THE MAIN USES AND GRATIFICATIONS OF FACEBOOK USE FOR
INTERNATIONAL STUDENTS IN HAWAI‘I

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Abstract

The present study examined Facebook use by international students. Two focus group discussions were conducted to explore the reasons international students first decided to use Facebook and the reasons they continue to use Facebook. Data from the focus group discussions was used to develop an online questionnaire. Analysis of the questionnaire data from 84 international students attending the University of Hawai‘i, Mānoa, the University of Hawai‘i, Hilo, and Kapi‘olani Community College indicated that they used Facebook for communication, professional reasons, and personal reasons, such as self-expression. This study also examined the relationship between the reasons motivating continued Facebook use, extent of Facebook use, and intercultural sensitivity. The reasons for using Facebook predicted the amount of Facebook use. No relationship was found between Facebook use, the reasons for using Facebook, and intercultural sensitivity. Implications were discussed.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgments</td>
<td>ii</td>
</tr>
<tr>
<td>Abstract</td>
<td>iii</td>
</tr>
<tr>
<td>Chapter 1: Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Chapter 2: Literature Review</td>
<td>4</td>
</tr>
<tr>
<td>What Are Social Network Sites?</td>
<td>4</td>
</tr>
<tr>
<td>Brief History of Social Network Sites</td>
<td>5</td>
</tr>
<tr>
<td>Facebook Research within the Social Sciences</td>
<td>5</td>
</tr>
<tr>
<td>Uses and Gratifications Approach</td>
<td>8</td>
</tr>
<tr>
<td>Gratifications of Facebook Use for College Students</td>
<td>9</td>
</tr>
<tr>
<td>Relationship Maintenance</td>
<td>10</td>
</tr>
<tr>
<td>Interpersonal Communication</td>
<td>10</td>
</tr>
<tr>
<td>Information</td>
<td>11</td>
</tr>
<tr>
<td>Other Motivations</td>
<td>11</td>
</tr>
<tr>
<td>International Students in the US</td>
<td>12</td>
</tr>
<tr>
<td>Gratifications of Facebook Use and Other SNS for International Students</td>
<td>14</td>
</tr>
<tr>
<td>Social Support</td>
<td>14</td>
</tr>
<tr>
<td>Information</td>
<td>14</td>
</tr>
<tr>
<td>Maintenance of Relationships with People Back Home</td>
<td>15</td>
</tr>
<tr>
<td>Social Surveillance</td>
<td>15</td>
</tr>
<tr>
<td>Adjustment</td>
<td>16</td>
</tr>
<tr>
<td>Acculturation</td>
<td>16</td>
</tr>
</tbody>
</table>
Data Analysis ................................................................................................................. 28

Stage 2: Survey .............................................................................................................. 29
  Study Population, Sampling Procedure, and Sample .............................................. 29
  The Questionnaire .................................................................................................... 29
  Administration of the Questionnaire ....................................................................... 33
  Data Analysis .............................................................................................................. 34
  IRB ............................................................................................................................... 35

Chapter 5: Findings ..................................................................................................... 36
  Characteristics of the Respondents ............................................................... 36
  Focus Groups ............................................................................................................ 36
  Online Survey .......................................................................................................... 36
    Age ......................................................................................................................... 37
    Gender .................................................................................................................... 37
    Nationality ............................................................................................................. 37
  Focus Group Findings ............................................................................................ 38
  Answers to the Research Questions ....................................................................... 39
    RQ1: To What Extent Do International Students Use Facebook? ........ 39
    RQ2: What Are the Main Gratifications for Facebook Use? .................. 41
      RQ2a: What Are the Gratifications Sought From Facebook Use? ...... 41
      RQ2b: What Are the Main Gratifications Obtained From Facebook Use? 42
    RQ3: What Is the Relationship Between the Main Gratifications of Facebook Use and the Amount of Facebook Use? ......................... 45
RQ4: To What Extent Do International Students Possess Intercultural Sensitivity? ................................................................. 52

RQ5: What Is the Relationship between Facebook Use and Intercultural Sensitivity? ................................................................. 52

Chapter 6: Discussion ........................................................................................................................................... 55

Chapter 7: Conclusions .................................................................................................................................................. 60

Contributions of the Study ........................................................................................................................................ 60

Limitations of the Study ............................................................................................................................................. 61

Suggestions for Future Research ............................................................................................................................... 61

Appendix A: Human Studies Program Approval of Exempt Status ............................................................... 63

Appendix B: Questionnaire ........................................................................................................................................ 64

References .................................................................................................................................................................. 81
Social network sites (SNSs) are a group of relatively new media and communication technologies that are of great interest to various academic fields including communication. SNSs, which allow individuals to form and maintain relationships through the Internet, have grown immensely popular. Not surprisingly, SNSs have become the focus for research studies across many disparate fields (boyd and Ellison, 2007).

Facebook has become the most popular SNS in the United States (US) with 92% of SNS users in the US using it (Hampton, Goulet, Rainie, & Purcell, 2011). According to Consenza (2012), Facebook is also becoming increasingly popular internationally. Facebook has over one billion members worldwide, and over half of them log on to the site every day (Kross, et al, 2013). Due to its immense popularity and global reach, Facebook has been the focus of many studies examining SNS and will also be the SNS focused on in this study.

One major area of Facebook research within the social sciences concerns the reasons that motivate people to use Facebook. The uses and gratifications approach (UGA) is a theoretical foundation that has been applied in multiple studies examining the reasons behind Facebook use. While such studies involving undergraduate college students are relatively common in the literature, studies that specifically examined international students are relatively limited.

More research devoted to international students’ use of Facebook and the reasons these individuals use Facebook is needed because of their significance as a valuable sub-population of the general student body attending institutions of higher education in the US. There are over 700,000 international students studying in institutions of higher education in the US (NAFSA: Association of International Educators [NAFSA], 2011) and they are an important sub-
population of the total student body because of their economic, cultural, and academic contributions.

Furthermore, research shows that international students experience a series of unique problems and challenges when studying abroad and in the US. Research examining international students’ use of Facebook and other SNSs suggests that SNS use may help alleviate the damage caused by these problems. One area that has yet to be given attention by researchers is intercultural sensitivity, which refers to the active desire to motivate oneself to understand, appreciate, and accept differences among cultures (Chen & Starosta, 2000). Intercultural sensitivity may be beneficial to international students as they learn to adapt and thrive while living and studying in the US.

Given the relatively limited research conducted on international students’ use of SNS in a US context, especially regarding the reasons why international students use SNS, and the lack of research exploring the relationship between intercultural sensitivity and Facebook use among international students, this proposed study addressed this gap in the research literature. With the hope of ultimately helping international students to achieve better experiences living and studying in the US, the purpose of this study was to examine international students’ use of Facebook in Hawai‘i. The main objectives of this study are 1) to examine Facebook use by international students, 2) identify the main reasons international students use Facebook, 3) and explore how Facebook use relates to intercultural sensitivity.

This study proceeded in two stages. During the first stage, focus groups were conducted to explore the reasons international students at the University of Hawai‘i, Mānoa have for using Facebook. Subsequently, data from the focus groups was used to generate a list of items for a questionnaire. The questionnaire was distributed to international students attending the
University of Hawai‘i, Mānoa, the University of Hawai‘i, Hilo, and Kapīʻolani Community College. Principal component analysis was conducted using the questionnaire data to identify the main reasons international students at UHM use Facebook. In addition to these items, the questionnaire also included measures for Facebook use. Additional quantitative analyses, including univariate regression, were conducted to assess potential relationships within the data.
Chapter 2
Literature Review

This chapter reviews the literature on Facebook. It first defines and briefly describes the history of SNSs. Then, it summarizes social science research on Facebook. Following this, it discusses the uses and gratifications approach and studies that have applied this approach toward studying Facebook among undergraduate college students. Subsequently, it introduces international students as a significant sub-population of students attending institutions of higher education in the US and describes studies addressing the reasons international students use Facebook. Lastly, it examines the existing research regarding the problems international students face while living and studying in the US and the concept of intercultural sensitivity.

What are Social Network Sites?

According to boyd and Ellison (2007), SNSs can be generally defined as “web-based services that allow individuals to 1) construct a public or semi-public profile within a bounded system, 2) articulate a list of other users with whom they share a connection, and 3) view and traverse their list of connections and those made by others within the system” (p. 211). The individual profile is the primary feature of SNSs, and it is the main interface by which members share information about themselves, such as age, occupation, location, and personal interests; share content, such as photographs; and communicate with others, by commenting on each other’s profiles or sending personal messages. Once new members create their profiles, they are asked to identify others with whom they share a connection. These connections, which are articulated on profiles, are necessary for members to interact and communicate with each other. These connections are the basis of one’s online social network.
Brief history of social network sites

The first SNS, SixDegrees.com, was created in 1997. It closed three years later because the Internet lacked a critical mass of people interested in SNSs and due to its technological simplicity (boyd and Ellison, 2007). Over the next few years, a number of SNSs catering to specific groups of individuals were launched, including LinkedIn, which sought to attract business professionals. The emergence of MySpace in 2003 was a major milestone in the history of SNSs. It quickly developed a large user base by attracting members of other SNSs because of its greater technological sophistication and greater potential for personalization of individual user profiles (boyd and Ellison, 2007). Beginning in 2004, the popularity of SNSs spread throughout the rest of the world, with Orkut.com in Brazil, Mixi in Japan, Cyworld in Korea, and Bebo in the UK, all attracting large numbers of users (boyd and Ellison, 2007).

Facebook was created in 2004 by Mark Zuckerberg and was originally intended for use by Harvard University students, but soon spread to other colleges and universities (boyd & Ellison, 2007). In 2005, it expanded to allow high school students, professionals in corporate networks, and the general public to become members (Joinson, 2008). Since then, Facebook has become the most popular SNS in the US with 92% of the SNS user base using Facebook (Hampton, Goulet, Rainie, & Purcell, 2011). Moreover, according to Consenza (2012), Facebook is also becoming increasingly popular internationally. Consequently, Facebook has been the focus of many studies examining SNS.

Facebook Research within the Social Sciences

Wilson, Gosling, and Graham (2012) identified five major areas of Facebook research in the social sciences after reviewing 412 peer-reviewed academic articles and conference papers published since 2012. The five areas of Facebook research include (a) descriptive analyses of
Facebook users, (b) identity presentation on Facebook, (c) the role of Facebook in social interactions, (d) privacy and information disclosure on Facebook, and (e) motivations for using Facebook.

According to Wilson, Gosling, and Graham (2012), studies belonging to the descriptive analyses of users area of research seek to explain, “who is using Facebook and what users are doing while on Facebook” (p. 205) by examining demographic characteristics, time-use trends, and conducting descriptive studies of Facebook users. Examples of studies in this area of research include comparing Facebook users with non-users and studying sub-populations within Facebook based on age, sex, gender, race, and behavior. The authors stress the importance of reporting demographic variables in Facebook research.

Studies that focus on identity presentation on Facebook attempt to understand the ways people present themselves on Facebook. According to Wilson, Gosling, and Graham (2012), identity presentation on Facebook “centers on the user profile, which serves as a stage on which users can make public or semi-public presentations of themselves” (p. 210). For example, after attempting to determine whether Facebook profiles convey accurate impressions of the profile owners, researchers have concluded that although some self-enhancement may occur, Facebook profiles generally portray fairly accurate representations of the profile owners’ offline identity. One possible explanation may be because Facebook friendships mostly begin offline, which discourages dishonest representation of oneself online.

The third area of Facebook research in the social sciences identified by Wilson, Gosling, and Graham (2012) examines social interactions that occur on Facebook and their positive or negative effect on relationships. For example, research in this area has examined the effects of Facebook interaction on the relationships between students and faculty, employees and
management, businesses and their customers, doctors and patients, and between romantic partners. Other research in this area has given attention to how people manage different types of relationships or overlapping social spheres on Facebook.

The fourth area of Facebook research identified by Wilson, Gosling, and Graham (2012) focuses on privacy and personal information disclosure on Facebook. An important issue addressed by this area of research is the discrepancy between Facebook users’ information disclosure behavior and their attitudes toward online privacy, which is known as the disclosure-privacy dilemma. Facebook users face a dilemma because disclosure of more, often personal, information results in a richer user experience. However, Facebook users are exposed to a greater risk of violations to their privacy. Research has shown that despite increased awareness regarding privacy on Facebook, users continue to share personal information.

The final area of Facebook research identified by Wilson, Gosling, and Graham (2012) relates to studies that have sought to determine the reasons people are motivated to use Facebook. While some research focuses on external pressures, such as direct communication from Facebook that encourage people to use the SNS, the majority of studies have focused on internal motivations. For example, multiple studies have identified users’ desires to keep in touch with friends as a common internal motivation for Facebook use (Ellison, Steinfield, & Lampe, 2007; Joinson, 2008; Lampe, Ellison, & Steinfield, 2008; Sheldon, 2008). Expanding on this, researchers have explored the relationship between Facebook use and perceived social capital, which refers to the benefits received from relationships with other people. Other internal motivations addressed in the research literature include the need for social grooming, minimization of feelings of loneliness, relieving boredom, and specific SNS features that motivate Facebook use.
Uses and Gratifications Approach

The uses and gratifications approach (UGA) is the theoretical foundation for multiple studies examining the reasons that motivate people to use Facebook. The focus of this approach is to understand the reasons people use a particular media channel or consume a particular kind of media content. The UGA was born from research that began in the early 1940s, which sought to understand the popular appeal of different radio programs, such as soap operas, and other media, such as daily newspapers (McQuail, 1987). Since then it has been applied to numerous other types of media channels, like television, and various types of media content.

