THE EFFECT OF ACCULTURATION ON CHINESE INTERNATIONAL STUDENTS’ USAGE OF FACEBOOK AND RENREN

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ABSTRACT

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Drawing from the theoretical framework of uses and gratifications theory, this project explored the ways that acculturation affects Chinese international college students’ usage of two social networking sites, Facebook and Renren. An online survey was conducted to gather data about Chinese international students' acculturation levels and their usage of and gratifications for Facebook ($N = 144$) and Renren ($N = 106$). Pearson correlations and bootstrapping analyses were performed.

Results showed that the adaptation to American culture was positively related to participants’ gratifications for and usage of Facebook. Moreover, gratifications mediated the relationship between acculturation and Facebook usage. Similarly, participants’ identification with Chinese culture was positively associated with their gratifications for Renren. However, acculturation was not found to be correlated with Renren usage. These findings have several implications for uses and gratifications theory, the bidimensional model of acculturation, and ethnic media use studies. In addition, this study provides suggestions for acculturative stress coping programs and marketers’ use of social networking sites.
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CHAPTER I. INTRODUCTION

The number of social network site (SNS) users has been growing explosively since 2003 (Pérez-Latre, Portilla, & Blanco, 2011). One spectacular expansion lies in the usage of Facebook, which is known as “one of the most popular means of communication in North America” (Ross et al., 2009). Pérez-Latre et al. (2011) documented that Facebook users were 400 million worldwide in March of 2010 and had reached 547 million by November of 2010. The number of monthly active Facebook users was 845 million by February 1, 2012 and had arrived at 1 billion by October, 2012 (“Key Fact,” 2012; Fowler, 2012). Although it originated in the United States (U.S.), Facebook has become a global phenomenon with 74% of its users residing outside of the U.S. by 2011 and approximately 81% of monthly active users outside the U.S. and Canada by 2012 (“Key facts,” 2012; Pérez-Latre et al., 2011). However, Facebook does not prevail all over the world; instead, it is partly restricted or wholly banned in several countries, including China, Iran, North Korea, and Syria (“Facebook IPO filing,” 2012).

Notably, in China, Facebook is officially blocked by Great Firewall, a national Internet filtering system, as a governmental effort to cut off the access to politically sensitive topics and activities on Facebook (Talbot, 2010). Instead, Renren, mainly targeting the Chinese market, is a similar SNS that had attracted 160 million users by 2011 (Lee, 2011). Renren is often referred to as the Chinese version of Facebook, since it shares the similar development path from a college site to a public SNS and has almost identical features as Facebook, including web design, applications, and functions (e.g., status updates, private message, albums, profile, wall, group, poking, tagging, liking, and sharing). Meanwhile, Renren differs from Facebook in several important ways. Specifically, it originated in China, is censored by the government, and situates itself in the Chinese cultural context. Further, it should be noted that, although in China there are a minority of Chinese who use a proxy
server to access Facebook, a large quantity of Chinese online social network users, especially college students, are using Renren instead (Lee, 2011; Li, 2007).

As documented by the Institute of International Education (2012), in this century of intense global movements, there are a dramatically increasing number of people studying abroad. Further, the U.S. attracts more international students for higher education than any other countries and China exports the largest number of students to the U.S. for education at the college or university level (Institute of International Education, 2012). With Chinese international students’ entering and staying in the U.S., two phenomena emerge. First, a cultural shifting process called acculturation happens in which they experience changes in the identification with their host and the native cultures (Berry, 1997). For instance, some become more involved in American culture, e.g., by adopting American diet and values, while some maintain their Chinese cultural heritage, e.g., by keeping traditional Chinese diet and values. Second, most of them obtain access to Facebook while holding a Renren account; in other words, they become users of two SNSs with similar functions but different cultural backgrounds. Specifically, for them, Renren serves as a platform for connecting with their previous Chinese communities and culture, while Facebook opens up an online space for interacting with the American communities and culture.

**Objectives**

Drawing from the theoretical framework of uses and gratifications theory (Katz, Blumler, & Gurevitch, 1974), this project explores the potential effect of acculturation on Chinese international students’ usage of Facebook and Renren. According to uses and gratifications theory, individuals actively seek media to satisfy their needs, mainly to connect, or disconnect, with different kinds of others, such as family, friends, and nation (Katz, Haas, & Gurevitch, 1973). Further, research showed that college students’ main motive for using SNSs is to satisfy interpersonal communication needs and to seek social approval and support.
Therefore, it is highly possible that being acculturated into American society or maintaining their Chinese identification affects Chinese international students’ SNSs gratifications and, therefore, their usage of Facebook and Renren. Thus, the purpose of this study is to examine how acculturation influences Chinese international students’ gratifications for and, hence, usage of the two SNSs.

**Rationale**

Although there are abundant studies on acculturation and Facebook usage respectively (e.g., Cheung, Chiu, & Lee, 2011; Davies, 2012; Dere, Ryder, & Kirmayer, 2010; Ellison, Steinfield, & Lampe, 2007; Hsu, 2010; Zywica & Danowski, 2008), none has been found to address the relationship between the two; specifically, whether and how acculturation affects Facebook usage by non-Americans. Moreover, research has yet to examine the influence of acculturation on Chinese international students’ usage of Renren. The inquiry into the potential relationship between acculturation and Chinese international students’ usage of Facebook and Renren is of great significance. Academically, this research is a meaningful examination of and gratifications theory in the emerging context of intercultural computer-mediated communication. Although uses and gratifications theory has already been applied and tested in multiple media settings, including various SNSs, such as Facebook and MySpace, this study can offer a brand new insight by applying uses and gratifications theory to intercultural communication process, specifically, the realm of acculturation. Facebook and Renren, the two functionally paralleled but culturally disparate SNSs, serve as optimal settings for this examination since the main variable distinguishing the two sites is culture. Besides, it can broaden the realm of traditional ethnic media research by investigating ethnic minority members’ usage of the mainstream and ethnic SNSs.

Pragmatically, the exploration of how Chinese international students use SNSs with different cultural orientations can offer insight into understanding their acculturative tension,
identity management, and adjustment techniques. According to the Institute of International Education (2012), China is the leading place of origin for students coming to the U.S. Specifically, for the 2011-2012 academic year, there were 194,029 students from China (i.e., Mainland China, Taiwan, and Hong Kong), which constituted 25.4% of international students enrolled in U.S. institutions of higher education. Studies have shown that because of the differences between Chinese and American cultures, Chinese international students, especially those with lower acculturation into America or lower identification with Chinese culture, experience high levels of socio-cultural difficulties and acculturative stress (Wang & Mallinckrod, 2006; Yeh & Inose, 2003). Further, these challenges can negatively impact Chinese international students' academic achievement (Yan & Berliner, 2009), life satisfaction (Ye, 2006), and mental health (Wang & Mallinckrod, 2006). Meanwhile, it has been found that informational and emotional support from online ethnic social groups, as well as social connection and interaction with Americans, serves as a buffer for acculturative stress for Chinese international students (Ye, 2006; Zhang & Goodson, 2011). At this point, it should be noted that Renren can serve as a source of social support from Chinese ethnic group members, while Facebook can be a convenient and low-pressure way to connect and interact with Americans. Therefore, the use of both Renren and Facebook should help Chinese international students cope with negative mental effects of acculturation. To magnify the role of Facebook and Renren in mediating acculturative stress, it is necessary to examine how the use of the two SNSs differs among people with different acculturation levels.

Overview

This research project is presented in five chapters. Chapter One introduces the research background, objective, rationale, and overview. In Chapter Two, a comprehensive literature review, examines the scholarship of the following four areas: SNSs – Facebook and Renren, acculturation, SNSs uses for gratifications, and ethnic media use. Chapter Three
describes the methods applied in this project and provides summary statistics for participant demographics, acculturation, and Facebook/Renren usage and gratifications. In Chapter Four, the results and analyses are presented. In Chapter Five, the key findings, implications, limitations, and directions for future research are discussed.
CHAPTER II. LITERATURE REVIEW

This chapter provides a comprehensive literature review on which the project was built. It is divided into three sections according to the subject of scholarships being examined. The first section discusses the definition and features of social network sites and the objectives and outcomes of using Facebook and Renren. The second section is constructed around the definitions, theoretical models, strategies, influencing factors, and stress of acculturation. The third section presents the theoretical framework of uses and gratifications theory, as well as its application to SNS research. The fourth section reviews studies on the usage of ethnic media and relates them to acculturation and uses and gratifications theory. Last, based on the literature, several hypotheses are proposed.

SNSs -- Facebook and Renren

Social network sites (SNSs) are “web-based services that allow individuals to… construct a public or semi-public profile” with personal stories in texts, pictures, and videos, as well as view and comment on those of others with whom they share a connection within a certain online system (Boyd & Ellison, 2007, p. 211; Cheung, Chiu, & Lee, 2011). According to Boyd and Ellison (2007), the emergence of SNSs represents a breakthrough in the organization of online communities as these networks are no longer interest-based, but person-centered (or "egocentric"). SNSs are structured around profiles which represent users’ selves and visualize their social networks to others “with the intention of contacting or being contacted by others” (Gross, Acquisti, & Heinz, 2005; as cited by Tufekci, 2008). Among numerous SNSs, Facebook is a remarkable one in terms of the number of its users as well as its real-name feature. Originally designed in early 2004 to support Harvard-only college networks, Facebook has gradually expanded its domain and eventually opened to everyone who is 13 years or older (Boyd & Ellison, 2007; Cassidy, 2006). The number of daily active Facebook users was approximately 552 million in June of 2012 and that of monthly active
users had reached 1 billion by October of 2012 (“Key facts,” 2012). According to Gross et al. (2005), SNSs are particularly prevalent among college students, the fact of which is true to Facebook and its Chinese counterpart, Renren.

Renren is a real-name SNS which has gone through similar development as Facebook. It was originally named Xiaonei (“On Campus”) in 2005 and was renamed Renren (“Everyone”) in 2009. Because it originated in China where Facebook is banned, Renren faces little direct competition with Facebook and by 2011 it had attracted 160 million users and 31 million of them are monthly-active (Chao, 2011; Lee, 2011). While sharing Facebook's web-design, main functions and applications (e.g., Photos, Notes, Groups, Events, Status Updates, Comments, Marketplace, Wall, and Messages; Ross et al., 2009, p. 585), as well as other minor features (e.g., poking, tagging, liking, and sharing), Renren distinguishes itself from Facebook in the following aspects. First, it is a SNS situated in China’s cultural context as it is mainly targeted at the Chinese market and its users are overwhelmingly Chinese. Second, it is censored by the government, so postings concerning highly politically sensitive topics, for instance, those criticizing the policies of the Chinese Communist Party, are subject to deletion.

The main objectives of SNSs are social connection and interaction. Facebook and Renren allow users to establish and manage their personal accounts, and share information including status updates, links, and photos with “friends” that are added on a reciprocal basis through the linkage between profiles (Lewis & West, 2009). Because of the one-to-many, instead of one-to-one, mode of communication on SNSs, Facebook and Renren serve as an efficient and convenient vehicle for maintaining and strengthening offline friendships within a large and diverse group of acquaintances (Chen, 2011; Ross et al., 2009; Young, 2011). Therefore, Chen (2011), the CEO of Renren, stated that Renren is particularly popular among white collar workers and college students whose time budget is tight. Similarly, according to
Lewis and West (2009), social interaction on Facebook is particularly necessary for young adults (especially college students). Consistent with uses and gratifications theory, research shows that a motivation to communicate is influential to SNS use, and college students’ main motive for using Facebook is to “experience selective, efficient, and immediate connection with others for their (mediated) interpersonal communication satisfaction and as an ongoing way to seek the approval and support of other people” (Sheldon, 2008; Urista et al., 2009, p. 226). Similarly, through studying how adults communicate using the specific tools of Facebook (i.e., wall postings, status updates, events, and photos), Young (2011) confirmed that adults also use Facebook status updates and photo postings as an alternative and economical way to engage with their friends and strengthen pre-existing relationships when face-to-face or telephone is not possible or desirable. The study of Ellison, Steinfield, and Lampe (2007) suggested that Facebook usage might help users who have low self-esteem and low life satisfaction to overcome barriers and, therefore, be beneficial to their well-being. Admittedly, the communication ties fostered by Facebook are characterized by broadness, weakness, low-pressure, and low commitment (Lewis & West, 2009).

Specifically, through using Facebook, college students bond and bridge with new college communities, as well as maintain connections with their previous community members (Ellison et al., 2007). Since Facebook is banned in China, it does not serve to maintain friendships for Chinese international students who come to the U.S., but mostly for bonding with new communities in the U.S. Instead, Renren provides a place for them to connect with old friends in China and new Chinese friends in the U.S. Similarly, Cummings, Lee, and Kraut (2006) argued that, when going to college, students’ high school friendships are at risk of ending because of increased geographic distance, decreased communication, and declined psychological connection. This is also true for Chinese international students when they move out of their homeland and leave their friends and communities. Fortunately,
engaging in computer-mediated communication with previous communities helps to slow the
decline in closeness and, therefore, maintain friendships over long distances (Cummings et
al., 2006). Further, it has been found that SNSs are particularly valuable for users living far
away from family and friends (e.g., living overseas) (Ellison et al., 2007; Young, 2011).
Therefore, it is very likely that by maintaining communication with pre-existing close
acquaintances, Renren can buffer the negative effects of “friendsickness” as Facebook has
been found to do for American college students (Ellison et al., 2007).

Acculturation

At the macro level, 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” (Redfield,
Linton, & Herskovits, 1936, p. 149). At the individual level, acculturation has been defined as
“the extent to which individuals [contacting a new culture] have maintained their culture of
origin or adapted to the larger [new] society” (Phinney, 1996, p. 921). According to Marin
(1992), there are three levels of acculturation: 1) the superficial level of acculturation occurs
when one changes diet and learns or forgets historical facts and traditions; 2) the intermediate
level involves the changing of language use, media preference, and degree of interaction
within native and host societies; 3) the significant level concerns internal changes in beliefs,
values, and norms.

Historically, there have been two ways of explicating acculturation: one is the
unidimensional model and the other one is the bidimensional model. According to Berry
(1997), the unidimensional model perceives home and host culture identifications as
inversely related and, therefore, by adapting to the host culture, one loses connection with his
or her home culture; while the bidimensional model posits that the two identifications are
independent and, therefore, home and host culture identifications should be examined
separately (see also Ryder, Alden, & Pauhus, 2000). According to the bidimensional model, individuals can have high levels of identification with both the home and host cultures; for instance, one can embrace the dominant diet, media, and values while maintain the native ones. Through comparing the unidimensional model with the bidimensional model in the contexts of personality, self-identity, and psychosocial adjustment, Ryder et al. (2000) concluded that the bidimensional model is more comprehensive and valid for understanding and operationalizing acculturation. The bidimensional model of acculturation has been applied to measure different domains of acculturation, including language, interaction, food, and media (Stephenson, 2000); loyalty, behavior, and situated identity (Dere, Ryder, & Kirmayer, 2010); and values, social relationships, and traditions (Ryder et al., 2000).

