CROSS-CULTURAL COMPARISON OF KOREAN AND AMERICAN

SOCIAL NETWORK SITES: EXPLORING CULTURAL DIFFERENCES IN

SOCIAL RELATIONSHIPS AND SELF-PRESENTATION

by

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ABSTRACT OF THE DISSERTATION

A Cross-Cultural Comparison of Korean and American Social Network Sites: Exploring

Cultural Differences in Social Relationships and Self-Presentation

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National culture is being challenged as societies evolve from their homogeneous origins. The theoretical base of this study uses two cultural dimensions, individualism-collectivism (Hofstede, 2001) and high-and low-context cultures (Hall, 1976), to unpack the effects of national culture on social network sites (SNSs). This study explores cultural differences in SNS usage patterns employing multiple methods, a paper-and-pencil survey and a content analysis of SNS profiles of survey respondents. The final analyses include a survey with 602 SNS users (361 college students in the United States and 241 college students in Korea) and a content analysis of 151 online profiles (58 Facebook and 93 Cyworld profiles).

The survey findings revealed that SNS relationship patterns replicated those of face-to-face, while reflecting users' cultural orientations. In the survey findings, members of collectivistic cultures maintained SNS relationships more tightly and narrowly. While indicating such closed SNS relationships, they also exhibited lower levels of amount of self-disclosure, higher levels of intimate and vulnerable self-disclosure, and a greater

willingness of privacy sharing than members of individualistic cultures. More visually anonymous online profiles also led to their closed SNS relationships by requiring random visitors, including old friends, to attain supplementary information to identify the user. As interdependent entities, members of collectivistic cultures paid more attention to self-presentation behaviors than members of individualistic cultures. The effect of individuals' cultural attitudes on SNS usage was mostly reconfirmed in the comparison by nationality while providing evidence of the effect of national culture. In the findings of the content analysis, Cyworld users from high-context cultures adopted more indirect communication styles that represent high-context cultures than Facebook users who adopted more direct communication styles that represent low-context cultures.

The evident influence of national cultures on SNSs suggests revisiting the cultural dimensions, individualism-collectivism and high-and low-context cultures, to explore how they may explain patterns specific to particular cultures. The findings also suggest that international versions of SNS services that may be developed with the assumption of homogenous global populations of users need to be designed with the consideration of how culture influences use and shapes SNS behaviors.

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Finally, I express the most gratitude to my dear friend, who has listened courteously and thoughtfully to my many types of expressions of emotional weakness, including my complaints and feelings of dismay. Without him, I would have emotionally collapsed before the completion of this research.

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I. INTRODUCTION

It is remarkable how today's individuals—especially the younger generation—
have a variety of different ways, physically and virtually, to maintain relationships with

family and friends, communicate their thoughts and activities, and meet new individuals.

Diverse Internet-based communication devices serve to connect individuals while

possibly reshaping those individuals' relationships. Social network sites (SNSs) center on

socializing among individuals while embracing both offline and online relationships.

Various SNS services[1] have their own unique purposes and target audiences all

over the world. Types of SNS service that are classified by purposes and target audiences,

for instance, can be defined by different entry qualifications. While comparing different

types of SNS services, Papacharissi (2009) classified SNSs into three types based on

entry process: social, professional, and exclusive. Facebook, as a representative SNS

service for socializing, has open membership[2]. Professional SNSs refer to business

networks, such as LinkedIn. To be a member of LinkedIn, people are required to have a

professional job where the job description can be regarded as the most important

information in their profiles. Finally, exclusive SNS services include ASmallWorld

where membership is permitted only by invitation of existing members. These different

entry qualifications lead to distinctive online profile structures and content.

Although the type of SNS service is well-classified by entry qualifications (or its

purposes and target audiences), lack of cross-cultural awareness may result in poor

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[1] Wikipedia lists 157 relevant sites with the premise that they are "not exhaustive" and "limited to some notable well-known sites."
[2] MySpace is also one of the leading social SNS services: while Facebook limited membership to only college students before 2004, MySpace was the most popular social SNS service in the United States and still takes the highest market share in England.

understanding of SNSs from various countries. Socializing-oriented SNS services, for instance, have been created with different languages and diverse alphabets all over the world and they have shown remarkable influence in local or national communities: e.g., Cyworld in Korea, Mixi in Japan, Badoo in Italy, and Orkut in Brazil.

National-based social networks among SNS users are composed of those who mostly share the same language and similar cultural experiences. This implies that SNS behavior is likely to differ across cultures due to different cultural values and attitudes. Since previous cross-cultural studies have shown that communicative behaviors and styles vary across cultures (Gudykunst & Nishida, 1986a, 1986b; Gudykunst & Ting-Toomey, 1992; Gudykunst, Yoon, & Nishida, 1987; Hall, 1976; Kim, Coyle, & Gould, 2009; Kim & Papacharissi, 2003), SNS users from various countries are likely to engage in different communicative behaviors. However, most of the research on SNSs has been conducted in the context of the United States, by studying college students' use of Facebook, in particular (e.g., Acquisti & Gross, 2006; Christofides, Muise, & Desmarais, 2009; Donath, 2007; Ellison, Steinfield, & Lampe, 2007; Tufekci, 2008a, 2008b), and a few studies attempted to explore such cultural differences in newer computer-mediated communication (CMC) settings (Kim & Papacharissi, 2003; Würtz, 2005; Yum & Hara, 2005). In this regard, this study investigates the effect of culture on SNS relating to communication and socializing; furthermore, this study explores whether or not previous findings on SNS usage in the United States are applicable to other cultural contexts.

To investigate cultural effects on SNSs, this study explores cultural differences in five pertinent communicative behaviors and attitudes, including SNS relationships, self-disclosure, anonymity, self-presentation, and privacy. Online profiles and friends lists,

which are hyperlinked with others' SNS pages, motivate users to self-present (Donath & boyd, 2004; Ellison Steinfield, Lampe, 2007). Despite previous findings of self-presentation on SNSs, they tended to focus only on self-presentation tactics (Jung, Youn, & McClung, 2007; Zarghooni, 2007). This study notes that people attempt to manage their image through various communicative behaviors, not just through self-presentation strategies, and SNS services provide diverse functions to manage online profiles. Accordingly, this study compares cultural differences in the relevant communicative behaviors and tools for self-presentation on SNSs while extending activities for self-presentation on SNSs.

In doing so, this study attempts to increase our understanding and comprehension of SNS use for self-presentation across cultures. An understanding of localized SNS use will contribute to estimating the future of SNS international versions and overseas markets.

Nation-Based Growth and International Versions

This study attempts to extend understanding of SNS use by comparing users in the United States and those in Korea. It is well-known that the United States has a large-scale SNS population and market due to the ubiquitousness of English, which lessens any language barriers. Despite its limited scale, Korea also has an astonishing SNS population. According to the annual business report of SK communications, which is the company that owns Cyworld, the representative Korean SNS service, around 47% of the Korean population have Cyworld accounts (more than 23 million individuals as of, 2009). Apart from people who do not have access to computers or the Internet, including infants and children, 23 million of Korea's 48.8 million population represents a remarkable

proportion. Considering the social influence of SNS use in a local boundary, the Korean users are comparable with the mainstream user population in the United States.

After acquiring notable success in a domestic market, the parent companies of SNS services have attempted to find markets abroad. Although, up to the present, the existing international versions have not yet shown notable global success compared to domestic success, the partial success of Cyworld international versions and, more recently, the rapid growth of Facebook international versions indicate the potential of international versions.

A brief review of international versions of Cyworld and Facebook may exhibit an interesting point to heighten the necessity of cross-cultural research of SNSs. SK communications launched Cyworld China and Cyworld Japan in 2005 and started Cyworld US and Cyworld Taiwan in 2006. Cyworld China and Cyworld Japan have attained a survivable market share even though they have been defeated by QQ in China and by Mixi in Japan respectively. Cyworld US, however, has never acquired a significant market share in the United States since it was launched in 2006. After revising the site from the original Cyworld (Cyworld Korea) design to a Facebook-like version, SK communications decided to withdraw their investment from Cyworld US in 2008. Before then, SK communications surrendered Cyworld European Corporation in early 2008.

Facebook has translated their service into approximately 100 languages. According to a report *Inside Facebook* (Smith, 2009), international users—who are non-English speaking users—increased from 34 million people in early 2008 to 95 million in early 2009 after making translated versions available. From this, it might be concluded

that Facebook looks successful in global markets. The successful growth in overseas

markets, however, seems not to have reached East Asian countries, including Korea,

China, and Japan (MacManus, 2008). Benjamin Joffe, managing director at Asian

Internet consultancy and co-founder of Mobile Monday Beijing, pointed out that

stereotypes of the countries might not bode success for the Asian markets *at Media 08*

(Australia's Annual Report for Digital Media Professionals) in Sydney.

Compared to the rapidly growing popularity of Facebook in European countries[3],

this stalled growth of Asian versions of Facebook may be comparable with the lack of

success of Cyworld US. In addition, the lack of success of each SNS service in particular

regions seems to be related to cultural dissimilarities. Cyworld international versions

have survived in China and Japan, presumably due to the similar cultural emphasis on

Confucianism and collectivism even though these three countries have shown slightly

different collectivistic tendencies. The three countries' national cultures also generally

belong to high-context cultures, even though they exhibit different levels of high-context

cultures respectively. On the contrary, Cyworld has been unsuccessful in the United

States and European countries, which can be generally categorized as individualistic and

low-context cultures[4]. Likewise, international versions of Facebook were less successful

in Asia than in Europe. These business-related occurrences implicate cultural effects on

SNS use and inspire research to examine such cultural effects.

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[3] Although Facebook also shows successful growth out of North America and Europe, most of these countries have no successful home SNS service that could reflect their national cultures.

[4] Although European countries range from individualistic to collectivistic and from low to high-context, the first targets of Cyworld Europe were Germany and England, which were closer to individualism and low-context cultures.

Socializing with a Larger Number of Individuals through SNSs

SNSs have been partly explained as a newer mode of socializing and as a venue of egocentric social networks (Donath, 2007). Given the possibility for close involvement in offline relationships on SNSs, SNS networks have reflected online socializing and also increases in overall socializing by the younger generation. Since socializing tends to be patterned by culture (Triandis, 1989), it can be expected that socializing on SNSs differs depending on users' cultural orientation. Although mainstream research has proposed wide-ranging SNS socializing (boyd, 2006; Ellison et al., 2007), this finding may not hold true in cultures whose members prefer socializing with narrow group of friends.

Without consideration of cultural differences, previous research on United States SNS users has claimed that the number of friends on one's friends list is often gauged as a level of popularity of a SNS profile (or its user) (boyd, 2006; Donath, 2007). For English-using SNSs, accordingly, *friending*, which refers to links between each other's profiles by registering and being registered on one's friends list, can be an indicator of mutually accepted good impressions and positive reputations (Cassidy, 2006; Kleck, Reese, Behnken, & Sundar, 2007).

Since SNS friends can be collected to heighten the appearance of popularity, the number of SNS friends will usually differ from that of actual friends. SNS friends are more likely to be comprised of a large number of weak ties that embrace casual friends and acquaintances as well as strong ties that include close friends and family. In terms of this kind of *friending*, Ellison et al. (2007) note that Facebook users take advantage of SNS networks to efficiently accumulate and maintain a large amount of social capital. The large number of weak ties on SNS networks is also verified by the study of Tufekci

(2008a). In a comparison of SNS users and non-users, she found that SNS users socialized more and had contacts with a larger number of people in the real world than non-users. However, the number of close friends that both users and non-users contacted was not significantly different. This finding indicates that SNS users maintain a large number of friends and acquaintances with the aid of SNS networks rather than increasing the number of actual close friends.

As societies become more complicated, SNSs that enable users to effectively maintain a large range of friends are certainly attractive social media. However, again, in certain cultures, the wide-ranging social networks may be unfit for traditional cultural attitudes. Consequently, users may not have such needs and, even if they do, they may face a clash between their individual desires and traditional cultural values. Paralleling their cultural orientation, users in certain cultures may transform SNS use or they may struggle against original cultural attitude. By involving SNS use of Korean users, this study attempts to reveal the diverse usage of SNSs.

<center>Other Research on minor SNSs</center>

Most of the previous studies concerning SNSs explored American college students. As a main counterpart of my research, literature concerning Cyworld was investigated, yet few relevant studies were found in English-based literature. An empirical study by Kim and Yun (2007) claims that Cyworld use reflects dialectical relational tensions caused by pairs of oppositional forces. In the view of dialectical tensions, Cyworld users employ SNSs to solidify interpersonal relations with their existing relationships, whereas they also show self-relation, which refers to objectification of one's own thought and feelings, which could be appreciated as self-

oriented behaviors. By relating the tensions to collectivistic and high-context Korean culture, they argue that Cyworld users, who are mostly younger Koreans in their 20s and 30s, reflect their individualistic attitudes on Cyworld, an attitude that clashes with traditional Korean cultural attitudes to create dialectical tensions. Thus, their research implies that there is an influence of Korean collectivistic culture against an egocentric socializing web persona when using SNSs.

Although a few cross-national studies of SNSs were conducted between two national user groups, the studies rarely indicated the possible pre-conditions surrounding those differences or explaining their occurrence. Banczyk, Krämer, and Senokozilieva (2008) demonstrated that there were differences in self-presentation on MySpace between users in the United States and those in Germany, yet they did not explain what might be influencing these differences.

This study predicts that users' cultural orientations (expectedly corresponding to national cultures) may answer SNS usage differences, especially in the comparison between nation-based user groups. According to Schooler (1998), regarding social/cultural shift, individuals perceive that their psychological-level changes first, social-structural changes follow, and then cultural-level changes occur. Time-lag among the three shifts may generate a gap between actors' behaviors and perception. Considering this possible gap, this study adopts two different methods, survey and content analysis. Survey methodology aims to measure users' self-reported attitudes and behaviors. Content analysis is used to investigate users' actual behaviors on SNSs, which may support or contradict self-reported attitudes and behavior in the survey.

Preview of the Following Chapters

Chapter II introduces theoretical concepts based on two dimensions of culture. It also elaborates sub-concepts from the cultural dimensions by reviewing relevant studies. In doing so, this chapter articulates a theoretical framework to explore cultural differences in SNS usage.

Chapter III discusses relevant literature on social relationships, self-disclosure, anonymity, self-presentation, and privacy. Each topic includes SNS and CMC literature and literature of cross-cultural comparisons. The reviewed cross-cultural literature mainly explores communication behaviors in face-to-face settings. This may be because there are few cross-cultural studies that explore cultural effects in SNS (or CMC) settings published in academic journals. Although there are some relevant studies, the findings do not fully explain cultural effects on the basis of individualism-collectivism or low-and high-context cultural dimensions, which are concepts integral to the theoretical framework of this study. This study also proposes hypotheses related to cultural differences in social relationships, self-disclosure, self-presentation, anonymity, and privacy.

Chapter IV discusses methods used, which are survey and content analysis. Sample, procedure, measure for survey and content analysis are discussed. Main research sites and key variables are also introduced with the results of factor analyses.

Chapter V reports findings. First, it illustrates the relationships between individuals' cultural attitudes and their nationality. Next, the findings reveal users' different behaviors and attitudes linked to their cultural attitudes, mostly using correlations. The results from independent samples t-test follow. The results of the t-tests

reconfirm the cultural effect on SNS usage, while revealing the significance of national culture to understand actors' behaviors and attitudes. Finally, this chapter reveals the findings of content analysis. To heighten reliability, independent samples t-test and chi-square analysis were employed to test hypotheses and compare profiles from two different SNS services, adding to descriptive analyses.

Findings demonstrate that despite well-known usage of SNSs, which refers to efficiently maintaining a wide range of social relationships through SNS connections, SNS users in more collectivistic cultures transform such a SNS usage. This study proposes that national cultures give a strong explanation of such usage transformation. The cultural effects on SNSs are verified by exploring cultural differences in various communicative behaviors and attitudes, including social relationships, self-disclosure, anonymity, self-presentation, and privacy.

Chapter VI discusses findings on the basis of the theoretical framework and previous findings from research studies. Previous studies comparing nation-bound SNSs from two countries—despite few studies—have shown differences in SNS motivation and usage (Banczyk et al., 2008; Jung et al., 2007). Nevertheless, they do not shed light on what may underlie or even evoke such differences. This study proposes that cultural values are closely involved with their behaviors and attitudes. Also, this chapter integrates the main findings from separately analyzed communicative behaviors, using two methodologies, survey and content analysis, and then discusses theoretical implications from the integrated findings. The chapter concludes with limitations of the study and suggestions for further research on cross-cultural comparison of SNS use.

II. THEORETICAL FRAMEWORK

What is Culture?

There are two facets that are often used to define culture: a) something learned and shared by people who exemplify a common group identity regarding how they think, believe, and behave; and, b) something embodied through communicative behaviors (Geertz, 1973; Hofstede, 2001; Lustig & Koester, 2002). When it is considered that culture is something learned and shared by a group of people, then it might be possible that individuals may share a number of cultures as diverse as the number of groups to which they belong. Culture can also be defined at multiple levels, from the individual level to the national level.

