely to use Renren.com for staying in communication with friends and contacts and seeking information than Facebook. The results also corresponded with the previous ones shown in the factor analysis of all the behavioral items on the two sites, which showed that SNS platform itself had a relationship with people's patterns of SNS use.

Table 6.6: Paired Samples T-tests for Facebook vs. Renren.com Use for Communication and Information

	Mean		S.D.		<i>t</i>	<i>p</i>
	Facebook	Renren.com	Facebook	Renren.com		
Communication	2.957	3.754	1.141	1.238	-6.84	.000***
Information	2.945	3.862	1.424	1.508	-6.58	.000***

Notes: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

## DISCUSSION

This study extends previous literature on motivations for or patterns of SNS use by comparing patterns of both host and home SNS use among student sojourners. The findings first showed that it was the SNS platform that mattered to Chinese international students in their use of different SNSs. Some participants tended to mainly use Facebook to do various activities, including commenting on friends' walls, chatting, reading the news feed for information, sharing their own life stories, and so on, while others tended to do these activities on Renren.com. As Renren.com, established as a Chinese version of Facebook, has a similar interface and feature design to Facebook, Chinese international student users' preference for one platform over the other may not be due to the interface and feature design of the two sites. Hence, their preference is most likely due to differences between the two sites in Chinese international students' social network composition, content shared, and required language.

In terms of whether there are certain patterns of use on Facebook and Renren.com, the findings are consistent with most of the previous studies on motivations for or patterns of use of SNSs, which indicate that people mainly use SNSs for social interaction or communication and information (Brandtzæg and Heim, 2009; Burke et al., 2010; Raacke and Bonds-Raacke, 2008; Park et al., 2009). However, the factorization of the use of popular features of the two sites does not generate other patterns of use which



were suggested by previous studies – entertainment and personal identity construction (see Valenzuela et al., 2008; Park et al., 2009). This is likely due to the fact that this study focused on the actual use behaviors rather than attitudinal motives for use. Therefore, the measure of the actual use behaviors on SNSs cannot completely reflect the motivational needs of people using SNSs under the framework of uses and gratifications.

Furthermore, this study compared the patterns of use on each SNS by Chinese international students in the U.S. and also each pattern of use between Facebook and Renren.com. The results did not show any significant difference between frequency of use for communication and for information on either Facebook or Renren.com. It seems that Chinese international students used SNSs for the purposes of communication and information to almost the same extent. However, the results did show significant differences in frequency of use for communication and also for information between Facebook and Renren.com. Participants were more likely to use Renren.com for both social interaction and information, which was consistent with the result produced by the factorization discussed earlier, which showed that they were more inclined to do various activities on one of the two SNSs. As both Chinese international students' old Chinese friends in China and new Chinese friends in the U.S. are on the site, Renren.com serves as an important tool for them to maintain old relationships and build new relationships. In addition, the home media provides information about events back in the home country, so it helps alleviate student sojourners' concerns about the families and friends they left behind (Lee, 2004; Zhou & Cai, 2002). Even though Facebook functions as an important channel for student sojourners to interact with host national friends, who serve as an important source of information about host culture and society (Kim, 1988), the language and cultural barriers to using the SNS cannot be disregarded. Therefore, Chinese

international students in the U.S. are more likely to use Renren.com than Facebook for both communication and information.

## **Chapter 7: Acculturation and Intensity of SNS Use**

Because Chinese international students experience the processes of acculturation to host culture and maintenance of home culture continuously, their different levels of acculturation might contribute to differences in the use of host and home SNSs. However, very few studies focus on the relationship between different levels of acculturation and SNS use. Only a single study conducted by Lin et al. (2011) explored how Facebook use affected international students' social, emotional, and college adjustment but not the opposite relationship. Thus, this study aims to fill this void by exploring how acculturation to host culture and maintenance of home culture affect Chinese international students' SNS use. I adopt three dimensions of acculturation—host language fluency and usage, host media use, host social interaction—to measure the levels of acculturation. I also adopt the home culture counterparts, home language usage, home media use, and home social interaction among Chinese communities in the U.S. to measure the maintenance of ties to home culture. As the influence of intensity of Facebook and Renren.com use to various forms of social capital has been found in the test of the hypotheses of RQ1, now RQ4a and RQ4b try to find how factors related to acculturation to host culture and maintenance of home culture contribute to different levels of intensity of Facebook use and intensity of Renren.com use respectively. Thus, six hypotheses were proposed:

H6a: Chinese international students in the U.S. who are more dedicated to using English are more likely to use Facebook intensively.