A principle assumption of the UGA is the active audience. An active audience implies that the individuals comprising the audience consciously choose to use a media channel or consume a particular type of content and, moreover, that their decision is goal-oriented (Katz, Blumler, & Gurevitch, 1974). Audience goals are determined by certain “needs,” such as information, relaxation, companionship, and diversion for example, which the audience seeks and expects to gratify through the use or consumption of media (McQuail, 1987). Needs are, in turn, derived from the social, psychological, and or physical conditions of each audience member (McQuail, 1987).

Another important part of the UGA is the difference between gratifications sought and gratifications obtained. According to Rosengren, Wenner, and Palmgreen (1985), the relationship between individuals’ needs and their media use behavior is mediated by gratifications sought. In other words, individuals’ needs determine the gratifications that they desire to obtain from media which, in turn, determines their behavior regarding what media channel to use or the type of media content to consume. Once an individual has used a particular media channel or consumed a particular type of media, that individual will have a sense of which
gratifications that were initially sought were ultimately obtained from his or her behavior regarding media channel use or content consumption. Perceived gratifications obtained then affect individual audience member characteristics and, as a result, the whole process starts over, forming a feedback loop.

The UGA is flexible in its applicability to new Internet-based media despite the fact it was originally used to study mass media, like radio and newspapers. Lin (1996) argued that the primary strength of the UGA is its ability to permit researchers to investigate a wide range of “mediated communication situations via a single or multiple sets of psychological needs, psychological motives, communication channels, communication content, and psychological gratifications within a particular or cross cultural context” (p. 574). As a result, the UGA has been applied to examine new media used including, cable TV, the VCR, the personal computer, and the Internet (Ruggiero, 2000). The following section discusses several studies that have applied the uses and gratifications approach toward studying Facebook will be discussed.

**Gratifications of Facebook Use for College Students**

College students have been the population of interest in studies regarding Facebook and other SNSs in the US (Ellison, Steinfield, & Lampe, 2007; Hargittai, 2008; Park, Kee, & Valenzuela, 2009) and around the world in countries such as Germany (Brocke, Richter, & Reimer, 2009), Malaysia (Hamid, Kurnia, Waycott, & Chang, 2011), the United Kingdom (Lang, 2012; Madge, Meek, Wellens, & Hooley, 2009), Australia (McCarthy, 2009), Canada (Orr, Sisic, Ross, Simmering, Arseneault, & Orr, 2009), and Japan (Sagayama, Kanenishi, Matsuura, Kume, Miyoshi, Matsumoto, & Yano, 2008). College students are likely studied for a variety of reasons. First, they were among the earliest adopters of SNSs. Facebook for example was initially only open to college students. They are also some of the most avid users of Facebook
and other SNSs in terms of population percentage (Lampe, Ellison, & Steinfield, 2008) and day-to-day usage (Quan-Hasse & Young, 2010). Consequently, studies that examine the reasons behind Facebook use often focus on college students. The following sections outline the main reasons undergraduate college students use Facebook.

**Relationship Maintenance.** Relationship maintenance is viewed as a major gratification of Facebook use in the literature. For example, Facebook is seen as a great way to reconnect with old friends and contacts that people may have lost touch with over time (Joinson, 2008). For some, Facebook is also considered a good way to forge new relationships (Raacke & Bonds-Raacke, 2008; Urista, Dong, & Day, 2009). Sometimes, individuals rely on Facebook to meet like-minded people and organize group activities (Joinson, 2008). Sheldon (2008) found that gender affected the type of relations sought through Facebook, where women were more likely to go to Facebook to maintain existing relationships, to pass time, and be entertained, whereas, men were more likely to go to Facebook to develop new relationships or meet new people. Facebook was also considered a good way to maintain relationships with geographically distant individuals (Urista, Dong, & Day, 2009; Golder, Wilkinson, & Huberman, 2007).

**Interpersonal Communication.** Interpersonal communication, not surprisingly, has been found by researchers to be another important gratification associated with Facebook use (Sheldon, 2008; Papacharissi & Mendelson, 2011). For example, Facebook was considered an effective method of communicating very emotional messages. According to Quan-Hasse and Young (2010), among a sample of Canadian undergraduate college students, “affection,” or using Facebook as a, “venue for expressing concern and friendship toward others,” was a significant gratification derived from Facebook use (p. 355). Perhaps, as a result of Facebook’s capacity to facilitate emotional interpersonal communication, Facebook users were found to have
derived a sense of companionship from their use of Facebook (Papacharissi & Mendelson, 2011) and sometimes turned to Facebook for advice in solving personal problems and as a means to overcome social inhibitions (Quan-Hasse & Young, 2010).

**Information.** Exchanging various kinds of information through Facebook is another gratification that is associated with Facebook use. For instance, Facebook is sometimes used as a “social search” tool by which individuals search for information regarding people of interest that they have met in an offline context (Lampe, Ellison, & Steinfield, 2008; Urista, Dong, & Day, 2009). Some people gain satisfaction from the activity of browsing other people’s social networks, to see for example, who belong to their friends’ social networks, in addition to viewing other “social information,” like the profiles and profile content of their Facebook friends (Joinson, 2008). Consuming social information as media content may even have some positive psychosocial benefits such as, feeling involved with what is going on with others and feeling socially included in a larger group (Joinson, 2008). However, sometimes information exchange via Facebook is merely about the give and take of meaningless gossip regarding other peoples’ online profiles (Bumgarner, 2007), but does not mean it is less gratifying than other types of information exchange. In contrast, Facebook is also considered as an effective means of conveying practical information (Papacharissi & Mendelson, 2011). Urista, Dong, and Day (2009), for example, found that Facebook was also viewed as an efficient and convenient way to convey information, such as a significant life event, to many people simultaneously.

**Other Motivations.** Some research has found that certain features of the Facebook website can be motivations in of themselves for people to use Facebook. For example, Joinson (2008) found that posting and viewing photographs, playing games, and using other kinds of applications were major motivations for people using Facebook in the United Kingdom. Other
studies have shown that Facebook may fulfill some basic entertainment needs that were originally satisfied with traditional mass media, such as TV and radio (Sheldon, 2008). For example, Facebook users reported using the SNS to habitually pass time, as a form of relaxing entertainment, and as a means of escape (Papacharissi & Mendelson, 2011). Others are motivated to use Facebook as a means for getting away from responsibilities and pressures (Quan-Hasse & Young, 2010). Papacharissi and Mendelson (2011), found that some people considered Facebook to be cool and trendy which supports Quan-Hasse and Young’s (2010) findings that Facebook use may be considered as a means to demonstrate a fashionable image and Urísta, Dong, and Day’s (2009) findings that Facebook use may be used to achieve popularity among one’s peers. Lastly, some research found that Facebook use was considered helpful professionally as a way to widen one’s social network (Zhang, Leo, & Leung, 2011) and for professional advancement (Papacharissi & Mendelson, 2011).

Although studies have examined the reasons college students use Facebook, relatively little attention has been given to the reasons international students use Facebook. The following sections will introduce international students as a significant part of the student body in US institutions of higher education and discuss the literature concerning their use of Facebook.

**International Students in the US**

International students came to the US in large numbers following the end of World War II, when the US wanted to expand its educational and cultural relations with the rest of the world (Sarkodie-Mensah, 1998). Since then, international student enrollment at US institutions of higher education has exhibited an upward trend (Sarkodie-Mensah, 1998). According to the Institution of International Education’s Open Doors Report, the number of international students studying in the US is now at an all-time high (NAFSA: Association of International Educators
For the past five years, the number of international students coming to the US has steadily increased and, for the 2010-2011 academic year, there were 723,277 international students enrolled in institutions of higher education in the US (NAFSA, 2011).

International students are an important sub-population of the total student body (3.5%) because of their economic, cultural, and academic contributions. During the last academic year, they contributed roughly $21 billion to the US economy (NAFSA, 2011). More importantly, 70.2% of the financial support covering international students’ living and educational expenses came from sources outside of the US (NAFSA, 2011). International students also pay disproportionately higher tuition and, in effect, subsidize a portion of the education of domestic students (Lewin, 2012). For example, Quazi (1999), as reported in Ozturgut and Murphy (2009), found that tuition money paid by international students allowed universities to hire more instructors and provide more facilities. International students also make valuable academic contributions. Trice (2003) found that professors felt international students were strong contributors and provided an “international perspective” that was beneficial to domestic students.

In the state of Hawai‘i, there were 4,768 international students enrolled in institutions of higher education during the past academic year (NAFSA: Association of International Educators [NAFSA], 2011b). These students contributed roughly $115 million to the state economy through tuition and living expenses (NAFSA, 2011b). The vast majority of international students are located on the island of Oahu. As of 2011, 1560 international students were studying at the University of Hawai‘i at Mānoa, 1000 at Brigham Young University, 993 at Hawai‘i Pacific University, 621 at Kapi‘olani Community College, 80 at Leeward Community College, and 32 at Chaminade University (NAFSA, 2011b).
Gratifications of Facebook Use and other SNS for International Students

Compared to college undergraduate students, studies focusing on the reasons international students use Facebook are relatively limited. However, the existing literature concerning international students and Facebook suggests that international students, like US undergraduate college students, are avid users of Facebook and other SNSs. Cao, Pauleen, and Bathurst (2012) found that the majority of the Chinese international students in New Zealand that they sampled in their study, 83%, used some type of SNS. Saw, Abbot, Donaghey, and McDonald (2013) also found that Facebook was the most popular SNS among international students from a sample of students from an Australian university. The research literature focused on international students and Facebook indirectly suggests that international students use Facebook and other SNS for a variety of reasons.

Social support. One reason for international students’ use of Facebook that is supported by the literature is for social support. Cao, Pauleen, and Bathurst (2012) compared Chinese international students’ use of Facebook and a Chinese SNS, called Renren, with their perceived sense of life satisfaction, social support, and composition of their social support networks. They found that size of social support network was significantly related with SNS use. Specifically, respondents who used Facebook had, on average, larger social networks consisting of non-Chinese international students and New Zealand students than those that did not use Facebook. Furthermore, use of both SNSs was significantly related with life satisfaction. Use of the Chinese SNS was significantly related with students’ sense of social support while Facebook use was not.

Information. International students may also use Facebook and other SNS for information. For example, Lang (2012) conducted a study in the UK examining the potential for
SNS to facilitate meaningful communication between students engaged in a foreign language study program abroad and students who had completed the program and returned home. Facebook was used to facilitate communication between the two groups of students in the hope that the students who had already completed the program could provide the students that were abroad with practical information and emotional support. After analyzing the interaction that took place on the SNS, the authors concluded that the project successfully achieved its goals of providing both practical information and emotional support. Saw, Abbot, Donaghey, and McDonald (2012), found that international students, attending an Australian university, for information and communication purposes, commonly used Facebook. Citing the need for international students to obtain information about their environment while studying abroad, Sin and Kim (2013) found that the majority of international students in their study used SNS, including Facebook, in their everyday life information seeking (ELIS). ELIS refers to housing or legal information for example. The authors concluded that SNS, like Facebook, serve as a valuable channel for purposeful everyday life information seeking.

**Maintenance of relationships with people back home.** Hjorth (2007) interviewed international students from South Korea who were studying in Melbourne, Australia, regarding their use of the Korean SNS, Cyworld. She found that the primary reason the students used Cyworld was to maintain relationships with people back home in South Korea.

**Social Surveillance.** Hossain and Veenstra (2013) examined SNS use by both domestic and international graduate students and found that compared to their domestic counterparts, international graduate students used SNS significantly more for social surveillance purposes. Social surveillance refers to using SNS to track the actions, beliefs, and interests of the larger groups to which they belong (Lampe, Ellison, & Steinfield (2008).
**Adjustment.** Lin, Peng, Kim, Kim, and LaRose (2011) examined interactions with home country friends and American friends through Facebook and found that time spent interacting with home country friends was positively correlated with social adjustment and college attachment. Interaction with American friends correlated positively with social adjustment slightly.

**Acculturation.** Park (2011) examined the effects of Facebook, in addition to foreign SNS and other mass media, on international students’ acculturative stress and psychological well-being. The author found that using Facebook, which was considered the host country SNS, helped facilitate acculturation and reduced acculturative stress for Korean and Chinese students that were studying in the US.

**Language.** Qiu (2011) examined the factors that enhance and or inhibit the language adjustment process of international students in the US and found that technology use, which included using Facebook and other SNS, to contact family in students’ home countries boosted the English language confidence of the participants in the study.