For Geertz, who noted that "man is an animal suspended in *webs of significance* he himself has spun" (Geertz, 1973, p. 5), cultural analysis is not intended to identify objective laws. Instead, he suggests that such analysis is the study of meanings shared among members in a culture. The meanings are often interpretable within a particular context. Understanding how culture influences individuals might begin with an understanding of a person's immediate surroundings. This assumes the importance of observation at fundamental levels, including at individual levels—e.g., family or neighborhood context—or organizational levels—e.g., school and workplace. Although Geertz's perspective has the distinct advantage of focusing on a person's total cultural environment, it may, nonetheless, obviate understanding at a reductive, theoretical level since it makes culture so subjective that only micro-situations might be understood.

While Geertz' (1973) cultural outlook has emphasized low-levels of cultural effects on individuals' behaviors and attitudes, Hofstede (2001) ascends to a high-level

view of culture. Hofstede emphasizes the significance of national culture by exploring

cultural attitudes of members from a single multinational organization in 40 countries.

Since he proposed cultural dimensions at the national level in the 1970s, many scholars

have verified the effect of national cultures using his cultural dimensions (Gudykunst,

Yoon, & Nishida, 1987; Gudykunst & Kitayaman, 1986, 1987; Triandis, 1989, Triandis,

Bontempo, Villareal, Asai, & Lucca, 1988). This high-level culture clarified some aspects

of individuals' attitudes and behaviors that low-levels of cultural aspects could not

explain. Cultural dimensions that Hofstede proposed also contributed to framing cultural

aspects of individuals rather than leaving them to amorphous and subjective

interpretations. From Geertz, Hofstede, and others, it would be logical to assume that

individuals are influenced by multiple levels of culture, from individual levels to national

levels.

The evidence available has shown support for the Hofstede position but changes

in technology now confront this view. Recent research asserts that rapid globalization has

decreased the significance of national culture or its cultural dimensions (Schimmack,

Oishi, & Diener, 2005). The focus of this study is to examine if there is evidence that

globalization has homogenized group communication patterns, norms, and mores or if

cultural integrity has been maintained within social networks. Although it may be true

that a single, high-level of culture cannot completely clarify an individuals' cultural

milieu in contemporary society, this study proposes that it should not infer that national

culture is less significant. In fact, it may be paradoxical that nationalism continues while

globalization is touted. This could place many individuals into a culturally mixed

environment. It is noteworthy that SNS services have expanded but that they have mostly done so within particular nations or cultures.

Culture can be defined in ways that identify its characteristics. Culture can inform individuals and it can shape certain behaviors. To understand embedded and intangible culture, researchers have explored associations between actors' behaviors and attitudes and their cultural profiles. Actors' behaviors and attitudes disclosed through communication processes can become significant factors to conceptualize culture. Therefore, this study explores SNS users' behaviors and attitudes to understand the potential impact of culture and how it may have effects on SNS use.

Individualism-Collectivism

Hofstede (2001) categorized five cultural dimensions by analyzing massive data obtained from a survey of thousands of employees from a single multinational organization in 40 countries. The survey was conducted twice (1967 to 1969 and 1971 to 1973) and it identified the following dimensions: (a) *power distance*, which refers to how much members admit and accept that power is distributed unequally; (b) *uncertainty avoidance*, which refers to the degree of a society's tolerance for uncertainty and risk; (c) *individualism-collectivism*, which refers to the degree to which individuals are individual-oriented versus group-oriented; (d) *masculinity-femininity*, the degree to which 'masculine' characteristics, such as wealth, assertiveness, and accomplishments, are valued versus 'feminine' characteristics such as nurturance, relationships, and quality of life; and, (e) *long- versus short-term orientation*, which is associated with Confucian cultural values, such as thrift, perseverance, personal stability, and respect for tradition.

Among these five cultural dimensions, individualism-collectivism has been most frequently adopted by other researchers of intercultural and cross-cultural studies (Kirkman, Lowe, & Gibson, 2006)**.** This study adopts individualism-collectivism as a main cultural framework. Hofstede's cultural dimension has often been criticized due to the lack of research outside of organizational settings. In fact, the other cultural dimensions are less likely to be applied and verified beyond organizational settings, whereas individualism-collectivism has been adopted and explored in a wide variety of individuals' and interpersonal situations. Triandis, Gudykunst, and Ting-Toomey are leading scholars exploring and extending individualism-collectivism at the individual level as well as at the national level.

Although some criticism surfaced that Hofstede ignored diverse propensities of members in a nation, it is worthwhile to note that a series of studies (Gudykunst, Matsumoto, Ting-Toomey, Nishida, Kim, & Heyman, 1996; Hui & Triandis, 1986; Triandis, 1986, 1989; Triandis et al., 1988) have ultimately supported effects of national cultures. These studies did account for individuals' different attitudes within a nation and also made cross-cultural comparisons. Kirkman et al.'s (2006) meta-analysis evidenced that individualism-collectivism was more applicable in cross-cultural comparisons rather than within a single culture. By naming the high-level of cultural effects as 'predominant cultural attitudes of individuals,' Triandis (1989, 1995) attempted to encompass differences among members in a national culture. The notion of predominant cultural attitudes means that individuals have diverse levels of cultural attitudes in an individualism-collectivism continuum and their predominant cultural attitudes become highlighted when two contradictory cultural values clash. In the second edition of

Culture's Consequences (2001)[5], Hofstede analyzed and accepted works and theoretical suggestions of other researchers.

Schimmack et al. (2005) propose other issues relating to the application and measurement of individualism-collectivism. First, if individualism can be posited as positively related to economic development (Hofstede, 2001), then individualistic cultures may be promoted and extended. Since the 1970s when Hofstede proposed his cultural dimensions, many countries have shown rapid economic growth. This may partly account for recent studies that attempted to apply individualism-collectivism and which failed to show dependable convergent validity of national differences (Oyserman, Coon, & Kemmelmeier, 2002). Regarding measurement, Schimmack et al. (2005) suggest that differences of response styles across cultures and nations generate measurement bias, regardless of the conceptual validity of individualism-collectivism. They also uncovered that vertical/horizontal individualism and collectivism dimensions proposed by Triandis (1995)—which was suggested as a solution for such measurement bias—creates a negative effect to confound original individualistic and collectivistic cultural traits.

Despite these issues, those studies that analyzed recent research on individualism-collectivism ultimately acknowledged the value of individualism-collectivism to better understand national cultural differences. Despite some controversial areas, they include the influences of potential external factors, such as measurement bias or social economic changes, rather than denying the validity of individualism-collectivism as a cultural dimension.

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[5] The first edition was published in 1980.

This study adopts individualism-collectivism as a robust cultural dimension as asserted in previous studies. The controversial issues surrounding this dimension are considered when applicable as potential influences over individual and group behaviors.

According to Hofstede (2001), individualism is represented by autonomous and independent individuals who are more or less detached from a group (e.g., loosely tied to a group). Individual goals and needs commonly take priority over group goals and needs. In contrast, collectivism is defined as a focus on group interdependence and cohesiveness. In a collectivistic culture, individual goals and needs are likely to be subservient to or indistinguishable from group goals and needs.

There are two proverbs that respectively represent individualism and collectivism: "the squeaky wheel gets the grease" and "the nail that stands out gets pounded down" (Markus & Kitayama, 1991, p. 234). The squeaky wheel is a figurative expression for people who assert their rights and actively state their own opinions. That is, the proverb says that the louder one expresses one's own opinions and beliefs, the more benefits and attention one receives. On the contrary, the latter proverb contains the lesson that if a person goes against group harmony either in a positive or a negative way (e.g., an outstanding person or an obtrusive one), he or she will be criticized by group members. The person (the nail) that stands out should restrain and adjust themselves to group values and norms and strive to blend in.

As indicated in the proverb above, in individualistic cultures where individuals are accentuated, self-esteem and self-reliance are encouraged as desirable social values (Triandis, 1989). These individualistic cultural traits support people to make their own choices and decisions, pursue their own goals, and, in turn, feel proud of individual

achievement. Members of individualistic cultures do not make sharp distinctions between in-group members and out-group members, unlike those of collectivistic cultures. Instead, individualistic cultures consider it important to keep an independent and consistent individual identity, regardless of outside situations (Triandis et al., 1988). This orientation encourages individualistic individuals to develop and reward an individual-oriented focus.

In contrast, collectivistic cultures tend to identify individual attitudes with in-groups' norms, values, and goals. Accordingly, people in collectivistic cultures acquire a sense of achievement when they fulfill a group goal. Their competitors are usually out-groups rather than other individuals. In a similar vein, people believe that they represent their in-groups and that their behaviors reflect the reputation of their in-group (Triandis et al., 1988). If a person places his or her own goal above a group goal, then that individual could, in a particular culture, be criticized as a selfish person or a person like the nail that stands out. One product of collectivistic social values is to encourage a self-effacing attitude while conforming to group norms. Social values that emphasize that in-groups are central and individuals are peripheral lead to group-oriented attitudes.

Individualism and collectivism have been conceptualized not as dichotomous perspectives but as two extreme points on a continuum, meaning that our understanding of culture may flow between one and the other (Markus & Kitayama, 1991; Triandis, 1989). Therefore, individuals' cultural attitudes are often defined by the degree to which they admit and accept cultural values of each cultural dimension and, at the national level, that cultural attitude is flexibly determined by the proportion of members who exhibit consistency in cultural approaches toward one direction on the continuum.

There may be individual variation within cultures. With regard to supporting elderly parents, it is commonly anticipated that Korean people feel stronger responsibility than American people while assuming Confucian values in Korean society. However, there are also American people who willingly sacrifice parts of their individual lives to support their elderly parents. In this case, they may seek their own well-being or self-satisfaction based on their individual virtue rather than Confucian values. Regardless of Confucianism or individuals' virtue, it is certain that both cases reflect collectivistic attitudes while different national cultures still hold.

This study compares two different national cultures reflected on SNSs. Previous studies have identified American dominant cultural traits as individualistic and Korean cultural traits as collectivistic (Gudykunst et al., 1987; Hofstede, 2001). This study starts with those assumptions in mind. Yet, it also does not overlook that individuals may vary on the spectrum of individualism-collectivism within these cultures. As such, it measures cultural attitudes and behavior at the individual level rather than assuming country is a proxy for cultural attitudes.

Individual, In-group, and Out-group Relationships

Individualistic cultures center on individuals' needs in social relationships. Given individual interests, such individuals readily make new relationships with strangers. Triandis (1989) claims that members of individualistic cultures are more sociable than those of collectivistic cultures. Although members of individualistic cultures usually belong to certain social groups, they place an emphasis on independent entities and often meet others as individuals rather than group members. Socializing is not based on a group versus a group but based on an individual versus an individual or individuals. If

necessary, individuals readily create and attend new social groups and leave existing social groups. Therefore, affiliation provides information to identify an individual rather than representing his or her whole identity. Individuals can affiliate with numerous social groups not due to greater socializing skills when compared to those in individualistic cultures, but because members of collectivistic cultures affiliate with more loosely bounded group relationships.

In collectivistic cultures, individuals rarely stand alone and readily rely on affiliated groups. Group affiliation is more than personal information. It can represent an individual. That is, members of collectivistic cultures tend to define themselves as a group member rather than an independent entity. Consequently, they readily identify their personal goals or needs with those of groups or willingly sacrifice their own personal needs for the groups' needs. A notion such as a common fate, the judgment of who is in-group or out-group, is very important when embarking on social actions. Social interactions are often conducted as group activities among group members rather than as individual activities. As a result, socializing in collectivistic cultures is often limited within several groups. Otherwise, individuals would confront out-group members. These group-oriented cultural attitudes in collectivistic cultures tend to sharpen a boundary between in-groups and out-groups while members of individualistic cultures consider both individual relationships with others and group relationships more flexibly and loosely.

Since their socializing is mostly limited to in-groups, members of collectivistic cultures are less sociable and less involved with new social groups than those from individualistic cultures. As bound by a concept of common fate, in-group bonds in

collectivistic cultures are tighter and more stable than those in individualistic cultures. In-groups are mostly formed on the basis of lifelong ties, such as blood, school, and regional ties, rather than newly created social interactions by individuals. Early on, a workplace tie was an important lifelong tie in some Asian countries, including Japan and Korea. As the idea of a lifelong workplace has diminished with changes in economic environments, this may less be considered as an in-group tie. Thus, since in-groups are socially given rather than voluntarily created, their in-group relationships are more stable and lasting than those found in individualistic cultures.

There are several studies that demonstrate associations between these cultural values and their actual social relationships. Lewin (1984) demonstrates that members of individualistic cultures tend to classify their social relationships in more detail than members of collectivistic cultures. In his study, depending on personal intimacy levels, American participants classified their relationships as lover, boy-or girlfriend, best friend, close friend, chum, pal, colleague, and acquaintances. This can be contrasted with the classification of Japanese participants. They simply used three levels, in-groups, acquaintances, and strangers. For them, those who are within in-groups are more important than what specific relationships they have with others.

Chen, Brockner, and Katz (1998) verify that members of collectivistic cultures tend to perceive that in-group reputation is directly involved with their personal reputation and such a common fate perspective leads members to generate greater in-group favoritism. Conversely, members of individualistic cultures loosely bound to in-groups are less likely to exhibit in-group favoritism. These lower levels of in-group favoritism in individualistic cultures can be supported by individuals' flexibility in

joining and leaving groups. That is, they will more readily leave their groups if the groups do not positively influence their personal reputation more than members of collectivistic cultures because they may have less responsibility as a member of a common fate community.

Gudykunst and Nishida (1986a) demonstrate the influence of similarity on friendship formation. The perception of similarity, such as "like me," is positively correlated with friendships across cultures. However, members of collectivistic cultures require more than similarity, such as long-term relationships and concerns with welfare of one another, whereas members of individualistic cultures allow strangers who exhibit greater similarities with them to willingly be friends. That is, members of collectivistic cultures tend to expect long-term relationships as well as similarities before announcing friendships. The long-term relationships and concerns for group welfare can be defined by in-group boundaries.

Independent Self and Interdependent Self

These tight or loose in-group bonds may affect one's self-concept. Markus and Kitayama (1991) propose that individualism and collectivism are reflected through individuals' ways of perceiving the self and others. In individualistic cultures, people learn to perceive their selves as independent and autonomous entities. They are taught to maintain a consistent self-image that is separate from the social context and are encouraged to express the self, such as one's desires, preferences, and attributes. These cultural traits eventually foster an independent self, which has a clear boundary of the self from others and which is highlighted by social comparison with others.

In contrast, collectivistic cultures foster an interdependent self, which is "connected, fitted, and assimilated," to situations or contexts (Markus & Kitayama, 1991, p. 227). Internal attributions of interdependent self, such as abilities, opinions, and personality, are subordinated to specific contextual situations. In other words, the self is flexibly defined depending on which social roles are requested in specific social situations and is more likely to be accommodated to external conditions. For example, people construe their selves in the form of "I am very shy in front of a stranger" rather than "I am shy." The latter describes the self in a general situation. In contrast, the former describes the self in a specific situation and implies that the self is not shy in front of close friends and family. Thus, in collectivistic cultures individuals frequently identify the self with respect to specific social situations including relative others and perceive these situations and relative others as a part of the self.

Motivations of communicative behaviors differ depending on which self is emphasized more, independent or interdependent, across cultures. In individualistic cultures, people are motivated by self-esteem, achievement, and self-actualization and are encouraged to express ego-focused emotions, such as pride and frustration. On the contrary, in collectivistic cultures, people are motivated by group similarity and deference of group goals and also they are discouraged from expressing ego-focused emotions; rather, they are encouraged to express other-focused emotions, such as sympathy.

The highlighted and perceived self by cultural traits affects motivations of interactions, and, in turn, the articulated motivations and communicative behaviors (e.g., emotion expressions) reinforce the self-construal and self-perceptions.

The low-and high-context cultural dimension will now be reviewed and the following section will develop hypotheses and research questions specifically related to SNS behaviors.

<div align="center">High-and Low-Context Culture</div>

This study also draws on high-and low-context cultures, which Hall (1976) proposed as another major cultural dimension. The high-and low-context cultural dimension has been mainly adopted by cross-cultural researchers who explore communication styles across cultures (Gudykunst, et al., 1996; Ting-Toomey, 1988). High-context cultures are characterized by less verbally explicit communication and more reliance on internalized context. Members of high-context cultures tend to use more context-based (implicit and informal) information. The context is commonly assured by close and long-term relationships within group or national boundaries. These communication styles rely on context rather than explicit verbal information as parallel indirect communication styles. Silence is a good example of an indirect communication style. Members of high-context cultures often use silence to avoid directly saying "no" (Hasegawa & Gudykunst, 1998). The frequent use of qualifiers is also used to avoid a direct response. The members also tend to rely on rituals that can replace everyday contexts among close relationships when interacting with strangers or within formal relationships. Ting-Toomey (1988) addressed indirect communication styles and found that nonveral communication cues are preferred by members of high-context cultures more than those of low-context cultures. Nonverbal cues, including physical gestures and visual materials, tend to allow senders to express their opinions indirectly, compared to

verbal cues, and enable receivers to be more flexible in creating interpretations based on context.

On the other hand, members of low-context cultures commonly tend to believe that necessary information should be verbally explicit. Misunderstandings due to hidden information in context may not be the responsibility of listeners, while members of high-context cultures are often driven to feel such responsibility. Accordingly, speakers try to express every word verbally and explicitly and expect little or no ambiguity for those interpretations of their words. The members of low-context cultures more easily communicate with strangers who are in short-term relationships because they rarely have and use internalized context in their conversations, compared to those of high-context cultures (Hall, 1976).