According to Berry (1997), there are four modes of individual acculturation: Assimilation, Integration, Separation, and Marginalization. Assimilation occurs when one seeks daily interaction with the host culture while rejecting one’s native cultural identity. The integration option is chosen when one holds an interest in both maintaining one's home cultural integrity and participating in the host society. Separation happens when one maintains one's culture of origin while avoiding interaction with the host culture. Finally, marginalization occurs when one is not involved in the maintenance of one's native culture or the adoption of the host one. According to Dow (2011), which strategies to choose depends on the willingness to participate in the host culture and to maintain their home cultural identity. To illustrate, individuals who are more motivated in participating in the host culture tend to engage in assimilation and integration, and those who are more comfortable staying within their heritage culture are more likely to choose separation and marginalization. Empirically, acculturation level is regarded as relatively high and individuals are perceived as more acculturated when assimilation and integration happen, while acculturation level is
relatively low and individuals are less acculturated when separation and marginalization occur.

The primary task for immigrants, suggested by Berry (2001), is to arrive at the ideal state of acculturation, which is integration, by which they have “successfully adapt[ed] to the dominant culture of their new environment, while retaining the important aspects of their original cultural identity” (as cited in Dow, 2011, p. 221). However, it is found that, to a large extent, mainland Chinese tend to maintain their home cultural traits (Deng & Walker, 2007). According to Berry (2001), factors influencing acculturation experiences include individuals’ motivation for migrating (e.g., voluntary or involuntary) and acculturating, individual factors (e.g., age, gender, education, socioeconomic status, language acquisition ability, and psychological characteristics), cultural factors, and factors related to the migrant experience (e.g., the existence/absence of social networks with the home/host culture members and the degree of intimacy with them). Specifically, the relatively low acculturation level among the general Chinese population in the U.S. might be explained through communication apprehension, cultural differences, and unparalleled social contacts with people from the native and host cultures, which have been found to be some of the main themes of Taiwanese graduate students’ cross-cultural experiences in the U.S. (Swagler & Ellis, 2003).

Entering and staying in a new culture is often accompanied by acculturative stress, especially for those who come to the U.S from Asia, Central/Latin America, and Africa, because of the dramatic cultural differences they experience (Yeh & Inose, 2003). This stress is negatively associated with acculturation level; specifically, socio-cultural adjustment difficulties and psychological distress of Chinese international students in the U.S. are negatively associated with both acculturation to the host culture and identification with the home culture (Glass & Bieber, 1997; Wang & Mallinckrod, 2006). Similarly, Yeh and Inose (2003) found that English language fluency, social support network satisfaction, and social
connectedness are all predictors for acculturative stress. Further, this stress can enormously affect individuals’ psychological and even physiological well-being (Glass & Bieber, 1997).

Moreover, for Chinese international students in the U.S., the link between acculturation and psycho-social adjustment difficulties is mediated by social connection and interaction with Americans (Zhang & Goodson, 2011). Zhang and Goodson found that one who feels more connected with Americans and the U.S society experiences less depression and socio-cultural adjustment difficulties; one who has little social interaction with Americans while being detached from the home culture — in the acculturation mode of “marginalization” — had the highest level of depression. Besides, among the Chinese international students who had used online ethnic social groups, those who reported receiving more online informational and emotional support from those groups experienced less acculturative stress and report higher life satisfaction (Ye, 2006). Therefore, it is likely that both Facebook and Renren usage can serve as a buffer for acculturative stress.

In addition, the literature has revealed that increasing acculturation levels are associated with changes in communication traits of Chinese in the U.S. (Hsu, 2010). To illustrate, among Chinese in the U.S., willingness to communicate is positively correlated to self-perceived communication competence and English language competence; communication apprehension is negatively associated with immersion time and motivation (Lu & Hsu, 2008). Specifically, Chinese who spend more time in the U.S. identify more with American culture, become more willing and competent in communication, and disclose more positive information about themselves but less frequently and in-depth (Hsu, 2010).

### SNS Uses for Gratifications

Based on a socio-psychological standpoint, uses and gratifications theory (U&G) proposes that individuals seek various mass media outlets and other resources according to their particular needs and, therefore, develop different patterns of media use (Rubin, 1994).
One main assumption underlining this perspective is that individuals use communication to fulfill their needs; specifically, people are active in the mass communication process as they link their gratifications with media choice (Katz et al., 1974). Contrary to traditional media research, which assumes an audience to be a passive mass, U&G regards audience as active consumers of media who choose certain media content according to their own interests and needs and, what is more, “synthesizes that content to satisfy those needs” (Baran & Davis, 1995, p. 219; Katz et al., 1974; as cited in Urista et al., 2009). In other words, media audience do not passively accept what is offered to them, but are actively involved in “a goal-directed, purposive, and motivated action” of media selection and usage (Rosengren, 1974, as cited in Urista et al., 2009, p. 218).

Scholarship has categorized mass media audience’s gratifications in multiple ways. According to McQuail, Blumler, and Brown (1972), there are four main clusters of gratifications: diversion, personal relationships, personal identity, and surveillance. Diversion includes "escape from the constraints of routine and the burdens of problems, and emotional release"; personal relationships refer to companionship and social utility; personal identity includes "personal reference, reality exploration, and value reinforcement"; and surveillance derives from "a desire for security or the satisfaction of curiosity and the exploratory drive" (Katz et al., 1974, p. 513). All these gratifications were integrated by Katz, Haas, and Gurevitch (1973) as individuals’ need to mainly to connect, or disconnect, with different kinds of others, e.g., family, friends, and nation. Further, Rubin (1994) identified a list of media use determiners including “people’s needs and motives to communicate, the psychological and social environment, the mass media, functional alternatives to media use, communication behavior, and the consequences of such behavior” (p. 419). He also suggested that there are both cognitive and affective needs, including the need for personal identity, escape, and self-presentation (Rubin, 2002).
As Dunne, Lawlor, and Rowley (2010) stated, U&G has been applied to various media types and media content. It was originally developed to examine traditional media, such as radio (Herzog, 1944), printed media, e.g., newspapers and magazines, (Payne, Severn, & Dozier, 1988; Berelson, 1949), and television (McQuail et al., 1972). According to Katz et al. (1973), these types of mass media have been found to have varying degrees of perceived helpfulness in satisfying certain needs, for example, “integration into the sociopolitical order is best served by newspapers; while "knowing oneself" is best served by books” (p. 164). Recently, the U&G framework has been brought into the emerging domain of new media, including the Internet. Not only has the appropriateness of applying U&G framework to online research been confirmed, but also some researchers, such as Rubin (2002) and Ruggiero (2000), argued that the Internet “may have revived and indeed rejuvenated U[ses] and G[ratifications] theory” (Dunne et al., 2010, p. 48). Therefore, in recent years, there is an increasing application of U&G in the online context.

As illustrated in the review by Urista et al. (2009), gratifications for the Internet are obtained either from its content or the browsing process; specifically, the primary gratifications that motivate individuals’ Internet use include the action of web searching, the acquisition of information, relaxation and entertainment, identity building, and interpersonal relationship maintenance (Ho Cho, 2007; Kayahara & Wellman, 2007; Stafford & Gonier, 2004). Urista et al. (2009) also noted that “some of these gratifications are mediated versions of face-to-face human communication” (p. 219). Within the online realm, a variety of social network sites, with their unprecedentedly growing pace, have been increasingly drawing communication scholars’ focus. Dunne et al. (2010) contended that U&G is an appropriate and relevant theory for examining SNSs. One of their arguments is that the interactive nature of such sites and the extremely active role SNSs users play, which is evident as they choose whether or not to log on, add friends, update profiles, upload pictures, and post comments,
etc., nullifies the traditional criticism towards the validity of the assumption of active audience, e.g., from Lometti, Reeves, and Bybee (1977). Therefore, U&G fits particularly well into the context of SNSs.

The capability to simultaneously fulfill users’ diverse needs, e.g., “entertainment, information exchange, surveillance, diversion and social utility functions”, contributes to the extreme popularity of SNSs (Ray, 2007, p. 17-18). According to Urista et al. (2009), the gratifications associated with SNSs usage include meeting individuals’ need for convenient and efficient communication, fulfilling their desire to create their own content in virtual communities (Song, LaRose, Eastin, & Lin, 2004), fostering supportive relationships and social popularity (Dominick, 1999), satisfying their curiosity about others and their wants to observe (Eastin, 2002), and accumulating their social capital through network-building (Ellison et al., 2007). Besides, by examining Bebo, Dunne et al. (2010) concluded that SNSs aid users in social identity creation and management as a way to obtain peer acceptance. Other studies have suggested that SNSs users are seeking an entertainment need, a “friend” need (“to keep in touch with old friends,” “to keep in touch with current friends,” and “to make new friends”), and a social information need (“to learn about events,” “to post social functions,” and “to feel connected”) (Quan-Haase & Young, 2010; Raacke & Bonds-Raacke, 2008). Above all, among the various gratifications, the primary one is interpersonal communication satisfaction (e.g., relationship formation, maintenance, and enforcement) and social approval and support (Sheldon, 2008; Urista et al., 2009). Similarly, Cai (2009) revealed that Renren users are seeking personal identity, personal relations, and diversion gratifications, which is consistent with McQuail et al. (1972).

**Ethnic Media Use**

In the traditional paradigm of uses and gratifications research, the main focus has been why and how individuals choose different media outlets. Gradually, there has been a
growing interest in bringing media use studies into various cultural contexts, for instance, ethnic media use, in order to extend our understanding of media use motivations and the resulted exposure (Reece & Palmgreen, 2000). Ethnic media are defined as “mass media targeted to particular ethnic or racial groups” (Johnson, 2000, p. 230). A survey conducted in 2005 by New California Media showed that approximately half of the 1850 surveyed racial/ethnic minority members preferred ethnic media to mainstream ones and, further, eighty percent of this population relied on ethnic media (Zusha, 2005). The popularity partly attributes to the fact that ethnic media are often produced in ethnic languages and they cover topics associated with ethnic interests that are not prevalent in the mainstream media, such as issues on immigration and minority health care. For instance, Pae (2001) reported that the Korean-related issues covered by Korean ethnic media can fulfill the audience’s needs for information, surveillance, social interaction, and cultural capital and identity.

Researchers have examined the correlation between ethnic media usage and cultural maintenance. A longitudinal panel study by Jeffres (2000) revealed that the usage of ethnic media (e.g., newspapers, television, radio, and magazines) is positively associated with the strength of ethnic identification across time in a multicultural context. He asserted that while both mass communication and interpersonal communication are important channels for immigrants’ acculturation, ethnic media channels are particularly significant for the maintenance of ethnic identity among adult non-immigrant ethnics. While confirming the role of media in maintaining ethnic identity, Mcgrath (2002) also recognized the effect of ethnic identity on media choices and, thus, suggested a reciprocal or circular relationship between ethnic identity and media use. Further, Shi (2005) suggested that Chinese international students actively and strategically use ethnic media for identity negotiation and cultural capital accumulation since ethnic media provide them with socializing topics and contexts which can help to maintain their cultural identifications and facilitate “an imagined
transnational Chinese community” (p. 66). McGrath (2002) believed ethnic media are particularly important for recent immigrants and Shi (2005) argued that “the unsatisfied desire to maintain connections with home countries/regions and cultures accentuates the importance of ethnic media in diasporic lives” (p. 65).

Moreover, studies found that ethnic minority members also use the mainstream media for cultural assimilation. For instance, Reece and Palmgreen (2000) observed a strongly positive correlation between the need for acculturation and motives for American television viewing among Asian Indian graduate students at a U.S. university. Individuals who had higher acculturation needs tended to be more motivated to view American television. The correlation between acculturation and the mainstream/ethnic media use has been confirmed in a variety of cultural contexts. Korean immigrants’ ethnic media usage, which was positively correlated with their ethnic attachment, declined and American media usage increased with their stay in the U.S. (Kim, 1978; see also Pae, 2001); Asian Indians’ adaptation to American culture was positively related to their use of American communication channels, both mass and interpersonal, and negatively related to their use of ethnic channels (Shah, 1991); for Latinos, assimilation to the dominant culture came with increased exposure to Anglo media and decreased usage of Hispanic media (Subervi-Velez, 1984).

Further, acculturation and ethnic media use have been found to be mediated by demographics. Neighborhood characteristics are one of the influencing factors. Shoemaker et al. (1987) claimed that ethnic concentration affects acculturation and, thus, ethnic media consumption by influencing the salience of the host and home cultures. They found a positive correlation between the proportion of Hispanics in the community and their likelihood of using Spanish-language mass media (e.g., print media and radio). Likewise, in regions with large Chinese populations, the salience of American culture is limited and that of Chinese culture is increased. Therefore, it is possible that Chinese international students within such
neighborhoods will have a lower pressure and weaker incentive to adjust to the mainstream culture and be more likely to maintain their heritage culture and previous media use pattern. Thus, in order to minimize the influence of different neighborhoods and capture a salient effect of acculturation on media usage, this study chose to recruit participants from the Midwest U.S. where Chinese are not concentrated.

While traditional ethnic media face great financial challenges due to relatively small and scattered markets, new communication technologies have enabled ethnic media to prosper by making them more affordable and accessible across distances (Jeffres, 2000; Mcgrath, 2002; Zhang & Hao, 1999). For instance, Shi (2005) found that Internet is the major source for ethnic cultural and informational exposure for Chinese international students living in neighborhoods where Chinese are not concentrated (e.g., Midwest of the U.S.). Therefore, how computer-mediated ethnic media are consumed is a subject worth investigating. Since Facebook and Renren can be seen as a pair of mainstream and ethnic media outlets, it is intriguing to see whether the correlation between acculturation and mainstream/ethnic media usage found in the literature of traditional ethnic media use also exist in the emerging SNS context.