The literature regarding international students’ use of Facebook and other SNS indicates that international students may use Facebook and other SNS for a variety of reasons including social support, obtaining information, maintenance of relationships with persons residing in students’ home country, social surveillance, adjustment to the host country environment, acculturation to host country culture, and English language confidence. However, compared to studies examining undergraduate college students, studies focused on the reasons international students use Facebook are limited. Furthermore, there is a limited amount of research that seeks to understand the reasons international students use Facebook by asking international students
directly. Consequently, this study will address this gap in the literature by applying the UGA to identify the main reasons international students use Facebook.

**Problems faced by international students in the US**

The literature regarding international students' use of Facebook underscores the fact that international students can face a series of difficult challenges when coming to the US to live and study. These unique challenges faced by international students are well documented in the research literature. The problems that international students may face include concern regarding one’s English language skill, in addition to, other academic, social, and personal problems.

For international students who come from countries where English is not the primary language spoken, concern regarding their English language skill is extensively documented in the research literature. Lee (1997) found that listening, speaking, and writing in English, in addition to vocabulary knowledge, were major concerns related to English language skill for international graduate level students. Similarly, Andrade (2006) found that international students were also concerned with comprehension of lectures, comprehension of assigned reading material, and note taking during lectures. Dillon and Swann (1997) found that international students lacked confidence regarding their English language abilities and Wan, Chapman, and Biggs (1992), found that international students who lacked confidence in their English language abilities felt more stress related to their academic work compared with international students who were confident in their English language skills.

Other than concern for English language ability, international students face a host of additional academic, social, and personal problems. Yi, Lin, and Kishimoto (2003) found that international students at a major Texas university were primarily concerned with academics, depression, and anxiety, after analyzing six years’ worth of counseling records. Sarkodie-
Mensah (1998) reported that international students also face difficulties with culture shock, social isolation, cross-cultural relations, and concern for conditions in home countries, financial difficulties, immigration laws, and general stress. Galloway and Jenkins (2005) found that international students were concerned with financial aid, placement (employment) services, religious services, student activities, and orientation services.

**Intercultural Sensitivity**

Given the significance of international students as a sub-population of the broader student body attending institutions of higher education in the US, it is critically important that an effort be made to ensure that their experience in the US is as fruitful and successful as possible. Conducting research examining the problems that international students face while living and studying in the US and identifying ways to dampen the negative effects of these problems is one way to ensure this. One area that has not received any attention from researchers in this regard is intercultural sensitivity.

Intercultural sensitivity refers to the active desire to motivate oneself to understand, appreciate, and accept differences among cultures (Chen & Starosta, 2000). According to Chen and Starosta (2000), persons who are more sensitive to culture, “are able to reach the level of dual identity and enjoy cultural differences by gradually overcoming the problems of denying or concealing the existence of cultural differences and attempting to defend their own world views, and moving to develop empathic ability to accept and adapt to cultural differences” (p. 4). It is reasonable to expect that international students who possess a high degree of intercultural sensitivity may adjust to and enjoy their experience in the US more than those with less intercultural sensitivity. Since the literature regarding international students and Facebook demonstrates that international students interact with individuals from their host country via
Facebook and other SNS (Cao, Pauleen, & Bathurst, 2012), this study will explore the relationship between Facebook use and intercultural sensitivity.

Summary

SNSs like Facebook have become incredibly popular in the US and around the world since their inception in the mid-2000s. As a result, SNSs have become the topic of many research studies. Social science research that focuses on Facebook consists of five categories, one of which concerns the reasons that motivate people to use Facebook. The UGA, which is a theoretical foundation that seeks to understand the reasons people use a particular media channel or consume a particular type of media content, is an effective way of understanding the reasons people use Facebook. Many studies have examined the reasons college undergraduate students use Facebook by applying UGA and have identified a variety of reasons that motivate their use of Facebook. In contrast, however, relatively fewer studies have examined the reasons that motivate international students to use Facebook, and moreover, the research that approaches this problem through UGA is limited. Furthermore, international students may face a series of difficult challenges when coming to the US to live and study. Given their importance as a sub-population of the broader student body attending institutions of higher education in the US, it is critically important that researchers understand the problems they face and explore ways of mitigating the damage affecting them. One area that has yet to be given attention by researchers is intercultural sensitivity, which may be beneficial to international students as they learn to adapt and thrive in the US. This study will address this gap in the research literature.
Chapter 3
Research Questions and Key Concepts

This chapter discusses the research questions and defines the key concepts constituting them that were used in this study.

The Research Questions

Multiple studies have examined Facebook use among different populations, including college undergraduate students, high school students, and the general public. Comparatively, however, the amount of research focused on international students’ use of Facebook is limited. Moreover, there is limited research concerning international student use of Facebook in a US context. Since comparatively fewer studies have examined international students’ use of Facebook in the US, the following research question was included for this study:

RQ1: To what extent do international students use Facebook?

One major area of SNS research in the social sciences examines what motivates people to use Facebook (Wilson, Gosling, & Graham, 2012). Within this area of research, UGA has been applied in multiple studies examining the reasons college undergraduate students (Quan-Hasse & Young, 2010), high school students (Urista, Dong, & Day, 2009), and the general population (Joinson, 2008), are motivated to use Facebook. However, research examining the reasons international students use Facebook, and especially by applying UGA, are comparatively limited. Therefore, the following research question was included in this study:

RQ2: What are the main gratifications of using Facebook by international students?

The uses and gratifications approach differentiates between gratifications sought and gratifications obtained (Rosengren, Wenner, & Palmgreen, 1985; Quan-Hasse & Young, 2010). Gratifications sought refer to gratifications people expect to get from using a media channel or
type of media content while gratifications obtained refer to gratifications that were actually received after using a media channel or type of media content. This conceptual distinction is meaningful because it distinguishes the reasons that motivate people to initially use a media channel or consume a type of media content and the reasons they have for continuing to do so (Quan-Hasse & Young, 2010). Given the significance of this conceptual distinction and the limited research that examined international students gratifications sought and gratification obtained from Facebook use, the following sub-research questions were included in this study:

RQ2a: What are the main gratifications sought from Facebook use by international students?

RQ2b: What are the main gratifications obtained from Facebook use by international students?

Quan-Hasse and Young (2010) found that certain gratifications obtained from Facebook use were positively associated with the amount of Facebook use for undergraduate college students. In order to explore the relationship between motivations for Facebook use and actual Facebook use, the following research question was included in this study:

RQ3. What is the relationship between the main gratifications for using Facebook and the amount of Facebook use?

The literature regarding international students' use of Facebook serves to underscore the fact that international students can face a series of difficult challenges when coming to the US to live and study. Given the significance of international students as a sub-population of the broader student body attending institutions of higher education in the US, it is critically important that an effort be made to ensure that their experience in the US is as fruitful and successful as possible. Conducting research examining the problems that international students
face while living and studying in the US and identifying ways to dampen the negative effects of these problems is one way to ensure this. One area that has not received any attention from researchers in this regard is intercultural sensitivity. Therefore, the following research question was included in this study:

RQ4: To what extent do international students possess intercultural sensitivity?

It is reasonable to expect that international students who possess a high degree of intercultural sensitivity may adjust to and enjoy their experience in the US more than those with less intercultural sensitivity. Since the literature regarding international students and Facebook demonstrates that international students interact with individuals from their host country via Facebook and other SNS (Cao, Pauleen, & Bathurst, 2012), the following research question was included in this study:

RQ5: What is the relationship between Facebook use by international students and their sense of intercultural sensitivity?

**Key Concepts**

This section conceptually defines the key concepts constituting the research questions outlined above including: 1) Facebook use, 2) main gratifications sought from Facebook use, 3) the main gratifications obtained from Facebook use, and 4) intercultural sensitivity. In addition, the demographic variables, including age, sex, and nationality, that were used in this study will also be defined.

**Facebook use.** The extent to which an individual uses Facebook has been measured in multiple ways (Ellison, Steinfield, & Lampe, 2008; Joinson, 2008; Quan-Hasse & Young, 2011). For this potential study, Facebook use will be conceptually defined as the extent to which an
individual is actively engaged in Facebook activities, emotionally connected to Facebook, and the extent Facebook is considered to be integrated in one’s daily life (Ellison et al., 2008).

**Gratifications sought from Facebook use.** Gratifications sought from Facebook use refer to the gratifications that an individual expects to obtain from using Facebook before actually having any experience actually using Facebook. As such, gratifications sought from Facebook use are expected to motivate an individual to decide to use Facebook for the first time.

**Gratifications obtained from Facebook use.** Conceptually, gratifications obtained from Facebook use refers to the gratifications an individual obtains after adopting Facebook. Gratifications obtained from Facebook use are expected to determine whether an individual decides to continue to use Facebook.

**Intercultural Sensitivity.** Intercultural sensitivity refers to the active desire to motivate oneself to understand, appreciate, and accept differences among cultures (Chen & Starosta, 2000).

**Demographic Variables.**

**Age.** Age will be conceptually defined as the number of years an individual has been alive since their year of birth.

**Gender.** Gender will be conceptually defined as the sex of an individual.

**Nationality.** Nationality will be conceptually defined as the country where an individual has citizenship.
Chapter 4
METHODS

This chapter discusses the methods used for data collection and analysis in this study. The data for this study was collected in two stages. Stage 1 consisted of two focus group discussions with international students attending the University of Hawai‘i, Mānoa. Stage 2 consisted of an online survey using a self-administered questionnaire, which was refined using the findings from the focus group discussions conducted in stage 1. The online survey was emailed to international students attending the University of Hawai‘i, Mānoa, the University of Hawai‘i, Hilo, and Kapi‘olani Community College. The study population, the sampling procedures, sample, the focus group discussion guide, the questionnaire, survey procedures, and data processing and analysis procedures are discussed below.

Stage 1: Focus groups

Focus group discussions have been found to be useful when conducting exploratory research (Urista, Dong, & Day, 2009). Since research examining the reasons international students use Facebook is relatively limited, this research method was deemed appropriate for the first stage of this study. This study conducted two focus group discussions lasting for roughly 90 minutes each. The first had six participants and the second had five participants for a total of eleven participants. Stewart, Shamdasani, and Rook (2007) provided guidance for conducting the discussions.

Focus group discussion participants. Potential focus group discussion participants were selected based on the following criteria. First, all participants were international students enrolled at the University of Hawai‘i at Mānoa. Second, all participants were Facebook users.
**Contacting potential participants.** Participants for the focus group discussions were recruited using purposive sampling and were invited to participate by phone and email. Once contact was established, potential participants were asked a few brief screening questions to ensure they were suitable to participate in the discussions including 1) whether they were an international student enrolled at the University of Hawai‘i at Mānoa and 2) whether they used Facebook or not. Following the screening questions, potential participants were given a brief description of the proposed research study, including the fact that the research will involve a focus group discussion, the general topic of the proposed research study. Information regarding the location, date, and approximate duration of the two focus group discussions was also given, in addition to, each discussion’s start and approximate end time. Participants were given the option to choose which discussion to participate in. Participants that agreed to participate in one of the two focus group discussions received a confirmation email containing the location and time of the discussion.

**Discussion group location.** The discussion groups were held in a conference room located in Crawford Hall on the University of Hawai‘i at Mānoa campus. This location was chosen because it was considered the most convenient and most comfortable location for the participants. Consequently, this was thought to reduce the likelihood that potential participants would experience confusion in finding the exact location of the discussion sessions and discourage potential participants from deciding not to participate.

**The moderator.** The primary researcher for this study was the moderator for each focus group discussion.

**The discussion guide.** To help facilitate the discussions, a discussion guide containing questions to guide and direct the discussion sessions was developed. The discussion guide
questions were developed to be relatively open in order to give potential participants a high
degree of freedom regarding their responses and to avoid “yes” or “no” answers. The following
questions were included in the initial discussion guide:

1. When did you first start using Facebook?

2. What is the first thing that comes to mind when you think about why you decided to first join
Facebook?

3. What did you expect to enjoy about using Facebook?

4. What is the first thing that comes to mind when you think about what you enjoy most about
using Facebook now?

5. What other words describe what you enjoy about using Facebook?

6. What do you use Facebook for?

7. What uses of Facebook are most important to you?

8. Is there anything else you would like to say about the reasons you use Facebook?

When appropriate, probing questions asking participants to elaborate or provide an example were
posed after a participant gave a response to one of the main questions.

Since it was impossible to predict in advance the way potential participants would
interpret and respond to the discussion questions, the discussion guide was pretested in advance
to help protect against potential participants from being confused during the actual discussion
session. The primary researcher of this study conducted the pretesting with another international
student who was willing to help in this regard. The pre-test participant was not informed of the
purpose of this study. As a result of the pre-testing the discussion guide was revised to include
the following questions:

1. When did you first start using Facebook?
2. What do you use Facebook for?

3. What are the most important ways you use Facebook?

4. Thinking back to when you first decided to join Facebook, why did you decide to join Facebook?

5. What did you expect to enjoy most about using Facebook at the time?

6. What do you enjoy most about using Facebook now?

7. How would you describe what you enjoy about using Facebook?

Conducting the focus group discussions. Two focus group discussions were conducted. The first was conducted on Wednesday October 30, 2013 from 4:30 to 6:00 pm and the second was conducted on Thursday October 31, 2013 from 12:00 to 1:30 pm.