Compared to individualism-collectivism, this high-and low-context cultural dimension has been adopted in a narrower context. Given that culture can be comprehensively embedded within individuals' thoughts, values, and behaviors, Hall's dimension explains only the behavioral pattern in a certain culture. It is occasionally associated with cultural values of individualism-collectivism to clarify why such a behavioral pattern is preferred in a certain culture (Gudykunst et al., 1996), yet is often confined to reveal different communication styles. The current study adopts this cultural dimension as one of its main cultural frameworks with the recognition that numerous prior studies have verified its validity as a measure of national cultures (Gudykunst et al., 1996; Kim & Papacharissi, 2003; Park, Zhang, & Ma, 2007; Okabe, 1983; Würtz, 2005). More recent studies have adopted this dimension to analyze web content rather than use

self-reported survey data. This may indicate that the cultural dimension is involved more with actors' actual behaviors than their perception.

This current study principally adopts the individualism/collectivism and low-/high-context cultural dimensions because these dimensions are most pertinent to explain a wide variety of aspects related to self-concept, relational issues, and communication styles. Moreover, there are many previous studies to define and verify Korean and American cultures using these two dimensions. According to the previous findings (Gudykunst, et al., 1987; Hofstede, 2001; Kim & Papacharissi, 2003), Korean culture is characterized as collectivistic and high-context, whereas American culture is characterized as individualistic and low-context. This study will re-measure the main samples' cultural orientation, while considering that culture could change even though it changes slowly, compared to personal/psychological phenomena and social structures (Schooler, 1998).

While the individualism/collectivism dimension facilitates an understanding of perceptions of the self and others and individuals' values, beliefs, and norms about the relationship of self to group, the low-and high-context cultural dimension articulates the differing communication styles of each culture. Low-context cultures are characterized by explicit and direct verbal expression. In comparison, high-context cultures are depicted as privileging implicit and indirect verbal expression (Ting-Toomey, 1988).

Hall (1976) states that people standardize what they pay attention to and what they ignore in interactions based on culture. In high-context cultures, much meaning is derived from one's given context or internalized understandings rather than being explicitly articulated or transmitted through verbal communication. Context refers to the

background and circumstances where a communication event occurs. Context is commonly assimilated through previous interactions and relationships. A long-term relationship between two communicators heightens mutual knowledge of each other, such as habitual gestures and communication backgrounds, which is hidden within their knowledge rather than being articulated.

Context plays a role in characterizing communication styles. Given high-context communication styles, communication codes in the absence of context can be incomplete and, accordingly, common experiences and understanding among communicators are often requested. On the contrary, in low-context cultures, meaning is more reliant on external information and rules than on internal information. Accordingly, information and meaning in conversations are applicable to any situation and translatable across contexts. Low-context communication styles allow total strangers to participate in conversations with less incongruity. Hall (1976) illustrates communication styles in low-context cultures by figuratively exemplifying conversations between two lawyers in a courtroom during a trial. This example indicates the great deal of information that is verbally elicited to transmit a message well.

According to the study of Gudykunst and Nishida (1986b), members of high-and low-context cultures exhibited different patterns of attributional confidence, which was measured by respondents' certainty of their partners' behavior, values, preferences, attitudes, feelings, and responses. Members of low-context cultures significantly increased attributional confidence of the partner through frequency of communication compared to those from high-context cultures. To the contrary, social background information of the partner, such as overlap in social network, interaction with others'

friends, and percentage of free time spent with others, is significantly correlated with high-context cultures. Regarding these results, Gudykunst and Nishida concluded that members of high-context cultures tended to reduce their uncertainty of partners by using indirect information, i.e., social information. That is, they sought family and school background to get to know the partner rather than asking personal information directly. Meanwhile, members of low-context cultures relied more on direct personal information for uncertainty reduction. Therefore, greater self-disclosure through frequent communication was found to be positively related to uncertainty reduction or attributional confidence.

Yum (1987) introduces *i-sim jun-sim* as a representative example of Korean indirect communication styles. *I-sim jun-sim* may be translated into telepathy, yet it implies something more than telepathy. It does not occur due to a super power but relies on an understanding of a comprehensive social context between two persons. That is, if two conversational partners can communicate through *I-sim jun-sim* without verbal information, it means that the two persons share a great amount of social context.

While *I-sim jun-sim* shows a use of silence among people who share social contexts in Korean communication styles, Okabe (1983) claims there is value in silence and its use to avoid conflicts in Japanese communication styles. According to Okabe, culturally diverse and heterogeneous American society tends to request higher levels of verbal skills. A desirable leader is a person who has good ability with verbal expression. By contrast, the more culturally homogeneous Japanese society tends to seek group harmony by avoiding confrontation. A desirable leader is not a person who has stronger

verbal skills but a person who improves group harmony with an unspoken charisma. The positive value of silence is also shown in Korean culture.

I-sim jun-sim, in fact, was originated from Buddhist scriptures and in Japan also has the same meaning, "*ishin-denshin*." The similar pronunciations of these might be traced to their use of the same Chinese characters. In fact, the virtue of silence had been emphasized by Chinese philosophy, Confucianism. This origin of the virtue of silence indicates that, in East Asia, high-context cultural styles are often related to traditional philosophy, such as Buddhism and Confucianism.

Although indirect communication styles were usually assessed as one of high-context cultural traits, such styles in fact have been universally used all over the world for politeness (Yum, 1988). Hence, we may conclude that members of high-context cultures more often adopt and prefer indirect communication styles than members of low-context cultures.

Ting-Toomey (1988) suggests the use of indirect communication styles with regard to facework. Face is "the positive social value a person effectively claims for himself by the line others assume he has taken during a particular contact" (Goffman, 1959, p. 213) and "a projected image of one's self in a relational situation" (Ting-Toomey, 1988, p. 215). Facework refers to the attempt to protect face both of self and others (Goffman, 1959).

During interactions, people attempt to protect their face and/or the face of others. According to Ting-Toomey and her colleagues (1988; Cocroft & Ting-Toomey, 1994), there are differences in facework between high-and low-context cultures. Members of high-context cultures are highly concerned about self-face and other-face (mutual face

preservation), whereas members of low-context culture are more likely to be more interested in saving their own face than the face of others. As a result, members of high-context cultures are more likely to adopt indirect and non-confrontational communication styles. On the contrary, members of low-context cultures are more concerned with clarity of communication and thus prefer direct, more confrontational communication styles.

For example, in a situation where one should say "no" in order to save one's own face, members of low-context cultures often tend to choose explicitly to say "no," whereas those of high-context cultures readily hesitate saying "no." They may save their own face by saying "no," yet they are also concerned about the embarrassment of the partner when listening to "no." As a result, members of high-context cultures rely on indirect communication styles. In doing so, they may not need to say "no," but the partner may understand the rejection.

In high-context cultures, silence can be an expression in an indirect way implying 'no' or 'I disagree,' whereas in low-context cultures, it may be a disruptive pause, break, and gap (Hasegawa & Gudykunst, 1998). Therefore, in low-context cultures, to directly say "no" may be more desirable.

Direct and indirect communication styles are readily replaced as a sub-dimension of high-and low-context cultures (Gudykunst & Ting-Toomey, 1992). Direct verbal style refers to "verbal messages that embody and invoke speakers' true intentions in terms of their wants, needs, and desires in the discourse process" (p. 224). According to Okabe (1983), using the absolute "I" in English is intended to articulate and predicate a subject of a sentence. Also, members of low-context cultures are more likely to use categorical words, such as "absolutely," "certainty," and "positively." Comparatively, indirect verbal

style refers to verbal messages in which speakers' intentions are concealed between the lines. Members of high-context cultures often drop off the subject to designate themselves and are more likely to rely on qualifiers, such as "maybe," "perhaps," "probably," and "somewhat" (Okabe, 1983). These indirect verbal styles often typify self-effacing attitudes, especially in East Asia.

In the next section, the current study applies these cultural values, norms, and traits to specific communication behaviors and relevant attitudes, including social relationships, self-disclosure, anonymity, self-presentation, and privacy. The next section will also include hypotheses and research questions. In doing so, this study explores understandings of the attitudes and behaviors of users who have culturally different backgrounds through SNSs.

III. LITERATURE REVIEW

boyd and Ellison (2007) define SNSs using principal characteristics of the SNSs including their ability to allow users to create online profiles and display friends on one's friends list. SNSs also include others' comments and pictures posted by both authors and visitors. Recently, SNS services have attached additional applications for self-expression and for online interactions. This chapter reviews relevant literatures dealing with the interaction of SNS characteristics with cultural differences.

Forming Relationships on SNSs

On SNSs, target audiences are made salient through friends lists. Users are connected with their friends through their network and repeatedly interact with them on the SNS. This study notes characteristics of the target audiences on one's friends. boyd (2006) points out that users on SNSs—specifically, Friendster and MySpace in the study—tend to distinguish "friending" on the sites from their actual friends. Users sometimes accept others' friend requests to save face. They tend to believe that rejecting a friend's request costs more than accepting it. Such a usage tendency is also verified on Facebook and Cyworld (Ellison, et al., 2007; Kim & Yun, 2007).

Despite this universal tendency on SNSs, this study assumes that friends lists on SNSs exhibit distinct inclinations across national cultures based on my pilot study. As previously noted, members of collectivistic cultures are closely involved with their in-group members, and, concomitantly, they are relatively disinterested in out-group members. Triandis (1989) designates that members of collectivistic cultures tend to form tight and intensive in-group relationships. Such in-groups narrow their size and numbers. In contrast, members of individualistic cultures are more likely to be independent from

in-groups, and freely affiliate and withdraw their relationships depending on their

individual preferences (Triandis, 1989; Triandis et al., 1988). They also prefer forming

new relationships rather than staying confined to existing relationships.

These cultural traits—in-group emphasis and individual emphasis—may be

reflected in friending on SNSs. For example, since people from collectivistic cultures

reach an agreement of exclusive in-group relationships, visitors who perceive themselves

as members of an in-group shared with the owner would request friending through SNSs

more than visitors who do not. boyd (2006) contends that friend requests occur in various

types of relationships not limited to existing relationships. For example, users of

MySpace and Friendster invite music bands, celebrities, and people who have 'cool'

profiles. It is not because they are users' real friends but because users intend to improve

their impression through 'cool' friends lists. In Facebook, users sometimes request a

friend connection to their professors. However, the professors are not their friends. Top 8

in MySpace is not usually composed of one's top eight best friends but composed of

people who are on a user's list of friends and who uploaded the user's name on Top 8 in

their MySpaces. Some users on SNSs distinguish their actual friends from online friends

on the list of friends (boyd, 2006).

By contrast, users of Cyworld are sensitive to the title, *ilchon*, which entitles one's

friends list and which is originally derived from the Korean kinship scheme. In the

Korean kinship scheme, Ilchon (1-chon) refers to the relationship between parents and

children, 2-chon to the relationship between grandparents and children, and 3-chon to the

relationship between aunt/uncles and nephew/nieces. By using the term, *ilchon*, which

refers to the closest kinship, instead of friends list, Cyworld heightens the incentive for

users to continue personal interactions with friends on their friends lists online. Users may heighten their accountability for friending on Cyworld due to the metaphor of blood ties (Kim & Yun, 2007). The metaphor serves to accentuate in-group ties in Korean collectivistic culture.

The accountability for friending on Cyworld induces frequent interactions through *ilchon tours*, in which one regularly visits one's *ilchon* friends' Cyworlds, and return visits, which refer to visits to respond to a friend's visit. These visits are accompanied by reciprocally suitable responses. A lack of responses may be regarded as insincerity of relationships (Kim & Yun, 2007). Thus, relationships and interactions in Cyworld are closely related to actual relationships. Relational tensions in the offline world are duplicated in Cyworld.

French, Bae, Pidada, and Lee (2006) explore the cultural differences in friendship when comparing college students from three countries: the United States, South Korea, and Indonesia. Their findings show that Korean students had the longest lasting friendships, the smallest group size, and the strongest exclusivity of in-group. These findings support previous research that in-group bonds in collectivistic cultures exhibit smaller and more stable in-group bonds than in individualistic cultures (Triandis et al., 1988). Based on the above research, this current study hypothesizes:

H1a. Users from individualistic cultures are likely to have more friends on their SNS friends lists than users from collectivistic cultures.

H1b. Users from collectivistic cultures are likely to have more intimate SNS friends (on average) than users from individualistic cultures on their SNSs.

Self-Disclosure in SNSs

Definition and Dimensions of Self-Disclosure

      Self-disclosure refers to personal information that one conveys to another and plays an important role when developing interpersonal relationships (Collins & Miller, 1994; Wheeless, 1978). One of the most prominent theories in this regard is Altman and Taylor's (1983) social penetration theory, which explains how people form close relationships by disclosing their selves gradually and by stages, from less intimate information to making "more personal aspects of their lives accessible" (p. 6). That is, in social penetration theory, the gradual process of self-disclosure is a core concept to build close relationships through interpersonal interactions.

      According to Altman and Taylor[6] (1983) there are two dimensions of self-disclosure: breadth and depth. Breadth of self-disclosure refers to frequency and timing of self-disclosure. While creating and maintaining relationships, people spend more time disclosing their selves continually. The breadth of self-disclosure increases with relationship development and consequently leads to an increase in intimacy. Depth of self-disclosure refers to the degree of intimacy when disclosing self. Information about the self changes from general to more personal, even vulnerable information while moving to the next stage of relationship development. Wheeless and Grotz (1976) propose duration of self-disclosure as another basic dimension of self-disclosure. Since the duration dimension refers to the amount of time spent disclosing, it may overlap with the breadth of self-disclosure (Wheeless & Grotz, 1976). In fact, following researchers have adopted other self-disclosure dimensions by fractionalizing. Breadth of self-

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[6] Their first edition was published in 1973.

disclosure can be fractionalized into two dimensions, duration and amount. Relying on communication goals, intentionality, honesty, and balance of positive/negative information have been measured as self-disclosure dimensions (Gibbs, Ellison, & Heino, 2006; Wheeless, 1978; Wheeless & Grotz, 1976).

Reciprocity is another influential attribute of self-disclosure (Collins & Miller, 1994; Laurenceau, Pietromonaco, & Barrett, 1998). If person A discloses the self to person B, the self-disclosure of person A provokes self-disclosure of person B. Unequal reciprocal exchanges are regarded as damaging to norms of reciprocity and, in turn, the social penetration process becomes a weakened communication behavior, which is not able to reach relationship development.

On SNSs, self-disclosure is commonly revealed through online profiles to attract the attention of online friends and random visitors (Christofides, Muise, & Desmarais, 2009). Previous studies have shown that SNS users exhibit a greater amount of self-disclosure despite their higher levels of privacy concern (Acquisti & Gross, 2006; Stutzman, 2006). More recently, Christofides et al. (2009) proposed that self-disclosure on SNSs tended to correlate less with privacy concerns.

The current study posits that cultural differences influence users' communication behaviors on SNSs and that this is partly evident from their degrees of self-disclosure. Ma (1996) conducted an intercultural study with research subjects who were American and East Asian students from China, Japan, Hong Kong, Korean and Taiwan. It was found that there were differences across cultures in the reasons provided for self-disclosure between CMC interactions and face-to-face interactions. Face-to-face interactants usually self-disclose more corresponding to the degree of relationship

closeness, whereas CMC interactants tend to increase self-disclosure to strangers in the absence of a commitment to close relationships. Ma also poses a future research question that a greater amount of self-disclosure without serious commitment can promote intimacy of relationships across cultures. That is, he acknowledges the necessity to explore cultural differences in self-disclosure in CMC settings. This study seeks its answer through a cross-cultural exploration of self-disclosure on SNSs.

Cultural Differences in Self-Disclosure

Individualism-Collectivism. As discussed earlier, individualistic cultures are more likely to emphasize individual autonomy and foster self-esteem and self-reliance, whereas collectivistic cultures are more likely to educate individuals not to stand out but to fit in and adopt group norms and goals. Teachings regarding this are salient in collectivistic cultures of East Asia where people have learned moderation based on Confucianism (Hofstede & Bond, 1987; Yum, 1988), which encourages individuals to be self-effacing and to restrain their individual desires and opinions to avoid conflicts with other in-group members.

Such teachings influence self-disclosure in collectivism, regardless of its communicative role to develop relationships, in that self-disclosure could have a negative impact on self-effacing attitudes and could elicit conflicts with others. Ting-Toomey (1988) argues that less self-disclosure in collectivistic cultures is attributed to a higher level of other-face concern, which refers to support of others' face saving. Excessive self-disclosure could damage face of relevant others while exposing vulnerable personal information in face-threat situations. The less information is disclosed, the smaller the chances of damaging the face of relevant others. Conversely, members of individualistic

cultures exhibit more concern with self-face—self-face protection—and are less concerned about others' face when expressing the self. Members hardly need to negotiate their facework with others because their facework is regarded as "an intrapsychic phenomenon" (Gudykunst, Ting-Toomey, & Chua, 1988), which reflects individuals' internal states. There are no role obligations based on group identity when saving one's face. Rather, members of individualistic cultures have been encouraged to express positive aspects of the self, which may be a way to save self-face.

Previous research has shown that people from individualistic cultures disclose themselves more than those from collectivistic cultures. Chen (1995) compared American and Taiwanese college students regarding levels of self-disclosure. In his study, American respondents tended to exhibit higher levels of self-disclosure on topics (e.g., opinions, interests, work, financial issues, personality, and body) and to target persons (e.g., parents, strangers, acquaintances, and intimate friends) than Taiwanese respondents. Ma (1996) asked American students to report how they perceived both their own and their partners' self-disclosure after communicating with their partners from East Asian countries in two different settings, CMC and face-to-face. Although American students perceived that both they and their partners from East Asia exhibited a greater amount of self disclosure in CMC interactions than in face-to-face interactions, American students also perceived that their partners exhibited relatively lower levels of self-disclosure than they did.