As uses and gratifications theory illustrates, it is now evident that people’s adoption and usage of a certain SNS can be explained by the site’s capability to meet certain needs. A further question is why individuals use multiple SNSs at the same time; to be more relevant to the current study, why Chinese international students are attracted by Facebook while they already have an almost identical SNS, and why they continue to use Renren after they have a new profile page on Facebook. An earlier study by Quan-Haase, Wellman, Witte, and Hampton (2002) indicated that using various types of media at the same time implies that each of the mediums satisfies a specific and distinct need and, therefore, cannot be replaced. Based on this notion, it can be referred that the reason why a large number of Chinese
international students use Facebook and Renren simultaneously is that they are looking for, to some extent, different gratifications from the two sites. At this point, it is worth noting that, although censorship does affect a small portion of Renren postings, the main apparent and influencing difference between the two SNSs comes from cultural aspects. Since Facebook and Renren are a pair of SNS counterparts as they resemble each other in almost every aspect except different cultural backgrounds on which the sites ground and to which the users belong, it is warranted to propose that it is different cultural gratifications, or gratifications associated with different cultures, that lead to the concurrent usage of Facebook and Renren. Specifically, on the one hand, Facebook, as a mainstream SNS, satisfies Chinese international students’ desire to communicate and bond with Americans, establish an online identity on the American SNS, seek information about the new American community, and to be involved in American culture; on the other hand, Renren, as an ethnic SNS, meets their need to stay connected with Chinese acquaintances, interact with newly known Chinese in the U.S., remain informed of the news of the previous Chinese community, and maintain their cultural selves as Chinese. Thus, based on uses and gratifications theory and the scholarship of traditional ethnic media use, it is argued that Chinese international students’ usage of Facebook is boosted by their American cultural orientation, while their continuing usage of Renren is fostered by their Chinese cultural identification.

According to the acculturation model as illustrated earlier, individuals with different acculturation levels differ in their cultural identifications and, hence, their motivation to be involved in the host and home cultures and communities (Berry, 1997; Dow, 2011). Therefore, it is proposed that acculturation can influence the gratifications Chinese international students seek on SNSs with different cultural orientations. Specifically, individuals with higher levels of American cultural identification tend to be more concerned with gratifications, especially those associated with relationship building, information
seeking, and identity constructing, in the American context – on Facebook; while individuals with higher levels of Chinese cultural identification might be more interested in fulfilling those gratifications in the Chinese context – on Renren. Thus, the following hypotheses are posed:

H1a: Chinese international students’ level of identification with American culture will be positively related to the extent to which they seek gratifications on Facebook.

H1b: Chinese international students’ level of identification with their heritage culture will be positively related to the extent to which they seek gratifications on Renren.

Further, according to uses and gratifications theory (Katz et al., 1974; Urista et al., 2009), it is highly possible that gratifications for Facebook and Renren will further influence Chinese international students' usage of the two SNSs. Because both time and activity dimensions are integral to social media usage, Ha and Hu (in press) proposed a new concept of SNS involvement to measure "the extent to which people indulge in social media" by examining both time consumption and the frequency of SNS users' update. Employing Ha and Hu's concept of SNS involvement, it is proposed that one seeking more gratifications on Facebook tend to be more involved with Facebook in terms of spending more time and updating more frequently, and the same applies to Renren.

H2a: The extent to which Chinese international students seek gratifications on Facebook will be positively related to their Facebook involvement in terms of usage time and the frequency of updating.

H2b: The extent to which Chinese international students seek gratifications on Renren will be positively related to their Renren involvement in terms of usage time and the frequency of updating.

Considering the two potential correlations, one between acculturation and SNS gratifications and the other one between SNS gratifications and SNS usage, it is argued that
individuals with higher level of American cultural identification are more likely to be involved in the use of Facebook and those with higher level of Chinese cultural identification are more likely to be involved in the use of Renren. Further, it is proposed that Chinese international students’ gratifications for Facebook and Renren mediate the relationship between acculturation and SNSs involvement (see Figure 1). In other words, individuals with stronger American identification are more concerned with gratifications for Facebook and, therefore, spend more time and update more frequently on Facebook; those with stronger Chinese identification are more concerned with gratifications for Renren and, therefore, spend more time and update more frequently on Renren.

Figure 1 SNS Gratifications as the Mediator between Acculturation and SNS involvement

Thus, the following hypotheses are posed:

H3a: Chinese international students’ level of identification with American culture will be positively related to their Facebook involvement in terms of usage time and the frequency of updating.

H3b: Chinese international students’ level of identification with Chinese culture will be positively related to their Renren involvement in terms of usage time and the frequency of updating.

H4a: Chinese international students’ gratifications for Facebook will mediate the effect of adapting to American culture on Facebook involvement in terms of usage time and the frequency of updating.
H4b: Chinese international students’ gratifications for Renren will mediate the effect of maintaining Chinese culture on Renren involvement in terms of usage time and the frequency of updating.

Last, according to Berry’s (1997) bidimensional model of acculturation, the host and home cultural identifications are independent and, therefore, should be examined separately. As discussed earlier, scholarship has confirmed that the bidimensional model is more comprehensive and valid for understanding and operationalizing acculturation than the unidimensional one (Ryder et al., 2000). However, researchers have not examined how the bidimensional and unidimensional models of acculturation operate in conjunction with U&G on Facebook and Renren. While the above hypotheses concerning acculturation are in accordance with the bidimensional model by distinguishing the adaptation to American culture from the maintenance of Chinese culture, this study takes a step further by questioning the approach to acculturation as a unit obtained from the sum of its two dimensions. Therefore, it is posed that:

H5a: The association between the unidimensional model’s conceptualization of acculturation and SNS gratifications will be lower than the association between the bidimensional model’s conceptualization of acculturation and SNS gratifications.

H5b: The association between the unidimensional model’s conceptualization of acculturation and SNS involvement will be lower than the association between the bidimensional model’s conceptualization of acculturation and SNS involvement.
CHAPTER III. METHODS

This chapter presents the research methods for this project. It is divided into three sections. The first one provides information about participants’ demographics. The second section presents the project’s procedures. In the third section, the four main operational measurements for acculturation, Facebook/Renren usage, Facebook/Renren gratifications, and demographics are discussed before summary statistics for each measurement are provided.

Participants

There were 163 participants in total (male = 54, female = 87, unspecified = 22). Among 139 respondents who provided demographic information, 82.0% were graduate students (N=114) and 17.3% were undergraduate students (N=24). Their ages ranged from 18 to 45 (M = 26.35, SD = 4.75). Most of them were studying in the Midwest of the U.S., such as Ohio (N = 53), Iowa (N = 22), and Michigan (N = 22). Universities at which they were studying included Bowling Green State University (N = 42), Iowa State University (N = 22), Michigan State University (N = 21), the University of Dayton (N = 7), the University of Missouri (N = 5), the University of Illinois at Urbana-Champaign (N = 5), and the University of Colorado Boulder (N = 4). Participants were in their first (N = 33), second (N = 48), third (N = 22), or fourth (N = 21) school year (M = 2.53, SD = 1.35). The majority identified their race/ethnicity as Chinese (N = 60) or Asian (N = 50)\(^1\) and reported themselves as Chinese citizens (N = 126)\(^2\). In terms of their lengths of residence in the U.S., the participants varied from “Less than 1 year” (N = 24), “1-2 years” (N = 44), “2-3 years” (N = 22), “3-4 years” (N = 25), to “Longer than 4 years” (N = 23) with a mean between two to three years.

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\(^1\) Other respondents self-identified as Taiwanese (N = 2), Yellow (N = 2), White (N = 2), Chinese European (N = 1), Chinese Islamic (N = 1), or reported being unaware or uncertain of their race/ethnicity (N = 3). The remaining answers were unidentifiable (e.g., "race", "language", "IIT"; N = 5) or missing (N = 12).

\(^2\) Other citizenships included Taiwan (N = 2), Principality of Sealand (N = 1), and dual citizenship (N = 1). The remaining citizenships were missing (N = 9).
In addition, the participants represented diverse academic disciplines including Finance/Business (N = 15), Journalism/Communication (N = 14), Electronic Engineering (N = 9), Statistics (N = 7), Computer Science (N = 7), Accounting (N = 6), Biology (N = 6), and Education (N = 5), etc. The above distribution was consistent with the report of Chinese international students’ fields of study by the Institute of International Education (2012). Most participants reported their written English proficiency (M = 3.56, SD = 0.67) as being “Good” (N = 68) or “Fair” (N = 57), followed by “Very Good” (N = 8) and “Poor” (N = 6). None reported “Very poor”. Similarly, for spoken English proficiency (M = 3.55, SD = 0.83), the majority reported “Good” (N = 60) or “Fair” (N = 50) followed by or “Very Good” (N = 8), “Poor” (N = 6), and “Very poor” (N = 1). Last, the mean of their most recent TOEFL iBT scores was 90.68 out of 120 (SD = 21.36).

Among 163 participants, 88.3% responded to Facebook questionnaires (N = 144) and 65.0% responded to Renren questionnaires (N = 106). Because this study examined each SNS’s usage independently, the sample size for this project’s Facebook analyses was 144, and the sample size for this project’s Renren analyses was 106. In order to provide an in-depth picture of the population being studied, the following three sections present participant demographics according to the division of (a) Facebook and Renren users, (b) exclusive Facebook users, and (c) exclusive Renren users.

**Facebook and Renren Users.** Among the 144 Facebook users and 106 Renren users, 99 used both SNSs (male = 33, female = 61, unspecified = 5), which constitute 60.7% of all respondents. Among this population, 81.8% were graduate students (N = 81) and 13.1% were undergraduate students (N = 13). Their ages varied from 18 to 38 (M = 25.11, SD = 2.99), and the mean of their lengths of residence in the U.S. was also between two to three years. Last, the mean of their most recent TOEFL iBT scores was slightly higher than the general sample (M = 92.83, SD = 14.53).
Exclusive Facebook users. There were 32 participants (male = 11, female = 20, unspecified = 1) who used Facebook but not Renren. 71.9% were graduate students (N = 23) and 18.8% were undergraduate students (N = 6). Their ages ranged from 18 to 42 (M = 28.61, SD = 6.07). The mean of their lengths of residence in the U.S. was between three to four years and the mean of their most recent TOEFL iBT scores was slightly higher than the general sample (M = 93.00, SD = 25.99).

Exclusive Renren Users. Only 7 respondents (male = 3, female = 4) used Renren but not Facebook. Two were undergraduate students, and five were graduate students. Their ages varied from 22 to 45 (M = 27.71, SD = 7.93) and the mean of their lengths of residence in the U.S. was also between two to three years. The mean of their most recent TOEFL iBT scores was lower than the general sample (M = 70.20, SD = 42.23).

Procedures

This study used an online survey to gather data for several reasons. First, this project investigated the ways that acculturation affects Chinese international college students’ usage of Facebook and Renren. Given the study’s main objective and hypotheses, a large amount of quantitative data about Chinese international students (e.g., their acculturation levels, SNS usage, and SNS gratifications) was needed to perform a series of inferential statistical analyses. Conducting surveys is one of the most effective and efficient ways to gather sufficient data directly from the population being studied (Babbie, 2007). Second, an online survey was used since this project aimed to recruit participants from a large geographical region of the U.S. (i.e., the Midwest). Conducting the survey online not only enabled Chinese international students in different districts of the Midwest to participate, but it also allowed the researcher to send invitations, reminders, and questionnaires in the least time-consuming and the most economical way. Finally, the use of an online survey is consistent with previous
research on acculturation and SNS usage (e.g., Ellison, Steinfield, & Lampe, 2007; Ross et al., 2009; Wang & Mallinckrod, 2006).

The following methods were applied to recruit participants online. First, the researcher sent a letter of invitation (Appendix A), as well as reminders, to the Chinese Students and Scholars Association email lists of three large Midwestern universities in the U.S. (i.e., Bowling Green State University, Iowa State University, and Michigan State University). Three reminders were sent at a weekly basis to the email lists of Bowling Green State University and Iowa State University. The invitation and two reminders were sent to the list of Michigan State University within the last week of participant recruitment. Second, an email of request (Appendix B) was sent to Chinese association leaders at twenty-five universities in the Midwest U.S. to ask for dissemination. Four responses were received which agreed to announce the survey invitation. Three of the four universities they represented were in Midwest and one in South. Specifically, the survey invitation was posted on the Renren webpage of Chinese Students and Scholars Association at Case Western Reserve University, sent to the Chinese student email lists of the University of Dayton and the University of Toledo, and announced to the QQ (a popular Chinese instant message) group of Chinese students in the University of South Alabama. Third, a dissemination request email was sent to several individuals studying at different universities in the U.S. The invitation reached Chinese student communities at three institutions in the Midwest (i.e., the University of Colorado Boulder, the University of Illinois at Urbana-Champaign, and the University of Missouri) through an email list or Yahoo group. Last, the email request was sent to an officer of a Chinese cultural organization in Midwest. Although 250 was originally set as the ideal number of participants, the actual number depended on a comprehensive consideration of the respondent rate, time and budget limit, and the statistical power to identify small, medium, and large effects.
In the recruitment letters, potential participants were invited to participate in the study by completing an online survey about their acculturation levels, Facebook and/or Renren usage and gratifications, as well as demographics. They were told that the survey would take ten to twenty minutes and, upon the completion of participation, they would obtain a chance to be entered into a drawing for a $30 gift card. In addition, it was also clarified that any of participants’ identifying information would not be included in the data and their confidentiality would be well protected. Individuals who were at least 18 years old, self-identified as Chinese, and were studying in the U.S. were eligible to participate. Both undergraduate and graduate students were invited to participate since 1) graduate students constitute the majority of Chinese international students in the U.S., 2) Facebook and Renren are popular among the two populations, and 3) the participation of both undergraduate and graduate students is consistent with the methods of previous studies concerning acculturation (Wang & Mallinckrod, 2006; Zhang & Goodson, 2011). Chinese international students who had both Facebook and Renren accounts were particularly encouraged to participate, although those who did not have one or both were also allowed to complete the online questionnaires. Data from participants who did not have at least one of the two SNS accounts were not used by the current study.

After accepting the terms on the research consent form (Appendix C), participants were instructed to complete an online survey. In the set of questionnaires, they were first asked to answer questions about their acculturation (see Appendix D) and usage of and gratifications for Facebook (see Appendix E) and Renren (see Appendix F). Then, they were asked to answer questions about their demographics (i.e., age, gender, education, race/ethnicity, citizenship, time spent in the U.S., and English proficiency (see Appendix G). After completing the survey, they were thanked and entered into a drawing for a $30 gift
card. The step of participant recruitment, as well as data gathering, was completed in approximately three weeks.

**Measurements**

**Acculturation**

A modified version of the Vancouver Index of Acculturation (VIA; see Appendix D) was used (Ryder, Alden, & Pauhus, 2000). This scale assesses three domains of acculturation: values, social relationships, and adherence to traditions. Among the 20 items, half measures the extent to which participants identify with the dominant culture (e.g., “I often participate in mainstream North American cultural traditions”); the other half assesses participants’ identification with the native culture (e.g., “I often participate in my heritage cultural traditions”). Respondents were asked to rate each item in terms of a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). VIA has been shown by Ryder et al. (2000) to be a reliable and valid instrument for measuring bidimensional acculturation levels for ethnic Chinese. As displayed on Table 2, its reliability was excellent. According to Ryder et al. (2000), the scale also had high concurrent validity and factorial validity.