Upon their arrival, participants were invited to enjoy food and refreshments and were given a consent to participate form and a short questionnaire containing items regarding their gender, age, duration of attendance at UH, and a number of questions designed to measure their extent of Facebook use including, the amount of time spent on the website daily and their number of Facebook friends.

Once the participants had completed the questionnaire and signed the consent forms, the moderator read a brief statement. This statement informed participants that the interview would be recorded, that their responses and participation in the focus group discussion would be kept confidential, to respect each other’s privacy by refraining from discussing the content of the discussion after it had concluded, and encouraged participants to freely voice their opinions in an orderly fashion and to enjoy themselves as much as possible. Subsequently, the moderator began recording and initiated the discussion by asking participants to go around and briefly introduce themselves. In order to help put participants at ease, they were also asked to give brief non-
intimate facts about themselves such as, their area of study, where they are from, or their family composition. Following the introductions the moderator posed the questions outlined in the final focus group discussion guide. All participants were encouraged to speak. This was accomplished by asking each participant for his or her opinion in turn. Each discussion session was ended promptly at the time it was specified to end.

**Data analysis.** According to Stewart, Shamdasani, and Rook (2007), analysis of focus group data can be relatively atheoretical, especially for marketing studies that seek to discover major ideas and themes that emerge from the group discussion. This particular approach is appropriate when focus group discussion data needs to be quantified and statistically analyzed. Since this study also sought to quantify and statistically analyze focus group discussion data, an atheoretical approach to analyzing the focus group discussion data called the scissor-and-sort technique was adopted (Stewart et al., 2007).

The first step in applying the scissor-and-sort technique involves going through the transcript and identifying those sections of it that are relevant to the research questions (Stewart, Shamdasani, & Rook, 2007). Based on the initial reading, a classification system for major topics and issues is developed and material in the transcript related to each topic is identified. Identified material may be phrases, sentences, or long exchanges between individual respondents (Stewart et al., 2007). Relevant sections are then grouped together according by topic.

Following the discussions, the recordings were transcribed in their entirety by the primary researcher. Following transcription, the primary researcher reviewed the transcripts several times and identified sections that represent gratifications sought and gratifications obtained from Facebook use. These sections were compiled into a list and related sections were
grouped according to common themes. This list will be discussed in the results section of this report.

**Stage 2: Survey**

**Study population, sampling procedure, and sample.** The population for this study was international students attending the University of Hawai‘i, Mānoa, the University of Hawai‘i, Hilo, and Kapi‘olani Community College. International students refer to individuals who come from outside of the United States, such as Asia, Africa, Europe, North America, and Pacific Region, and study at the University of Hawai‘i.

According to each institutions’ respective office responsible for international students, the total number of international students in attendance at the time the study was conducted was 2,187, with 1,303 at the University of Hawai‘i, Mānoa, 182 and the University of Hawai‘i, Hilo, and 702 at Kapi‘olani Community College. Potential respondents were recruited by an invitation email that was sent through each institution’s office responsible for international students. Consequently, the entire study population was sampled for this study. The sample consisted of 84 international students who responded to the invitation email, and fully completed the online questionnaire.

**The questionnaire.** The questionnaire used for this study consisted of four sets of questions. The first set of questions asked respondents to indicate their age, gender, nationality, and number of semesters attended at the University of Hawai‘i. The second set, asked respondents about their Facebook use including time spent on Facebook per day, total number of Facebook friends and five questions related to Facebook use. The third set asked respondents about the reasons they decided to join Facebook, i.e. gratification sought, and the reasons for why they currently use Facebook, i.e. gratifications obtained. A sample of 38 items was
extracted from the exploratory list of themes generated from the focus group discussion data. In generating the items, the original wording was changed as little as possible. The items were grouped to represent gratifications sought and gratifications obtained from Facebook use. The fourth set contained the items in the intercultural sensitivity scale (See Appendix B for a copy of the questionnaire).

The first set of questions asked respondents to indicate their age, gender, nationality, and number of semesters attended at the University of Hawai‘i. Question 1) asked respondents to indicate their age. This question was rated on a 6-point scale: 1= under 18, 2= 18-25, 3= 26-34, 4= 35-54, 5= 55-64, and 6= 65 or older. Question 2) asked respondents to indicate their gender. This question was rated on a 2-point scale: 1= male and 2= female. Question 3) asked respondents to indicate their nationality. Question 4) asked respondents to indicate the number of semesters they had attended at their respective University of Hawai‘i institution. This question was rated on a 10-point scale: 1= less than one, 2= one, 3= two, 4= three, 5= four, 6= five, 7= six, 8= seven, 9= eight and 10= more than eight.

The second set contained questions asking respondents about their Facebook use. The first question in this set asked respondents “On a typical day, how much time do you spend on Facebook?” This question was rated on an 8-point scale: 1= no time at all, 2= less than 10 minutes, 3= 10-30 minutes, 4= more than 30 minutes, up to 1 hour, 5= more than 1 hour, up to 2 hours, 6= more than 2 hours, up to three hours, 7= more than 3 hours, up to 4 hours, and 8= more than 4 hours. The next question asked respondents “About how many total Facebook friends do you have?” This question was rated on a 10-point scale: 1= less than 10, 2= 10-49, 3= 50-99, 4= 100-149, 5= 150-199, 6= 200-249, 7= 250-299, 8= 300-349, 9= 349-400, 10= 400 or more. The subsequent five questions in this set asked respondents “With regard to your use of Facebook,
please select the appropriate answer: 1) Facebook is a part of my everyday activity, 2) I am proud to tell people I am on Facebook, 3) Facebook has become a part of my everyday routine, 4) I feel out of touch when I haven’t logged onto Facebook for a day, and 5) I would be sorry if Facebook shutdown.” These items were rated on a 7-point scale: 1=strongly agree to 7=strongly disagree.

The third set of questions contained statements relating to the reasons they first decided to use Facebook, i.e. gratifications sought, and the reasons why they currently use Facebook, i.e. gratifications obtained. These questions were rated on a 7-point scale ranging from 1= strongly agree to 7= strongly disagree. Reasons for first deciding to join Facebook included: 1) I decided to join Facebook because many people I knew started to use Facebook, 2) I decided to use Facebook because of peer pressure, 3) I decided to use Facebook because a friend invited me to use Facebook, 4) I decided to use Facebook because other international students said I should start using Facebook, and 5) I decided to use Facebook because it was something new that I wanted to try. Reasons for continuing to use Facebook included: 1) I use Facebook to learn about American culture, 2) I use Facebook to connect with my American friends, 3) I use Facebook to keep in touch with friends who are in my home country, 4) I use Facebook to keep in touch with family members or loved ones who are in my home country, 5) I use Facebook to know what is happening in my home country, 6) I use Facebook to help cope with life in Hawai‘i, 7) I use Facebook to read international news stories, 8) I use Facebook to read local news stories, 9) I use Facebook to obtain information about emergency situations, 10) I use Facebook to connect with most of my friends at school, 11) I use Facebook to improve relationships with my professors, 12) I use Facebook to keep in touch with my friends, 13) I use Facebook to message my friends, 14) I use Facebook to stay connected with people who I rarely
see, 15) I use Facebook to keep in touch with all my friends instantly, 16) I use Facebook to receive emotional support, 17) I use Facebook to express how I am feeling, 18) I use Facebook to keep in touch with friends who are far away, 19) I use Facebook to make connections with other people that will help my career, 20) I use Facebook to obtain information about employment opportunities in my home country, 21) I use Facebook to obtain information about my academic field, 22) I use Facebook to obtain information about my academic field, 22) I use Facebook to obtain information about events that are going on around me, 23) I use Facebook to go through my friends’ status updates on the news feed, 24) I use Facebook to share photos, 25) I use Facebook to share photos, 26) I use Facebook to play games, 27) I use Facebook to watch videos, 28) I use Facebook to share what is going on in my life, 29) I use Facebook because communication is less formal, 30) I use Facebook because it is easier to communicate, 31) I use Facebook to reconnect with friends I have not contacted for a long time, 32) I use Facebook to follow an organization’s Facebook page, and 33) I use Facebook to belong to a Facebook group.

The fourth set of questions contained the questions from the intercultural sensitivity scale from Chen and Starosta (2000). These items asked respondents how they perceived themselves as communicators and were rated on a 7-point scale ranging from 1= strongly agree to 7= strongly disagree. Items from the intercultural sensitivity scale included: 1) I enjoy interacting with people from different cultures, 2) I think people from other cultures are narrow-minded, 3) I am pretty sure of myself in interacting with people from different cultures, 4) I find it very hard to talk in front of people from different cultures, 5) I always know what to say when interacting with people from different cultures, 6) I can be as sociable as I want to be when interacting with people from different cultures, 7) I don’t like to be with people from different cultures, 8) I respect the values of people from different cultures, 9) I get upset easily when interacting with
people from different cultures, 10) I feel confident when interacting with people from different cultures, 11) I tend to wait before forming an impression of people from different cultures, 12) I often get discouraged when I am with people from different cultures, 13) I am open-minded to people from different cultures, 14) I am very observant when interacting with people from different cultures, 15) I often feel useless when interacting with people from different cultures, 16) I respect the ways people from different cultures behave, 17) I try to obtain as much information as I can when interacting with people from different cultures, 18) I would not accept the opinions of people from different cultures, 19) When interacting with people from different cultures, I am sensitive to subtle meanings, 20) I think my cultures is better than other cultures, 21) When interacting with people from different cultures, I often give positive responses, 22) I avoid those situations where I will have to deal with culturally different people, 23) I often show my understanding through verbal or non-verbal cues when interacting with people from different cultures, 24) I have a feeling of enjoyment towards differences between myself and people from different cultures.

The survey instrument was developed using Qualtrics survey building software. There were a total of 73 questions. See appendix B for the questionnaire.

Administration of the Questionnaire. On December 13, 2013, the first email was sent out to international students attending the University of Hawai‘i, Mānoa requesting their participation. The email introduced the primary researcher and explained the study was about international students’ use of Facebook at the University of Hawai‘i, Mānoa. It was also stated that the UH Human Studies Program had approved the survey. The link to the survey as well as a statement of appreciation for participation was also included in the email.
As stated above, the survey officially began on December 13, 2013. By the end of December, there were 58 submitted questionnaires. On January 13, 2014, a second invitation was sent out, which resulted in 71 additional submitted questionnaires. On February 13, 2014, invitation emails were sent to international students attending the University of Hawai‘i, Hilo and Kapi‘olani Community College resulting in 79 additional submitted questionnaires. The total number of questionnaires submitted was 210. Of these 84 questionnaires were complete. The survey was open for three months.

**Data Analysis.** All the information on the completed on-line questionnaires was obtained as an SPSS.sav file, which was downloaded from the Qualtrics website, and subsequently, imported to the SPSS program. In order to analyze the data to answer the research questions, descriptive statistics, frequency distributions, a principal components analysis, and regression analyses were used.

Principal components analysis and factor analysis are statistical analysis techniques that reduce data to fewer “latent” variables, or underlying variables (Field, 2009). The difference between factor analysis and principal components analysis is factor analysis derives a mathematical model from which factors are estimated, whereas principal components analysis decomposes the original data into a set of linear variates (Field, 2009). Principal components analysis identifies underlying variables by constructing a correlation matrix of variables showing the correlations between each variable. If groups of variables are highly correlated, this suggests that those variables could be measuring facets of the same underlying dimension. By reducing a data set from a group of interrelated variables to a smaller set of factors, factor analysis achieves parsimony by explaining the maximum amount of common variance in a correlation matrix.
using the smallest number of explanatory constructs (Field, 2009). There are multiple examples of the use of factor analysis in the social sciences.

As reported in Field (2009), trait theorists in psychology used factor analysis endlessly to assess personality traits. Principal components analysis has also been employed to understand the underlying motivations driving Facebook use. Principal components analysis has been used to identify the main motivations behind Facebook use for general population in Hong Kong (Zhang, Tang, & Leung, 2011) and the UK (Joinson, 2008) and university students in the US (Sheldon, 2008; Park, Kee, & Valenzuela, 2009; Papacharissi & Mendelson, 2011).

Regression analyses can be conducted using factor scores, which are derived from the principal components analysis, on other variables. Factor scores represent a composite score for each individual on a particular factor. The factor scores tell us an individual’s score on this subset of measures. Therefore any further analysis can be carried out on the factor scores rather than the original data (Field, 2009).

IRB. In order to comply with legal regulations as set forth by the Institutional Review Board, all participants will be required to provide informed consent by clicking on a link prior to taking the survey.
Chapter 5
Findings

This chapter presents and discusses the findings from the present study. Before presenting the answers to the research questions, the sample is described in terms of the respondents’ age, gender, and nationality.

Characteristics of the Respondents

**Focus groups.** There were eleven total participants in the focus group discussions. In the focus group discussion held October 30, 2013, there were four males and two females. Their average age was 27.17. The nationalities represented in the group were Canadian, Malaysian, Japanese, Korean, Chinese, and Taiwanese. The average number of semesters attended at UH was four semesters. The average number of hours spent on Facebook daily was more than two hours and up to three hours. All had at least 250 friends on Facebook. In the focus group held October 31, 2013, there were five females. Their average age was 25.75. The nationalities represented in the group were Japanese, Taiwanese, and three Korean. The average number of semesters attended at UH was five semesters. The average time spent on Facebook per day was more than three hours and up to four hours. The average number of Facebook friends was 250 to 299.