H6b: Chinese international students in the U.S. who are more interested in using American media in English are more likely to use Facebook intensively.

H6c: Chinese international students in the U.S. who are more eager to build up American social networks are more likely to use Facebook intensively.

H7a: Chinese international students in the U.S. who are more used to using Chinese are more likely to use Renren.com intensively.

H7b: Chinese international students in the U.S. who are more interested in using Chinese media in Chinese are more likely to use Renren.com intensively.

H7c: Chinese international students in the U.S. who are more interested in Chinese friends in the U.S. than American friends are more likely to use Renren.com intensively.

## **FINDINGS**

Regression analyses were conducted to test the above hypotheses. In the previous studies, gender, educational levels, and length of residence in the host country were theorized and tested as crucial factors influencing the levels of acculturation (e.g., Berry, 1997; Dato-on, 2000; Kim, 1988). Field of study is likely to influence the levels of acculturation as well because international students in Liberal Arts-related schools have more American classmates and less international fellow students compared to science-related international students. Thus, demographic variables, such as gender, year in the U.S., undergraduate or graduate student, and field of study, were controlled to examine whether four factors related to acculturation to host culture and three factors related to maintenance of home culture are associated with intensity of Facebook use and intensity of Renren.com use over demographic variables. First, a regression was used to test the relationships of English proficiency, voluntary English use, American media use, and American social interaction—which are the dimensions of acculturation to host culture—with intensity of Facebook use (see Table 7.1). Demographic variables were entered first

as a block in the regression, followed by the block of the four acculturation factors as described above and three factors of maintenance of home culture, including voluntary Chinese use, Chinese media use, and Chinese social interaction. The total variance in intensity of Facebook use explained by the model was 30.0%. ( $F(11, 203) = 8.920, p = .000$ ). American media use and American social interaction were statistically significant predictors ( $\beta = .188, p = .011$ ;  $\beta = .290, p = .001$ ) even after controlling for all the demographic variables and maintenance of home culture variables. American social interaction even has a stronger effect than American media use on intensity of Facebook use. The more American media they use and the more dedicated they are to interacting with American friends, the more intensively participants use Facebook. There was no relationship between English use and English proficiency and intensity of Facebook use. Thus, Hypotheses 5b and 5c were supported but Hypothesis 5a was not supported. However, none of the maintenance of home culture factors contributed significantly to intensity of Facebook use, which showed that the extent to which participants maintain their Chinese home culture did not affect their intensity of Facebook use.

As for the demographic variables, current educational level and school in the U.S. significantly predicted intensity of Facebook use ( $\beta = -.254, p = .000$ ;  $\beta = -.162, p = .022$ ). Graduate students used Facebook much less intensively than undergraduate students. As age at the time of migration significantly influences the rate of acculturation, individuals who migrate to the host country at older ages might be less acculturated than those who migrate at younger ages (Kim, 1988). Thus, graduate students, who might be less acculturated compared to undergraduate students, might use Facebook less frequently. Furthermore, participants from science-related schools are less likely to use Facebook as well. This might be because science students have fewer American

classmates than liberal arts students, and as a result, they spend less time on Facebook interacting with their American friends.

Second, another regression was conducted to test the relationships of voluntary Chinese use, Chinese media use, and Chinese social interaction—which are the dimensions of maintenance of home culture—with intensity of Renren.com use (see Table 7.1). The same regression method was used. The model significantly explained 19.8% of the total variance in intensity of Renren.com use ( $F(11, 179) = 5.006, p = .000$ ). The social interaction with Chinese friends in the U.S. was the only significant predictor, and a very strong one, among the three factors in maintenance of home culture to intensity of Renren.com use, even after controlling for demographic variables and acculturation factors ( $\beta = .316, p = .000$ ). The more they are interested in interacting with Chinese friends in the U.S., the more likely it is that participants use Renren.com intensively. Thus, only Hypothesis 6c was supported. However, the results also showed that American media use, a factor in acculturation to host society, had a positive relationship with intensity of Renren.com use as well. Among the demographic variables, years in the U.S. had a significantly negative relationship with intensity of Renren.com use. This suggests that the longer participants stay in the U.S., the less intensively they use Renren.com.