Table 2 Summary Statistics for Acculturation ($N = 163$)

<table>
<thead>
<tr>
<th>Individual Scales</th>
<th>Mean</th>
<th>SD</th>
<th>$\alpha$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptation to American Culture</td>
<td>3.35</td>
<td>0.64</td>
<td>0.87</td>
</tr>
<tr>
<td>Maintenance of Chinese Culture</td>
<td>3.79</td>
<td>0.73</td>
<td>0.92</td>
</tr>
<tr>
<td>Overall Acculturation</td>
<td>3.57</td>
<td>0.34</td>
<td>0.92</td>
</tr>
</tbody>
</table>

Table 2 presents the summary statistics for participants’ acculturation scores. The adaptation to American culture score was the mean of the ten items measuring the host cultural identification, and the maintenance of Chinese culture score was the mean of the
other ten items assessing the heritage cultural identification. The overall acculturation score was obtained by summing the score of adapting to American culture with the reversed score of maintaining Chinese culture. As shown on Table 2, respondents reported a higher level of identification with Chinese culture than with the American one.

**Facebook/Renren Involvement**

The Facebook Questionnaire (see Appendix E) and Renren Questionnaire (see Appendix F), adapted from the Facebook Questionnaire (Ross et al., 2009), were used to measure participants’ Facebook and Renren involvement and gratifications. Based on the Facebook Questionnaire (Ross et al., 2009), some items, for instance, those measuring security functions, were excluded because of the current study’s specific focus on acculturation, some questions concerning interpersonal communication were modified to assess participants’ interaction with Chinese and Americans, and some other items were added to measure participants’ length of using Facebook and Renren, the composition of their friends on the two SNSs (Pew Internet & American Life Project, 2011), and their gratifications for Facebook and Renren, which will be discussed in the following section. After modification, each of the two questionnaires included 24 items mainly assessing participants’ Facebook/Renren involvement in terms of usage time and frequency of update.

Respondents were asked to rate the statements using a Likert-type scale, answer the questions by choosing the most relevant option, and to specify when necessary. Specifically, 1) usage time was measured by asking participants to indicate the average time they spent on Facebook/Renren per day (1 = 10 minutes or less, 2 = 10 to 30 minutes, 3 = 31 to 60 minutes, 4 = 1 to 2 hours, 5 = 2 to 3 hours, and 6 = 3 hours or more); 2) the frequency of updating was the mean of the seven items measuring participants’ frequency of using specific Facebook/Renren applications to generate content (i.e., updating statuses and commenting on others’, uploading pictures and commenting on others’, checking one’s own Wall and posting
on others’, as well as sending private messages) (1 = not at all, 2 = less than once per year, 3 = a few times per year, 4 = less than once monthly, 5 = once monthly, 6 = twice monthly, 7 = once weekly, 8 = 2 or more times weekly, 9 = once daily, and 10 = more than once daily).

As shown on Table 3, Facebook users reported a moderate level of updating frequency and a low level of usage time. Renren users’ updating frequency was slightly lower than Facebook and their usage time was slightly higher.

Table 3 Summary Statistics for SNS Involvement

<table>
<thead>
<tr>
<th>Individual Scales</th>
<th>N</th>
<th>Mean/SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook Updating Frequency</td>
<td>135</td>
<td>5.00/1.97</td>
</tr>
<tr>
<td>Facebook Usage Time</td>
<td>144</td>
<td>1.68/1.09</td>
</tr>
<tr>
<td>Renren Updating Frequency</td>
<td>104</td>
<td>4.77/2.05</td>
</tr>
<tr>
<td>Renren Usage Time</td>
<td>104</td>
<td>1.88/1.13</td>
</tr>
</tbody>
</table>

**Facebook/Renren Gratifications**

In the Facebook Questionnaire (see Appendix E) and Renren Questionnaire (see Appendix F), the last question, adjusted from Raacke and Bonds-Raacke (2008) and Sheldon (2008), asked about participants’ gratifications for Facebook and Renren. Respondents were instructed to answer “Why do you use Facebook?” by rating seventeen statements in terms of a 5-point Likert-type scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). The gratification scale consisted of four dimensions: interpersonal relationship gratifications (e.g., “To communicate with current friends”), diversion/entertainment gratifications (e.g., “To pass time when bored”), personal identity gratifications (e.g., “To build my online image”), and social information gratifications (e.g., “To obtain information”). In the later analysis, two items were deleted from the scale because 1) “to feel less lonely” lacked face validity and was too obscure to fit into any dimension and
2) “to develop a romantic relationship” tested a theoretically different aspect from the other items in the interpersonal relationship gratifications domain and, thus, weakened the subscale’s reliability. Removing these two items improved the subscale’s internal reliability (from $\alpha = 0.67$ to $\alpha = 0.72$).

Table 4 Summary Statistics for SNS Gratifications

<table>
<thead>
<tr>
<th>Individual Scales</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>$\alpha$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Facebook Gratifications</strong></td>
<td>131</td>
<td>3.41</td>
<td>0.60</td>
<td>0.89</td>
</tr>
<tr>
<td>Interpersonal Relationship Gratifications</td>
<td>131</td>
<td>3.48</td>
<td>0.66</td>
<td>0.72</td>
</tr>
<tr>
<td>Diversion/Entertainment Gratifications</td>
<td>131</td>
<td>3.36</td>
<td>0.81</td>
<td>0.70</td>
</tr>
<tr>
<td>Personal Identity Gratifications</td>
<td>131</td>
<td>3.12</td>
<td>0.85</td>
<td>0.81</td>
</tr>
<tr>
<td>Social Information Gratifications</td>
<td>131</td>
<td>3.59</td>
<td>0.65</td>
<td>0.68</td>
</tr>
<tr>
<td><strong>Overall Renren Gratifications</strong></td>
<td>103</td>
<td>3.43</td>
<td>0.72</td>
<td>0.93</td>
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<tr>
<td>Interpersonal Relationship Gratifications</td>
<td>103</td>
<td>3.33</td>
<td>0.71</td>
<td>0.74</td>
</tr>
<tr>
<td>Diversion/Entertainment Gratifications</td>
<td>103</td>
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<td>0.91</td>
<td>0.84</td>
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<td>Personal Identity Gratifications</td>
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<td>3.21</td>
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<td>0.87</td>
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<tr>
<td>Social Information Gratifications</td>
<td>103</td>
<td>3.62</td>
<td>0.82</td>
<td>0.84</td>
</tr>
</tbody>
</table>

As displayed on Table 4, this scale had excellent reliability for overall Facebook and Renren gratifications. The reliability of its subscales was either strong or acceptable. The scores of Facebook/Renren gratifications, both in general and in the four dimensions, were the means of the items measured. Results showed that, among the four Facebook gratification subscale means, social information was the highest, followed by interpersonal relationship, diversion/entertainment, and personal identity. For the Renren counterparts, social information was also the highest, but followed by diversion/entertainment, interpersonal relationship, and personal identity.
Demographics

The Demographic Questionnaire (see Appendix G) consisted of eleven questions measuring participants’ age, gender, education, race/ethnicity, citizenship, length of residence in the U.S., and English proficiency. To begin, respondents were asked to indicate their gender and age. Then they were asked “Are you currently an undergraduate or graduate student?”, “Which year are you in?”, “What is your major”, “What is your minor (if applicable)”, and “Which university are you currently studying at?” The following questions concerning race/ethnicity and nationality were then posed: “How do you identify yourself by race/ethnicity?” and “What is your citizenship?” Participants were allowed to self-identify with multiple racial/ethnic identities. Then, length of residence in the U.S. was measured by asking “How long have you been staying in the U. S.??” followed by six choices: less than 6 months, 6 months to 1 year, 1–2 years, 2–3 years, 3–4 years, and longer than 4 years (Wang, & Mallinckrod, 2006). “Less than 6 months” and “6 months to 1 year” were later combined to make the scale’s intervals more equivalent. Last, English language proficiency was assessed by both their self-reported proficiency and their most recent score of TOEFL iBT, The Test of English as a Foreign Language (Internet-based Test). Adapted from Wang and Mallinckrod (2006), respondents were instructed to respond to “How good do you think your written English proficiency is?” and “How good do you think your spoken English proficiency is?” in terms of a 5-point Likert-type scale (1 = very poor, 2 = poor, 3 = fair, 4 = good, 5 = very good).
CHAPTER IV. RESULTS

This chapter, which consists of six sections, presents this study’s main results. The first section provides information about participants’ basic usage of Facebook and Renren. The second one presents the data analysis results for H1a and H1b concerning the correlation between acculturation and SNS gratifications. The third section presents the results for the correlation between SNS gratifications and involvement as predicted in H2a and H2b. The fourth one demonstrates the analyses for H3a and H3b concerning acculturation and SNS involvement. In the second and fourth sections, the results for H5 on overall acculturation are provided. The fifth section provides multiple mediator analyses for the mediation of SNS gratification on the effect of acculturation on SNS involvement, as predicted in H4a and H4b. Last, in the sixth section, regressions analyses controlling for participants’ English proficiency and length of stay in the U.S. are presented.

Facebook and Renren Usage

Among 162 respondents\(^3\), 88.9% reported having Facebook accounts (\(N = 144\)). Their length of membership varied; 23.6% had been Facebook members for less than one year (\(N = 34\)), 24.3% within 1-2 years (\(N = 35\)), 24.3% within 2-3 years (\(N = 35\)), 13.2 % within 3-4 year (\(N = 19\)), and 14.6% had Facebook accounts longer than 4 years (\(N = 21\)). Among the 144 participants, 66% had college classmates on the Facebook friend list, 62% had graduate school classmates, 45% had coworkers, 25% had spouses or current romantic partners, 23% had high school classmates, and 13% had siblings or relatives. Among their friends, the majority were Chinese (\(M = 53.68\%, SD = 26.45\)) and American (\(M = 32.67\%, SD = 24.62\)). Other races/nationalities of their Facebook friends included African, Brazilian, French, Indian, Japanese, Korean, Russian, Thai, and Saudi Arabian.

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\(^3\) One respondent dropped out before the Facebook questionnaire.
Out of 149 respondents\(^4\), 71.1% had Renren accounts (\(N = 106\)). Among the 104
Renren users who responded, 6.7% had been using it for less than one year (\(N = 7\)), 6.7%
within 1-2 years (\(N = 7\)), 10.6% within 2-3 years (\(N = 11\)), 13.5 % within 3-4 year (\(N = 14\)),
and 62.5% (\(N = 65\)), the majority, had been using Renren for longer than 4 years. Among the
104 respondents, 61% had college classmates on their Renren friend list, 50% had high
school classmates, 40% had graduate school classmates, 23% had coworkers, 22% had
siblings or relatives, and 15% had spouse or current romantic partner. Unsurprisingly, their
Renren friends were predominantly Chinese (\(M = 98.18\%, SD = 8.95\)) and American only
constituted an extremely limited portion (\(M = .57\%, SD = 3.55\)). Other races/nationalities of
their Renren friends were Asian, European, Japanese, and Korean.

**Acculturation and SNS Gratifications**

To begin, Table 6 presents the results for the Pearson bivariate correlation analysis
testing H1a, Chinese international students’ level of identification with American culture
would be positively related to the extent to which they sought gratifications on Facebook. A
moderate correlation between adapting to American culture (i.e., American acculturation) and
seeking Facebook gratifications in general was observed, \(r(131) = .30, r^2 = .09, p < .001\).
Thus, H1a was confirmed. Further, positive correlations persisted between American
acculturation and the four types of Facebook gratifications: for interpersonal relationship
gratifications, \(r(131) = .30, p < .001\); for diversion/entertainment gratifications, \(r(131) = .17,
p = .05\); for personal identity gratifications, \(r(131) = .21, p = .02\); and for social information
gratifications, \(r(131) = .30, p < .001\). Therefore, American acculturation was found to be
positively correlated with Facebook gratifications in general and also to each of the four types
of gratifications: interpersonal relationship, diversion/entertainment, personal identity, and
social information.

\(^4\) Fourteen respondents dropped out before the Renren questionnaire.
Likewise, a Pearson correlation was performed to test H1b which predicted that Chinese international students’ level of identification with their heritage culture would be positively related to the extent to which they sought gratifications on Renren. As Table 7 shows, there was a statistically significant correlation with a small effect size between the maintenance of Chinese culture and overall Renren gratifications, \( r(103) = .24, r^2 = .06, p = .02 \). Thus, H1b was supported. Further, when examining Chinese cultural identification and the four types of Renren gratifications, nuanced differences appeared. Specifically, for interpersonal relationship gratifications, \( r(103) = .22, p = .02 \); for diversion/entertainment gratifications, \( r(103) = .20, p = .05 \); for social information gratifications, \( r(103) = .29, p < .001 \); however, for personal identity gratifications, no significant correlation was found, \( r(103) = .09, p = .35 \). Therefore, the maintenance of Chinese culture was positively correlated with Renren gratifications in general. However, a closer look at the data revealed that Chinese cultural identification was systematically correlated with only three of the four types of Renren gratifications. Specifically, Chinese cultural identification was not correlated with personal identity gratifications.

H5a predicted that the relationship between overall acculturation and SNS gratifications would be weaker than the relationship between the bidimensional model’s conceptualization of acculturation and SNS gratifications. As presented on Tables 6 and 7, there was no significant correlation between overall acculturation (which was the sum of its American subscale score and the reversed score of the Chinese subscale) and both Facebook and Renren gratifications in general. In addition, overall acculturation was not correlated with any of the four types of SNS gratifications. As reported earlier, there were statistically significant correlations between the bidimensional model’s conceptualization of acculturation and SNS gratifications (see Tables 6 and 7). In sum, the unidimensional model’s conceptualization of acculturation was not correlated with SNS gratifications; however, the
bidimensional model’s conceptualization of acculturation was systematically related to SNS gratifications. These analyses provided support for H5a.