**Online survey.** The sample included 84 (0.04%) respondents out of a total 2,187 international students attending the University of Hawai‘i, Mānoa (1303), University of Hawai‘i, Hilo (182), and Kapiʻolani Community College (702) who completed the email questionnaire sent out in Fall 2013 and Spring 2014. The online survey was available through the Qualtrics Survey Software website from December 2013 to March 2014.
**Gender.** Table 1 shows the gender composition of the respondents who participated in the online survey.

Table 1.  
Frequency Table of Respondents’ Genders  

<table>
<thead>
<tr>
<th>Gender</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>30 (35.7%)</td>
</tr>
<tr>
<td>Female</td>
<td>54 (64.3%)</td>
</tr>
<tr>
<td>Total</td>
<td>84 (100%)</td>
</tr>
</tbody>
</table>

**Age.** Table 2 shows the frequency of respondents’ ages.

Table 2.  
Frequency Table of Respondents’ Ages  

<table>
<thead>
<tr>
<th>Age</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-25</td>
<td>52 (61.9%)</td>
</tr>
<tr>
<td>26-34</td>
<td>26 (31%)</td>
</tr>
<tr>
<td>35-54</td>
<td>5 (6%)</td>
</tr>
<tr>
<td>55-65</td>
<td>1 (1.2%)</td>
</tr>
<tr>
<td>Total</td>
<td>84 (100%)</td>
</tr>
</tbody>
</table>

**Nationality.** With respect to respondents’ nationalities, Table 3 shows the frequency of respondents’ nationalities. Japan (14.3%) was the nationality with the most representation followed by China (11.9%).

Table 3.  
Frequency Table of Respondents Nationality  

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>2</td>
<td>2.4</td>
</tr>
<tr>
<td>Australia</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Brazil</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Cameroon</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Canada</td>
<td>4</td>
<td>4.8</td>
</tr>
<tr>
<td>Chile</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>China</td>
<td>10</td>
<td>11.9</td>
</tr>
<tr>
<td>Micronesia</td>
<td>9</td>
<td>10.7</td>
</tr>
<tr>
<td>Fiji</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Finland</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>France</td>
<td>2</td>
<td>2.4</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>India</td>
<td>3</td>
<td>3.6</td>
</tr>
<tr>
<td>Iran</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Italy</td>
<td>1</td>
<td>1.2</td>
</tr>
</tbody>
</table>
Japan 12 14.3
Korea 6 7.1
Malaysia 2 2.4
Marshall Islands 3 3.6
Mexico 1 1.2
New Zealand 2 2.4
Norway 1 1.2
Palau 1 1.2
Philippines 3 3.6
Russia 1 1.2
Singapore 2 2.4
Slovenia 1 1.2
Spain 2 2.4
Taiwan 3 3.6
Thailand 2 2.4
Turkey 1 1.2
Ukraine 1 1.2
Vietnam 1 1.2
Total 84 100

**Focus Group Findings**

The primary researcher identified sections of the focus group discussion transcripts that related to gratifications sought and gratifications obtained from Facebook use. The primary researcher sought to identify sections that were related and grouped these accordingly. A total of 98 unique sections were identified and grouped according to 19 themes. Table 4 outlines the main themes that were identified.

Table 4. Themes Identified From the Focus Group Discussion Transcript

<table>
<thead>
<tr>
<th>Theme</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>News/Information about one’s home country</td>
<td>To know what is happening in my home country. To obtain news about my home country.</td>
</tr>
<tr>
<td>General News</td>
<td>To read international news stories. To read local news stories.</td>
</tr>
<tr>
<td>Academic News/Information</td>
<td>To obtain information about my academic field.</td>
</tr>
<tr>
<td>Employment</td>
<td>To obtain information about post doc positions and fellowships.</td>
</tr>
<tr>
<td>Information</td>
<td>To obtain information that is useful to me. To obtain information about events that are</td>
</tr>
</tbody>
</table>
going on around me.

<table>
<thead>
<tr>
<th>Relationships in home country</th>
<th>To keep in touch with friends in my home county. To keep in touch with loved ones and or family members in my home country.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distant relationships</td>
<td>To keep in touch with friends who are far away. To communicate with friends/people in another country.</td>
</tr>
<tr>
<td>International friends</td>
<td>To make international friends in Hawai‘i</td>
</tr>
<tr>
<td>Relationships with professors</td>
<td>To improve relationships with my professors.</td>
</tr>
<tr>
<td>School relationships</td>
<td>To connect me to most of my friends at school.</td>
</tr>
<tr>
<td>Career connections</td>
<td>To make connections with other people that will help my career.</td>
</tr>
<tr>
<td>General relationship maintenance</td>
<td>To keep in touch with my friends.</td>
</tr>
<tr>
<td>Sharing</td>
<td>To share what is going on in my life. To show other people activities that I enjoy.</td>
</tr>
<tr>
<td>Entertainment</td>
<td>To share photos. To play games. To go through my friends’ status updates on the news feed.</td>
</tr>
<tr>
<td>Ego</td>
<td>To receive attention from other people.</td>
</tr>
<tr>
<td>Support</td>
<td>To receive understanding from other people. To help cope with life in Hawai‘i.</td>
</tr>
<tr>
<td>Ease of communication/convenience</td>
<td>Because communication is less formal. To keep in touch with all my friends instantly.</td>
</tr>
<tr>
<td>Facebook groups</td>
<td>To belong to a Facebook group.</td>
</tr>
<tr>
<td>American culture and relationships with Americans</td>
<td>To learn about American culture. To connect with my American friends.</td>
</tr>
</tbody>
</table>

**Answers to the Research Questions**

**RQ1: To what extent do international students use Facebook?** With respect to respondents’ time spent on Facebook per day, the mean response was 3.99 (SD = 1.50).

Therefore, the average time spent on Facebook per day was approximately more than one hour and up to two hours. A plurality of respondents (33.3%) spent 10 to 30 minutes a day on Facebook. Some respondents (15.5%) spent less than 10 minutes a day on the SNS and very few respondents (3.6%) spent more than three hours on Facebook per day. 47.7% spent between one
hour and three hours on the website. Table 5 shows a frequency table for respondents’ time spent on Facebook per day.

Table 6.
Frequency Table of Time Spent On Facebook Per Day

<table>
<thead>
<tr>
<th>Time</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10 minutes</td>
<td>13</td>
<td>15.5</td>
<td>15.7</td>
</tr>
<tr>
<td>10 to 30 minutes</td>
<td>28</td>
<td>33.3</td>
<td>48.2</td>
</tr>
<tr>
<td>More than 30 minutes, up to an hour.</td>
<td>12</td>
<td>14.3</td>
<td>62.7</td>
</tr>
<tr>
<td>More than 1 hour, up to two hours.</td>
<td>15</td>
<td>17.9</td>
<td>80.7</td>
</tr>
<tr>
<td>More than 2 hours, up to 3 hours.</td>
<td>13</td>
<td>15.5</td>
<td>96.4</td>
</tr>
<tr>
<td>More than 3 hours, up to 4 hours.</td>
<td>1</td>
<td>1.2</td>
<td>97.6</td>
</tr>
<tr>
<td>More than 4 hours.</td>
<td>2</td>
<td>2.4</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>84</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

With respect to respondents’ number of Facebook friends, the mean response was 7.76 (SD = 2.92). Therefore, the average number of Facebook friends was roughly between 250 and 349 Facebook friends. A majority of respondents (53.6%) had 400 or more friends on Facebook and nearly 70% of respondents had more than 250 friends on Facebook. Table 6 shows a frequency table for respondents’ number of Facebook friends.

Table 6.
Frequency Table of Number of Facebook Friends

<table>
<thead>
<tr>
<th>Number of Facebook Friends</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10</td>
<td>1</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>10-49</td>
<td>5</td>
<td>6.0</td>
<td>7.1</td>
</tr>
<tr>
<td>50-99</td>
<td>5</td>
<td>6.0</td>
<td>13.1</td>
</tr>
<tr>
<td>100-149</td>
<td>7</td>
<td>8.3</td>
<td>21.4</td>
</tr>
<tr>
<td>150-199</td>
<td>5</td>
<td>6.0</td>
<td>27.4</td>
</tr>
<tr>
<td>200-249</td>
<td>4</td>
<td>4.8</td>
<td>32.1</td>
</tr>
<tr>
<td>250-299</td>
<td>1</td>
<td>1.2</td>
<td>33.3</td>
</tr>
<tr>
<td>300-349</td>
<td>7</td>
<td>8.3</td>
<td>41.7</td>
</tr>
<tr>
<td>350-399</td>
<td>4</td>
<td>4.8</td>
<td>46.4</td>
</tr>
<tr>
<td>400 or more</td>
<td>45</td>
<td>53.6</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>84</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
In response to the item “Facebook is a part of my everyday activity,” the mean response was 2.74 (SD = 1.74). Roughly 77% of respondents agreed that Facebook was a part of their daily activity. In response to the item "I am proud to tell people that I am on Facebook," the mean response was 3.75 (SD = 1.71). Roughly 40% of respondents agreed with this statement and 26% of respondents disagreed with this statement. A sizable portion of respondents (33%) neither agreed nor disagreed. In response to the item "Facebook has become a part of my daily routine," the mean response was 2.94 (SD = 1.70). Roughly 74% of respondents agreed that Facebook was a part of their daily routine and only about 19% of respondents disagreed. In response to the item “I feel out of touch when I haven’t logged into Facebook for a day," the mean response was 4.15 (SD = 1.89). Approximately 43% of respondents agreed with this statement, about 46% of respondents disagreed. In response to the item “I would be sorry if Facebook shutdown," the mean response was 3.54 (SD = 1.93). A majority of respondents (54.8%) agreed that they would be sorry if Facebook were to shut down compared to 27.4% of respondents who disagreed.

RQ2: What are the main gratifications of Facebook use?

RQ2a: What are the main gratifications sought from Facebook use? There were five gratifications sought from Facebook use that were identified in the focus group discussion stage of this study. Table 7 summarizes the means and standard deviations of the means for all the gratifications sought from Facebook use variables.

<table>
<thead>
<tr>
<th>Gratification Sought</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Because many people I knew started using Facebook.</td>
<td>2.62</td>
<td>1.59</td>
</tr>
<tr>
<td>Because of peer pressure.</td>
<td>4.61</td>
<td>1.70</td>
</tr>
<tr>
<td>Because a friend invited me to use Facebook.</td>
<td>3.62</td>
<td>1.84</td>
</tr>
<tr>
<td>Because other international students said I should start using Facebook.</td>
<td>5.14</td>
<td>1.78</td>
</tr>
</tbody>
</table>
Looking at the means, we can see that the most popular reason for initially deciding to use Facebook on average was "because many people I knew started using Facebook." The next item that respondents most agreed with was "because a friend invited me to use Facebook." This was followed by "because it was something new that I wanted to try." Respondents, on average, disagreed that peer pressure and other international students were the reasons they first decided to use Facebook.

**RQ2b: What are the main gratifications obtained from Facebook use by international students?** A principal components analysis (PCA) was conducted on the 33 items with orthogonal rotation (Varimax). The items were reverse coded prior to the analysis. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis, KMO= .767, and all KMO values for individual items were > .585, which is above the acceptable limit of .5 (Field, 2009). Bartlett’s test of sphericity $\chi^2 (528) = 1656.290$, $p < .001$, indicated that correlations between items were sufficiently large for PCA. An initial analysis was run to obtain eigenvalues for each component in the data.

Nine components had eigenvalues over Kaiser’s criterion of 1 and in combination explained 72.33% of the variance. However, due to the number of variables, communality values, and sample size in this study, Kaiser’s criterion was deemed unsuitable. Stevens (2002) recommends using the scree plot when sample size is more than 200 participants, so this method was also deemed unsuitable. Consequently, this study relied on a parallel analysis, also referred to as a Monte Carlo simulation, to determine the number of components to retain. Each eigenvalue is compared against an eigenvalue for the corresponding factor in many randomly generated data sets that have the same characteristics as the data being analyzed. In doing so,
each eigenvalue is being compared to an eigenvalue from a data set that has no underlying factors. Factors that are bigger than their random counterparts are retained. SPSS syntax for conducting the parallel analysis/Monte Carlo simulation was provided by O'Connor, 2000 (Field, 2009). Based on the results of the parallel analysis, three components were retained and in combination explained 48.93% of the variance. Table 8 shows the factor loadings after rotation.

Table 8.
Summary of principal components analysis results.