Table 7.1: Regressions Predicting Intensity of Facebook Use and Intensity of Renren.com Use

	Model: N = 204			Model: N = 180		
	Intensity of Facebook Use			Intensity of Renren.com Use		
	$\beta$	SE	t	$\beta$	SE	t
Gender (Female)	.059	.105	.843	.149	.122	1.901
Year in the U.S.	.064	.014	.933	-.233	.029	-3.098**
Education (Graduate)	-.254	.130	-3.553***	-.031	.160	-.389
Field of Study (Science)	-.162	.112	-2.313*	-.027	.136	-.333
Adjusted R <sup>2</sup>		.124			.054	
English Proficiency	-.022	.093	-.298	-.125	.118	-1.496
Voluntary English Use	.119	.052	1.387	-.113	.062	-1.211
American Media Use	.188	.068	2.582*	.207	.081	2.534*
American Social Interaction	.290	.097	3.427**	.150	.116	1.619
Voluntary Chinese Use	-.022	.051	-.301	.101	.062	1.209
Chinese Media Use	.056	.067	.809	.008	.086	.100
Chinese Social Interaction	.093	.084	1.376	.316	.114	4.101***
Adjusted R <sup>2</sup> Change		.176			.144	
Adjusted R <sup>2</sup> Total		.300			.198	

Notes: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

## DISCUSSION

The present study extends the existing literature regarding acculturation and media use by focusing on how acculturation to host culture and retention of culture of origin affect the intensity of both host and home SNS use among Chinese international students in the United States. It does not consider the process of cross-cultural adaptation as a whole but explores specifically which dimensions reflecting acculturation to host culture and maintenance of home culture affect the intensity of host and home SNS use.

The findings showed that two of the three dimensions reflecting the levels of acculturation to American host culture—American media use and American social interaction—were positively associated with intensity of Facebook use, after controlling for demographic variables and even factors regarding the maintenance of home Chinese

culture. This is consistent with the implications in previous studies that the higher the levels of acculturation, the more frequently people use host media (Peeters & D'Haenens). Although more research is needed to understand the relationships, I provide some possible explanations here. American media in general provide knowledge of the values, customs, and cultures of the host society, which reduces student sojourners' uncertainty about the host society and host nationals (Kim, 1988). The more student sojourners use American media, the better they understand American society and people. Hence, it is more likely for them to know the importance of Facebook to American students for keeping in touch with one another, which encourages them to use this SNS more frequently in order to establish and maintain relationships with their American friends. As for the impact of social interaction with American friends on the intensity of Facebook use, it is most likely due to the fact that the more American friends Chinese international students have offline, the more American friends they are likely to have on Facebook. As a result, they might use Facebook much more frequently than those who have fewer American friends.

On the other hand, none of the three dimensions reflecting the levels of maintenance of Chinese home culture were associated with intensity of Facebook use. As discussed in the review of literature, a unidimensional model of acculturation emphasizes the assumption that the cross-cultural adaptation to host society invariably leads to a weakening of one's maintenance of home culture (Gordon, 1964; Ruiz 1981; Phinney, 1990). If this is valid for student sojourners, the maintenance of Chinese home culture ought to have a negative relationship with the intensity of Facebook use. However, this is not the case. Thus, the results suggest that acculturation to host culture and maintenance of home culture are likely to be independent from each other for student sojourners, as indicated in the bidimensional model of the process of cultural change (Berry, 1997;



Berry, Kim, Power, Young, & Bujaki, 1989; Laroche, Kim, Hui, & Joy, 1996; Mendoza, 1989). One possible explanation is that the short length of stay of student sojourners in the host country does not validate the weakening of ethnic identification while they are experiencing the process of acculturation to the host society.

Furthermore, the dimension of social interaction with Chinese friends in the U.S. was positively related to intensity of Renren.com use. This is most likely due to the fact that Chinese international students are more likely to use Renren.com rather than Facebook to form and maintain relationships with their Chinese friends in the U.S., which was shown in the earlier findings. Thus, if they have more Chinese friends offline, they are likely to have more Chinese friends online, especially on Renren.com, compared to Facebook, and they are more willing to use Renren.com as well. This suggests that the levels of maintenance of home culture also predict the use of home media. We should also note that none of the dimensions of acculturation to host culture, except for American media use, were related to intensity of Renren.com use. American media use did not have a negative relationship with intensity of Renren.com use, which further implies the independence of acculturation to host culture and maintenance of home culture for student sojourners. However, more studies are needed to understand the possible trend implied in the present study.