**SNS Gratifications and Involvement**

H2a predicted that the extent to which Chinese international students sought gratifications on Facebook would be positively related to their Facebook involvement in terms of usage time and their frequency of update. On Table 6, it can be seen that overall Facebook gratifications was significantly correlated with Facebook updating frequency with a small effect size, $r(130) = .28$, $r^2 = .08$, $p < .001$. Further, small correlations also existed between Facebook users’ frequency of update and the four types of gratifications for Facebook: for interpersonal relationship gratifications, $r(130) = .19$, $p = .03$, for diversion/entertainment gratifications, $r(130) = .24$, $p = .01$, for personal identity gratifications, $r(130) = .33$, $p < .001$, and for social information gratifications, $r(130) = .19$, $p = .04$. Thus, the number of times participants generated content on Facebook was positively correlated with Facebook gratifications in general and also with each type of gratifications. However, the data showed no significant correlations between the amount of time spent on Facebook and any type of Facebook gratifications: for overall Facebook gratifications, $r(131) = .12$, $p = .16$; for interpersonal relationship gratifications, $r(131) = .11$, $p = .19$, for diversion/entertainment gratifications, $r(131) = .13$, $p = .16$, for personal identity gratifications, $r(131) = .03$, $p = .72$, and for social information gratifications, $r(131) = .13$, $p = .13$. Therefore, the results only partially supported H2a; Facebook gratifications were positively correlated with the frequency of users’ update on Facebook, but not with the time they spent on the SNS. Nevertheless, it is worth mentioning that, with $N = 131$ and $\alpha = .05$, the power to detect significant correlation for small effects was .21; although it was satisfactory for medium and large effects. The power to detect medium effects was .94, and the power to detect large effects was in excess of .99.
H2b asserted that the extent to which Chinese international students sought gratifications on Renren would be positively related to their involvement in Renren in terms of usage time and their frequency of update. As displayed on Table 7, the results yielded a large correlation between overall Renren gratifications and Renren updating frequency, $r(102) = .53$, $r^2 = .28$, $p < .001$; thus, Renren updating frequency shared approximately 28% of the variance in Renren gratifications sought in general. Also, the correlations between Renren users’ frequency of update and each of the four gratification types were either large or moderate: for interpersonal relationship gratifications, $r(102) = .50$, $p < .001$, for diversion/entertainment gratifications, $r(102) = .39$, $p < .001$, for personal identity gratifications, $r(102) = .55$, $p < .001$, and for social information gratifications, $r(102) = .41$, $p < .001$. In other words, Renren updating frequency was positively correlated with Renren gratifications in general and also for each type of gratification. Further, there was a moderate correlation between Renren usage time and overall gratifications, $r(102) = .35$, $r^2 = .12$, $p < .001$. Similarly, the correlations between Renren usage time and specific gratifications for Renren were either moderate or small: for interpersonal relationship gratifications, $r(102) = .36$, $p < .001$, for diversion/entertainment gratifications, $r(102) = .28$, $p = .01$, for personal identity gratifications, $r(102) = .32$, $p < .001$, and for social information gratifications, $r(102) = .26$, $p = .01$. In sum, both Renren usage time and updating frequency were positively correlated with Renren gratifications; the results supported H2b.

**Acculturation and SNS Involvement**

H3a predicted that Chinese international students’ level of identification with American culture would be positively related to their Facebook involvement in terms of usage time and their frequency of update. As shown on Table 6, the correlation between adapting to American culture and Facebook updating frequency was statistically significant, $r(135) = .20$, $r^2 = .04$, $p = .02$. Similarly, there was a small correlation between the level of
American acculturation and the time spent on Facebook, \( r(144) = .22, r^2 = .05, p = .01 \). Therefore, the identification with American culture was found to be positively correlated with Facebook involvement in terms of both usage time and updating frequency; H3a was supported.

Likewise, H3b predicted that Chinese international students’ level of identification with Chinese culture would be positively related to Renren involvement in terms of usage time and their frequency of update. Table 7 shows that the correlation between the maintenance of Chinese culture and Renren updating frequency was not statistically significant, \( r(104) = -.09, p = .36 \); nor was the correlation between maintaining Chinese culture and Renren usage time, \( r(104) = .02, p = .85 \). In other words, the identification with the Chinese cultural heritage was not correlated with Renren involvement in terms of usage time and updating frequency; H3b was rejected. Nevertheless, it is worth mentioning that, with \( N = 104 \) and \( \alpha = .05 \), the power to detect significant correlation for small effects was .17; although it was satisfactory for medium and large effects. The power to detect medium effects was .88, and the power to detect large effects was in excess of .99.

H5b predicted that the relationship between the unidimensional model’s conceptualization of acculturation and SNS involvement would be weaker than the relationship between the bidimensional model’s conceptualization of acculturation and SNS involvement. As shown by Table 7, there was no significant correlation between overall acculturation and both Renren usage time and updating frequency. For overall acculturation and Renren usage time, \( r(104) = .06, p = .53 \); for overall acculturation and Renren updating frequency, \( r(104) = .09, p = .36 \). However, as Table 6 reports, there was a small correlation between the overall acculturation level and Facebook usage time, \( r(144) = .22, r^2 = .05, p = .01 \), as well as a moderate correlation between overall acculturation and Facebook updating frequency, \( r(135) = .37, r^2 = .14, p < .001 \). It is important to note that the correlation between
overall acculturation and Facebook involvement was stronger than the correlation between
the bidimensional model’s conceptualization of acculturation and Facebook involvement (see
Tables 6 and 7). Therefore, H5b was not supported.

**Acculturation, Gratifications, and SNS Involvement**

H4a and H4b predicted that SNS gratifications would mediate the relationship
between acculturation and SNS involvement. Preacher and Hayes’ (2008) bootstrapping
procedure was applied for the mediation analysis, because it is superior to other traditional
approaches in several significant ways (for studies using bootstrapping analysis, see Burke et
al, 2012; Burleson et al, 2009; Jaremka et al., 2012; Osberg, Billingsley, Eggert, Insana,
2012). First, instead of inferring mediation based on the extent to which the direct path is
reduced (e.g., Baron & Kenny, 1986), bootstrapping estimates the significance of indirect
effects. Second, unlike the Sobel test (1982), bootstrapping not only allows multiple
mediators, but also adjusts all paths for covariates not proposed to be mediators (Kenny,
2012). Third, it generates more powerful tests, since it requires no assumption of the
sampling distribution normality and, thus, effectively reduces Type II error. Specifically,
Preacher and Hayes’ (2008) bootstrapping procedure examines mediation by generating a
point estimate of the indirect effect of the independent variable (X) on the dependent variable
(Y) through mediator variable(s) (M; M₁, M₂, M₃…) and then testing the estimate for
significance by constructing 95% confidence intervals around the estimate (see also Hayes,
2009).

Figure 5 Total Effect of Acculturation on SNS Involvement

```
X: Acculturation  c  Y: SNS Involvement
```

While Figure 5 shows the total effect of X (acculturation) on Y (SNS involvement),
which is represented by c, Figures 8 and 9 present the two hypothesized mediational models
being tested in this study. In Figure 8, X (acculturation) is proposed to influence Y (SNS
Table 6 Intercorrelations among acculturation, Facebook involvement, and Facebook gratifications

<table>
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<th>Facebook Gratifications</th>
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<td>Facebook Usage Time</td>
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<td>.22**</td>
</tr>
<tr>
<td>Overall Acculturation</td>
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<td>.22**</td>
</tr>
</tbody>
</table>

Facebook Involvement

| Facebook Updating Frequency | .19*                | .24**                  | .33***                        |
| Facebook Usage Time         | .11                 | .13                    | .03                           |

Note. For correlation between acculturation and Facebook updating frequency, N = 135; for correlation between acculturation and Facebook usage time, N = 144; for correlation between acculturation and Facebook gratifications, N = 131; for correlation between Facebook updating frequency and Facebook gratifications, N = 130; and for correlation between Facebook usage time and Facebook gratifications, N = 131. *p < .05, **p < .01, ***p < .001.
Table 7 Intercorrelations among acculturation, Renren involvement, and Renren gratifications

<table>
<thead>
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<th>Variables</th>
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<th>Renren Gratifications</th>
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<td>Renren Usage Time</td>
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</tr>
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</table>

Note. For correlation between acculturation and Renren involvement, N = 104; for correlation between acculturation and Renren gratifications, N = 103; and for correlation between Renren involvement and Renren gratifications, N = 102. * p < .05, ** p < .01, *** p < .001.
involvement) through $M$ (overall gratifications for the SNS). In this model, $a$ represents the effect of $X$ on $M$, $b$ represents the effect of $M$ on $Y$ controlling for $X$, and $c'$ represents the direct effect of $X$ on $Y$ controlling for $M$. Thus, bootstrapping was used to test the significance of the indirect effect of $X$ on $Y$ through $M$, which is represented by $a*b$.

Further, this study divided SNS gratifications into four specific dimensions in order to find more nuanced and in-depth mediational effects. As shown by the model in Figure 9, $X$ (acculturation) is hypothesized to influence $Y$ (SNS involvement) through multiple mediators, i.e., $M_1$ (interpersonal relationship gratifications), $M_2$ (diversion/entertainment gratifications), $M_3$ (personal identity gratifications), and $M_4$ (social information gratifications). Similarly, the effects of $X$ on $M_1$, $M_2$, $M_3$, and $M_4$ are represented by $a_1$, $a_2$, $a_3$, and $a_4$; the effects of $M_1$, $M_2$, $M_3$, and $M_4$ on $Y$ are represented by $b_1$, $b_2$, $b_3$, and $b_4$. 

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$M_3$, and $M_4$ on $Y$ controlling for $X$ are represented by $b_1$, $b_2$, $b_3$, and $b_4$; and the direct effect of $X$ on $Y$ controlling for $M_1$, $M_2$, $M_3$, and $M_4$ is represented by $c'$. Thus, bootstrapping was used to examine the significance of the indirect effects of $X$ on $Y$ through $M_1$, $M_2$, $M_3$, and $M_4$, which are represented by $a_1*b_1$, $a_2*b_2$, $a_3*b_3$, and $a_4*b_4$, respectively.

Tables 10 and 11 present the multiple mediator models for Facebook and Renren obtained from using SPSS V. 20 and Hayes’ INDIRECT macro (available at http://afhayes.com/spss-sas-and-mplus-macros-and-code.html). The unstandardized regression coefficients reported in Table 10 were based on 5,000 resamples from the current sample of 130 while those in Table 11 were based on 5,000 resamples from the current sample of 102. The statistical significance of these coefficients was determined by biased corrected confidence intervals and, specifically, an interval that excludes zero indicates a statistically significant mediation at $p < .05$ (Preacher & Hayes, 2008).

H4a predicted that Chinese international students’ gratifications for Facebook mediated the effect of adapting to American culture on Facebook involvement in terms of usage time and their frequency of update. First, Table 10 shows that the total effect of adapting to American culture on Facebook updating frequency was large, $r = .79, p = .01$; the effect of identifying with American culture on overall Facebook gratifications was medium, $r = .31, p < .001$; the effect of Facebook gratifications on Facebook updating frequency was large, $r = .75, p = .01$; the direct effect of the adaptation to American culture on Facebook updating frequency was not statistically significant, $r = .56, p = .06$; and the indirect effect of adapting to American culture on Facebook updating frequency through overall gratifications was significant, $r = .23, z = 2.11, p = .04$. Therefore, the effect of American acculturation on Facebook updating frequency was fully mediated by individuals’ overall gratifications for Facebook. However, when testing the four types of Facebook gratifications, the direct effect of American acculturation became significant, $r = .66, p = .03$, and only personal identity
gratifications remained to have a relatively significant mediational effect, $r = .24, z = 1.90, p = .06$. The other three dimensions were not found to mediate: for interpersonal relationship gratifications, $r = .01, z = .04, p = .97$, for diversion/entertainment gratifications, $r = .41, z = 1.20, p = .23$, and for social information gratifications, $r = -.66, z = -1.44, p = .15$. Therefore, a more nuanced examination of the data indicates that personal identity gratifications partly mediated the relationship between acculturation and Facebook updating frequency.

Second, although the total effect of adapting to American culture on Facebook usage time was significant, $r = .46, p = .01$, it was explained through the direct effect of the adaptation to American culture, $r = .43, p = .02$. No mediation was observed for overall gratifications ($r = .03, z = .61, p = .54$), interpersonal relationship gratifications ($r = .00, z = .03, p = .97$), diversion/entertainment gratifications ($r = .03, z = .75, p = .45$), personal identity gratifications ($r = -.05, z = -.95, p = .34$), and social information gratifications ($r = .05, z = .55, p = .58$). Therefore, H4a was partially confirmed; Chinese international students’ gratifications for Facebook were found to mediate the effect of adapting to American culture on their frequency of updating Facebook, but not their time spent on the SNS.

H4b predicted that Chinese international students’ gratifications for Renren mediated the effect of maintaining Chinese culture on Renren involvement in terms of usage time and their frequency of update. First, as presented on Table 11, the effect of maintaining Chinese culture on overall Renren gratifications was significant, $r = .27, p = .02$, so was the effect of overall Renren gratifications on Renren updating frequency, $r = 1.65, p < .001$, which led to a limited indirect effect of the maintenance of Chinese culture on Renren updating frequency through overall gratifications, $r = .45, z = 2.24, p = .03$. However, the indirect effect was partially cancelled out by the significantly negative direct effect of maintaining Chinese culture on Renren updating frequency, $r = -.75, p = .01$, and, therefore, the total effect of
maintaining Chinese culture on Renren updating frequency was not statistically significant, $r = -.30, p = .38$. Thus, in this model, an inconsistent mediation existed in which two opposing processes occurred and their effects counteracted each other (Kenny, 2012; MacKinnon, Fairchild, & Fritz, 2007). Nevertheless, the confidence intervals for the indirect effect ranged from -.05 to 1.04 and included zero, which indicated that the mediational effect of Renren gratifications was not, although very close to, statistically significant. Further, when examining the four types of Renren gratifications, the inconsistent model persisted and the indirect effects of gratifications became even less significant.