<table>
<thead>
<tr>
<th>Structure Matrix</th>
<th>Rotated Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>Communication</td>
</tr>
<tr>
<td>To keep in touch with family members or loved ones who are in my home country.</td>
<td>.81</td>
</tr>
<tr>
<td>To message my friends.</td>
<td>.68</td>
</tr>
<tr>
<td>To keep in touch with friends who are far away.</td>
<td>.67</td>
</tr>
<tr>
<td>Because it is easier to communicate.</td>
<td>.65</td>
</tr>
<tr>
<td>To keep in touch with all my friends instantly.</td>
<td>.58</td>
</tr>
<tr>
<td>To stay connected with people I rarely see.</td>
<td>.57</td>
</tr>
<tr>
<td>To reconnect with friends I have not contacted for a long time.</td>
<td>.57</td>
</tr>
<tr>
<td>To read international news stories.</td>
<td>.53</td>
</tr>
<tr>
<td>To keep in touch with my friends.</td>
<td>.52</td>
</tr>
<tr>
<td>To obtain information about events that are going on around me.</td>
<td>.43</td>
</tr>
<tr>
<td>To obtain information about employment opportunities in my home country.</td>
<td>.19</td>
</tr>
<tr>
<td>To improve relationships with my professors.</td>
<td>-.11</td>
</tr>
<tr>
<td>To learn about American culture.</td>
<td>-.10</td>
</tr>
<tr>
<td>To make connections with others that will help my career.</td>
<td>.27</td>
</tr>
<tr>
<td>To obtain information about my academic field.</td>
<td>.06</td>
</tr>
<tr>
<td>To help cope with life in Hawai‘i.</td>
<td>.29</td>
</tr>
<tr>
<td>To read local news stories.</td>
<td>.41</td>
</tr>
<tr>
<td>To belong to a Facebook group.</td>
<td>.04</td>
</tr>
<tr>
<td>To play games.</td>
<td>-.04</td>
</tr>
<tr>
<td>To obtain information about emergency situations.</td>
<td>.42</td>
</tr>
<tr>
<td>To watch videos.</td>
<td>.40</td>
</tr>
<tr>
<td>Because communication is less formal.</td>
<td>.21</td>
</tr>
<tr>
<td>To share what is going on in my life.</td>
<td>.16</td>
</tr>
<tr>
<td>To go through my friends’ status updates on the news feed.</td>
<td>.15</td>
</tr>
<tr>
<td>To connect with my American friends.</td>
<td>.07</td>
</tr>
</tbody>
</table>
To express how I am feeling.         .00  .35  .63
To share photos.                   .46  .16  .50
To gossip.                         .35  .15  .40
To receive emotional support.      .15  .33  .44
To follow an organization’s Facebook page. .19  .40  .41
To connect with most of my friends at school. .27  .28  .38

<table>
<thead>
<tr>
<th>Eigen values</th>
<th>10.46</th>
<th>3.29</th>
<th>2.40</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of variance</td>
<td>31.69</td>
<td>9.97</td>
<td>7.27</td>
</tr>
<tr>
<td>α</td>
<td>.90</td>
<td>.85</td>
<td>.82</td>
</tr>
</tbody>
</table>

The items that cluster on the same components suggest that component 1 represented using Facebook for communication with others. Most international students leave already well-established relationships with their friends, family members, and loved ones when they come to the US to study. Using Facebook to maintain communication in these existing relationships clustered around the first component. Furthermore, other items, such as using Facebook to obtain knowledge about what is happening in international students’ home countries and reading international news stories, relate to the idea that communicating through Facebook is done to maintain communication with people back home or who are far away. Since component 1 represented items indicating that international students used Facebook to maintain communication channels, it was named “communication.”

The second component represented using Facebook for professional reasons. As international students, adapting to their new professional environment requires that they learn about American culture, establish good relations with their professors, learn about their academic field, learn about their new environs through local news stories, and learn to cope with the difficulties of adjusting to their new lives in Hawai‘i. Furthermore, international students are forward thinkers when it comes to their employment prospects when their academic careers are over and use Facebook to explore employment opportunities in their home country and make connections with people who may help with their careers. Since most of the items that clustered
around the second component represented using Facebook for professional reasons, the second component was named "professional."

Finally, items that clustered around the third component represented more personal reasons for using Facebook. For example, items relating to personal expression, such as "to share what is going on in my life," "to express how I am feeling" and "sharing photos," were clustered around the third component. Other items included using Facebook to gossip, looking at friends’ updates, and receiving emotional support. Since most of the items that clustered around the third component represented using Facebook for personal reasons, this component was named "personal."

RQ3. What is the relationship between the main gratifications for using Facebook and the amount of Facebook use? A series of hierarchical regression analyses were conducted regressing time spent on Facebook on the communication, professional, and personal factors while controlling for respondents’ age and gender. The measures of Facebook use were reverse coded and the age variable was recoded into a binary variable. Respondents were grouped into a young and older category for age. Young respondents were ages 18 to 25 and older respondents were ages 26 and above. Separate analyses were conducted for each measure of Facebook use and on a composite measure of Facebook use.

*Time spent on Facebook per day.* The factor scores from the earlier principal components analysis were regressed on time spent on Facebook per day controlling for respondents’ age and gender. The assumption of no multicollinearity among the predictor variables was met because all VIF values were significantly smaller than 10 (All VIF=1). Potential outliers that might influence the regression model were not found and the assumption of independent errors was met (Durbin-Watson=2.00).
Step 1 of the model was not significant, \( F(2, 81) = 1.04, p = .36 \). Step 2 of the model was significant, \( F(5, 78) = 5.28, p < .001 \) and explained approximately 25.3% of the variance in the data. The factors communication (\( \beta = .39, p < .001 \)) and personal (\( \beta = .27, p < .01 \)) were significant predictors of time spent per day on Facebook and professional was not. Table 9 shows the coefficients for the regression model.

### Table 9.
Summary of Hierarchical Regression Analysis for Variables Predicting Scores For a Composite Measure of Facebook Use.” (N=84)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>( \beta )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>4.16</td>
<td>.31</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.49</td>
<td>.34</td>
<td>-.16</td>
</tr>
<tr>
<td>Gender</td>
<td>.02</td>
<td>.34</td>
<td>.01</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>4.23</td>
<td>.28</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.39</td>
<td>.30</td>
<td>-.13</td>
</tr>
<tr>
<td>Gender</td>
<td>-.16</td>
<td>.31</td>
<td>-.05</td>
</tr>
<tr>
<td>Communication</td>
<td>.59</td>
<td>.15</td>
<td>.39***</td>
</tr>
<tr>
<td>Professional</td>
<td>-.09</td>
<td>.15</td>
<td>-.06</td>
</tr>
<tr>
<td>Personal</td>
<td>.41</td>
<td>.15</td>
<td>.27**</td>
</tr>
</tbody>
</table>

Note: \( R^2 = .03 \) for Step 1; \( \Delta R^2 = .23 \) for Step 2 (\( p < .001 \)).

\* \( p < .05 \), \** \( p < .01 \), \*** \( p < .001 \)

**Number of Facebook friends.** The next regression analysis conducted regressed the number of Facebook friends on the communication, professional, and personal factors while controlling for respondents’ age and gender. The assumption of no multicollinearity among the predictor variables was met because all VIF values were significantly smaller than 10 (All VIF=1). There were no potential outliers influencing the model. The assumption of independent errors was met (Durbin-Watson=2.26).

Step 1 of the model was not significant, \( F(2, 81) = 2.32, p = .11 \). Step 2 of the model was significant, \( F(5, 78) = 9.23, p < .001 \), and explained roughly 37.2% of the variance in the data. The factor communication (\( \beta = .55, p < .001 \)) and respondents’ age (\( \beta = -.18, p < .05 \)) were
significant predictors of the number of Facebook friends while professional, personal and respondents’ gender were not. Table 10 shows the coefficients for the regression model.

Table 10.
Summary of Hierarchical Regression Analysis for Variables Predicting Number of Facebook Friends. (N=84)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>8.18</td>
<td>.59</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-1.38</td>
<td>.65</td>
<td>-.23*</td>
</tr>
<tr>
<td>Gender</td>
<td>.16</td>
<td>.66</td>
<td>.03</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>8.23</td>
<td>.59</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-1.10</td>
<td>.54</td>
<td>-.18*</td>
</tr>
<tr>
<td>Gender</td>
<td>-.08</td>
<td>.56</td>
<td>-.01</td>
</tr>
<tr>
<td>Communication</td>
<td>1.61</td>
<td>.26</td>
<td>.55***</td>
</tr>
<tr>
<td>Professional</td>
<td>-.38</td>
<td>.27</td>
<td>-.13</td>
</tr>
<tr>
<td>Personal</td>
<td>.09</td>
<td>.27</td>
<td>.03</td>
</tr>
</tbody>
</table>

Note: R² = .054 for Step 1; ΔR² = .32 for Step 2 (p < .001).
*p < .05, **p < .01, ***p < .001

Item “Facebook is a part of my everyday activity.” The next regression analysis regressed the score for the item, “Facebook is a part of my everyday activity” on communication, professional, and personal while controlling for respondents’ age and gender. The assumptions of multicollinearity and independent errors were met (All VIF=1, Durbin-Watson=1.38) and there were no outliers influencing the model.

Step 1 of the model was not significant, F (2, 81) = .34, p = .72. Step 2 of the model was significant, F (5, 78) = 10.71, p < .001, and explained roughly 41% of the variance in the data. The factors communication (β = .43, p < .001) and personal (β = .47, p < .001) were significant predictors of respondents’ feeling that Facebook was a part of their everyday activity and the factor professional was not. Table 11 shows the coefficients for the regression model.

Table 11.
Summary of Hierarchical Regression Analysis for Variables Predicting Responses to the Item “Facebook Is a Part of My Everyday Activity.” (N=84)
<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>4.64</td>
<td>.34</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-1.01</td>
<td>.37</td>
<td>-0.28*</td>
</tr>
<tr>
<td>Gender</td>
<td>-.00</td>
<td>.38</td>
<td>-.00</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>4.44</td>
<td>.29</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-1.18</td>
<td>.31</td>
<td>-0.05</td>
</tr>
<tr>
<td>Gender</td>
<td>-.18</td>
<td>.33</td>
<td>-0.05</td>
</tr>
<tr>
<td>Communication</td>
<td>.74</td>
<td>.15</td>
<td>.43***</td>
</tr>
<tr>
<td>Professional</td>
<td>.11</td>
<td>.16</td>
<td>.07</td>
</tr>
<tr>
<td>Personal</td>
<td>.81</td>
<td>.15</td>
<td>.47***</td>
</tr>
</tbody>
</table>

Note: $R^2 = .01$ for Step 1; $\Delta R^2 = .40$ for Step 2 (p < .001).

*p < .05, **p < .01, ***p < .001

Item “I am proud to tell people I am on Facebook.” The next regression analysis regressed the score for the item “I am proud to tell people I am on Facebook” on the three factors while controlling for respondents’ age and gender. The assumptions of multicollinearity and independent errors were met (All VIF=1, Durbin-Watson=1.98) and there were no outliers influencing the model.

Step 1 of the model was significant, $F (2, 81) = 3.66, p < .05$. Step 2 of the model was significant, $F (5, 78) = 15.91, p < .001$, and explained 50.5% of the variance in the data. For Step 1, age was significant ($\beta = -.28, p < .05$) and gender was not. For Step 2, age ($\beta = -.25, p < .05$) and the factors communication ($\beta = .35, p < .001$), professional ($\beta = .18, p < .05$), and personal ($\beta = .52, p < .001$) were significant, while gender was not. Table 12 shows the coefficients for the regression model.

Table 12.
Summary of Hierarchical Regression Analysis for Variables Predicting Responses to the Item “I Am Proud to Tell People I Am On Facebook.” (N=84)
Item “Facebook has become a part of my daily routine.” The next regression analysis regressed the scores for the item “Facebook has become a part of my daily routine” on the three factors while controlling for respondents’ age and gender. The assumptions of multicollinearity and independent errors were met (All VIF=1, Durbin-Watson=1.48) and there were no outliers influencing the model.

Step 1 of the model was not significant, $F (2, 81) = .87, p = .42$. Step 2 of the model was significant, $F (5, 78) = 9.96, p < .001$) and explained 39% of the variance in the data. The factors communication ($\beta = .36, p < .001$) and personal ($\beta = .50, p < .001$) were significant predictors of the independent variable and the factor professional was not. Table 13 shows the coefficients for the regression model.

Table 13.
Summary of Hierarchical Regression Analysis for Variables Predicting Responses to the Item “Facebook Has Become a Part of My Daily Routine.” (N=84)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.38</td>
<td>.35</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.46</td>
<td>.38</td>
<td>-.13</td>
</tr>
<tr>
<td>Gender</td>
<td>-.23</td>
<td>.39</td>
<td>-.07</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.49</td>
<td>.28</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.35</td>
<td>.31</td>
<td>-.10</td>
</tr>
<tr>
<td>Gender</td>
<td>-.47</td>
<td>.32</td>
<td>-.13</td>
</tr>
<tr>
<td>Communication</td>
<td>.61</td>
<td>.15</td>
<td>.36***</td>
</tr>
<tr>
<td>Professional</td>
<td>.06</td>
<td>.15</td>
<td>.04</td>
</tr>
<tr>
<td>Personal</td>
<td>.84</td>
<td>.15</td>
<td>.50***</td>
</tr>
</tbody>
</table>

Note: $R^2 = .08$ for Step 1; $\Delta R^2 = .42$ for Step 2 ($p < .001$).