## **Chapter 8: Conclusion**

SNSs have become increasingly popular and important in students' everyday lives. As Facebook is the dominant SNS for American students in the U.S. and Renren.com is heavily used by Chinese students in China, Chinese international students in the U.S. are likely to use both the host and home SNSs to keep in touch with their friends in the host and home countries. The purpose of the study is to explore the similarities and differences between host and home SNS use among this particular group of students in the United States, which not only has a large population but also has pronounced cultural differences compared to the predominant American culture. The study compared Chinese international students' use of Facebook and Renren.com with respect to intensity and patterns of use in particular. It further explored how these student sojourners in the U.S. used the two SNSs to build up and maintain their social networks and social capital and how their levels of acculturation were associated with their SNS use.

The present study presents the findings that Chinese international students in the U.S. spend much more time and have a significantly larger number of friends on Renren.com than on Facebook. In terms of the two main functions of the SNS—facilitating communication and providing information—the students are inclined to use Renren.com more frequently compared to Facebook. These student sojourners are more likely to use Renren.com rather than Facebook to keep in contact with their Chinese friends, whether they are in the U.S., China, or other parts of the world. Thus, from any perspective—intensity of use, patterns of use, and interaction with Chinese friends—Chinese international students in the U.S. are more likely to use their home SNS, Renren.com, than the host SNS, Facebook.

In terms of whether host and home SNS use can generate certain benefits for Chinese international students in the U.S., both the intensity of Facebook and Renren.com use are demonstrated to be conducive to the development of Chinese international students' bridging social capital. Renren.com can also be used to keep in touch with old Chinese friends in China, which helps retain their maintained social capital as well. However, use of neither the two sites is associated with the student sojourners' bonding social capital established in the United States.

The factors that are associated with the differences in intensity of use between Facebook and Renren.com might be attributed to student sojourners' different levels of acculturation to host culture and maintenance of home culture along with other demographic factors. It must be noted that not all of the dimensions reflecting the levels of acculturation to host culture and maintenance of home culture studied in this research—language proficiency and usage, social interaction, and media use—are associated with intensity of host and home SNS use. The findings suggest that the student sojourners who interact with American friends and/or use American media more heavily are more likely to use Facebook intensively, spending more time and having more friends on the SNS as well as feeling more emotionally attached to the SNS. On the other hand, only students who are more inclined to interact with Chinese friends in the U.S. are more likely to use Renren.com intensively.

#### **THEORETICAL AND PRACTICAL IMPLICATIONS**

The present study has several theoretical and practical implications. First of all, while SNSs have been highlighted as important social tools, especially for student users, to form and maintain relationships with various kinds of social ties, which create and maintain related social capital, there is a lack of empirical research on how international

students use SNSs, let alone on a comparison of their use of host and home SNSs. This study helps fill this void by exploring and comparing how Chinese international students in the U.S. use both host and home SNSs. It concludes that these student sojourners used their home SNS much more intensively than the host SNS. However, both of the two SNSs, especially the host SNS, played important roles in developing the student sojourners' bridging social capital, which refers to the resources provided by weak ties, i.e. opportunities for contact with people with diverse backgrounds and access to information that otherwise cannot be obtained from interaction with strong tie friends (Putnam, 2000). This result further demonstrates the association between SNS use and bridging social capital found in a number of previous studies (Burke et al., 2010; Chu & Choi, 2011; Ellison et al., 2007; Lin et al., 2011; Steinfield et al., 2008). Due to this fact, Chinese international students in the U.S. ought to use Facebook more intensively in order to get more benefits from bridging social capital. Renren.com was also demonstrated as an effective tool for Chinese international students to maintain their relationships with old friends in China, which are related to maintained social capital. As a result, these students ought to keep using Renren.com, which can help them gain and maintain both bridging and maintained social capital.