Second, as Table 11 shows, while there was a negative but not significant direct effect of maintaining Chinese culture on Renren usage time ($r = -.12, p = .50$), the significantly positive effect of maintaining Chinese culture on overall Renren gratifications ($r = .27, p = .02$) and that of overall gratifications on Renren updating frequency ($r = .57, p < .001$) led to a limited positive indirect effect of the maintenance of Chinese culture on Renren updating frequency through overall gratifications ($r = .16, z = 2.00, p = .04$). However, the positive indirect effect of acculturation was again partially cancelled out by its negative direct effect and, therefore, the total effect of acculturation on Renren usage time was not significant, $r = .03, p = .86$. Similarly, the confidence intervals for the indirect effect ranged from -.02 to .42 and included zero, which indicated that the mediational effect of Renren gratifications was not, although very close to, statistically significant. Further, when testing the four types of gratifications for Renren, the inconsistent model persisted with less significant indirect effects of gratifications. In sum, although H4b was rejected, the results seemed to suggest a mild inconsistent mediation among acculturation, Renren gratifications, and Renren involvement.
Table 10 Summary of the indirect effect of acculturation on Facebook involvement through Facebook gratifications \((N = 130)\)

<table>
<thead>
<tr>
<th>IV ((X))</th>
<th>Mediator ((M))</th>
<th>DV ((Y))</th>
<th>Effect of (X) on (M) ((a))</th>
<th>Effect of (M) on (Y) ((b))</th>
<th>Direct Effect ((c'))</th>
<th>Indirect Effect ((a*b)) ((95% CI))</th>
<th>Total Effect ((c)) ((95% CI))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptation</td>
<td>Overall Gratifications</td>
<td>Frequency</td>
<td>.31***</td>
<td>.75**</td>
<td>.56</td>
<td>.23* ((.03, .58))</td>
<td>.79**</td>
</tr>
<tr>
<td></td>
<td>Interpersonal Relationship</td>
<td>Frequency</td>
<td>.33***</td>
<td>.01</td>
<td>.66*</td>
<td>.00 ((- .26, .27))</td>
<td>.79**</td>
</tr>
<tr>
<td></td>
<td>Diversion/Entertainment</td>
<td>Frequency</td>
<td>.23</td>
<td>.41</td>
<td>.10</td>
<td>(-.01, .38)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Personal Identity</td>
<td>Frequency</td>
<td>.30*</td>
<td>.80**</td>
<td>.24</td>
<td>(.01, .66)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Information</td>
<td>Frequency</td>
<td>.33***</td>
<td>-.66</td>
<td>-.22</td>
<td>(-.60, .02)</td>
<td></td>
</tr>
<tr>
<td>Adaptation</td>
<td>Overall Gratifications</td>
<td>Time</td>
<td>.31***</td>
<td>.10</td>
<td>.43*</td>
<td>.03 ((- .08, .13))</td>
<td>.46**</td>
</tr>
<tr>
<td></td>
<td>Interpersonal Relationship</td>
<td>Time</td>
<td>.33***</td>
<td>.01</td>
<td>.43*</td>
<td>.00 ((- .15, .12))</td>
<td>.46**</td>
</tr>
<tr>
<td></td>
<td>Diversion/Entertainment</td>
<td>Time</td>
<td>.24*</td>
<td>.13</td>
<td>.03</td>
<td>(-.02, .15)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Personal Identity</td>
<td>Time</td>
<td>.29*</td>
<td>-.16</td>
<td>-.05</td>
<td>(-.21, .02)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Information</td>
<td>Time</td>
<td>.33***</td>
<td>.14</td>
<td>.05</td>
<td>(-.08, .24)</td>
<td></td>
</tr>
</tbody>
</table>

*Note. Adaptation = Adaptation to American Culture, Frequency = Facebook Updating Frequency, Time = Facebook Usage Time, CI = Confidence Intervals. *\(p < .05\), **\(p < .01\), ***\(p < .001\), two-tailed.*
Table 11 Summary of the indirect effect of acculturation on Renren involvement through Renren gratifications (N = 102)

<table>
<thead>
<tr>
<th>IV (X)</th>
<th>Mediator (M)</th>
<th>DV (Y)</th>
<th>Effect of X on M (a)</th>
<th>Effect of M on Y (b)</th>
<th>Direct Effect (c')</th>
<th>Indirect Effect (a*b) (95% CI)</th>
<th>Total Effect (c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td>Overall Gratifications</td>
<td>Frequency</td>
<td>.27*</td>
<td>1.65***</td>
<td>-.75*</td>
<td>.45 (-.05, 1.04)</td>
<td>-.30</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Interpersonal Relation</td>
<td>Frequency</td>
<td>.26*</td>
<td>.84*</td>
<td>-.63*</td>
<td>.22 (.00, .69)</td>
<td>-.30</td>
</tr>
<tr>
<td></td>
<td>Diversion/Entertainment</td>
<td>.28</td>
<td>.03</td>
<td></td>
<td>.01</td>
<td>(-.16, .27)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Personal Identity</td>
<td>.14</td>
<td>.83**</td>
<td></td>
<td>.12</td>
<td>(-.17, .50)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Information</td>
<td>.39**</td>
<td>-.04</td>
<td></td>
<td>-.01</td>
<td>(-.42, .25)</td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>Overall Gratifications</td>
<td>Time</td>
<td>.27*</td>
<td>.57***</td>
<td>-.12</td>
<td>.16 (-.02, .42)</td>
<td>.03</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Interpersonal Relation</td>
<td>Time</td>
<td>.26*</td>
<td>.48*</td>
<td>-.08</td>
<td>.13 (-.01, .40)</td>
<td>.03</td>
</tr>
<tr>
<td></td>
<td>Diversion/Entertainment</td>
<td>.28</td>
<td>.12</td>
<td></td>
<td>.03</td>
<td>(-.04, .24)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Personal Identity</td>
<td>.14</td>
<td>.19</td>
<td></td>
<td>.03</td>
<td>(-.03, .19)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Information</td>
<td>.39**</td>
<td>-.18</td>
<td></td>
<td>-.07</td>
<td>(-.32, .05)</td>
<td></td>
</tr>
</tbody>
</table>

Note. Maintenance = Maintenance of Chinese Culture, Frequency = Renren Updating Frequency, Time = Renren Usage Time, CI = Confidence Intervals. * p < .05, ** p < .01, *** p < .001, two-tailed.
English Proficiency and Length of Stay in the U.S.

In order to control the potential effect of English language proficiency and the length of residence in the U.S. on Chinese international students’ SNS gratifications and usage, a series of simultaneous multiple regression analyses were performed. All predictor variables were entered in one step. First, American acculturation, English proficiency (i.e., participants’ most recent TOEFL iBT score), and length of stay were entered as independent variables with the dependent variable being Facebook gratifications and involvement, respectively. Second, Facebook gratifications, English proficiency, and length of stay were entered as independent variables with the dependent variable being Facebook involvement. Third, Chinese cultural maintenance and length of residence in the U.S. were entered as independent variables with the dependent variable being Renren gratifications and involvement, respectively. Last, Renren gratifications and length of stay were entered as independent variables with the dependent variable being Renren involvement. English proficiency was not included for the regression analyses for Renren since participants’ friends on Renren were overwhelmingly Chinese and the site of Renren is exclusively operated in Chinese language. Thus, English skills were not likely to affect SNS gratifications and usage in this ethnic context. Results for the regression analyses for Facebook \((N = 95)\) were summarized on Tables 12 and 13, and those for Renren \((N = 100)\) were presented on Tables 14 and 15.

As displayed on Tables 12 and 13, participants’ English language proficiency and the length of their stay in the U.S. were not predictive of or correlated with Facebook involvement in terms of updating frequency and usage time. Although they had a small effect on participants’ gratifications for Facebook, the effect was much weaker than that of American acculturation. Besides, the negative small effect of residence time on Facebook gratifications suggests that the longer they stayed in the U.S., the less likely they sought
gratifications on Facebook. Nevertheless, when controlling for participants’ English proficiency and the amount of time spent in the U.S., American acculturation continued to serve as a strong predictor for both their Facebook gratifications and involvement (see Tables 12 and 13). Further, with language skills and residence time being controlled, participants’ gratifications for Facebook predicted their frequency of update, but not the amount of time they spent on Facebook, which were consistent with study’s original results.

As shown by Tables 14 and 15, the amount of time participants spent in the U.S. did not predict their frequency of update and usage time on Renren. Admittedly, it had a negative effect on gratifications they sought on Renren, which suggests that their gratifications for Renren decreased with their stay in the U.S. Most importantly, when controlling for participants’ residence time in the U.S., seeking Renren gratifications continued to have a strong effect on participants’ frequency of update and their time spent on Renren (see Tables 14 and 15). The maintenance of Chinese culture was a significant predictor for Renren gratifications but had no significant effect on Renren usage, which was also consistent with study’s original results. In a word, regression analyses showed that this study’s original results persisted after controlling for participants’ English skills and length of stay in the U.S.
Table 12 Intercorrelations among acculturation, length of stay in the U.S., English proficiency, and Facebook gratifications and involvement

<table>
<thead>
<tr>
<th>Variables</th>
<th>Adaptation</th>
<th>Facebook Gratifications</th>
<th>Facebook Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Updating Frequency</td>
</tr>
<tr>
<td>Adaptation</td>
<td>-.11</td>
<td>-.13</td>
<td>-.10</td>
</tr>
<tr>
<td>Facebook Gratifications</td>
<td>-.29**</td>
<td>.21*</td>
<td>.06</td>
</tr>
<tr>
<td>Length of Stay in the U.S.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Proficiency</td>
<td>-.13</td>
<td>.21*</td>
<td>.06</td>
</tr>
</tbody>
</table>

*Note. Adaptation = Adaptation to American Culture. *p < .05, **p < .01, ***p < .001, one-tailed.

Table 13 Results of simultaneous multiple regression for Facebook

<table>
<thead>
<tr>
<th>Variables</th>
<th>Facebook Gratifications</th>
<th></th>
<th>Facebook Involvement</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>β</td>
<td>sr² unique</td>
<td>R</td>
<td>b</td>
</tr>
<tr>
<td>Adaptation</td>
<td>.38***</td>
<td>.36</td>
<td>.13</td>
<td>.50***</td>
<td>.84*</td>
</tr>
<tr>
<td>Length of Stay in the U.S.</td>
<td>-.10*</td>
<td>-.24</td>
<td>.06</td>
<td></td>
<td>-.08</td>
</tr>
<tr>
<td>English Proficiency</td>
<td>.01*</td>
<td>.23</td>
<td>.05</td>
<td></td>
<td>.01</td>
</tr>
<tr>
<td>Facebook Gratifications</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.94*</td>
</tr>
<tr>
<td>Length of Stay in the U.S.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.01</td>
</tr>
<tr>
<td>English Proficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.00</td>
</tr>
</tbody>
</table>

*Note. Adaptation = Adaptation to American Culture. *p < .05, **p < .01, ***p < .001.
Table 14 Intercorrelations among acculturation, length of stay in the U.S., English proficiency, and Renren gratifications and involvement

<table>
<thead>
<tr>
<th>Variables</th>
<th>Maintenance</th>
<th>Renren Gratifications</th>
<th>Updating Frequency</th>
<th>Usage Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td></td>
<td>.22*</td>
<td>-.08</td>
<td>.02</td>
</tr>
<tr>
<td>Renren Gratifications</td>
<td></td>
<td></td>
<td>.55***</td>
<td>.35***</td>
</tr>
<tr>
<td>Length of Stay in the U.S.</td>
<td>-.03</td>
<td>-.25**</td>
<td>-.17*</td>
<td>-.08</td>
</tr>
</tbody>
</table>

*Note. Maintenance = Maintenance of Chinese Culture. *p < .05, **p < .01, ***p < .001, one-tailed.

Table 15 Results of simultaneous multiple regression for Renren

<table>
<thead>
<tr>
<th>Variables</th>
<th>Renren Gratifications</th>
<th>Renren Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>β</td>
</tr>
<tr>
<td>Maintenance</td>
<td>.27*</td>
<td>.23</td>
</tr>
<tr>
<td>Length of Stay in the U.S.</td>
<td>-.13**</td>
<td>-.26</td>
</tr>
<tr>
<td>Renren Gratifications</td>
<td>1.50***</td>
<td>.54</td>
</tr>
<tr>
<td>Length of Stay in the U.S.</td>
<td>-.05</td>
<td>-.04</td>
</tr>
</tbody>
</table>

*Note. Maintenance = Maintenance of Chinese Culture. *p < .05, **p < .01, ***p < .001.
CHAPTER V. DISCUSSION

In this chapter, the results of this project are discussed. It starts with presenting and interpreting the key findings of this study, including the correlations between acculturation, SNS gratifications, and SNS involvement, the mediational effects of SNS gratifications, and the comparison of the two approaches to acculturation. Then, theoretical and pragmatic implications of these findings are presented. Last, the current study’s several limitations are identified and future research directions are discussed.

Key Findings

Drawing from the theoretical frameworks of the bidimensional acculturation model and uses and gratifications theory, this study sought to explore the relationship between acculturation, SNS gratifications, and SNS involvement for Chinese international students. Because of the culturally different orientations and memberships of the two SNSs, Facebook and Renren provided a unique space for linking the three grand factors together for investigation. This project’s analyses elicited several key findings.

First, as participants’ identification with American culture increased, Chinese international students became more concerned with seeking gratifications on Facebook, including those associated with developing interpersonal relationships, diverting and entertaining, managing online personal identity, and obtaining social information. Consistent with uses and gratifications theory, this study further revealed that, the greater extent to which they sought gratifications on Facebook, the more frequently they used Facebook to generate content, including statuses, pictures, and comments. These results persisted when controlling for participants’ English language proficiency and the amount of time spent in the U.S. Moreover, gratifications were found to fully mediate the relationship between American acculturation and their Facebook updating frequency. Specifically, Chinese international students’ need for building, managing, and presenting their personal identity was a strong
mediator. In other words, acculturation increased Chinese international students’ desire to communicate their personal identity on Facebook, which in turn led them to post more frequently on this SNS. However, gratifications did not mediate the relationship between acculturation and the amount of time Chinese international students spent on Facebook, because gratifications were not correlated with the time individuals spent on the SNS. Nevertheless, acculturation had a direct effect on the time Chinese international students spent on Facebook. Thus, those who identified more with American culture tended to be more involved into Facebook by not only generating content more frequently but also devoting more time to the site. In sum, this study suggests that 1) with Chinese international students’ adapting to the host society, their gratifications for Facebook increase which facilitates their adoption of a more active Facebook using style and 2) Chinese international students’ identification with American culture directly and positively influences the amount of time they spent on Facebook.

Second, Chinese international students who had a higher level of identification with Chinese culture (i.e., higher Chinese cultural maintenance) were likely to seek more gratifications on Renren, especially for interpersonal relationship, diversion/entertainment, and social information needs. Interestingly, those who engaged in more Chinese cultural maintenance were not found to seek more personal identity gratifications on Renren. Further, consistent with uses and gratifications theory, a stronger will to fulfill needs on Renren, both overall gratifications and the four types of gratifications associated with interpersonal relationship, diversion/entertainment, personal identity, and social information, contributed to Chinese international students’ involvement with Renren in terms of spending more time and updating more frequently on this SNS. These results remained when participants’ English skills and length of stay in the U.S. were controlled. However, the maintenance of Chinese culture had a negative direct effect on Renren involvement which canceled out its positive
indirect effect through Renren gratifications; the total effect of acculturation on Renren involvement was not statistically significant. In sum, it is suggested that while Chinese international students with higher levels of identification with their heritage culture are likely to have stronger gratifications for Renren which can positively predict Renren involvement, the Chinese orientation itself seems to decrease their Renren involvement and, as the result, they are not more involved into Renren.