These results however are limited to general situations unrelated to serious commitments and close relationships. Given close relationships, especially in-groups, members of collectivistic cultures tend to exhibit more intimate self-disclosure than

members of individualistic cultures. In the study of French et al. (2006), Korean students

disclosed themselves more in interactions with friends than American students. Wheeler,

Reis, and Bond (1989) also demonstrated that Chinese students showed group

interactions—as a group member—more often than American students. As Ma (1996)

indicates, self-disclosure in individualistic cultures often plays a role as an icebreaker in

initial interactions. That is, a greater amount of self-disclosure can readily occur without

intimacy. In collectivistic cultures where in-group interactions are salient compared to

those with out-groups, self-disclosure is discouraged in initial stages. Unlike the case of

group interactions, Wheeler et al. (1989) found that in partner interaction (as an

individual), American students participated in interactions more than Chinese students.

That is, members of collectivistic cultures rarely disclosed themselves as an individual

apart from a group. This cultural difference in self-disclosure can be associated with

socializing. Members are good at socializing in individual cultures where a greater

amount of self-disclosure among strangers occurs than in collectivistic cultures (Triandis,

1989). Regarding self-disclosure, therefore, members of individualistic cultures display

higher levels of self-disclosure and interactions regardless of in-and out-group members,

whereas members of collectivist cultures are more likely to self-disclose within their in-

groups.

Such self-disclosure to in-groups in collectivistic cultures exhibit higher levels of

intimate information because it occurs among close relationships. Wheeless, Erickson,

and Behrens (1986) demonstrated that American students showed greater amounts of

self-disclosure and low levels of depth of self-disclosure than international students from

non-Western cultures. This research explored diverse dimensions of self-disclosure, such as amount, intention, valence, depth, and honesty.

Strong in-group bonds in collectivistic cultures may be related to a greater depth of self-disclosure. People from collectivistic cultures perceive higher levels of similarities with their in-group members (Gudykunst & Nishida, 1986a). They also exhibit more intimate and harmonious communication attitudes toward their in-group members than do those from individualistic cultures (Gudykunst et al., 1987). These communication attitudes may facilitate intimate self-disclosure, entail reciprocity effects of self-disclosure, and, in turn, heighten intimacy of relationships.

There are a limited number of cross-cultural studies of self-disclosure in CMC (Kim & Papacharissi, 2003; Yum & Hara, 2005). Kim and Papacharissi compared homepages in US Yahoo! and Korean Yahoo! and showed that American users disclosed themselves more than Koreans through their homepages and that this was consistent with findings in face-to-face interactions. Yum and Hara (2005) also reported that Americans were more likely to disclose personal information than Koreans in a CMC setting. In fact, Yum and Hara (2005) expected that Korean users exhibited higher levels of intimate self-disclosure than American users in an online community because the researchers regarded an online community as an in-group bond. An opposite result to this expectation may indicate that an online community is not replaced with physical in-group bonds in that members are mostly composed of people who were not supported by existing social ties (family, school, and regional ties).

This study attempts to establish that SNS settings differ from general online community settings. Online communities are more likely to be composed of members

unknown to each other in the physical world, whereas the majority of SNS friends are known members based on actual offline relationships. Therefore, if relationship intimacy is involved in SNS self-disclosure, it will not differ from previous findings in face-to-face settings. That is, cultural differences in self-disclosure in face-to-face settings should be reproduced in the SNS setting.

In sum, members of in-group collectivistic cultures apparently retain different attitudes toward self-disclosure. Members of individualistic cultures tend to self-disclose in accordance with relationship development stages. Self-disclosure on SNSs can be presupposed in two different conditions: a) self-disclosure as an icebreaker on SNS profiles that anyone can access; and, b) intimate self-disclosure among close relationships evident in SNS content where accessibility can be limited by privacy settings.

Drawing on previous studies (Chen 1995; Kim & Papacharissi, 2003; Wheeless et al., 1986; Yum & Hara, 2005) and considering two different conditions on SNSs, this study hypothesizes that members of individualistic cultures tend to exhibit a greater *amount* of self-disclosure than those from collectivistic cultures on their SNSs. Also, it is assumed that people from collectivistic cultures tend to exhibit greater *depth* of self-disclosure on SNSs than those from individualistic cultures.

> H2a. Users from individualistic cultures tend to exhibit a greater amount of self-disclosure than users from collectivistic cultures on their SNS profiles.

> H2b. Users from collectivistic cultures tend to exhibit a greater depth of self-disclosure than users from individualistic cultures on their SNSs.

High-and Low-Context Cultures. Given that users convey what they want to show and how they want to be perceived through their SNSs, their communication styles will be revealed through their communication behaviors and the posted content. This study

posits that high-and low-context communication styles are associated with users'

behaviors and attitudes on their SNSs. Further, it postulates that cultural differences

among users are articulated through the different communication styles. Previous

research has shown that high-and low-context communication styles are reflected in

CMC settings as well as face-to-face interactions although there have not been many

studies in this area.

By comparing Geocities homepages in US and Korean Yahoo!, Kim and

Papacharissi (2003) verified that American authors of personal homepages used direct

communication styles more and Korean authors relied on indirect communication styles.

In their study, indirect communication styles included inter-links, animation effects, and

associations with certain online groups. American authors articulated their identities, such

as their ethnicity and residence, by displaying all their information through text. They

also used still pictures to explicitly reveal their visual identities. Korean authors posted

more nonverbal information or images, such as moving pictures, cartoons, and their own

manipulated photos, rather than their own personal information. They also expected

readers to get information through other relevant web sites instead of offering all

information on their homepages.

These direct/indirect communication styles are reflected on other commercial web

pages as well. Würtz (2005) found that McDonald's websites from Denmark provided a

detailed outline of the rest of the website by using many intra-links, headings,

subheadings, and illustrations on the front page. She claimed that these direct expressions

increased transparency of information on the webpage. In contrast to the McDonald's

websites from this low-context culture, Japanese McDonald's main page was composed

of a limited amount of text and a large image. A visitor hardly acquired enough information until he/she performed mouse-overs on the sparse text or the large image.

Thus, these cross-cultural studies show that websites from high-context cultures are more likely to use indirect communication styles, such as graphics, animations, and inter-hyperlink, whereas websites from low-context cultures are more likely to use direct communication styles. For example, they articulate all information by using text and, further, by using intra-hyperlink to provide detailed information (Kim & Papacharissi, 2003; Würtz, 2005). Accordingly, this current study hypothesizes that users from high-context cultures use more indirect communication styles than users from low-context cultures in revealing themselves through SNSs.

> H3a. Users from high-context cultures tend to use more indirect communication styles to disclose the self on their SNSs than users from low-context cultures.

> H3b. Users from high-context cultures tend to rely on nonverbal information more, whereas users from low-context cultures tend to rely on verbal information more in their SNSs.

Online Anonymity in SNSs

Previous CMC studies have shown that, just as in face-to-face interactions (Rubin, 1975), anonymity affects self-disclosure in CMC interactions. Further, research demonstrates that online anonymity draws even higher levels of self-disclosure in CMC interactions than self-disclosure in face-to-face conditions (Bargh, McKenna, & Fitzsimons, 2002; Joinson, 2001; Kam & Chismar, 2002; Tidwell & Walther, 2002). Bargh et al. (2002) show that people disclose their true selves more after interacting with their partners in CMC than after interacting in face-to-face. Their finding suggests that online anonymity facilitates the disclosure of true selves among new acquaintances and such self-disclosure facilitates the formation of intimate relationships. Bargh et al. also

argue that honest self-disclosure under online anonymity gives rise to a positive image of interactants and, ultimately, leads to the formation of intimate relationships.

These previous studies of self-disclosure in CMC mainly presuppose that CMC environments are fully anonymous and non-identifiable, compared to face-to-face environments. However, changing CMC environments allow users to manage various levels of anonymity and/or identifiable information. That is, users have more options regarding what types of personal information that they conceal or reveal and to what degree they do so. Such flexible anonymity control leads this study to examine how SNS users manage their anonymity depending on their cultural orientation.

Anonymous (1998) defines anonymity in terms of whether or not a message source is known and suggests that the definition of anonymity is related to the degree to which both senders and receivers perceive message sources as unknown and unspecified. There are two different types of anonymity, visual and discursive anonymity. Visual anonymity refers to whether or not receivers see a message source (a sender). Discursive anonymity refers to a message in the absence of verbal information about the source. This study adopts Anonymous' definition of anonymity and it deals separately with anonymity in terms of its types: visual and discursive.

Recent CMC environments have facilitated the use of visual tools, such as still pictures and video materials. These tools vary in visual anonymity. Users can control the levels of their visual anonymity depending on how to use the visual tools. The degree of discursive anonymity is also controllable in CMC interactions. When posting a message, a user can keep his/her discursive anonymity by omitting his/her name. These anonymities in CMC not only rely on users' intentions but also are controlled by

particular media. For example, Cyworld users are forced to identify themselves by showing their real names in public. This enforcement of identification was taken to protect users from anonymous attackers in 2005.

Levels of anonymity vary on a continuum from non-anonymous to fully anonymous depending on perceptions of senders and receivers (Anonymous, 1998). For example, using a real name, a pseudonym, or no name can differentiate the degree of anonymity perceptions (Scott & Bonito, 2006). Pseudonymity is another type of anonymity because it provides a fictitious message source rather than the presence or absence of message source (Anonymous, 1998). In addition to discursive anonymity, visual anonymity ranges on a continuum from identifiability to anonymity—such as posting actual photos, partial actual photos, obviously fake photos, non-obviously fake photos, and no photos (Qian & Scott, 2007).

Receivers can accept or try to identify anonymous sources (Anonymous, 1998). Anonymous proposes that receivers are more likely to accept a message source (a sender)'s anonymity, when perceiving low risk or threats from the message source. There are other factors for receivers to perceive anonymity about senders: (a) increased knowledge of identity information of senders; (b) previous interactions with senders; and, (c) the potential for future interaction with senders (Rains & Scott, 2006). Rains and Scott also suggest that receivers have more confidence about identifiability of senders when synchronously communicating with senders, such as face-to-face and online chatting, when recognizing senders' reduced controllability to message construction, and, when perceiving the presence of a third party with information about the senders' identity. Thus, receivers can perceive senders' anonymity in a variety of ways. The receivers who

suspect the identifiability of senders regardless of disclosed information paradoxically

may influence the senders' anonymity behaviors. Rains and Scott (2006) indeed claim

that receivers' perceptions of senders' anonymity may be more important than senders'

actual reasons or motivations for anonymous communication within particular

interactions. Therefore, it may be assumed that the presence of receivers, both known and

unknown, affects the sender's perception of their own anonymity to receivers.

In addition, the receiver's anonymity to the sender affects the sender's

communication behaviors. On SNSs, users have two types of audiences, known and

unknown (Acquisti & Gross, 2006; boyd, 2007a, 2007b). If the audience is known, users

readily create their own strategies to present the self, while more or less giving up being

anonymous. If the audience is unknown, users may control their anonymity depending

first on their motivations and expectations. For example, if users welcome contact with

strangers, users may provide identifiable information more than those who do not. In this

case, information might include tastes, self-descriptive information, photos, as well as

demographic information because users may expect people who have similar tastes and

personalities to contact them. If users would like people who already know them offline,

rather than random strangers, to contact them, users would provide the least amount of

information as possible to identify themselves. Thus, the degree of anonymity on the

front page can indicate users' motivation to make friends on SNSs.

Ever-changing CMC environments allow the researcher to explore anonymity in

diverse ways. This study focuses on how cultural attitudes influence users' behavioral

anonymity strategies on SNSs. The next section attempts to identify the cultural

implications of anonymity behaviors.

Cultural Differences in Anonymity

     Individualism-Collectivism. The preference of anonymity in collectivism relates to social relationships. According to Triandis (1989), members of collectivistic cultures are not good at making friends with out-group members, whereas members of individualistic cultures more easily create new relationships. Members of collectivistic cultures tend to stay in preformed in-group boundaries, such as family ties, ties from the same birthplace, or school ties. Collectivism requires people to make efforts not to create in-groups but to maintain in-groups. Such dependence on involuntary in-groups is connected with hesitance of self-disclosure and preference of anonymity toward strangers. While evading self-disclosure, which plays a crucial role in the initiation of social relationships, members of collectivistic cultures tend to rely on preformed in-groups, of which members already know one's personal information. Additionally, they prefer being anonymous to strangers as much as their disinterest in making new relationships.

     Previous research also indicates the preference of anonymity in collectivism engaging in a desire of affiliation (Morio & Buchholz, 2009). Members of collectivistic cultures are more reluctant to stand out and, instead, prefer to hide behind a group identity, while highlighting their affiliation to a group. The concealed self relates to an anonymous self. On the other hand, in individualistic cultures, the desire for autonomy impels people to disclose their unique identity. Constructing a more explicit self-identity, therefore, is necessary to highlight oneself. This point relates to self-effacing attitudes in collectivism and encouragement of self-esteem in individualism.

     In a similar vein, Karwowski (2001) notes that the Japanese, who are generally more collectivistic, tend to express their opinions more readily when anonymously using

groupware (GDSS) than when they are identified, in particular, while in front of their supervisors. They usually avoid speaking up and objecting to other opinions directly. Such an attitude is similar to the attitude that people hide a unique self-identity behind a group identity. Members of collectivistic cultures do not want to be recognized among other members even when suggesting a great idea. They want to contribute their opinions as a group member, not as an individual. As a result, they feel more reassured when being anonymous. Members of individualistic cultures, on the contrary, want to show their outstanding contributions. Such an attitude is supported by individualistic cultural values that emphasize the external expression of self-esteem. Thus, previous research has shown that anonymity encourages members of collectivistic cultures to disclose their personal opinions in public because anonymity facilitates activities as a group member rather than as an individual.

These cultural implications of anonymity behaviors on SNSs can lead to two assumptions. First, in collectivistic cultures anonymity on one's SNS front page or profile page may reduce unexpected contacts. On the other hand, it may encourage the user to self-present more positively and even more aggressively, while consciously or unconsciously evading one's identity as an individual. Individualistic cultural values may place an emphasis on other aspects. These functions of anonymity may be utilized depending on where predominant cultural values place their emphasis. Accordingly, this study hypothesizes the following:

> H4. Users from collectivistic cultures will display more anonymity on their front page than users from individualistic cultures.

High-and Low-Context Cultures. Previous research has shown that members of low-context cultures are more likely to rely on verbal information than members of high-context cultures and members of high-context cultures are more likely to prefer nonverbal information to convey their messages (Würtz, 2005). These cultural differences reflect direct/indirect communication styles (Gudykunst & Ting-Toomey, 1992). Members of low-context cultures tend to be more willing to write out information to transmit clarified messages, whereas members of high-context cultures may allow omission if context can replace the omitted parts. Understanding between interactants of omitted parts of messages represents social bonds between them.

This study poses the question of how people perceive and control their anonymity. That is, what information are they concerned with in terms of being anonymous? As indicated earlier, anonymity in social interactions depends on anonymity perception of both the sender and the receiver rather than being absolute full anonymity (Rains & Scott, 2006). If there is cultural consensus between the two interactants on anonymity and/or identifiability, it may be associated with communication styles that the two interactants culturally share. Members of high-context cultures, who are more likely to rely on nonverbal information, may control visual information rather than discursive information, while perceiving an effect of visual anonymity rather than discursive anonymity. Members of low-context cultures would be expected to be the opposite. Despite cultural indications of communication styles, there is no empirical research about cultural differences in anonymity. Accordingly, this study suggests a question rather than a hypothesis:

> RQ1. Are cultural differences evident in the use of visual versus discursive anonymity on SNSs?

Self-Presentation in SNSs

Self-presentation refers to how a communicator controls information about the self to make a good impression (Schlenker & Pontari, 2000). It reflects how a communicator wants to look to others. Goffman (1959) describes people as actors who, just like in a theater, play various roles on the stage of life. People on the stage perceive audiences' views and make efforts to conduct appropriate roles that audiences expect. Thus, self-presentation is a goal-driven social behavior, which is caused by awareness of audiences in specific situations. Actors do not disclose all information about the self and, instead, they control what information they disclose or not, depending on their purposes; such as saving face (Goffman, 1959), managing impressions (Buss, 2001; Goffman, 1959), and controlling their relationship with audiences (Jones, 1990). The more obvious the purpose of impression management is, the stronger the motivation for self-presentation.

According to Goffman, people present the self while interacting with others, through expressions given, which are "the deliberately stated messages indicating how one wishes to be perceived," and through expressions given off, which are "the much more subtle—and sometimes unintentional—messages communicated via action and nuance" (p. 9). Expressions given are under an actor's control, whereas expressions given off can be seen as out of one's control. An actor can intentionally compose messages, but he/she cannot as easily control gestures during interactions. Expressions given off, however, are able to be controlled when a receiver cannot see the actor, such as in CMC environments because expressions given off are commonly transmitted by visual cues.

Given that expressions given off commonly are leaked through visual cues, such as facial expressions, eye contact, and gestures, the CMC environment allows for less unintentional nonverbal leakage. Thanks to these advantages, people may prefer CMC interactions when facing embarrassing situations (O'Sullivan, 2000) and when hiding undesirable aspects of the self (Schau & Gilly, 2003). The absence of expressions given off in CMC interactions facilitates selective self-presentation (McKenna & Bargh, 2000; O'Sullivan, 2000; Schau & Gilly, 2003; Walther, 1996).