Second, this study contributes to the existing literature by examining the social network composition and frequency of contact with various kinds of social networks differentiated by geographic locations and nationalities and ethnicities on both host and home SNSs among Chinese international students. Previous studies theorized and tested the idea that international students' friendship patterns offline were composed of co-national friends primarily, host national friends secondarily, and other international friends thirdly (Bochner et al., 1977; Bochner, Hutnik, & Furnham, 1985; Furnham & Alibhai, 1985; Maundeni, 2001; Neri & Ville, 2008). Little research up to the present has

studied the social network patterns of international students on host SNSs, let alone compared how student sojourners contact different types of social networks on host and home SNSs. The present study found that students' social networks on Facebook were composed of primarily Chinese friends in the U.S. and that they contacted Chinese friends in the U.S more frequently than host national and international friends on Facebook. The findings are consistent with the offline friendship patterns founded in the previous studies. The present study also found that Chinese students preferred Renren.com to Facebook to contact with their Chinese friends wherever they were. This suggests, from the perspective of social interaction with Chinese friends, that student sojourners are more likely to use their own home SNS.

Third, the present study measured the actual SNS use behaviors rather than users' psychological needs. It further demonstrates that the main patterns of SNS use are for communication and information seeking with regard to the motivational needs shown in previous studies (Brandtzæg and Heim, 2009; Burke et al., 2010; Raacke and Bonds-Raacke, 2008; Park et al., 2009). Furthermore, from the perspective of patterns of use, Chinese international students are more likely to use their home SNS for both communication and information seeking. The results suggest that it is the SNS platform that matters most to Chinese international students and that they are more willing to do various activities on their home SNS.

Finally, the present study considered several dimensions that reflect levels of acculturation to host American culture and maintenance of home Chinese culture in order to compare how each dimension in the process of cross-cultural adaption is associated with intensity of host SNS use and intensity of home SNS use. The most important dimension of acculturation to host culture that was associated with the intensity of Facebook use was social interaction with American friends. American media use was

associated with the intensity of Facebook use as well. In terms of the intensity of Renren.com use, social interaction with Chinese friends in the U.S. was strongly related. Although I cannot say which factors precede the others, the levels of acculturation to host culture and maintenance of home culture seem to play important roles in the intensity of Facebook and Renren.com use by Chinese international students in the United States. These findings complement previous literature, most of which only focused on the direction of the relationship from media use to acculturation. In addition, the study also found that acculturation to American host culture and maintenance of Chinese home culture do not conflict but seem to be parallel in the process of cross-cultural adaptation among Chinese international student sojourners in the United States. These results support the bidimensional model that the two dimensions of cross-cultural change of immigrants and sojourners seem to be independent from each other (Berry, 1997; Berry, Kim, Power, Young, & Bujaki, 1989; Laroche, Kim, Hui, & Joy, 1996; Mendoza, 1989). These findings suggest that the process and levels of acculturation might be better measured and studied by the dimensions of both acculturation to host culture and maintenance to home culture.

#### **LIMITATIONS AND FUTURE RESEARCH**

The present study has several limitations that should be addressed in future research. First, the study was conducted with a convenience sample at UT Austin rather than a random sample, let alone at several universities in different regions. The convenience sampling method makes generalizations about the results unlikely. Therefore, it is likely that participants' experiences cannot represent the diversity of experiences that can be expected from the entire population of Chinese international

students in the United States. Future research should use a random sampling method and try to encompass Chinese international students in different regions of the United States.

Second, the study only focused on the specific population of Chinese international students in the United States. Since Facebook has been blocked in China for several years, Chinese people in China might not be able to use it legally. Therefore, Chinese international students in the U.S. might not be able to interact with their old friends in China through Facebook either, which makes the use of Facebook among Chinese international students a unique case. As a result, the comparison between host and home SNS use reflects the particularity of Chinese international students and cannot be applied to other ethnic student sojourners. Therefore, future research might focus on other ethnic groups of international students in the United States, who also have their own home SNS and then compare the results to this present study.

Third, this study cannot conclude that there are causal relationships between the levels of acculturation to host culture and maintenance of home culture with intensity of Facebook use or with intensity of Renren.com use through using regression analyses. Future research might benefit from using structural equation models to explore the direction of the relationship between them. It might be possible that levels of acculturation and SNS use are mutually influenced.