Some of these findings on Renren correspond with Facebook findings while the others differ. First, while personal identity gratifications for Facebook were not only correlated with American acculturation but also mediated its effect on Facebook updating frequency, seeking personal identity on Renren was not correlated with the identification with Chinese culture and did not have a mediational effect. This can be explained through the difference in Chinese international students’ friends on Facebook and Renren. It was found that significantly more Chinese international students reported having graduate school classmates, coworkers, and spouse or current romantic partner on their Facebook friend lists, while more reported having siblings or relatives and high school classmates in their Renren friends. Therefore, it can be argued that those who are more adapted to the American society might experience a stronger desire, or pressure, to present themselves when facing the academically, professionally, and romantically significant audience on Facebook and, therefore, post on Facebook more frequently to fulfill such needs. However, presenting themselves online to people with whom they share a biological connection and adolescent acquaintances who might play a less important role in their current lives might seem less urgent and, therefore, does not lead people to be more active Renren users even when they identify more with Chinese culture. Besides, while their Facebook friends consisted of people from the host, home, and other cultures, their friends on Renren were overwhelmingly from their native Chinese communities. The need to build and present oneself to a relatively new
and culturally diverse community can be more powerful in influencing one’s SNS using behavior than maintaining one’s image to a relatively old and culturally homogeneous audience set. This difference can also contribute to the varying effects of personal identity gratifications for Facebook and Renren.

Further, Chinese international students’ gratifications for Renren had a strong influence on their Renren involvement measured by usage time and updating frequency; however, their gratifications for Facebook can only predict their posting frequency but not the amount of time spent on Facebook. While usage time and updating frequency are often positively related, they in fact describe two different attributes of social media usage. Specifically, according to the difference in usage time, there are heavy and light SNS users; according to the difference in updating frequency, there are active and passive SNS users (Ha & Hu, in press). Therefore, this study indicates that, unlike on Renren, those who seek more gratifications on Facebook are not more likely to be heavier Facebook users by devoting more time to the site, but instead, they are driven to become more active Facebook users in order to meet those needs. It can be inferred that actively using Facebook through posting statuses, photos, and comments might be a better way to, if not suffice to, satisfy those gratifications associated with Facebook. This can also explain why gratifications for Facebook failed to mediate the effect of acculturation on Facebook usage time. Meanwhile, for Renren, not only being active, but also spending more time, for instance, to observe, can contribute significantly to the fulfillment of gratifications for Renren and, thus, are both performed by Chinese international students who have stronger SNS needs. In a word, gratifications for Facebook and Renren might call for different fulfilling strategies, which lead to the different correlation patterns between gratifications and involvement for the two sites.
Besides, American acculturation had a positive effect on the amount of time individuals spent on Facebook and their frequency of generating content on the SNS; however, maintaining Chinese culture was found to have a negative direct effect on Renren involvement. One possible explanation is that the population with higher levels of Chinese identification is more engaged in offline social and cultural activities within their cultural group or related with their heritage culture, and, therefore, has a tighter time budget to spare to the SNS. Besides, when taking into account the indirect effect of Renren gratifications, the maintenance of Chinese culture did not influence Renren involvement, the finding of which was different from Facebook. There could be a variety of reasons. First, while adapting to the host culture means adopting and adjusting one’s identification with a different culture, maintaining one’s heritage culture is often characterized with keeping the cultural identification that has already been built in. Therefore, it is likely that their acculturation in the Chinese dimension is more subtle than what has occurred in the American one and, thus, is less influential in causing changes in their Renren using behaviors. Second, most Chinese international students started using Renren more than four years ago, long before they came to the U.S. The chronic usage of Renren might have resulted in a stable using pattern that cannot be easily altered even with the effect of acculturation. In contrast, Facebook is relatively new to this population most started to use it after their arrival to the U.S. In fact, for most Chinese international student Facebook users, the adoption of Facebook and their experiences of acculturation are almost simultaneous. Thus, what they experience culturally and socially is more likely to shape their usage of this newly adopted SNS, but not the one with which they have a long established relationship.

Another key finding of this study is that the bidimensional model of acculturation is a more accurate conceptualization and operationalization of acculturation than the unidimensional one and, further, the two dimensions need to be examined separately in some
research contexts. In the analyses of this study, both the relevant host or home dimension of acculturation and the overall acculturation level, obtained from summing the score of adapting to American culture and the reversed score of maintaining Chinese culture, were included as variables when testing the correlations between acculturation and SNS gratifications, and acculturation and SNS involvement. Results showed that American acculturation was positively correlated with Chinese international students’ general Facebook gratifications, as well as the four specific types of gratifications associated with personal relationship, diversion and entertainment, personal identity, and social information; also, the maintenance of Chinese culture was positively correlated with general gratifications for Renren, as well as the three types of gratifications except for personal identity gratifications, the potential reason of which has been discussed earlier. However, the overall acculturation level showed no correlation with both gratifications for Facebook and Renren, both in general and in any of the four dimensions.

Admittedly, a meaningful correlation was found between the overall acculturation level and Chinese international students’ Facebook involvement, although no such relationship was observed for Renren involvement. The stronger correlation between Facebook involvement with overall acculturation than that with its American dimension indicates that it is not only the identification with American culture but also the link with Chinese culture that affects their Facebook usage. In other words, those who are assimilated into the dominant culture while rejecting the heritage one might be the most involved Facebook users, those who are separated from the dominant culture while embracing the heritage one might be the least involved Facebook users, while their counterparts who integrate the two cultures or are marginalized from both are likely to stay between the two extremes in terms of Facebook involvement.
Implications

These findings have several theoretical implications. First, it is suggested that uses and gratifications theory serves as a solid framework for understanding the relationship between Chinese international students’ host and home cultural identifications and SNS usage, especially for Facebook involvement. The emerging intercultural computer-mediated communication landscape, in which people are playing an even more active role in the consumption of both cultures and medias, provides this traditional communication theory a new space to thrive. Second, while the findings concerning acculturation and Facebook are in accordance with the relationship between acculturation and mainstream media use in the traditional ethnic media use literature, others concerning acculturation and Renren contradict with what have been found between acculturation and ethnic media use. Therefore, it suggests that ethnic media use in the SNS context differs from traditional media in some significant ways which call for further investigation. Third, this study suggests that English proficiency and the length of residence in the U.S. need to be considered when studying the relationship between acculturation and SNS usage since English skills and residence time were found to affect Chinese international students’ gratifications for both mainstream and ethnic SNSs.

Fourth, while SNS gratifications as a whole have been found to correlate with both acculturation and SNS involvement, the examination of SNS gratifications in specific dimensions can elicit more nuanced and insightful findings. For instance, this study suggests that personal identity gratifications for Facebook can mediate the effect of adapting to American culture on individuals’ updating frequency of Facebook, but the same gratification dimension for Renren does not even correlate with the maintenance of Chinese culture, nor does it has any mediational effect. Last but not the least, acculturation is a double dimensional process in which individuals’ identifications with the host and home cultures
change more independently than interdependently. In this study, while the dominant and heritage dimensions can, to varied extents, predict Chinese international students’ gratifications for and usage of Facebook and Renren, respectively, overall acculturation as the sum of its two dimensions is less effective in predicting their SNS gratifications and frequency of update. Therefore, this study provides a powerful evidence for the warranty of investigating dominant and heritage dimensions separately when studying the effect of acculturation, especially when the affected subjects also follow a host-home dichotomy.

Pragmatically, this study also offers many significant implications. Previous research found that, for Chinese international students in the U.S., the link between acculturation and acculturative difficulties and stress is mediated by social interaction with Americans and social support from online ethnic groups (Ye, 2006; Zhang & Goodson, 2011). Thus, both Facebook and Renren usage might serve as a buffer for acculturative stress. However, this study indicates that Chinese international students who are in the acculturation stage of “separation”, being separated from the mainstream culture while embracing the heritage one, are likely to be the least involved Facebook users and are not more likely to use Renren. As a result, this group might face greater difficulties than their peers and are in need of effective social supports. Thus, university and community programs developed to help international students cope with acculturative stress should pay special attention to this population.

In addition, the study also provides suggestions for marketers on Facebook. According to Holland and Gentry (1999), advertisers need to recognize the increasing ethnical and cultural diversity of the U.S. population and respond with marketing efforts targeted at ethnic minority groups. They claimed that, in order to enhance communication and gain approval, marketers often accommodate to the intended audience by drawing references to the ethnic culture and choosing models from the same ethnic group. Further, according to Ferle and Morimoto (2009), Asian American consumers appear to be an
appealing market that needs to be better understood by advertisers. Although small in its proportion in the U.S. population, Chinese international students also possess a buying power that is promising enough to draw the interest of advertisers. Therefore, this study suggests Facebook advertisers should take into account the fact, especially when designing advertisements, that those who identify more with American culture are more likely to be their potential audience since this population spend more time on and use more frequently of the platform.

**Limitations and Direction for Future Research**

The current study has several limitations. First, although generally speaking the data had sufficient statistical power to detect correlations and mediations, it was still limited in size and might account for the small variation in participants’ acculturation scores and the failure to detect some small effects, especially for Renren data. Second, graduate students constituted approximately 82.0% of this study’s participants and undergraduate students only constituted 17.3%. According to the Institute of International Education (2012), for Chinese international students enrolled in U.S. institutions of higher education, the nationwide proportion of graduate students was 45.6% and that of undergraduate students was 38.4%. Others were enrolled in OPT, i.e., Optional Practical Training (9.5%), or non-degree programs (6.5%). Therefore, this study’s sample was not representative in terms of educational level.

Third, since some participants only used Facebook or Renren and others used both, the former population was represented once in the data analyses, for Facebook or Renren, while the latter were represented twice, for Facebook and Renren. Thus, in order to avoid potential biases, future research should gather data from Chinese international students who have both Facebook and Renren accounts. Alternatively, future studies could investigate differences between Chinese international students (a) who have Facebook accounts, (b) who
have Renren accounts, (c) who have both Facebook and Renren accounts, and (d) who are not members of Facebook or Renren. Last, the measurement for Facebook/Renren usage time could have better captured the complexity and variation of the data. The measurement overestimated participants’ SNS usage by asking them to indicate the average time they spent on Facebook/Renren per day from the following options: 10 minutes or less, 10 to 30 minutes, 31 to 60 minutes, 1 to 2 hours, 2 to 3 hours, and 3 hours or more. As a result, the reported usage time was extremely low and limited in its variation (for Facebook, $M = 1.68$, $SD = 1.09$; for Renren, $M = 1.88$, $SD = 1.13$) which might have affected the detection of meaningful correlations and mediations concerning SNS usage time.

This exploratory study has revealed many significant findings which suggest that ethnic media use in the SNS context differs from traditional media and, thus, calls for future research to build a more comprehensive picture by bringing the examination of acculturation and SNS usage into a variety of contexts. For instance, researchers can investigate the relationship between acculturation and 1) the usage of Facebook and Renren among Chinese international students in regions where Chinese are more concentrated (e.g., California and New York); 2) Chinese international students’ usage of other pairs of SNSs (e.g., Twitter and Weibo); 3) mainstream and ethnic SNS usage for other ethnicities (e.g., the usage of Facebook and Cyworld among South Koreans in the U.S.). Further, research can examine the relationship between acculturation and SNS usage in a transnational context. For instance, it is intriguing to study the ways that maintaining American culture and adapting to Chinese culture affect the usage of Renren and Facebook among American students in China.

Last, this study reveals that Chinese international students’ need for personal identity presentation mediates the relationship between acculturation and their usage of Facebook, but not their usage of Renren. This finding implies that Chinese international students might have different self-presentation needs and strategies for Facebook and Renren. In order to
investigate this subject, future research can employ qualitative research methods (e.g., content analyses) to examine the ways that Chinese international students construct their online image on Facebook and Renren, respectively.

In conclusion, acculturation and SNS usage is a new and promising research area worth scholars’ dedication. Future research can use different methodological approaches to explore the relationship between acculturation and SNS usage in a variety of contexts. The investigation will be both theoretically and pragmatically meaningful by enhancing our understanding of ethnic minorities' media usage.
REFERENCES


Eastin, M. (2002). From Internet use to the unique Internet user: Assessing information, entertainment and social cognitive models of Internet use. Paper presented to the National Communication Association, New Orleans, LA.


search.proquest.com.maurice.bgsu.edu/docview/367463658?accountid=26417

Dear Chinese International Students,

You are invited to participate in a study exploring the impact of acculturation on Chinese international students’ usage of Facebook and Renren. Your participation will be crucial for the understanding of Chinese international students’ social network sites choice, acculturative tension, identity management, and adjustment techniques.

For the study, you will be asked to complete an online questionnaire about your acculturation levels and Facebook and/or Renren usage and gratifications that will take about 20 minutes. Upon your completion, you will obtain a chance to be entered into a drawing for a $30 gift card. The odds of winning are approximately 1:50.

Individuals who are age 18 or older, self-identify as Chinese, and are currently studying in the U.S. are eligible to participate. You are particularly encouraged to participate if you have both Facebook and Renren accounts. Any of your identifying information will not be included in data and your confidentiality will be protected at my best.

Please click the following link to participate:
https://www.surveymonkey.com/s/LanmingThesisSurvey

If you have any question or need additional information about this study, please contact me at lanminc@bgsu.edu or (515) 708-6213.

Gratefully,
Lanming Chen
Graduate student
School of Media and Communication
Bowling Green State University
Dear [Organization Officer’s Name],

I'm Lanming Chen, a second-year master’s student in Media and Communication. I'm now working on my thesis The Effect of Acculturation on Chinese International Students’ Usage of Facebook and Renren (the Chinese counterpart of Facebook).

Academically, this study will be a meaningful attempt to examine uses and gratifications theory in the emerging context of intercultural computer-mediated communication. Pragmatically, the exploration of how Chinese international students use social network sites with different cultural orientations will offer insights into understanding their acculturative tension, identity management, and adjustment techniques.

For this proposed study, I plan to do an online survey and, therefore, need a large number of Chinese international students (both undergraduates and graduates) to participate. More details are provided in the letter of invitation below. It is worth noting that participants will obtain a chance to be entered into a drawing for a $30 gift card upon their completion of participation.

I’m writing this email to ask for your help. If possible, could you forward this email to your members who might be eligible and interested to participate or might have a network of Chinese international students? Your kindly help will be extremely crucial for the initiation of my research. If you have any question or need additional information about this study, please contact me at lanminc@bgsu.edu or (515) 708- 6213. I gratefully appreciate your help!

Sincerely,

Lanming Chen
Graduate student
School of Media and Communication
Bowling Green State University

[Insert the letter of invitation here]
Research Title: The Impact of Acculturation on Chinese International Students’ Usage of Facebook and Renren
Principal Researcher: Lanming Chen, Graduate Student
Project Advisor: Dr. Lisa K. Hanasono, Assistant Professor

I. Purpose/Benefits
This study aims to examine the impact of Chinese international students’ acculturation level on their usage of Facebook and Renren. Upon your completion of participation, you will obtain a chance to be entered into a drawing for a $30 gift card. The odds of winning are approximately 1:50. Meanwhile, your participation will be crucial for the understanding of Chinese international students’ social network sites choice, acculturative tension, identity management, and adjustment techniques.