In this regard, Walther (1992, 1996) proposes that people take advantage of visual anonymity in CMC interactions. Thanks to visual anonymity, actors could control all kinds of information and consequently they could more easily conduct selective self-presentation and attach positive images to their real ones. However, SNS circumstances do not shield users under full anonymity. Most users participated in SNS activities with their identified self. Dissimilar to predating online interactions, the identified self on SNSs confines the benefit of selective self-presentation. Receivers already know the actors and can easily compare between the online and offline selves. Actors may find it difficult to construct online persona away from the actual self and, consequently, they may take similar strategies of self-presentation to those in face-to-face, as predicted by the effect of anticipated future interaction. In their study of self-presentation in an online dating setting, Gibbs et al. (2006) found that users were more likely to self-disclose in a realistic manner. Honest self-disclosure also proved detrimental in feeling they were able to make a good impression.

Although SNS circumstances tend to discourage selective self-presentation unlike those predating CMC interactions, they also provide other advantages. Buffardi

and Cambell (2008) point out that there are two ideal aspects of self-presentation: a) narcissism is more easily heightened among superficial relationships than among intimate and committed relationships; and b) SNS pages are highly controlled by users. That is, self-presentation on SNSs is encouraged by superficial relationships and by users' absolute authority to control all kinds of content on their SNS pages.

Some researchers explore internal characteristics of self-presentation. According to the study of Buffardi and Cambell (2008), SNS users who exhibited a high level of narcissism—which was evaluated by readers who visit the SNS page—disclosed personal information and actively interacted through Facebook more than those who did not. Stefanone and Jang (2007) revealed that users who were more extraverted tended to self-disclose on their blogs more than those who were less extraverted when interacting with strong ties. Jung, Youn, and McClung (2007) involved individuals' motives with self-presentation on Cyworld. By using principal component factor analysis, they found five factors of individual motives, including entertainment, self-expression, professional advancement, passing time, and communication with family and friends. They also showed self-presentation strategies relating to individuals' motives.

Although these previous studies demonstrate interesting findings, I note that they tend to focus on internal parts of actors while overlooking significant external factors, including the target audience. Previous studies have shown that target audience is a crucial factor to determine self-presentation strategies (Walker, 2000; Walther, 2007). The perceived attention of the audiences by an actor plays an influential role to increase motivation of self-presentation (Schlenker & Weigold, 1992). In the study by Walther (2007), when respondents expected a professor as their target audience, they used polite

language, whereas, when they expected high school students, they used more casual language. In addition, respondents who envisioned a professor as their audience took more time to compose and edit a message than those who envisaged high school students. Anticipated target audiences also affect what information users convey through their personal homepage. According to the study by Walker (2000), authors who expected that the main audience was strangers tended to convey their autobiographical information more than personal narrative statements. Authors who expected an audience of people they already knew offline tended to increase narrative statements, while reducing autobiographical information.

Since self-presentation is a situation-based and goal-driven communication behavior (Goffman, 1959), target audience is important to understand self-presentation behaviors in a certain situation. Moreover, SNS users have relatively more specific target audiences, compared with those predating online communities. Although perceived target audience by SNS users may differ from an actual audience because SNS users tend to perceive the range of their audiences more narrowly than actual ones (boyd, 2007a), the perceived target audience is important because users' behaviors are mostly based on their perception of audiences rather than actual ones.

In this cross-cultural study, the researcher pays attention to the target audience, which is usually concretized by SNS friends lists, because it is expected that cultural values for socializing influence self-presentation strategies on SNSs relating target audience. In addition, users' perception of anonymity on SNSs is notable to understand cultural effect on SNS use. Although SNS users mostly identify themselves through online profiles, the CMC environment enables users to control levels of anonymity using

indirect (asynchronous) communications, controlling the degree of self-disclosure, and changing privacy settings. These instruments of anonymity control depend on users' purpose of SNS use.

In addition, theory on self-presentation has been developed primarily in American cultural settings and has not taken cultural differences into accounts. This current study draws cultural differences into self-presentation on SNSs. That is, given the crucial roles of motivation and audiences on self-presentation, this study explores how cultural values affect the motivation and perceived audiences and, further, self-presentation.

Cultural Differences in Self-Presentation

Cross-cultural studies indicate more attention to self-presentation among collectivistic cultures, especially with regards to self-identity. Triandis (1989) claims that members of collectivistic cultures tend to identify themselves as the collective self, whereas members of individualistic cultures tend to identify themselves as the private self. The collective self refers to one's concern about how in-groups, including family, coworkers, and classmates, assess one's self. The private self refers to how one perceives oneself internally, such as self-identifying with shyness. Since members of collectivistic cultures are more attentive to significant others' assessment of the self, there is strong external motivation and consciousness of self-presentation. In contrast, for people who strongly perceive the private self, self-presentation may be a more internal matter, such as self-satisfaction. Thus, collectivists who care about others' assessment of the self have more motivation to self-present than individualists.

Hofstede (2001) also emphasizes the concern about others' assessment in collectivism. He notes how cultural differences lead to different actions during

misbehavior. To him, collectivism is represented as a shame culture, whereas individualism corresponds to a guilt culture. In collectivistic shame-oriented cultures, people are more concerned about others' thoughts and judgments rather than acknowledgement of their own misbehavior. As long as the misbehavior of the person is concealed, one's reputation might be protected, as there would be no opportunity for criticism. In individualistic guilt-oriented cultures, where internal principles are emphasized, self-criticism may be harder to avoid because members cannot self-deny the misbehavior. This cultural difference may partially explain why in collectivistic cultures, the greater concern about what others think would lead members to pay special attention to their self-presentation.

In another cultural aspect of self-presentation, Ting-Toomey (1988) argues that in collectivistic cultures, the self is situationally and relationally defined. Collectivistic members willingly adapt themselves to given situations and relationships and tend to place the locus of face on others. Consequently, they are concerned about others' face as well as their own. In her argument, face refers to "a projected image of one's self in a relational situation" (Ting-Toomey, 1988, p. 215) and facework designates the ways to present face. Given the concern of others' face-saving, members of collectivistic cultures may self-present not only because of their own good impressions but also to save others' face. On the contrary, members of individualistic cultures place the locus of face on the self and are more concerned about their own face-saving and they may have more internal motivation for self-presentation. Such motivation of self-presentation therefore is less affected by situational and relational conditions.

In a similar vein, Markus and Kitayama (1991) propose that members of collectivistic cultures build their self-concept by relying on relationships with in-group members. For example, in a family situation, if a woman is placed as a mother, she is more likely to perceive herself as a mother and idealizes herself fitting to such a social role. That is, her identity as an individual is overwhelmed by her identity as a mother. Since individuals are commonly identified on the basis of their social roles and relationships, they may have more responsibility for their image: their social images are easily involved with the social reputation of their close relationships. This stands in contrast to people from individualistic cultures. Members of individualistic cultures consistently keep their identities as an independent self even when they perceive their roles as a mother in a family situation. The identity of a mother is only a part of an individual's identity. This study assumes that influences of relationship and situation on self-concept in collectivistic cultures may also affect self-presentation. That is, members of collectivistic cultures may have strong motivation of self-presentation for both internal and external reasons, while members of individualistic cultures are more concerned about their own internal needs. Accordingly, this study hypothesizes the following:

> H5. Users from collectivistic cultures tend to pay more attention to self-presentation on their SNSs than users from individualistic cultures.

Privacy Concerns in SNSs

Altman and Chemer's (1984) perspective on privacy, "selective control of access to the self" (p. 77), deals with physical settings. They claim that privacy is a changing process: depending on circumstances, individuals regulate to what extent they reveal or conceal their personal information as well as determine when to allow access to a given "privacy zone" or territory. Such privacy regulation is specified by what individuals say

or how they say it. Applying this privacy notion to SNS settings, it may be said that users' privacy is articulated by what information they disclose on their online profiles and how they change their privacy settings.

Whereas Altman and Chemer pay attention to privacy as a dynamic process, Hall (1966) prefers to use the term territory. For him, animals, including human beings, desire to occupy their own physical space, despite varying degrees of desire. This desire for privacy in the physical world extends to mental dimensions in human society.

Hall's territory concept of privacy is significant in that it includes the notion of boundary. Predating online communities are less related to privacy boundaries, whereas SNS users construct their apparent privacy boundaries within the SNS networks. They have privacy territories with their user IDs, reveal their possession of the territories by creating online profiles, and may continually protect their territories by changing privacy settings. Because such boundaries are conceptual versus physical, they may seem to be easily penetrated. Consequently, as with all types of CMC interactants, SNS users deal extensively with privacy issues.

Accepting privacy as the human right to control personal information while using the notion of territory allows us to expand privacy from individuals' human rights to collective privacy boundaries. A collective privacy boundary is formed when members of a group assume joint responsibility for sharing private information (Petronio, 2000). Because both joint-ownership and responsibility are involved in such groups, trust between group members is an important factor affecting collective privacy and regulation. The stronger the ties among members, the more trust within the collective privacy boundary, which, in turn, facilitates the disclosure of private information within the

privacy boundary.

        With regard to SNS privacy, previous research has shown that SNS users tend to

be less concerned about privacy threats than the actual possibility of privacy threats

despite increased use of privacy settings (Acquisti & Gross, 2006). Although users know

that Facebook provides such functions, 22% of them have no idea where they can alter

the settings. Facebook users express concerns that strangers could access their personal

information, yet, they provide this information on their Facebook sites. This illustrates

that users' general attitudes toward privacy are inconsistent with what they actually do on

Facebook. Acquisti and Gross argue that such inconsistency between users' attitudes and

behaviors related to privacy is caused by their misconception of the size of audiences.

        Barnes (2006) also found that SNS users' privacy behaviors tended to contradict

their attitudes. In her study, teenagers tended to sacrifice their privacy to satisfy their

needs to self-present on SNSs. Such willingness to giving up privacy is promoted by

uncertainty of boundaries between private and public sphere on SNSs. In the study by

Stutzman (2006), Facebook users generally disclosed a large amount of personal

information, yet they are less likely to disclose more vulnerable information, including

interests, political views, sexual orientation, and the "About Me" section (less than 60%

of respondents disclosed the information), compared to identity information, such as

name, gender, email, friend network, picture, birthday and hometown (the range of self-

disclosure of such information is between 85% and 60%). The relatively low percentage

of disclosure of narrative information (disclosed by less than 60% of users) did not

confirm that users actually attempted to protect their privacy, yet it may be said that they

were aware of the possibility of privacy invasion.

More recently, Tufekci (2008b) reported that privacy awareness of Facebook users has increased. However, the increased privacy awareness did not influence self-disclosure on SNSs. That is, users' higher levels of privacy awareness were not significantly correlated with lower levels of self-disclosure. Users may construe that privacy threats are offset by the benefits which can be accrued from self-disclosure on SNSs. According to Tufekci (2008a), although SNS users' awareness of privacy has been increasing, users are less concerned about privacy than non-users. Users also tend to justify their self-disclosure against their actual concern of privacy. Regarding this privacy attitude, Tufekci argues that SNS users tend to believe that, compared to privacy threats in the physical world, privacy threats may be perceived as less serious online. In the physical world, a stranger could follow a person home, or pick up a lost ID card.

The defense of SNS users sounds plausible, yet there are online features of which users may not be aware regarding privacy threats at unexpected times and places: persistence, searchability, replicability, and invisible audience (boyd, 2007a). Persistence refers to recorded personal contents online, which will be accessed ten years later. Searchability is based on personal information that enables friends to locate one another, including name, affiliation, or email address. The term "*googling"*, a verb form of the online search engine brand, is emblematic of online searchability today. The third, replicability, refers to the diffusion of personal contents by copying and pasting. Finally, invisible audience refers to unknown audience, including lurkers. Ten-year-later audiences and those who access information through googling or copied-and-pasted postings are also invisible audiences. Comparable propensities were also noted by other researchers (Joinson & Paine, 2007, Milberg, Smith, & Burke, 2000).

Joinson and Paine (2007) suggest that anonymity or a lack of social presence in CMC is closely associated with privacy. The higher level of anonymity or a lack of social presence encourages actors to disclose their private information. Such disclosure of private information however, reduces control of privacy and heightens privacy concerns. With regard to the association between self-disclosure and privacy, they pointed out that the decrease of privacy control is toward a third party and, instead, given anticipated interactants for relationship development, actors achieve intimate interactions through self-disclosure. This point may explain paradoxical privacy behaviors of SNS users against privacy concern above. That is, despite a risk of privacy invasion from strangers, SNS users disclose their private information to maintain existing SNS relationships.

Within a network boundary, self-disclosure is positively related to trust between interactants. A specific network boundary improves trust between interactants, thereby eliciting more intimate self-disclosure. Conversely, given strangers as interactants, disclosure of personal information decreases control of privacy. Dwyer, Hiltz, & Passerini (2007) demonstrated that, despite similar levels of privacy concern between two SNS users, Facebook users exhibited significantly greater trust in their interactants than MySpace users. The higher level of trust in interactants results in a greater willingness to share personal information.

According to Petronio (2002), people determine with whom they share privacy and build a collective privacy boundary which includes themselves. In the privacy boundary, people keep their privacy while sharing it with others. Given this collectivistic privacy boundary, users can acquire a plausible defense between a desire of self-disclosure and privacy concern and they can assure their privacy protection as easily as to

build their privacy boundaries by changing privacy settings. Additionally, this study

expects that culture more or less influences formation of the privacy boundary in that

privacy boundary depends on actors' privacy perception and with whom they share their

personal aspects.

Cultural Differences in Privacy Concern

Culture is a significant factor in understanding extended privacy boundaries and

the continual regulation of privacy by users. Cultural values, indeed, do influence what

privacy boundaries people build and how they regulate privacy (Altman & Chemers,

1984; Petronio, 2000). Hofstede (2001) claims that, for members of collectivistic

cultures, privacy as an individual human right is less important than it is for members of

individualistic cultures. Just as members of collectivistic cultures are more willing to give

up their individual needs for group harmony, they also yield their privacy rights to the in-

group. Hofstede assesses that such a tendency in collectivism results in general

indifference to privacy.

Echoing this perspective, Milberg et al. (2000) found that there was a significant

positive association between individualism and privacy concern on a commercial website.

Since individualistic cultures appreciate individuals as independent entities, they are

more inclined to appeal for privacy and less likely to accept intrusion on privacy by

group or other organizational practices.

Bellman, Johnson, Kobrin, & Lohse (2004), however, demonstrated the opposite

tendency to both Hofstede's (2001) and Milberg et al.'s (2000) findings: participants who

were less individualistic exhibited higher levels of privacy concern than those who were

more individualistic. Bellman et al. found higher levels of personal information

disclosure in individualistic cultures. The desire to disclose personal information may diminish privacy concern.

Members of individualistic cultures may be said to care more about their personal identity. By disclosing their personal uniqueness, members of individualistic cultures attempt to distinguish themselves from others. Therefore, they may be willing to disclose personal information during initial interactions in order to inform others about their distinctive identities (Gudykunst & Ting-Toomey, 1992). They also manipulate the environment to maintain personal privacy more than members of collectivist cultures because, once they inform of their individual uniqueness, they try to save their own personal territory, physically or psychologically.

Petronio (2000) proposes a different viewpoint regarding the influence of unique self-identity in individualism on privacy attitudes: according to her, individuals tend to moderate revealing their privacy to protect self-esteem. Therefore, when users have needs to protect self-esteem, they evade disclosing personal information, which could make users vulnerable.

Some previous studies have shown that, despite various factors affecting perception of privacy, people tend to generally be concerned about privacy across cultures and across the type of SNSs (Dwyer et al., 2007; Joinson & Paine, 2007.). Other studies suggest that individualistic and collectivistic cultural attitudes influence the degree of privacy concern (Bellman et al., 2004; Milberg et al, 2000). However, the direction of correlation is controversial. To further address privacy attitudes, this study proposes the following research question:

RQ2. How do individualistic or collectivistic cultural values influence privacy

attitudes on SNSs?

IV. METHOD

Pilot Study

Participants and Research Process

For this study, a pilot study was initiated as a pre-test of the main research

procedures and protocols. The pilot was structured to collect data from participants of the

same population as the main research. The interview participants were selected from a

convenience sample of undergraduate and graduate students at two universities during

spring semester in 2007: 12 American and 18 Korean respondents recruited from a large

Northeastern public university and a large private university in the United States and in

Korea respectively. They were asked to speak about their SNS activities in a school

building and voluntarily decided to participate in the interview. All Korean participants

had an account on Cyworld. Of the American participants eight were Facebook users and

seven were MySpace users. Five American participants had both Facebook and MySpace

accounts. The average age of Korean participants was 25.7 years old and that of

Americans was 22. Compulsory military service of young male adults among the

Koreans might heighten their average age despite a similar social status.

A total of 30 semi-structured interviews were conducted for 30 minutes on

average. In order to confirm their answers, some participants visited their SNSs by using

their personal laptop computers. Other participants relied on their memory, in particular,

about the number of friends on their friends lists and the type of personal information

disclosed. All interviews were recorded and transcribed. The American interviews were

transcribed by three American coders. Korean transcriptions were made by the researcher

whose native language was Korean and who had studied abroad in the United States since

2003. Korean transcriptions were translated into English by the researcher and supervised by an American professor. Transcriptions included pauses and laughs. Interview questions included the following; a) demographic information; b) general usage of the Internet and SNSs; c) the number of friends and the type of relationships on the friends list; d) main interactants through SNSs; e) profile pictures and basic information; and, f) which personal information is open to the public and which is kept private. These interview questions and processes were approved by the university's institutional review board for the protection of human subjects in research.