Fourth, this present study utilized single quantitative methods but not a combination of both quantitative and qualitative methods. Some of the results, such as the preference for using Renren.com over using Facebook for both communication and information and the association between acculturation and SNS use cannot be interpreted completely based on the data from the study alone. It is necessary to have complementary qualitative data collected through in-depth interviews to address the difficulties of interpretation.

## Appendix A. Questionnaire

### FACEBOOK OR RENREN.COM GENERAL USE

Do you have a Facebook (Renren.com) account?

How long have you been using Facebook (Renren.com)? \_\_\_\_\_ years

In the past 30 days, about how often have you used Facebook (Renren.com)?

- Daily
- Weekly
- Monthly
- Less often
- Never

On a typical day of using Facebook (Renren.com), about how much time do you spent on the SNS? \_\_\_\_\_ hours \_\_\_\_\_ minutes

About how many total Facebook (Renren.com) friends do you have? \_\_\_\_\_

Thinking about how Facebook (or Renren.com) is integrated into your daily activities, please indicate how much you agree or disagree with the following statements.

- Facebook (Renren.com) is part of my everyday activity
- I am proud to tell people I'm on Facebook (Renren.com).
- I feel out of touch when I haven't logged onto Facebook (Renren.com) for a while.
- I feel that I am part of the Facebook (Renren.com) community.
- I would be sorry if Facebook (Renren.com) shut down.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

### FACEBOOK OR RENEN.COM PATTERNS OF USE

How often do you use Facebook (Renren.com) to do each of the following activities?

- Comment on or "like" friends' status, posts, or photos
- Post on friends' wall
- Send a message or chat with friends in private
- Invite friends to join activities



Read news feed for information about politics, society, and entertainment  
 Read news feed for job information  
 Read news feed for information about campus events  
 Browse news feed for fun  
 Play games  
 Update your own status about your life  
 Post articles, videos, links, etc.  
 Upload photos

A few times an hour  
 A few times a day  
 About once a day  
 A few times a week  
 A few times a month  
 Less often  
 Never

#### **SOCIAL NETWORKS ON FACEBOOK**

Thinking about all of your Facebook friends, please indicate the percentage of your friends who are:

Chinese	0%
Other Asians	>0% - 20%
Americans	>20% - 40%
Others	>40% - 60%
	>60% - 80%
	>80% - 100%

Thinking about your Facebook friends who currently live in the U.S. or in China, please indicate how often you interact with the following groups of people on Facebook:

Chinese in the U.S.	Daily
Chinese in China	Weekly
Chinese in other countries	Monthly
Other Asians in the U.S.	Less often
White or Caucasian Americans in the U.S.	Never
Asian Americans in the U.S.	
African Americans in the U.S.	
Latin Americans in the U.S.	
Others in the U.S.	

## **SOCIAL NETWORKS ON RENREN.COM**

Thinking about your Renren.com friends who currently live in the U.S., in China, or in other countries, please indicate how often you contact or interact with the following group of people on Renren.com:

Chinese in China	Daily
Chinese in the U.S.	Weekly
Chinese in other parts of the world	Monthly
	Less often
	Never

## **SOCIAL CAPITAL**

People interact with their family, close friends, classmates, coworkers, acquaintances, and strangers in their lives. Thinking about these people at UT Austin and/or in China, please indicate how much you agree or disagree with the following statements.

I feel I am part of the UT Austin community.

I am interested in what goes on at UT Austin.

Interacting with people at UT Austin makes me want to try new things.

I am willing to spend time to support general UT Austin activities.

At UT Austin, I come into contact with new people all the time.

Interacting with people at UT Austin reminds me that everyone in the world is connected.

There are several people at UT Austin I trust to solve my problems.

If I needed an emergency loan of \$100, I know several people at UT Austin I can turn to.

There are several people at UT Austin I can turn to for advice about making very important decisions.

The people I interact with at UT Austin would be good job references for me.

There are people I feel comfortable talking to at UT Austin about intimate personal problems.

I do not know people at UT Austin well enough to get them to do anything important.

I'd be able to find out about events in China from some friends living there.

If I needed to, I could ask some friends in China to do a small favor for me.

I'd be able to stay with some friends in China if traveling back to China.

I'd be able to find information about a job or internship from some friends in China.

It would be easy to find people to come to my friend reunion party in China.

Strongly agree

Agree

Neither agree nor disagree

Disagree  
Strongly disagree

### ACCULTURATION TO HOST CULTURE AND MAINTENANCE TO HOME CULTURE

Thinking about how you use English/Chinese language in the U.S., please indicate how much you agree or disagree with the following statements.