*p < .05, **p < .01, ***p < .001
**Item “I feel out of touch when I haven’t logged into Facebook for a day.”** The scores for the item “I feel out of touch when I haven’t logged into Facebook for a day,” was regressed on the three factors while controlling for respondents’ age and gender. The assumptions of multicollinearity and independent errors were met (All VIF=1, Durbin-Watson=1.84) and there were no outliers influencing the model.

Step 1 of the model was not significant, F (2, 81) = 1.22, p = .30. Step 2 of the model was significant, F (5, 78) = 10.34, p < .001, and explained approximately 40% of the variance in the data. The factors communication (β = .38, p < .001) and personal (β = .46, p < .001) were significant predictors of the independent variable and the factor professional was not. Table 14 shows the regression coefficients for the regression model.

Table 14.
Summary of Hierarchical Regression Analysis for Variables Predicting Responses to the Item “I Feel Out of Touch When I Haven’t Logged Into Facebook For A Day.” (N=84)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>4.29</td>
<td>.38</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.57</td>
<td>.42</td>
<td>-.15</td>
</tr>
<tr>
<td>Gender</td>
<td>-.36</td>
<td>.43</td>
<td>-.09</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>4.35</td>
<td>.31</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.42</td>
<td>.34</td>
<td>-.11</td>
</tr>
<tr>
<td>Gender</td>
<td>-.54</td>
<td>.36</td>
<td>-.14</td>
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<tr>
<td>Communication</td>
<td>.72</td>
<td>.17</td>
<td>.38***</td>
</tr>
<tr>
<td>Professional</td>
<td>.24</td>
<td>.17</td>
<td>.13</td>
</tr>
<tr>
<td>Personal</td>
<td>.87</td>
<td>.17</td>
<td>.46***</td>
</tr>
</tbody>
</table>

Note: R² = .03 for Step 1; ΔR² = .37 for Step 2 (p < .001).
*p < .05, **p < .01, ***p < .001

**Item “I would be sorry if Facebook shutdown.”** The scores for the item “I would be sorry if Facebook shutdown” were regressed on the three factors while controlling for respondents’ age and gender. The assumptions of multicollinearity and independent errors were met (All VIF=1, Durbin-Watson=1.33) and no outliers were found.
Step 1 of the model was not significant, F (2, 81) = .35, p = .70. Step 2 of the model was significant, F (5, 78) = 6.91, p < .001, and explained roughly 31% of the variance in the data. The factors communication (β = .27, p < .01) and personal (β = .47, p < .001) were significant predictors of the independent variable and the factor professional was not. Table 15 shows the coefficients for the regression model.

Table 15.
Summary of Hierarchical Regression Analysis for Variables Predicting Responses to the Item “I Would Be Sorry If Facebook Shut Down.” (N=84)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>4.72</td>
<td>.40</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.30</td>
<td>.44</td>
<td>-.08</td>
</tr>
<tr>
<td>Gender</td>
<td>-.22</td>
<td>.44</td>
<td>-.06</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>4.81</td>
<td>.34</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.20</td>
<td>.38</td>
<td>-.05</td>
</tr>
<tr>
<td>Gender</td>
<td>-.42</td>
<td>.39</td>
<td>-.11</td>
</tr>
<tr>
<td>Communication</td>
<td>.52</td>
<td>.18</td>
<td>.27**</td>
</tr>
<tr>
<td>Professional</td>
<td>.18</td>
<td>.19</td>
<td>.10</td>
</tr>
<tr>
<td>Personal</td>
<td>.91</td>
<td>.18</td>
<td>.47***</td>
</tr>
</tbody>
</table>

Note: R² = .01 for Step 1; ΔR² = .30 for Step 2 (p < .001).
*p < .05, **p < .01, ***p < .001

Composite score for Facebook use measures. Finally, the sum of all variables measuring Facebook use was regressed on the three factors while controlling for respondents’ age and gender. The assumptions of multicollinearity and independent errors were met (All VIF= 1, Durbin-Watson= 1.43) and no outliers were found.

Step 1 of the model was not significant, F (2, 81) = 2.28, p = .11. Step 2 of the model was significant, F (5, 78) = 24.69, p < .001, and explained 61.3% of the variance in the data. Respondents’ age (β = -.18, p < .05) and the factors communication (β = .56, p < .001) and personal (β = .50, p < .001) were significant predictors of the independent variable and the factor professional was not. Table 16 shows the coefficients for the regression model.
Table 16. Summary of Hierarchical Regression Analysis for Variables Predicting Scores For a Composite Measure of Facebook Use.” (N=84)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
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<td>Step 1</td>
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<td></td>
</tr>
<tr>
<td>Constant</td>
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<td>1.93</td>
<td></td>
</tr>
<tr>
<td>Age</td>
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<td>2.13</td>
<td>-.23*</td>
</tr>
<tr>
<td>Gender</td>
<td>-.60</td>
<td>2.16</td>
<td>-.03</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>37.24</td>
<td>1.28</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-3.48</td>
<td>1.40</td>
<td>-.18*</td>
</tr>
<tr>
<td>Gender</td>
<td>-2.00</td>
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<td>-.10</td>
</tr>
<tr>
<td>Communication</td>
<td>5.39</td>
<td>.68</td>
<td>.56***</td>
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<td>Professional</td>
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<td>.69</td>
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</tr>
<tr>
<td>Personal</td>
<td>4.82</td>
<td>.68</td>
<td>.50***</td>
</tr>
</tbody>
</table>

Note: $R^2 = .05$ for Step 1; $\Delta R^2 = .56$ for Step 2 (p < .001).

*p < .05, **p < .01, ***p < .001

**RQ4: To what extent do international students possess intercultural sensitivity?**

Respondents’ scores for the intercultural sensitivity scale were summed to compute a composite score after reverse coding questions 2, 4, 7, 9, 12, 15, 18, 20, and 22, which were suggested by the scale’s developers. The mean was 104.64 (SE 1.31), the median was 104, and the mode was 104. The highest possible score was 168 and the lowest possible score was 24. The range of scores was 76-140.

**RQ5: What is the relationship between Facebook use and intercultural sensitivity?**

A series of hierarchical regression analyses was conducted regressing reverse-coded responses for questions relating to Facebook use on respondents’ scores for the intercultural sensitivity scale while controlling for respondents’ age and gender. Responses for the age variable were recoded into a binary variable, which divided respondents into young and older categories. Respondents’ in the young category were ages 18 to 25 and respondents in the older category were ages 26 and above. Separate analyses were conducted for each measure of Facebook use and on a composite measure of Facebook use.
**Time spent on Facebook per day.** Responses for time spent on Facebook per day were regressed on respondents’ scores for the intercultural sensitivity scale while controlling for age and gender. The model was not significant.

**Number of Facebook friends.** The data for number of Facebook friends was regressed on respondents’ scores for the intercultural sensitivity scale while controlling for age and gender. The model was not significant.

**Item “Facebook is a part of my everyday activity.”** Responses for the item “Facebook is a part of my everyday activity” were regressed on respondents’ scores for the intercultural sensitivity scale while controlling for respondents' age and gender. The model was not significant.

**Item “I am proud to tell people I am on Facebook.”** Responses for the item “I am proud to tell people I am on Facebook” were regressed on respondents’ scores for the intercultural sensitivity scale while controlling for respondents' age and gender. Step 1 of the model was not significant, $F(2, 81) = 1.36, p = .26$. Step 2 of the model was significant, $F(3, 80) = 3.24, p < .05$, and explained 10.8% of the variance in the data. Table 17 shows the regression coefficients for the model.

Table 17. Summary of Hierarchical Regression Analysis for Variables Predicting Intercultural Sensitivity. (N=84)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
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<td></td>
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<tr>
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<td>-.16</td>
</tr>
<tr>
<td>Gender</td>
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<td>2.73</td>
<td>-.09</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
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<td></td>
</tr>
<tr>
<td>Age</td>
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<td>-.08</td>
</tr>
<tr>
<td>Gender</td>
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<td>2.64</td>
<td>-.09</td>
</tr>
<tr>
<td>Item</td>
<td>2.02</td>
<td>.78</td>
<td>.29*</td>
</tr>
</tbody>
</table>

Note: $R^2 = .03$ for Step 1; $\Delta R^2 = .08$ for Step 2 (p < .05).
*p < .05, **p < .01, ***p < .001

**Item “Facebook has become a part of my daily routine.”** Responses for the item “Facebook has become a part of my daily routine” were regressed on respondents’ scores for the intercultural sensitivity scale while controlling for respondents' age and gender. The model was not significant.

**Item “I feel out of touch when I haven’t logged into Facebook for a day.”** Responses for the item “I feel out of touch when I haven’t logged into Facebook for a day” were regressed on respondents’ intercultural sensitivity score while controlling for respondents’ age and gender. The model was not significant.

**Item “I would be sorry if Facebook shutdown.”** Responses for the item “I would be sorry if Facebook shutdown” were regressed on respondents’ scores for the intercultural sensitivity scale while controlling for respondents’ age and gender. The model was not significant.

**Composite score for Facebook use measures.** Respondents’ scores for all Facebook use measures were summed to compute a composite Facebook use score. This composite score was regressed on respondents’ scores for the intercultural sensitivity scale while controlling for respondents' age and gender. The model was not significant.
Chapter 6
Discussion

This chapter discusses the findings from the present study in relation to the existing literature. Although the results of this study will be compared with previous studies, it should be noted that different data sets cannot really be compared.

Facebook use

Time spent on Facebook per day. On average, the international students who participated in this study spent more time per day on Facebook than other groups of individuals in previous research. The international students in this study spent on average approximately more than 1 hour, less than 2 hours on Facebook per day. Undergraduate students in Ellison, Steinfield, and Lampe's (2007) study, spent on average approximately 10 to 30 minutes per day on Facebook. The international students in Cao, Pauleen, and Bathurst's (2012) study, spent on average 21.1 minutes per day on Facebook.

Number of Facebook friends. With respect to number of Facebook friends, international students in this study had, on average, more Facebook friends than other groups and compared to other studies of international students. According to Facebook’s own statisticians, the average number of Facebook friends of all Facebook users is 190 (Facebook, 2014). According to Hampton, Goulet, Rainie, and Purcell (2011), the average number of Facebook friends for their sample of American Facebook users was 229 friends on Facebook. The undergraduate college students in Ellison, Steinfield, and Lampe's (2007) study had on average more than 151 and less than 200 friends on Facebook and the international students in Cao, Pauleen, and Bathurst’s (2012) study had on average 50.4 Facebook friends.
Other questions regarding Facebook use. With respect to the remaining questions relating to Facebook use, a comparison was made between the undergraduate college students in Ellison, Steinfield, & Lampe’s (2007) study. However, a direct comparison is impossible because one question was omitted in this study and moreover, the way answers were scored was also different. In order to allow for a comparison, the answers in this study were reverse coded and re-coded from a 7-point scale to a 5-point scale. For the item “Facebook is a part of my everyday activity,” the re-coded mean for this study was 3.83, which was higher than the mean (3.12, SD = 1.26) in Ellison et al. (2007). For the item “I am proud to tell people I am on Facebook,” the re-coded mean for this study was 3.20, which was lower than the mean (3.24, SD = 0.89) in Ellison et al. (2007). For the item “Facebook has become a part of my daily routine,” the re-coded mean for this study was 3.68, which was higher than the mean (2.96, SD = 1.32) reported in Ellison et al. (2007). For the item “I feel out of touch when I haven’t logged onto Facebook for a day,” the re-coded mean for this study was 2.96, which was higher than the mean (2.29, SD = 1.20) reported in Ellison et al. (2007). For the item “I would be sorry if Facebook shut down,” the re-coded mean for this study was 3.30, which was lower than the mean (3.45, SD = 1.14) reported by Ellison et al. (2007). Therefore, for three out of five items, the international students in this study reported on average a higher level of Facebook use than the undergraduates sampled in Ellison et al. (2007).

Reasons for first starting to use Facebook (gratification sought)

The gratifications sought for using Facebook that were identified in this study were 1) because many people I knew started using Facebook, 2) because of peer pressure, 3) because a friend invited me to use Facebook, 4) because other international students said I should start using Facebook, and 5) because it was something new that I wanted to try. Quan-Hasse and
Young (2010) identified the following gratification sought from Facebook use by undergraduate college students: 1) a friend suggested it, 2) everyone I know is on Facebook, 3) help others keep in touch with me, 4) find classmates, 5) received a promotional email, 6) get to know more people, 7) network in general, 8) find course information, 9) find dates, and 10) find people with mutual interests.

Comparing this study with Quan-Hasse and Young’s (2010) study demonstrates that there are both similarities and differences when it comes to the reasons international students and undergraduate students first decided to use Facebook. Meeting friends’ expectations and conforming to their peers were both in the most popular reasons for initially using Facebook for both studies. However, for this study peer pressure and the desire to try something new were reasons that were absent in Quan-Hasse and Young’s (2010) study. Conversely, keeping in touch with people, finding classmates, getting to know more people, networking, course information, finding dates, and finding people with mutual interests were reasons identified in Quan-Hasse and Young’s (2010) study that were not found in this study.