Findings from Interview Data

Size of SNS Relationships. This interview data demonstrated that Korean participants preferred maintaining a smaller number of relationships with their close friends on SNSs, whereas American participants had a larger number of relationships which broadly included acquaintances, friends, close friends, and family. Only four out of 18 Korean participants (22%), contrasting with nine out of 12 American participants (75%), had 100 or more persons on their friends lists. On average, Korean participants had 60.2 persons and American participants had 169.5 persons on their friends lists[7]. The smallest number on their friends lists was three and the largest number was 200 in the Korean user group. The American user group ranged from 20 to 400.

Range of SNS Friends. Both Korean and American participants agreed that they did not want strangers to be on their friends lists. However, in regard to the acceptable friend range, the two cultural user groups revealed different perceptions. The friends lists of the

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[7] In a following survey conducted in 2008, the number of SNS friends increased in both national SNSs (446 in American SNSs versus 94 in Korean SNSs), yet the ratio was more salient (from 2.8:1 to 4.8:1).

Korean SNS users were mostly composed of people with whom the participants currently

socialized offline and belonged to the current social groups. On the contrary, American

participants embraced broader relationships from less familiar acquaintances based on

their interests, needs, and tastes to close personal relationships, such as high-school and

college friends. In addition, American respondents tended to include willingly one-shot

encounters on SNS friends lists despite no further interactions.

Intensity of Connections. The different range of SNS friends might elicit different

levels of interaction intensity. Korean participants expected to share their daily lives with

friends through SNS activities, such as "where to go to have lunch." On the contrary,

American respondents revealed their satisfaction with online connections devoid of

substantial intimate interactions. For American respondents, occasional contact through

SNS connections was enough to maintain the relationships.

The Role of SNSs as a Communication Tool. The stricter limitation of SNS friends

on Korean SNSs seemed to influence the character of SNSs as a communication tool.

Although Korean SNS users mostly conducted one-to-many more than one-to-one

conversations through SNSs, they were more likely to regard SNSs as private

communication devices than Americans. American respondents tended to perceive SNSs

as a semi-public communication tool. Since they recognized formal relationships or

acquaintances who hardly knew each other on SNSs, they would select discussion topics

for their public images.

Amount of Self-Disclosure. Regarding SNS self-expression, American respondents

revealed that they were willing to disclose identifiable information of the self. They took

sufficient time to fill given items out on online profiles and tended to show their

confidence in their profiles to represent themselves. Korean respondents, on the contrary, were less likely to believe that online profiles represented themselves and less likely to have a desire to inform others about their identities through SNSs. Such attitudes resulted in incomplete online profiles which provided little information on certain items. Instead, they were more interested in sharing their personal thoughts and opinions with restricted people in whom they trusted.

Intimacy of Self-Disclosure. Despite the indication of a small amount of self-disclosure, Korean respondents were more likely to be devoted to exchanging intimate personal experiences with friends through SNSs using both photo-and text-diaries. American respondents generally exhibited uneasiness to share their personal feelings and thoughts on SNSs. Although they were responsible for self-introduction and for updating life changes occasionally, American respondents tended to think it was silly to disclose personal occurrences too often on SNSs. Thus, the nature of self-disclosure differed between Americans and Koreans. American users were more interested in self-introduction by self-disclosing, whereas Koreans seemed to open their privacy with more limited SNS friends.

Concern of Self-Presentation. American respondents were more likely to deny their concerns with self-presentation even though they admitted they selected good-looking pictures before posting them. That is, compared to their actual behaviors for self-presentation, they seemed to diminish their concern for self-presentation. On the contrary, Korean respondents mostly acknowledged their concern about others' assessment of the self and tried to create good impressions. For example, self-presentation of Korean respondents not only involved posting good-looking pictures but also using photoshop to

polish and modify pictures. They also selected topics for presentation in an attempt to satisfy their perception of others' expectations.

Since there were few previous studies of cross-cultural comparisons of SNS use, the findings from the pilot study guided the researcher in designing the research study.

Survey Analysis

This study conducted a survey of SNS users and a content analysis of their SNS profiles. Survey data reported users' self-reported attitudes and behaviors of SNS use and the findings of content analysis demonstrated users' actual behaviors. This dual approach was undertaken to increase the validity of findings and went beyond the limits of self-reported survey data by allowing the researcher to understand users' perception of their attitudes and behaviors and also to fill the gap, if any, between the attitudes/perceptions and actual behavior.

Survey Sample

The survey method used here allowed the researcher to collect data from a sample appropriate to the topic under investigation. The majority of SNS users are young and many are college students; hence, the sample used here corresponds to that profile. The design also enabled the researcher to effectively explore a large amount of participants. The survey used in this study collected SNS usage data of each sample during a short time span in an attempt to minimize the influence of external events.

The main participants in this investigation were selected from undergraduate students from two universities: one in the United States, and the other in Korea. 394 American respondents were recruited from the communication department of a large public university in the United States. As the second sample group, 241 Korean

respondents were recruited from a leading Korean private university. As an indicator of acculturation, the third sample group was added to the two main cultural groups. The third sample was composed of 140 Korean-Americans and Koreans who had lived in the United States for more than seven years. These individuals were recruited from Korean cultural groups and Korean language classes at the same university as that of the first American sample group. In this sample group, the participants who felt more comfortable using the Korean language rather than English were excluded because they seemed to be similar to the Koreans in Korea[8]. Although they had lived in the United States for a long time after immigrating, most of them still had social networks in Korea.

American Sample. Among the American sample, 62% (*N*=222) were Caucasian/European Americans, 9% (*N*=34) were African Americans, 8% (*N*=30) Hispanic/Latino Americans, 21% (*N*=74) Asian Americans, and less than 1% (*N*=1) Native American. The original sample included *other* (*N*=28) that mostly consisted of international students who were not US citizens or permanent residents and who were studying in the United States. I excluded the 28 non-US citizen/permanent residents from the American sample. Of 394 respondents, five did not disclose their ethnicity. Consequently, the American sample consisted of 361 respondents.

As noted above, the Americans were composed of various ethnic groups, including Caucasian/European, African, Hispanic/Latino, Asian, and Native Americans.

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[8] When doing the survey, Korean-Americans could select one of two versions of questionnaire, a Korean or English version. Finally, respondents who used the Korean-version questionnaire were excluded. Rhee, Uleman, Roman and Lee (1995) defines the qualification of acculturation as those who have friends from the same ethnic group and mostly hang out with them but do not speak the ethnic language. Referring to their definition, this study screened those who used the Korean-version questionnaires because they could have ethnic friends and also mostly use the ethnic language with friends.

The different ethnicities could cause different cultural attitudes despite similar nationality. To assess the possible cultural ethnicity effect on the American sample, the researcher compared cultural attitudes of these ethnic groups using ANOVA. Regarding Group Harmony, the ethnic groups revealed significant differences ($F(3, 354)=2.76$, $p < .05$) (see Table 1).

Post hoc analysis clarified that a significant difference was valid only between Caucasian/European and African American/Black ($p < .05$). Although it was interesting that the result conflicted with the existing common perception that African Americans were more collectivistic than Caucasian/Europeans, the unbalanced numbers of participants between the two samples (221 Caucasian/Europeans versus 33 African American/Black) might make the result biased.

Whether or not there were external factors (or biases), the researcher examined all possible cases that might make results different, including a comparison between total American, Korean-American, and Korean samples, between Caucasian/European Americans and the other two sample groups and between African American/Black and the other two sample groups. This was because diverse ethnic subgroups in the American sample could be biased in the comparison of cultural attitudes with other national groups. The results, in the end, exhibited that none of the combinations changed the results of national comparisons.

Similarly, high-context culture was measured and compared. As Table 1 shows, one Native American exhibited a relatively higher level of high-context cultural attitudes. The other ethnic groups scored slightly lower than the neutral position (score = 3). That is, the American sample generally was toward low context cultures. All combinations of

comparable groups exhibited similar results, as well as the comparison of the total American sample with the other two samples. The relatively smaller numbers in the other subgroups—compared to the number of Caucasian/Europeans—may alleviate possible differences by ethnic cultures. In the end, this study included all cases in the American sample regardless of different ethnicities.

The survey asked which SNS account the respondents had and which one was a primary SNS. Table 2 showed that many SNS users had more than one SNS. Among the various SNSs, Facebook was the overwhelming majority as a primary SNS. Five respondents did not indicate a primary SNS.

40% of the American sample (N=146) were male and 60% (N=215) were female. There were 120 first-year students (33%), 112 sophomores (31%), 106 juniors (29%), and 23 seniors (6%). The average age was 20 (SD = 2). Only 9% of respondents had had an SNS account for less than one year and approximately 20% had had one for three or more years. 35% of the students created an account around one or two years ago and 36% had used SNSs between two and three years.

The average number of friends on the SNS friends list was 446 persons (SD = 352). The average amount of time spent per day on SNSs was 70 minutes (SD = 61). While online (212 minutes per day on average, SD = 153), respondents spent 33% of this time (70 mins.) on the Internet for SNS activities. Daily visits to their SNSs averaged 8 times per day (SD = 48). The mean number of close friends on the SNS friends list was 40 persons (SD = 58). The broad deviation for each item indicates that individuals' SNS usage may vary.

Korean Sample. All of the 241 respondents were Koreans and Cyworld users. 91 male (38%) and 150 female college students (62%) participated in the survey. The average age was 22 (*SD* = 2) and included 10 first-year students (4%), 83 sophomores (34%), 68 juniors (28%), and 81 seniors (34%). Almost 72% of these participants (173) had had a Cyworld account for three or more years. Only four respondents created a Cyworld account within one year. Compared to Americans, a large amount of Korean participants have had their accounts longer on average (cf. 20% of Americans versus 72% of Koreans among users for three or more years). This is probably due to the fact that Cyworld has been in existence longer (since 2001) than Facebook (since 2004) and MySpace (since 2003).

Friends list size was 94 on average (*SD* = 75). On average, they spent 47 minutes for SNS activities per day (*SD* = 40). Koreans spent less time using SNSs than did Americans, yet 31% of their time spent on the Internet was devoted to SNSs, a similar proportion to that of Americans. Like Americans, one of Koreans' major motives for accessing the Internet was the use of SNSs. On average, Koreans visited their SNSs three times per day (*SD* = 4). Finally, the mean number of close friends on SNS friends list was 16 persons (*SD* = 15). The range of standard deviation of each item was not as broad as that of Americans, yet it also indicated broad dispersion of the usage pattern.

Korean-American Sample. As mentioned earlier, this study collected a Korean-American sample separately from the Asian American ethnic category to assess bicultural aspects of SNS usage beyond American and Korean cultural traits. Although 140 cases were collected from Korean cultural groups and Korean language classes, 43 cases were removed because those individuals were not Korean-Americans. The 43 cases were

composed as follows: three Caucasian/European American, one African American, five Asian American (including Chinese-Americans and Philippine-Americans, not Korean-Americans), 30 Korean respondents, and four no answerers were finally removed. Of 140 respondents, 97 respondents comprised the final Korean-American sample. Most of these individuals were born in the United States or immigrated before their teen years. Although they primarily spoke with their parents in Korean, they generally felt more comfortable using English rather than Korean and spoke with their siblings and friends primarily in English. In addition, these respondents maintained cultural ties with Korea through participation in Korean culture-related activities, including language classes, churches, and club activities.

If nationality were to be the defining factor, then the Korean-American sample could technically be included with Americans. Despite the overlap, Korean-Americans could represent bicultural aspects that they might have. This sample is also expected to characterize different levels of acculturation between American and Korean cultures. That is, Korean-Americans blend the two different national cultures into their cultural identity as a result of acculturation.

The Korean-American sample included 47 male (49%) and 50 female (52%) college students with an average age of 20 years ($SD = 2$). There were 24 first-year students (25%), 42 sophomores (43%), 20 juniors (21%), and 11 seniors (11%). Seven respondents had created an SNS account within the last year and 30 respondents created an SNS account between one and two years ago. 35 respondents created an account between the last two to three years. A total of 25 respondents had an SNS account for three years or more. The majority used Facebook as their primary SNS and three of the

Korean-Americans primarily used Cyworld. The average number of friends on their SNS friends list was 349 (*SD* = 200). Out of the average time Korean-Americans spent online (224 minutes per day), over 25% of their time (64 minutes) was devoted to SNSs (*SD* = 74, *SD* = 144, respectively). Visits to SNSs averaged five times per day (*SD* = 7). The mean of close friends on the SNS friends list was 38 (*SD* = 52). This usage is more similar to the American sample than the Korean sample. The similarity between Americans and Korean-Americans may be due to their same nationality (despite different ethnicities) and/or due to the same primary SNS service, Facebook.

Koreans had the highest proportion of close friends on the friends list (30%), followed by Korean-Americans (21%), with Americans (20%), having the lowest proportion of close friends on their friends lists. Regarding number of visits, Koreans exhibited the fewest number of visits, followed by Korean-Americans, with Americans having the highest number of SNSs visits.

Table 5, which presents descriptive statistical data from each sample, indicates that the differences in SNS usage among the samples, if any, might be caused by national cultures. Americans and Korean-Americans have the same apparent nationality: American. When compared to the Koreans, Americans and Korean-Americans were similar across many items, including the length of SNS ownership, the total number of friends, and the percentage of close friends. For example, Americans and Korean-Americans had around three to four times more friends than Koreans on their friends lists. In contrast, Koreans embraced close friends as SNS friends 10% more than those of Americans and Korean-Americans.

These similarities between Americans and Korean-Americans may be related to sharing the same communicative fields. They may share behavioral norms through Facebook activities and learn cultural norms within American culture. Although parents and ethnic groups could have a cultural impact on Korean-Americans, the communicative fields where peer-group interactions mostly occur may affect the cultural attitudes of Korean-Americans.

My hypotheses were based on differences in individuals' cultural attitudes. That is, I considered the possibility that some Koreans could be more individualistic than some Americans, or vice versa, while conceding that cultural attitudes of individuals were not exactly matched to their national cultures (Gudykunst et al., 1987, 1996; Triandis, 1989). However, national cultures generally reflect predominant cultural traits of national members, as previous cross-cultural studies have verified that individuals' cultural traits were closely related to national cultures (Triandis et al., 1988). This study therefore measured and analyzed communicative behaviors on SNSs, including social relationships, self-disclosure, anonymity, self-presentation, and privacy, by nationality as well as by individuals' cultural attitudes. I also considered that a primary SNS also would influence users' predominant communicative behaviors in that specific communicative circumstances could make cultural attitudes of participants more tangible than in general circumstances.

Research Sites

Although there were diverse SNSs in the United States and in Korea, it was obvious that participants converged on a couple of SNSs based on the most powerful social networks. As shown above, most of the Americans and Korean-Americans were

Facebook users and all Koreans were Cyworld users. Hence, this study focused on these two SNSs. Additionally, Cyworld US, which is an international version of Cyworld, will be briefly explained because it might be evidence showing a cultural effect on SNS user interfaces.

   Cyworld. Cyworld launched as a web service to provide online community spaces to members in 1999. In 2001, Cyworld offered personal spaces called *minihompy*, an abbreviation of mini homepage, to current members as well as newcomers. As shown through the name, *minihompy* is a transformed personal website and facilitates managing personal contents by providing an easy template. Blog templates were not very popular in Korea because of their plain and limited functions. In contrast, Cyworld was equipped with attractive features for self-expression, such as *miniroom* (a virtual room that a user can decorate in his/her own way), *minime* (an avatar for which a user can change hairstyle, clothes, accessories, and facial expressions), background music, and *skin* (wall paper for *minihompies*).

   In addition to functions for self-expression, Cyworld features online social networks. Users invite and register their friends as *ilchon* relationships and connect their personal sites with their friends' sites. *Ilchon* originated from Korean kinship networks and refers to the closest kinship, between parents and children. By adopting the term, *ilchon*, to represent an online buddy list, Cyworld induces users to have loyalty to social networks on Cyworld.

   Cyworld users can also exchange elaborate cyber gifts, such as music files, items for *minime*, and *skins*, which are consumable only in Cyworld. They also have wish lists illustrating what they would like to receive as cyber gifts from their friends. These

decoration items and gift functions have formed active cyber markets within Cyworld. They are traded by using acorns, which represent cyber currency in Cyworld. It is notable that the trade of acorns forms 80% of the revenues of Cyworld (Sim, 2007).

Cyworld has provided Cyworld videos since 2007, which are shared only within Cyworld. Cyworld video service has rapidly increased based on the given networks of Cyworld users ("Cyworld video", 2007). Thus, Cyworld has extended its services beyond basic SNS functions. As will be described below, this trend of service extension has been shown in other SNSs as well.

Facebook. Facebook was launched in 2004 and limited its users to only those with a college email address. Although this limitation was completely removed in 2006, college students are still the strongest user group of Facebook. 90% of college students in the United States have Facebook accounts and visit daily (Prescott, 2007). While overtaking MySpace in market share, Facebook has been the central focus as the most promising web business (O'Neill, 2009). Since Facebook extended the user population to anyone with a valid email address, this advancement has caused Facebook to continue growing.