II. Procedure
Individuals who are age 18 or older, self-identify as Chinese, and are currently studying in the U.S. are eligible to participate. You will be asked to complete an online questionnaire about your acculturation level and your usage and gratifications of Facebook and Renren. The survey will take approximately 20 minutes. Please clear your internet browser and web page history after you complete this study.

The participation is completely voluntary. You may withdraw your consent or refrain from answering any questions without penalty or explanation.

III. Risks
The anticipated risks that you might experience are no greater than those normally encountered in daily life. If you do experience any discomfort, please contact the BGSU Counselling Center. It is located at 104 College Park Office Building and the phone number is (419) 372-2081.

IV. Participant’s Rights
1. Any of your identifying information will not be included in the data and your confidentiality will be well protected. All the data will be kept on a password-protected personal computer and only the researcher and her advisor will have access to the data.
2. You may withdraw from the study at any time or refuse to answer any questions in which you feel uncomfortable. Your relationship to BGSU will not be affected if you withdraw.
3. You have the right to have all your questions about this study answered by me.
4. You may request a summary or copy of the results of this study.
VI. Contact Information

If you have any questions or comments concerning this study, you can contact Lanming Chen at (515) 708-6213 (lanminc@bgsu.edu), or Dr. Lisa K. Hanasono, my project advisor, at (419) 372-3512 (LisaKH@bgsu.edu).

If you have questions or concerns about the conduct of this study or your rights as a research participant, you may contact the Chair of Bowling Green State University's Human Subjects Review Board at (419) 372-7716 (hsrb@bgsu.edu).

By clicking “NEXT”, you are indicating that you are 18 or older; have been informed of the study’s purpose, benefits, procedure, and risks; had all your questions answered; and voluntarily agree to participate in the research.
APPENDIX D: VANCOUVER INDEX of ACCULTURATION

(Modified from Ryder, Alden, & Pauhus, 2000)

The following question, consisting of 20 items, asks about your acculturation experience. Many of these statements will refer to your heritage culture, meaning the culture that has influenced you most (other than American culture). It may be the culture of your birth, the culture in which you have been raised, or another culture that forms part of your background. If there are several such cultures, pick the one that has influenced you most. If you do not feel that you have been influenced by any culture other than American culture, please try to identify a culture that may have had an impact on previous generations of your family.

Please write your heritage culture in the space provided. ____________.

Please answer each question as carefully as possible by indicating your degree of agreement or disagreement.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. I often participate in my heritage cultural traditions. 1 2 3 4 5
2. I often participate in mainstream North American cultural traditions. 1 2 3 4 5
3. I would be willing to marry a person from my heritage culture. 1 2 3 4 5
4. I would be willing to marry a North American person. 1 2 3 4 5
5. I enjoy social activities with people from the same heritage culture as myself. 1 2 3 4 5
6. I enjoy social activities with typical North American people. 1 2 3 4 5
7. I am comfortable working with people of the same heritage culture as myself. 1 2 3 4 5
8. I am comfortable working with typical North American people. 1 2 3 4 5
9. I enjoy entertainment (e.g., movies, music) from my heritage culture. 1 2 3 4 5
10. I enjoy North American entertainment (e.g., movies, music). 1 2 3 4 5
11. I often behave in ways that are typical of my heritage culture. 1 2 3 4 5
12. I often behave in ways that are ‘typically North American.’ 1 2 3 4 5
13. It is important for me to maintain or develop the practices of my heritage culture. 1 2 3 4 5
14. It is important for me to maintain or develop North American cultural practices. 1 2 3 4 5
15. I believe in the values of my heritage culture. 1 2 3 4 5
16. I believe in mainstream North American values. 1 2 3 4 5
17. I enjoy the jokes and humor of my heritage culture. 1 2 3 4 5
18. I enjoy typical North American jokes and humor. 1 2 3 4 5
19. I am interested in having friends from my heritage culture. 1 2 3 4 5
20. I am interested in having North American friends. 1 2 3 4 5

Note. The heritage subscore is the mean of the odd-numbered items, whereas the mainstream subscore is the mean of the even-numbered items.

Copyright 1999 by Andrew G. Ryder, Lynn E. Alden, and Delroy L. Paulhus.
APPENDIX E: FACEBOOK QUESTIONNAIRE
(Modified from Ross et al., 2009)

A) Do you currently have a Facebook account?      Yes      No

B) If no, why not?
- Have other social network sites already (Please specify: ___________________)
- Do not have time
- Not interested
- Have never heard of Facebook before
- Other (Please specify: _________________________)

If you answered ‘‘Yes’’, please continue to item #1. If No, please skip to Renren Questionnaire.

The first part of this questionnaire is to assess your basic use of and attitudes towards Facebook

21. How long have you been on Facebook? 
   Less than 6 months   6 months to 1 year   1–2 years   2–3 years   3–4 years   4+ years

22. On average, approximately how many minutes per day do you spend on Facebook? 
   10 or less            10–30            31–60               1–2 h               2–3 h                3+ h

23. Facebook is part of my everyday activity.
   Strongly Disagree    Disagree    Neutral    Agree    Strongly Agree

24. I feel out of touch when I have not logged on to Facebook for awhile.
   Strongly Disagree    Disagree    Neutral    Agree    Strongly Agree

25. I feel I am part of the Facebook community.
   Strongly Disagree    Disagree    Neutral    Agree    Strongly Agree

26. I would be sad if Facebook shut down.
   Strongly Disagree    Disagree    Neutral    Agree    Strongly Agree

This section of the questionnaire is to assess your use of the basic Facebook functions and applications.

27. Approximately how many friends are on your Facebook friends list? 
____________

28. Please indicate the approximate percentage of your Facebook friends in terms of race/nationality (The total should equal 100).
   Americans __% 
   Chinese ___% 
   Other ___% (Please specify: ___________________)

29. Please indicate the approximate percentage of your Facebook friends in terms of gender (The total should equal 100).
   Male ____% 
   Female ____% 

30. Please check the type of people you have on your Facebook friends list in following categories (Check all that apply).
   a. Parents 
   b. Spouse or current romantic partner 
   c. Siblings and relatives (Other than parents or spouse) 
   d. Co-workers from your current or previous job 
   e. Neighbors 
   f. Classmates in college 
   g. People you went to high school with
h. Members of a group you belong to
i. People you have never met in person
j. People you have met in person only one time
k. Other
31. How often do you update your Facebook status?
   More than once daily
   once daily
   2 or more times weekly
   once weekly
   twice monthly
   once monthly
   less than once monthly
   a few times per year
   less than once per year
   not at all
32. How often do you comment on other people’s status?
   same as item #7
33. Whose statuses do you comment most frequently on? (If you don't comment on people's statuses at all, please skip this question).
   American friends   Chinese friends   Friends from other countries
34. Approximately how many Photo Albums do you presently have on Facebook? __________
35. How frequently do you post pictures?
   same as item #7
36. How often do you comment on other people’s photos?
   same as item #7
37. Whose photos do you comment most frequently on? (If you don't comment on people's photos at all, please skip this question).
   American friends   Chinese friends   Friends from other countries
38. How often do you check your own Wall?
   same as item #7
39. How often do you post on other people’s Walls?
   same as item #7
40. Whose Walls do you post most frequently on? (If you don't post on people's Walls at all, please skip this question).
   American friends   Chinese friends   Friends from other countries
41. How often do you send private Facebook messages?
   same as item #7
42. To whom do you send private Facebook messages to most frequently? (If you don't send private Facebook messages at all, please skip this question).
   American friends   Chinese friends   Friends from other countries

This section of the questionnaire is to assess your gratifications of Facebook.
45. Why do you use Facebook?
   Strongly Disagree Disagree Neutral Agree Strongly Agree
   - To communicate with my current friends
   - To communicate with people from my past
   - To make new friends
   - To communicate with my American friends
   - To communicate with my Chinese friends
- To distract from my schoolwork
- To obtain information
- To share information about myself
- To build my online image
- To present myself
- To read other people’s profile
- To see other people’s pictures
- To feel connected
- To pass time when bored
- To develop a romantic relationship
- To feel less lonely
- To have fun
- Other (Please specify: __________________)

44. How satisfied are you with Facebook, overall?
Not satisfied at all        Barely satisfied       Neutral       Satisfied       Very satisfied
APPENDIX F: RENREN QUESTIONNAIRE
(Modified from Ross et al., 2009)

A) Do you currently have a Renren account?    Yes    No

B) If no, why not?
- Have other social network sites already (Please specify: ___________________)
- Do not have time
- Not interested
- Have never heard of Renren before
- Other (Please specify: _________________________)

If you answered ‘‘Yes’’, please continue to item #1. If No, please skip to Demographics Questionnaire.

The first part of this questionnaire is to assess your basic use and attitudes towards Renren.

46. How long have you been on Renren?
   Less than 6 months   6 months to 1 year   1–2 years   2–3 years   3–4 years   4+ years

47. On average, approximately how many minutes per day do you spend on Renren?
   10 or less            10–30            31–60               1–2 h               2–3 h                3+ h

48. Renren is part of my everyday activity.
   Strongly Disagree    Disagree    Neutral    Agree    Strongly Agree

49. I feel out of touch when I haven’t logged on to Renren for a while.
   Strongly Disagree    Disagree    Neutral    Agree    Strongly Agree

50. I feel I am part of the Renren community.
   Strongly Disagree    Disagree    Neutral    Agree    Strongly Agree

51. I would be sad if Renren shut down.
   Strongly Disagree    Disagree    Neutral    Agree    Strongly Agree

This section of the questionnaire is to assess your use of the basic Renren functions and applications.

52. Approximately how many friends are on your Renren friends list?

53. Please indicate the approximate percentage of your Renren friends in terms of race/nationality (The total should equal 100).
   Americans ___%  
   Chinese ___%  
   Other ___% (Please specify: ________________)

54. Please indicate the approximate percentage of your Renren friends in terms of gender (The total should equal 100).
   Male ___%  
   Female ___%  

55. Please check the type of people you have on your Renren friends list in following categories (Check all that apply).
   a. Parents  
   b. Spouse or current romantic partner  
   c. Siblings and relatives (Other than parents or spouse)  
   d. Co-workers from your current or previous job  
   e. Neighbors  
   f. Classmates in college  
   g. People you went to high school with  
   h. Members of a group you belong to
i. People you have never met in person
j. People you have met in person only one time
k. Other
56. How often do you update your Renren status?
   More than once daily
   once daily
   2 or more times weekly
   once weekly
   twice monthly
   once monthly
   less than once monthly
   a few times per year
   less than once per year
   not at all
57. How often do you comment on other people’s status?
   same as item #7
58. Whose statues do you comment most frequently on? (If you don't comment on people's statuses at all, please skip this question).
   Friends you met before you came to the United States
   Friends you met in the United States
59. Approximately how many Photo Albums do you presently have on Renren?
   __________
60. How frequently do you post pictures?
   same as item #7
61. How often do you comment on other people’s photos?
   same as item #8
62. Whose photos do you comment most frequently on? (If you don't comment on people's photos at all, please skip this question).
   Friends you met before you came to the United States
   Friends you met in the United States
63. How often do you check your own Wall?
   same as item #8
64. How often do you post on other people’s Walls?
   same as item #8
65. Whose Walls do you post most frequently on? (If you don't post on people's Walls at all, please skip this question).
   Friends you met before you came to the United States
   Friends you met in the United States
66. How often do you send private Renren messages?
   same as item #8
67. To whom do you send private Renren messages to most frequently? (If you don't send private Renren messages at all, please skip this question).
   Friends you met before you came to the United States
   Friends you met in the United States

This section of the questionnaire is to assess your gratifications of Renren.
70. Why do you use Renren?
   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree
   - To communicate with my current friends
- To communicate with people from my past
- To make new friends
- To communicate with my American friends
- To communicate with my Chinese friends
- To distract from my schoolwork
- To obtain information
- To share information about myself
- To build my online image
- To present myself
- To read other people’s profile
- To see other people’s pictures
- To feel connected
- To pass time when bored
- To develop a romantic relationship
- To feel less lonely
- To have fun
- Other (Please specify: ____________________)

69. How satisfied are you with Renren, overall?
   Not satisfied at all       Barely satisfied       Neutral       Satisfied       Very satisfied
APPENDIX G: DEMOGRAPHICS QUESTIONNAIRE

The following questions are about your basic information.

71. Gender: Male ____ Female ____

72. Age: ____

73. Are you currently an undergraduate or graduate student?
   A. Undergraduate student
      Which year are you in? 1 ____ 2 ____ 3 ____ 4 ____ 5 ____ 6 ____ 7 ____ 8 ____
   B. Graduate student
      Which year are you in? 1 ____ 2 ____ 3 ____ 4 ____ 5 ____ 6 ____ 7 ____ 8 ____

74. What is your major? __________________________
   What is your minor (If applicable)? __________________________

75. Which university are you currently studying at? __________________________

76. How do you identify yourself by race/ethnicity? __________________________

77. What is your citizenship? ______

78. How long have you been staying in the U. S.? (1 = less than 6 months, 2 = 6 months to 1 year, 3 = 1–2 years, 4 = 2–3 years, 5 = 3–4 years, 6 = longer than 4 years) ____

79. How good do you think your written English proficiency is? (1 = very poor, 2 = poor, 3 = fair; 4 = good, 5 = very good) _____

80. How good do you think your spoken English proficiency is? (1 = very poor, 2 = poor, 3 = fair; 4 = good, 5 = very good) ______

80. Your most recent TOEFL iBT score: ______
APPENDIX H: HSRB APPROVAL LETTER

DATE: January 7, 2013

TO: Lanming Chen
FROM: Bowling Green State University Human Subjects Review Board

PROJECT TITLE: [393997-3] The Impact of Acculturation on Chinese International Students’ Usage of and Self-presentation on Facebook and Renren

SUBMISSION TYPE: Revision

ACTION: APPROVED
APPROVAL DATE: January 7, 2013
EXPIRATION DATE: December 4, 2013
REVIEW TYPE: Expedited Review

REVIEW CATEGORY: Expedited review category # 7

Thank you for your submission of Revision materials for this project. The Bowling Green State University Human Subjects Review Board has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

Modifications Approved:
An additional way researchers will protect confidentiality is to separate participants' email addresses from their survey responses once the data have been downloaded.
Please note that you are responsible to conduct the study as approved by the HSRB. If you seek to make any changes in your project activities or procedures, those modifications must be approved by this committee prior to initiation. Please use the modification request form for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. All NON-COMPLIANCE issues or COMPLAINTS regarding this project must also be reported promptly to this office.

This approval expires on December 4, 2013. You will receive a continuing review notice before your project expires. If you wish to continue your work after the expiration date, your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date.

Good luck with your work. If you have any questions, please contact the Office of Research Compliance at 419-372-7716 or hsrb@bgsu.edu. Please include your project title and reference number in all correspondence regarding this project.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Bowling Green State University Human Subjects Review Board's records.