**Reasons for continuing to use Facebook (gratifications obtained)**

The results of the principal component analysis in this study suggest that there are three main gratifications obtained from Facebook use by international students. The component called “communication,” broadly refers to using Facebook to maintain communication channels and especially with people in their home countries. The second component, which was named “professional,” broadly refers to using Facebook as a means to adjust to and excel in their new academic environment and establish connections that could help them professionally, like with professors or employers. The third component, which was named “personal,” broadly refers to using Facebook for personal reasons, such as self-expression.
Quan-Hasse and Young’s (2010) study of the uses and gratifications of Facebook use for undergraduate students, they identified six underlying components from a principal component analysis that represented gratifications obtained from Facebook use for their sample. The six components were 1) pastime (which referred to using Facebook for relaxation, entertainment, and escape), 2) affection (which referred to expressing concern and friendship toward others), 3) fashion (which referred to appearing fashionable to others), 4) sociability (which referred to maintaining existing social ties), 5) sharing problems (which referred to talking about others concerns), and 6) social information (which referred to information about their friends and peers). Compared with the current study, Quan-Hasse and Young’s (2010) study shares one gratification obtained, which was maintaining existing social ties. However, an important difference was that for the undergraduate college students in Quan-Hasse and Young’s (2010) study the existing social ties were more related to new relationships whereas in the current study the gratification was related more to maintaining existing ties with people back home.

Referring back to the research literature that indirectly alluded to gratifications obtained from Facebook use by international students, the gratifications identified in the literature included 1) social support, 2) information, 3) maintenance of relationships with people in one’s home country, 4) social surveillance, 5) adjustment, 6) acculturation, and 7) language. The results of this study somewhat support what is in the research literature because individual items that were identified as gratifications obtained support the gratifications identified in the literature. For example, information, maintenance of relationships with people in one’s home country, and adjustment were gratifications that were identified in the focus group stage of this study and incorporated into the subsequent principal components analysis.
Relationship between reasons for continuing to use Facebook (gratifications sought) and amount of Facebook use.

All but one regression analysis found that the factors scores for the factors communication and personal were significant predictors of all the Facebook use measures. Consequently, using Facebook to communicate and for personal expression are the gratifications that relate positively with Facebook use. Similar to this study, other studies have found measures of Facebook use to be significantly predicted by factors relating to gratifications obtained (Quan-Hasse & Young, 2010; Joinson, 2008).

Relationship between Facebook use and intercultural sensitivity

The part of this study regarding intercultural sensitivity was exploratory in nature and designed to contribute to the existing research literature that explores the relationship between Facebook use and the problems faced by international students when they come to live and study in the US. The results of this study indicate that there is no significant relationship between Facebook use and intercultural sensitivity. There was only a small relationship between the respondents’ scores for the item “I am proud to tell people I am on Facebook” and respondents’ intercultural sensitivity scores. All other analyses of a potential relationship were not significant.
Chapter 7
Conclusions

This study examined international student use of Facebook at the University of Hawai'i by seeking to understand the extent to which international students used Facebook, identifying the main reasons that motivated international students to first decide and continue to use Facebook, describe the relationship between the motivations for Facebook use and Facebook use, and describe the relationship between Facebook use and intercultural sensitivity. The data collection method employed for this study was face-to-face focus group discussions and an online survey using a convenience sample.

The respondents were international students currently attending one of three University of Hawai'i institutions including the University of Hawai'i, Mānoa, the University of Hawai'i, Hilo, and Kapi'olani Community College. The background characteristics of respondents examined in this study were age, gender, and nationality.

The findings from this study showed that international students are avid users of Facebook. They spent an average of between one to two hours per day on Facebook and the vast majority of respondents had more than 400 Facebook friends. Over 70% of respondents agreed that Facebook was a part of their everyday activity and routinely used Facebook every day. A majority of respondents said they would be sorry if Facebook were to shut down. This study also identified the main reasons they first decided and continue to use Facebook and found support for a relationship between the main reasons motivating Facebook use and the actual amount of Facebook use.

Contribution of the study

The present study contributes to the research literature in multiple ways. First, it addresses a gap in the existing literature relating to the limited nature of research examining the
main reasons international students use Facebook by giving attention to the topic. Second, it extends and supports the literature regarding UGA by applying the theoretical foundation to a population that has received limited attention and by supporting the UGA conceptual model.

**Limitations of the study**

One limitation of this study relates to the sample that was used. First, the sample used in this study was not representative of the population because random sampling was not used. Furthermore, this study had a very small sample rate of 0.04% and, perhaps as a result, a portion of the data did not follow a normal distribution. Consequently, it is difficult to generalize conclusions from this sample to the study population. Another limitation of the study is that only one person, the primary researcher, transcribed and analyzed the focus group discussion data. Therefore, this study heavily relied on one analyst who may introduce subjectivity and bias into the results. Consequently, this may result in reliability for the focus group discussion results of the study. There were also limitations that pertained to the questionnaire portion of this study. Limitations related to the questionnaire stem from the problems associated with relying on a self-administered questionnaire. Self-reported data measures individuals' perceptions, and therefore, it is possible that respondents' actual behaviors may differ from what they reported. There was also a very high dropout rate. Out of the total 210 questionnaires that were submitted, only 84 were complete. This may have been due to the questionnaire being too long resulting in participant fatigue. Finally, another major limitation of this study is that it cannot compare its results with the results of previous studies due to fundamental differences between data.

**Suggestions for future research**

Future research should use a larger sample and employ different sampling techniques to create a more representative sample so that results can be generalized to the larger population of
study. Future research studies should also look at reasons for discontinuing use of Facebook and other SNS, in addition to, comparing reasons for first using and continuing to use other SNS besides Facebook. Finally, future research should continue to explore potential relationships between Facebook and other SNS use with variables that relate to the problems international students face, given their importance as a part of the student body enrolled in institutions of higher education in the US.
Appendix A: Human Studies Program Approval of Exempt Status

October 22, 2013

TO: James Kim  
Principal Investigator  
Communication

FROM: Denise A. Lin-DeShetler, MPH, MA  
Director

SUBJECT: CHS #21613- “The Main Uses and Gratifications of Facebook Use for International Students at the University of Hawaii at Manoa”

This letter is your record of the Human Studies Program approval of this study as exempt.

On October 22, 2013, the University of Hawai‘i (UH) Human Studies Program approved this study as exempt from federal regulations pertaining to the protection of human research participants. The authority for the exemption applicable to your study is documented in the Code of Federal Regulations at 45CFR 46.101(b)(Exempt Category 2).

Exempt studies are subject to the ethical principles articulated in The Belmont Report, found at http://www.hawaii.edu/irb/html/manual/appendices/A/belmont.html.

Exempt studies do not require regular continuing review by the Human Studies Program. However, if you propose to modify your study, you must receive approval from the Human Studies Program prior to implementing any changes. You can submit your proposed changes via email at uhirb@hawaii.edu. (The subject line should read: Exempt Study Modification.) The Human Studies Program may review the exempt status at that time and request an application for approval as non-exempt research.

In order to protect the confidentiality of research participants, we encourage you to destroy private information which can be linked to the identities of individuals as soon as it is reasonable to do so. Signed consent forms, as applicable to your study, should be maintained for at least the duration of your project.

This approval does not expire. However, please notify the Human Studies Program when your study is complete. Upon notification, we will close our files pertaining to your study.

If you have any questions relating to the protection of human research participants, please contact the Human Studies Program at 956-5007 or uhirb@hawaii.edu. We wish you success in carrying out your research project.
Appendix B: Online Questionnaire

Q1 How old are you?

1= Under 18
2= 18-25
3= 26-34
4= 35-54
5= 55-64
6= 65 or older

Q2 What is your gender?

1= Male
2= Female

Q3 What is your nationality?

Q4 For how many semesters have you studied at the University of Hawai‘i?

1= Less than one
2= One
3= Two
4= Three
5= Four
6= Five
7= Six
8= Seven
9= Eight
10= More than eight

Q5 On a typical day, how much time do you spend on Facebook?

1= No time at all
2= Less than 10 minutes
3= 10-30 minutes
4= More than 30 minutes, up to 1 hour
5= More than 1 hour, up to 2 hours
6= More than 2 hours, up to 3 hours
7= More than 3 hours, up to 4 hours
8= More than 4 hours

Q6 About how many total Facebook friends do you have?

1= Less than 10
2= 10-49
Q7 With regard to your use of Facebook, please select the appropriate answer. Facebook is a part of my everyday activity.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

4. With regard to your use of Facebook, please select the appropriate answer. I am proud to tell people I am on Facebook.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

5. With regard to your use of Facebook, please select the appropriate answer. Facebook has become a part of my daily routine.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

6. With regard to your use of Facebook, please select the appropriate answer. I feel out of touch when I haven’t logged onto Facebook for a while.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

7. With regard to your use of Facebook, please select the appropriate answer. I would be sorry if Facebook shutdown.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

Q8 The next set of questions asks about the reasons you decided to join Facebook. Please select the appropriate answer.

8-1. I decided to join Facebook because many people I knew started to use Facebook.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

8-2. I decided to use Facebook because of peer pressure.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

8-3. I decided to use Facebook because a friend invited me to use Facebook.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

8-4. I decided to use Facebook because other international students said I should start using Facebook.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

8-5. I decided to use Facebook because it was something new that I wanted to try.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

Q9 The next set of questions asks about the reasons you use Facebook currently. Please select the appropriate answer. I use Facebook...

9-1. I use Facebook to learn about American culture.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-2. I use Facebook to connect with my American friends.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-3. I use Facebook to keep in touch with friends who are in my home country.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-4. I use Facebook to keep in touch with family members or loved ones who are in my home country.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-5. I use Facebook to know what is happening in my home country.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-6. I use Facebook to help cope with life in Hawai‘i.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-7. I use Facebook to read international news stories.
9-8. I use Facebook to read local news stories.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-9. I use Facebook to obtain information about emergency situations.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-10. I use Facebook to connect with most of my friends at school.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-11. I use Facebook to improve relationships with my professors.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree
9-12. I use Facebook to keep in touch with my friends.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-13. I use Facebook to message my friends.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-14. I use Facebook to stay connected with people who I rarely see.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-15. I use Facebook to keep in touch with all my friends instantly.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-16. I use Facebook to receive emotional support.

1= Strongly Agree
2= Agree
3= Somewhat Agree
9-17. I use Facebook to express how I am feeling.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-18. I use Facebook to keep in touch with friends who are far away.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-19. I use Facebook to make connections with other people that will help my career.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-20. I use Facebook to obtain information about employment opportunities in my home country.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree
9-21. I use Facebook to obtain information about my academic field.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-22. I use Facebook to obtain information about events that are going on around me.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-23. I use Facebook to go through my friends’ status updates on the news feed.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-24. I use Facebook to gossip.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-25. I use Facebook to share photos.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-26. I use Facebook to play games.
1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-27. I use Facebook to watch videos.
1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-28. I use Facebook to share what is going on in my life.
1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-29. I use Facebook because communication is less formal.
1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-30. I use Facebook because it is easier to communicate.
1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-31. I use Facebook to reconnect with friends I have not contacted for a long time.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-32. I use Facebook to follow an organization’s Facebook page.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

9-33. I use Facebook to belong to a Facebook group.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

Q10 The next set of questions seeks to gain a better understanding of how you perceive yourself as a communicator. Please select the appropriate answer.

10-1. I enjoy interacting with people from different cultures.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

10-2. I think people from other cultures are narrow-minded.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

10-3. I am pretty sure of myself in interacting with people from different cultures.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

10-4. I find it very hard to talk in front of people from different cultures.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

10-5. I always know what to say when interacting with people from different cultures.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree
10-6. I can be as sociable as I want to be when interacting with people from different cultures.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

10-7. I don’t like to be with people from different cultures.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

10-8. I respect the values of people from different cultures.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

10-9. I get upset easily when interacting with people from different cultures.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

10-10. I feel confident when interacting with people from different cultures.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

10-11. I tend to wait before forming an impression of people from different cultures.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

10-12. I often get discouraged when I am with people from different cultures.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

10-13. I am open-minded to people from different cultures.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

10-14. I am very observant when interacting with people from different cultures.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

10-15. I often feel useless when interacting with people from different cultures.
10-16. I respect the ways people from different cultures behave.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

10-17. I try to obtain as much information as I can when interacting with people from different cultures.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

10-18. I would not accept the opinions of people from different cultures.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

10-19. When interacting with people from different cultures, I am sensitive to subtle meanings.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
10-20. I think my culture is better than other cultures.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

10-21. When interacting with people from different cultures, I often give positive responses.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

10-22. I avoid those situations where I will have to deal with culturally different people.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree

10-23. I often show my understanding through verbal or non-verbal cues when interacting with people from different cultures.

1= Strongly Agree
2= Agree
3= Somewhat Agree
4= Neither Agree nor Disagree
5= Somewhat Disagree
6= Disagree
7= Strongly Disagree
10-24. I have a feeling of enjoyment towards differences between myself and people from different cultures.

1 = Strongly Agree
2 = Agree
3 = Somewhat Agree
4 = Neither Agree nor Disagree
5 = Somewhat Disagree
6 = Disagree
7 = Strongly Disagree
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