However, school networks are still primary in Facebook. School networks are automatically connected when users offer their school affiliations. Although users can disconnect the networks by managing privacy settings, users tend to feel they benefit from the automatic connection with other users in their same school networks. For example, Facebook users have a greater sense of security in regards to privacy and stalking than MySpace users (Dwyer et al., 2007) because Facebook users have the impression that users, including themselves, belong to at least one credible institution.

In addition to online profiles and networks, Facebook has extended supplementary services. For example, Facebook opened a gift shop in February 2007, where users can buy and give virtual gifts to their friends with the payment of one dollar for each item. Users can also share videos through Facebook in the same way they share photos, e.g., tag on videos. Some applications, such as pokes, built-in instant messaging, and Wall, encourage users to initiate small chat sessions with SNS friends. *Free classified ads* is a good example of how users can employ the enhanced social network features on Facebook. Bumper stickers can be an additional apparatus for self-expression. Thus, Facebook has added supplementary applications to embellish the value of its overall service platforms.

Procedure

A paper-and-pencil survey was administered in undergraduate communication classes with the three main sample groups: American, Korean-American, and Korean college students who used domestic SNSs in their own countries. American students who participated in this survey received extra credit in their classes. Korean students received a small gift from the researcher. These two samples were separately collected in several communication classes both in the United States and in Korea. For Korean-Americans, the same survey process was conducted in four Korean language classes: two elementary language classes, one intermediate language class, and one advanced language class. The researcher also visited several places to recruit Korean-Americans, including Korean churches and club gatherings. These groups might have participated in the survey more casually since their participation was not a part of class activities. This third sample also

received small gifts from the researcher. Before participating in this survey, all students

signed informed consent forms notifying them of their rights as human participants.

Data collection was conducted during the 2008 spring semester. Since American

and Korean Universities had different Academic years, the data collections were

conducted separately under the lead of the researcher. The American data was collected

in early April and Korean data was collected in late May.

Instrument and Measures

Individualism-Collectivism Cultural Variable. The 14 items of INDCOL cultural

attitudes were measured with a 5-point Likert-type scale; 5=strongly agree; 4=agree;

3=undecided; 2=disagree; and 1=strongly disagree. The items were analyzed using

maximum likelihood factor analysis. Factors were rotated using a Varimax rotation

procedure. The rotated solution extracted three interpretable factors, Group Harmony,

Problem-Solving, and Friend Involvement. Group Harmony factor accounted for 21.6%

of the item variance, Problem-Solving factor accounted for 33.7%, and Friend

Involvement factor accounted for 32.5% (see Table 6).

6 of 14 items were deleted because of low reliability. Group Harmony

(Cronbach's Alpha =.59), combining three items, was taken from the INDCOL scale of

Triandis (1995). The items are as follows: a) I usually sacrifice my self-interested for the

benefit of my group; b) It is important for me to maintain harmony within my group; and,

c) I hate to disagree with others in my group. Problem-Solving was composed of three

items from Chan (1994) (Cronbach α=.60): a) When faced with a difficult personal

problem, one should consult widely one's friends and relatives; b) When faced with a

difficult personal problem, it is better to decide what to do yourself, rather than follow the

advice of others (reversed); and, c) I would rather struggle through a personal problem by myself, than discuss it with my friends (reversed). Friend Involvement was composed of two items from Cha (1994) (Cronbach α=.76). The items are as follows: a) I allow my close friends to interfere in my private life and b) Close friends allow me to interfere in their private life. For these three variables, high score stands for collectivistic cultural attitudes.

   High- and Low-Context Cultural Variable. A total of 11 items were employed to measure High-and Low-Context cultural traits. These items were measured with a 5-point Likert-type scale; 5=strongly agree; 4=agree; 3=undecided; 2=disagree; and 1=strongly disagree.

   Eight HCC-LCC items were adopted from Gudykunst et al.'s (1996) scale: a) seven items of the use of indirect communication and b) one item of interpersonal sensitivity. The sample items of indirect communication are as follows: a) I communicate in an indirect fashion; b) I use silence to avoid upsetting others when we communicate, and c) I avoid clear-cut expressions of feelings when I communicate with others. The interpersonal sensitivity was asked by the following item: I qualify (e.g., use "maybe," "perhaps") my language when I communicate. Three items were implemented from Bresnahan, Sheaman, Lee, Park, Mosher, and Ohashi (2002). Of the three, two items, which were designed to measure clarity of communication styles: a) It is usually more important to say things clearly rather than politely; and, b) A person cannot think unless he/she can put it into words. The third item, which was related to the use of silence in communication, was included in the final High-Context Culture index: It is better to risk not speaking enough than to risk speaking too much.

The items were also analyzed using maximum likelihood factor analysis. Factors were rotated using a Varimax rotation procedure (see Table 7). The rotated solution yielded two factors; a) high-context culture and b) low context culture. Instead of using two separate factors, this study integrated them as one factor of high-context culture by reversing the second factor. As Figure 1 shows, the loaded items were not practically distinguished when two items that were composed of the second factor were reversed (see Figure 1). In fact, item 2, my communication with others is ritualistic, was similarly loaded in both high-and low-context cultural factors. It may be because the meaning of "ritualistic" is ambiguous. According to Hall's (1976) high-and low-context cultural dimension, members of high-context cultures often use rituals rather than explicitly saying every single word. That is, senders omit communication cues expected by rituals and receivers interpret the omitted cues using rituals. Thus, "ritualistic" refers to a fixed communication pattern. However, it could be misinterpreted as a metaphor of external information—the opposite meaning to internal information (non-expressed internal context)—that refers to explicitly expressed thoughts of an actor by respondents. With this suspicion, the item was dropped. Finally, this study created one factor using 10 items, including the reversed two items and excluding one item loaded on both factors. Cronbach's Alpha of the items was .721. The highest score stands for strong high-context cultural attitudes.

Composition of Friends List. This study assessed the composition of one's friends list. For the assessment of the size, this study asked participants the follow question, "Approximately, how many people do you have on your friends list on your social network site?" The degree of intimacy with online friends was measured through

the composition of friends list. Participants were asked to indicate what percentage of online friends on their SNSs was made of the following: close/best friends (including a romantic partner), friends, family members, acquaintances/classmates, and strangers.

Self-Disclosure. To measure self-disclosure, first, this study adopted seven items of the General Disclosiveness Scale (GDS; Wheeless, 1978; Wheeless & Grotz, 1976). The sample items of self-disclosure are as follows: (a) I do not often post about myself; (b) My statements of my feelings are usually brief; (c) I often discuss my feeling about myself; and, (d) I intimately disclose who I really am, openly and fully. Participants answered the items considering SNS settings: "please think about when you reveal yourself through your social network site and mark how much you agree or disagree with each statement." The scales ranged from 1=strongly disagree to 5=strongly agree with a 5-point Likert-type scale.

Dimensions of self-disclosure were assessed by maximum likelihood factor analysis. Two factors were rotated using a Varimax rotation procedure: *amount* of self-disclosure, Cronbach's Alpha=.60 and *intimacy* of self-disclosure, Cronbach's Alpha=.74 (see Table 7). The factor of amount of self-disclosure accounted for 18.5% of the item variance, and the factor of intimacy of self-disclosure accounted for 20.7% of the item variance. One item that was loaded on both factors was dropped.

Qian and Scott (2007) also measured self-disclosure to assess an association with the level of anonymity. This study also adopted some self-disclosure items from their study in order to extend their findings on blogs to on SNSs. The directive indicated SNS settings instead of blogs: "The following statements are about your behaviors of disclosing yourself on your social network site. Please indicate how much or how often

you usually do the following." The first four items were measured with a 5-point Likert-type scale; 5=always; 4=frequently; 3=sometimes; 2=rarely; and 1=never. The sample items included the following statements: a) To what extent do you show your softer, more sensitive side on your social network site and b) To what extent do you reveal things about yourself than you are ashamed of on your social network site. The last item was measured with another 5-point Likert-type scale and no specific directive; 5=extremely intimate; 4=somewhat intimate; 3=neutral; 2=not very intimate; and 1=not intimate at all; including a) To what extend are you willing to reveal that you love someone you know in your social network site and b) imagine you had kept a personal diary or jounal that is exactly the same as your social network site, to what extent were you willing to show it to people you know (see Table 8 to attain all items measured).

The same process of factor analysis was conducted. Among five indicators, four loaded on a single factor with an average factor loading of .63. The factor of *vulnerability* of self-disclosure accounted for 41.7% of the item variance and Cronbach's Alpha was .72. Since one item negatively loaded, the researcher dropped it.

Self-Presentation. This study adopted self-presentation items of Lee, Quigley, Nesler, Corbett, & Tedeschi (1999) to measure self-reported behavior of self-presentation. Participants answered the items considering SNS settings: "please mark the number on the scale which most closely represents your behavior when revealing yourself through your social network site." Participants were asked to rank frequency with 5-point Likert-type scale: 5=very frequently, 4=somewhat frequently, 3=sometimes, 2=somewhat infrequently, and 1=very infrequently. The sample items are as follows: (a) I tell others

about my positive qualities; (b) I express the same attitudes as others so they will accept me; and, (c) I act in ways I think others should act.

These items were also analyzed using maximum likelihood factor analysis with varimax rotation. A single factor was extracted from five items. The factor of self-presentation accounted for 40% of the item variance and Cronbach's Alpha was .73. Table 9 shows its factor analysis result.

Anonymity. *Visual anonymity* and *discursive anonymity* were measured following the study of Qian and Scott (2007). Visual anonymity was assessed by the type of profile photo: a) no photo; b) an obviously fake picture (e.g., a known celebrity, a landscape, or an animal photo); c) a non-obviously fake picture (e.g., a photo that readers may mistake for a real photo of the self); d) a partial actual self-picture (e.g., an actual self-photo but one's appearance may be distorted or hidden by an obstacle); e) an actual self-picture (e.g., mug shot); and, (f) a revealing actual picture (an actual photo with one's friends or family or a self-photo that reveals a given situation through background, such as club, birthday party, etc.).

For discursive anonymity, participants were asked what name they used for themselves on their online profile. The level of anonymity was measured using following indicators: a) anonymous; b) obvious pseudonym; c) non-obvious pseudonym; d) partial real name (e.g., revealing only first name or last name); and, e) full real name.

These scales of visual and discursive anonymity were reversed when analyzing data. Accordingly, the higher score referred to the highest level of anonymity in the findings.

Privacy. This study used modification of three scenarios about general privacy concerns from the study by Acquisti and Gross (2006). Participants were asked to rate "how worried" they were about each statement on a 5-point Likert scale: 1=not worried at all, 2=not very worried, 3=neutral, 4=somewhat worried, and 5=very worried. The following statements were asked: a) A stranger knew where you lived and your address; b) Five years from now, complete strangers would be able to find out easily the name of your current partner and your current school information; and, c) A friend of a friend that you do not even know knew your name, your email, your home phone number, and your instant messaging nickname. This study also adopted four statements to inquire about participants' attitudes about privacy on SNSs. The original statements referred to Facebook, but this study modified the specific SNS service into more general terms to include generic social networking sites. Each statement was measured by a 5-point Likert scale ranging from 1=strongly disagree to 5=strongly agree: a) I like to reveal information about myself to others through my social network site; b) I trust the people I interact with on my social network site; c) I can share my personal thoughts with others on my social network site; and d) I have included identifiable personal information in my profile.

To integrate and reduce items, a factor analysis was conducted. Two factors were extracted: Privacy Concern, Cronbach's Alpha=.79, and Privacy Sharing, Cronbach's Alpha=.66. See Table 10.

This study also asked users about their ability to manage privacy settings. The ability and actual usage of privacy settings were expected to help understand their actual efforts to protect their privacy, regardless of their perception of privacy concerns. For this

assessment of users' actual efforts (behavior), this study asked users as follows: "Do you know if there are privacy settings that you can control for your privacy protection?" "Have you used privacy settings to protect your privacy?" These questions were used in the study of Acquisti and Gross (2006) to measure users' ability to control their privacy. Participants were asked to answer the questions on a yes/no scale. Finally, Table 11 displays Cronbach's α for all created variables.

Content Analysis

Sample

This study conducted a content analysis to enhance validity of survey findings. Since the survey data were subjectively self-reported, this study needed to compensate for this limitation through a content analysis that provided survey participants' actual behaviors. The actual behaviors were obtained through examination of a sample of respondents' web pages as found on an SNS. The web pages were then subjected to content analysis to determine how information was displayed and the availability of personal information.

Data obtained for the content analyses were collected by asking SNS survey participants if they were willing to have their profiles analyzed. In the American sample, 78 of 361 valid cases (22%) allowed the researcher to analyze their SNS online profiles. Except for 2 cases, all were Facebook users. There were 18 cases which provided inaccurate account information and these profiles could not be found on Facebook. Despite users' permission to analyze SNS profiles, 7 users blocked accessibility to online profiles and did not respond to requests from the researcher to gain access to this information. Six users opened their contents to everyone, including non-SNS friends.

Overall, after removing 27 cases (2 non-Facebook cases, 18 inaccurate account information, and 7 inaccessible profiles), there were 51 cases usable for analysis. In the analysis of profile photos, however, 7 inaccessible profiles were additionally included because profile photos were disclosed to the public regardless of the qualification of SNS friends.

Although 110 Korean sample participants allowed the researcher to analyze their SNSs, 17 cases were not found on Cyworld. Among 93 valid cases (39%), 54 users (22%) allowed the researcher to access personal contents as an SNS friend, while 39 users (16%) rejected a friend request or did not respond to it.

My content analysis was principally conducted using 144 cases. 93 Cyworld cases (22% of total Korean sample) and 51 Facebook cases (14% of total American sample) were available to access online profile pages, either fully or partially. The different interfaces between Facebook and Cyworld posed some methodological challenges.

Specifically, Facebook users control whether or not to open their whole SNS pages to strangers through privacy settings, whereas Cyworld users do not have the option to block the entire page containing the online profile. Instead, Cyworld automatically reveals some user items, including name and sex, while leaving other items of information empty. Contact information was a key item in differentiating the accessibility of SNS friends versus strangers. Results of the content analysis reflected this difference. When the researcher accessed Cyworld profiles as an SNS friend, 64% of online profiles disclosed one or more contact information items, including email address, cell phone number, and home address and phone number. When accessing Cyworld

profiles as a stranger, only 10% of profiles disclosed one or more items of contact

information.

Considering such differences with respect to privacy settings and the level of

friend relationships, this study principally analyzed cases where the researcher could

access online profiles either partially or fully. In certain items, this study also considered

the differences in self-disclosure between SNS friends and non-SNS friends. In fact,

different user interfaces among SNS types is one reason for the different sample sizes for

variables concerning *About me* and *Profile photo*. The other reason is that all users did

not fill or use the items. All profile photos on both samples were available for every case

except for some cases where users did not post any photo. Cyworld has no choice to hide

profile photos unless users do not post it. Facebook enables users to manage disclosure of

profile photos, yet, no individual in this sample changed this privacy setting. As a result,

the sample sizes of profile photos are bigger than other items, including *About me*.

Coding Categories

About Me. Contents on *About me* from participants' SNSs were collected and

categorized by two coders who were Koreans fluent in both Korean and English and who

were in a graduate school in the United States. Two independent coders separately

categorized and then reduced and adjusted categories to high-and low-context cultural

dimension because common categories from two coders were most plausibly articulated

by the dimension. Five final categories were created: a) explicit self-description; b)

listing personal information; c) implicit self-description; d) non-self-related information;

and, d) using picture. The first two categories refer to direct communication styles in low-

context cultures. The next three categories were coded into indirect communication styles in high-context cultures.

The content was also coded by the use of first-person references. The use of first-person references was expected to reveal individual-oriented self-construal versus group-oriented self-construal in individualism-collectivism cultural dimension. Two categories were used: a) first-person self-reference, such as *I* or *my* (*na-nun* or *na-eui*) and b) first-person group-reference, such as *we* or *our* (*woo-ri*).

Regarding categories from high-and low-context cultural dimension, first, *explicit self-description* refers to no requirement of additional context to understand text. The text obviously revealed topics, including about whom, what, and to whom. Next, *listing personal information* includes self-related words, such as name, age, and affiliation. Each of the self-related words explicitly conveys information about the self without additional context. The contracted information tended to reduce ambiguity of information, compared to completed sentences by eliminating ambiguous elements.

The third category, *implicit self-description*, usually required additional context to understand messages. Otherwise, it may be easy for the text to be understood differently from the original intention of the writer. Such ambiguity of text is structured as a journal-like writing style in a monologue tone. Some text was too ambiguous to totally understand it, especially to outsiders who lacked context about the writer.

The fourth category, *non-self-related information*, includes cases where self-related information is not directly mentioned. Authors may write their favorite quotes or mention their personal interests. The fifth category, *using pictures*, is available only for Cyworld users. Using a picture may function against the original purpose of *About me*,

which aims for self-description. Nevertheless, this seems to be a consistent propensity of profile pages on Cyworld: being more flexible to use pictures and images. Thus, open-ended *About me* may empower users to use implicit communication styles beyond the original function of *About me*. Since Facebook enables users to employ only text on *About me*, this category is not available for the Facebook users.

Finally, *other* was given as the last category. If coders estimated that no category incorporated a case, the case was coded as *other*. For example, although first-person references may indicate that a topic is related to the self, it could be categorized into *other* because of no self-description. These cases commonly revealed self-promise or personal jokes: "10 years later, to make my profile proud, hard training" and "(I) will be able to use magic soon." Since a wizard is a fantasy reference, the latter would present this as a personal joke.