I often speak English at school.	Strongly agree
I often speak English at work.	Agree
I often speak English off school and work.	Neither agree nor disagree
I often speak Chinese at school.	Disagree
I often speak Chinese at work.	Strongly disagree
I often speak Chinese off school and work.	

How do you evaluate your English proficiency?

Reading skills	Excellent
Listening skills	Good
Writing skills	Fair
Speaking skills	Poor
	None

Thinking about how you interact with your American/Chinese friend in the United States, please indicate that how much you agree or disagree with the following statements.

I like to go to places where I can be with Americans in the U.S.  
Most of my closest friends in the U.S are Americans.  
I have a lot of American friends in the U.S.  
I feel comfortable dealing with Americans.  
I like to go to places where I can be with Chinese in the U.S.  
Most of my closest friends in the U.S. are Chinese.  
I have a lot of Chinese friends in the U.S.  
I feel comfortable dealing with Chinese in the U.S.

Strongly agree  
Agree  
Neither agree nor disagree  
Disagree  
Strongly disagree

Thinking about after you came to the U.S., how you use American media in English and media from China in Chinese, please indicate how much you agree or disagree with the following statements.

- I often watch American TV programs.
- I often read news through news media from the US in English.
- I often listen to American music.
- I often browse American websites for fun.
- I often watch Chinese TV programs.
- I often read news through news media from China in Chinese.
- I often listen to Chinese music.
- I often browse Chinese websites for fun.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

#### **DEMOGRAPHIC QUESTIONS**

Were you born in China?    yes or no

Are you male or female?    male or female

How old are you?

How long have you been in the United States? \_\_\_\_\_years \_\_\_\_\_months

Are you currently \_\_\_\_\_?

- An undergraduate student
- A graduate student
- None

Which school are you in at UT Austin?

Do you have any family members or relatives who live in the U.S.?    yes or no

What's your future plan after graduation with your current degree?

- Go back to China soon
- Stay in the United States first but will go back to live in China ultimately
- Stay in the United States for immigration as a final goal

## **Appendix B. Intensity of SNS Use Scale**

### **INTENSITY OF FACEBOOK OR RENREN.COM SCALE IN THIS STUDY**

I adopted 7 items, which are shown below, from the Facebook intensity scale created by Ellison et al. (2007), to create the present Facebook or Renren.com intensity of use scale. The items regarding number of friends on the SNS and time spent on the SNS are open-ended questions. I transformed the two items first by taking the logarithm. Next, I standardized all the other five items and the two transformed items and then took an average of all the seven items.

#### Scale Items:

Facebook (Renren.com) is part of my everyday activity  
I am proud to tell people I'm on Facebook (Renren.com).  
I feel out of touch when I haven't logged onto Facebook (Renren.com) for a while.  
I feel that I am part of the Facebook (Renren.com) community.  
I would be sorry if Facebook (Renren.com) shut down.  
About how many total Facebook (Renren.com) friends do you have? (open-ended)  
On a typical day of using Facebook (Renren.com), about how much time do you spent on the SNS? (open-ended)

### **FACEBOOK INTENSITY SCALE CREATED BY ELLISON, STEINFELD, AND LAMPE (2007)**

The Facebook Intensity Scale created by Ellison et al. (2007) used 8 items as shown below. Individual items were first standardized due to differing item scale ranges and then averaged to create the intensity scale. They also suggested on their online interaction that the two items regarding number of friends and time spent on the SNS could be asked as open-ended questions. Then a log transformation must be taken to the two items before standardizing and averaging across all the individual items. The methods of creating Facebook Intensity Scale were shown in their paper (Ellison et al., 2007) and on the website of their online interaction lab (<https://www.msu.edu/~nellison/TOIL/scales.html>).

#### Scale Items:

Facebook is part of my everyday activity  
I am proud to tell people I'm on Facebook  
Facebook has become part of my daily routine  
I feel out of touch when I haven't logged onto Facebook for a while  
I feel I am part of the Facebook community  
I would be sorry if Facebook shut down  
Approximately how many TOTAL Facebook friends do you have? (close-ended)  
In the past week, on average, approximately how much time PER DAY have you spent actively using Facebook? (close-ended)

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