This study also coded first-person references: whether the first-person self-references, *I* or *my* (*na-nun* or *na-eui*) or group-references, *we* or *our* (*woo-ri*), were used when self-describing. The usage pattern of first-person references is expected to indicate how to construe the self based on the individualism-collectivism cultural dimension. If a person perceives the self independently, he or she may commonly use first-person self-references ("*I*"). Such a use parallels individual-centered attitudes in individualism. If a person perceives the self interdependently through relational situations, he or she may use first-person group-references ("*we*"), even though he or she describes the self alone. This reveals group-oriented collectivistic cultural attitudes. In fact, Koreans habitually omit subjects when the subject is identified by context. Considering this Korean language habit, this study includes cases where the first-person reference is omitted, yet, according

to context, it is obvious who is talking. These first-person references were coded separately from direct/indirect communication styles above. See Table 14 for examples of each category.

   Profile Photo. *Profile photo* was categorized by six levels of identification. These categories were adopted from a study of Qian and Scott (2007): a) no photos; b) obviously fake photos, e.g., known celebrity, a animal, or a landscape; c) non-obviously fake photos, e.g., one that is unclear if the person in the photo is the user; d) distorted actual photos, e.g., despite a self-photo, it is hardly identified because it is blurred or altered in some way; e) actual photos including only the user; and, f) actual photos including family, friends or background.

Training Procedures

   The first coder—who was also the author—was familiar with the data because she had participated in the whole process of the research. The second coder was familiar with SNS usage as both a Facebook and Cyworld user and was additionally trained to perform the coding task, including learning main theoretical concepts. While the first coder led the process, the two coders created coding categories in cooperation. They temporarily and independently named each data point based on the main theoretical concepts and then compared and adjusted the created names of categories. While discussing how to create categories, the two coders heightened their understanding of each category's theme.

Inter-Coder Reliability

   Two independent coders analyzed the *About me* section and *Profile photo* both on Facebook and Cyworld. Each coder created categories of *About me* separately and

integrated the categories for parsimonious analysis. Qian and Scott's (2007) categories were used which revealed the level of identification (or anonymity) on a profile photo, which was related to the extent of self-representation on a profile photo. Cohen's Kappa was employed to measure intercoder reliability. It was assumed that agreement levels at or above .70 constitute acceptable consistency between the coders (Kurasaki, 2000).

Coding was independently conducted by two coders and, due to initial low intercoder reliability on some categories, the coders met to discuss disagreements and then conducted a second iteration of coding. After the second coding, there were still disagreements due to ambiguity of the content itself. In cases of disagreement, the researcher decided to adopt judgments of coder 1 as an expert coder because coder 1 had more understanding and involvement of this research compared to coder 2 who partially participated in this research. Table 15-1 and 15-2 show final inter-coder reliability of each item.

As Inter-coder reliability tables show above, the two coders reached a high level of agreement on most items. However, some items had relatively lower rates of inter-coder reliability. Most of all, the small sample size affected the lower level of inter-coder reliability. For example, although the reliability of non-self-related information was low, the actual number of disagreed cases was only 2 cases of 23. Coder 1 estimated the two cases as non-self-related information, whereas coder 2 assigned them into *other*.

Disagreement occurred in cases where the subject (topic) was ambiguous: non-self-related information or self-related-yet-not-self-description. This uncertainty was more or less due to an omitted subject. For the same reason, reliability of first-person reference categories tended to be lower as well, due to omitted references.

The small sample size also affected the low rate of reliability on *Profile photo*. Although only 3 of 92 cases were not coded the same in non-obvious fake photo category on Cyworld, the inter-coder reliability was quite low. Moreover, non-obviously fake photo, as the category definition implies, was based on ambiguity of user identity. The coders did not agree whether or not to code this as a self-photo. Blocked accessibility to photo album made it more difficult to attain agreement. Aside from these ambiguous cases, most cases attained a high level of agreement between the two coders.

V. RESULTS

Survey Results

Predominant National Culture of Each Sample

Individualism-Collectivism. A one-way analysis of variance (ANOVA) was conducted with regard to the association between individualism-collectivism cultural attitudes of individuals and their nationalities. The results revealed that Group Harmony was associated with participants' nationality, $F(2, 693) = 30.8$, $p < .001$. The post hoc test verified that Americans were less likely to be concerned about Group Harmony than the Koreans, yet there was no significant difference between Americans and Korean-Americans. Koreans exhibited higher levels of Group Harmony (and thus collectivism) than Americans and Korean-Americans, respectively.

The other two variables, Problem-Solving and Friend Involvement, were also significant, $F(2, 693) = 6.7$, $p = .001$ and $F(2, 695) = 6.7$, $p = .001$. However, follow-up tests did not support theoretical expectations. For Problem-Solving, Americans scored higher than Koreans. Koreans exhibited the lowest score among the three samples. Similarly, for Friend Involvement, Koreans scored lower than both Americans and Korean-Americans.

Since higher scores indicate stronger collectivistic cultural traits, as theoretical assumptions indicated, the results of Problem-Solving and Friend Involvement variables indicated that Americans displayed more collectivistic attitudes than Koreans (see Figure 3 and 4). Koreans also exhibited lower levels of collectivistic attitudes than Korean-Americans regarding the two cultural variables.

As shown above, two of three individualism-collectivism variables resulted in opposite findings when compared to existing theoretical hypotheses. However, it may not be concluded that the existing theoretical hypothesis of national cultures was not correct. Alternatively, it would be better to consider some possible explanations, such as cultural shifts or methodological concerns.

In terms of these contradictory results, first, I suggest a limited sample in the original study of Friend involvement. Friend Involvement from Cha (1994) was developed through previous studies that were limited to Korean society. Cha found cultural shifts in Korean society through the use of this measure, yet he never tested it on Americans or non-Koreans[9]. The results of my study may suggest that the items may not be reliable indicators in cross-cultural research.

Next, the findings for Problem-Solving, which asked respondents to what extent they agreed to consult friends to solve their personal problems, may be related to a measurement bias. Chan (1994) measured collectivistic and individualistic cultural attitudes separately[10]. In this study, however, the scales were mixed and measured as the

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[9] Originally, Cha (1994) adopted Friend Involvement items in order to compare in-group behavior between members of older and younger generations of Koreans. In his study, members of the older generation were more open to letting friends into their lives (i.e., they rated higher in Friend Involvement) than were the younger generation. Since the main participants were young Koreans in my study, the low level of Friend Involvement might parallel Cha's findings. However, there is no explanation for the higher scores of Americans and Korean-Americans because the scale has never been verified in other cultures and societies.

[10] These separate measurements of individualism-collectivism cultural attitudes are an attempt at a multi-method approach of cultural differences to heighten measurement reliability (Triandis, 1995). These separate measurements have shown interesting results. For example, Cocroft and Ting-Toomey (1994) measured American and Japanese samples by separately assessing collectivistic cultural items and individualistic items. Americans showed a lower level of collectivistic cultural attitudes and higher levels of individualistic attitudes. On the contrary, Japanese had higher levels of both collectivistic

same scale. Items of individualistic cultures were coded in reverse later to create an index of overall collectivistic cultural attitudes. As a result, my scale may miss increasing individualistic attitudes in current Korean society. As Korean society economically develops, Koreans may have heightened their individualistic tendencies while holding traditional collectivistic attitudes. My measurement may fail to reflect the cultural shift.

In developing countries, the cultural shift from collectivistic to individualistic cultures is explained by Hofstede (2001) who proposes that economic development influences cultural shift. It was not expected that Americans would tend to score high on collectivistic cultural attitudes. In this regard, the current study suggests that American users may be affected by specific behavioral norms on SNSs that are linked to group activities. This can be compared to Koreans who had strong definitions of group activities. Americans had relatively thin cultural norms of group-oriented activities. Earlier, Lea and Spears (1995) proposed that visual anonymity and physical isolation in CMC de-indivisuated users and highlighted group identity rather than self-identity. The group-oriented attitude of American users may be caused by CMC media characteristics where there is a lack of group-oriented cultural norms. This assumption might have some theoretical importance but it would require additional study to reveal the basis for such behavior. Noted earlier is the possibility that the very structure of the SNS can pre-determine behavioral options available to users.

Although many nations and societies have indicated cultural shifts toward more individualism, national cultures are viewed as valid representations of how a society

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and individualistic cultural attitudes. This finding implies that Japanese exhibit both traditional cultural attitudes and newly highlighted attitudes corresponding to economic development.

governs its norms (Oyserman et al., 2002; Schimmack et al., 2005). Economic

development in a society influences its social structures and has an effect on individuals'

living conditions, yet the original cultural patterns change slowly while revealing clashes

between traditional cultural values and changing individuals' psychological needs.

(Schooler, 1998; Hofstede, 2001). This phenomenon can be seen in Japanese society,

which has experienced heightened individualism with the evolution of its economy, yet

strong collectivistic traits endure (Cocroft & Ting-Toomey, 1994). Kim, Coyle, and

Gould (2009) confirm the effect of national culture by analyzing website design features

between Korea and the United States despite similarities of economic development status

and of the Internet infra structures between the two countries.

This study accordingly adopted a cultural variable rather than dropping it to re-

confirm or challenge the influence of national culture on communication attitudes and

behaviors. Group Harmony was finally adopted because the factor is not only composed

of dependable items verified by numerous cultural studies (Hui & Triandis, 1986;

Triandis, 1986, 1989; Triandis et al., 1988; Triandis, 1995) but also, among the three

factors, most clearly identifies the cultural concept of individualism-collectivism. Future

research may need to re-evaluate Problem-Solving and Friend Involvement.

High-and Low Context Culture. To evaluate the relationship between high-and

low-context culture and nationality, an ANOVA was conducted. The ANOVA was not

significant. That is, Americans, Korean-Americans, and Koreans did not differ

significantly in high-and low-context cultural tendencies.

Regarding the insignificance, this study proposes two possible explanations. First,

survey participants might report their attitudes on the basis of media usage habit, while

computer-mediated communication (CMC) offset culturally learned communication styles of individuals. Tidwell and Walther (2002) demonstrate that CMC interactants use more direct communication styles than do face-to-face interactants in order to compensate for the lack of communication cues. Such media characteristics may lead SNS users, regardless of cultural orientation, to use direct communication styles. Age similarity may be another factor that diminishes cultural differences in communication style. Since participants in this study were limited to college students, there may be strong similarities among this population beyond cultural orientation. Next, the pre-coded items and formats on SNSs and fixed user interfaces could act to discourage users or shape their original communication styles into pre-existing formats. According to the results (Figure 5), all of the three samples revealed no specific differences even though they all exhibited slightly low-context cultural attitudes. This may also indicate that participants were rarely aware of their own communication styles. This result however does not mean that SNS users have no culturally preferred communication styles. The findings from content analysis in this study will show the influence of cultural effects on their communication/information styles.

Cultural Attitudes of SNS User Groups. As shown in the sample description earlier, the majority of users primarily used Cyworld Korea (Cyworld below) and Facebook. The rest of SNSs were too minor to find statistical significance. This study investigated cultural attitudes of the two representative SNS user groups to examine if cultural variables, including Group Harmony and High-Context Culture, are associated with the type of primary SNSs. The two user groups also represented nationality

respectively[11]. The result of an independent-samples *t*-test showed that Cyworld users scored higher on Group Harmony than Facebook users, $t(567)= 7.75$, p < .001, (also see Figure 5). However, there were no significant results in High-context cultural attitudes. These results corresponded to those by nationality, particularly between Koreans and Americans.

Dismissal of Korean-Americans from This Study. According the results of cultural attitudes, Korean-Americans did not show consistent differences in cultural attitudes from those of Americans or of Koreans in both INDCOL variables and High-Context Culture. Although the sample presented a significant difference from those of the Koreans in the comparison of Group Harmony, it was not differentiated from those of the Americans. For Friend Involvement, the Korean-Americans exhibited significantly different attitude from that of Koreans, while there was no significance between the Americans and Korean-Americans. Korean-Americans did not demonstrate any significant relationship to either Americans or Koreans regarding Problem-Solving. In addition, High-Context Culture did not show significant associations between nationality and cultural attitudes of individuals, including triple and paired comparisons among each sample.

Based on the above analyses, this study decided to include only American and Korean samples, while removing the Korean-American sample, in order to heighten reliability of data analyses. Cultural characteristics of Korean-Americans could make cultural differences ambiguous rather than being an indicator of a cultural intermediate group of acculturation.

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[11] All Cyworld users were Koreans and all Facebook users were Americans after removing Korean-Americans and international students in the American sample.

Cultural Attitudes on SNS Relationships

This study hypothesized that members of collectivistic cultures were likely to have fewer friends on their friends list than members of individualistic cultures (H1a). The hypothesis was supported. Members of collectivistic cultures had fewer friends on their friends list than those of individualistic cultures, $r(593) = -.084$, $p < .05$. Also, I hypothesized that members of collectivistic cultures were likely to have more intimate relationships with their SNS friends than members of individualistic cultures (H1b). To measure intimacy of SNS friends, participants were asked about what percentage of SNS friends they considered as close friends. I measured the correlation between the percentage of close friends and individuals' cultural attitudes to examine H1b. It was not supported.

However, there was another notable result. The percentage of strangers on friends list was correlated with cultural attitudes, $r(594) = -.101$, $p < .05$. That is, members of individualistic cultures tended to have more strangers than members of collectivistic cultures on their friends lists. According to the findings of preliminary research, the strangers may be included on one's friends list in order to attain information regularly, including information about club events, concerts, and parties. The strangers may also have the potential to be transformed into acquaintances at the moment they become SNS friends. Whoever strangers are, the finding indicates that members of individualistic cultures are amenable to sharing personal information and networks with strangers more than members of collectivistic cultures in order to attain or develop relationships with them. In sum, the findings designated that members of individualistic cultures were

relatively more open to SNS relationships, whereas members of collectivistic cultures tended to maintain relatively closed networks on SNSs (see Table 19).

Cultural Attitudes on Self-Disclosure

Correlation coefficients were computed among Group Harmony and the self-disclosure variables. The results of the correlational analyses presented in Table 18 show that Group Harmony and three self-disclosure variables were statistically significant. Group Harmony was negatively correlated with amount of self-disclosure, $r(589) = -.084$, p < .05, and positively correlated with intimate self-disclosure, $r(584) = .163$, p < .001, as well as the extent of disclosure of vulnerable personal information, $r(572) = .226$, p < .001. As predicted, the results demonstrated that members of collectivistic cultures were generally less likely to disclose their personal information (H2a), yet more likely to disclose intimate and vulnerable information than members of individualistic cultures (H2b). The findings suggest that people who are individualistic open their SNSs more than those who are collectivistic, while indicating positive attitudes to relationship development on SNSs based on social penetration theory (Altman & Taylor, 1983). They also suggest that people who are more collectivistic maintain closed relationships on SNSs mostly with friends to whom the users disclose intimate and vulnerable information. See Table 20.

Cultural Attitudes on Anonymity

Correlation was used to assess relationships between individualism-collectivism cultural attitudes and types of anonymity, which were measured by visual and discursive anonymity. Hypothesis 4, which predicted cultural differences in anonymity on the SNS profile page, was partially supported. Regarding discursive anonymity, participants

revealed what type of name they used: anonymous, obvious or non-obvious pseudonym, and partial or full real name. Visual anonymity was measured by the type of profile photos, from no photo to obvious or non-obvious fake picture and partial, actual, or actual with life picture.

In the area of discursive anonymity, students who were more collectivistic preferred using an identifiable name more than people who were more individualistic, $r(594) = -.098$, p < .05. However, regarding this result, there may be biases because of a technical feature and behavioral norms within SNSs. Since 2005, Cyworld, with its strongly collectivistic Koreans users, has regulated the use of full real names when creating user accounts. Hence, many Cyworld users may have no choice whether or not to be anonymous or to use pseudonyms or real names. The effect of behavioral norms of SNSs may be predicted from the fact that most Facebook users who have no technical limitation use their real names. These points will be discussed in more detail in the discussion section.

Visual anonymity, without a bias from SNS system, was significantly correlated with Group Harmony, $r(593) = .174$, p < .001. This result supports H4, namely, that members of collectivistic cultures prefer being visually anonymous more than members of individualistic cultures on the profile page of their SNSs.

This study also found that there was a significant relationship between visual anonymity and High-Context Culture, $r(586) = .086$, p < .05. This result indicated that visual anonymity correlates indirect communication styles on SNSs. Table 21 revealed cultural effects on Anonymity.

Cultural Attitudes on Self-Presentation

This study predicted that members of collectivistic cultures would attend to self-presentation more than members of individualistic cultures on the basis of individualism-collectivism theoretical assumptions (H5). As predicted, Group Harmony was positively correlated with higher levels of attention of self-presentation, $r(592)=.212$, p < .001. The result indicates that members of more collectivistic cultures are more apt to consider others' assessment on the self compared to those who are more individualistic.

In addition, the correlation of High-Context Culture with self-presentation was statistically significant, $r(583)=.130$, p < .01. This result reflects the fact that the High-Context Culture variable is an indicator of a cultural effect on communication styles. These results are shown in Table 22.

Cultural Attitudes on Privacy

In terms of privacy, two factors were derived from factor analysis: a) Privacy Concern (Cronbach α=.80) and b) Sharing Privacy (Cronbach α=.78). Privacy Concern were measured by how worried users would be in cases where their personal information was disclosed to strangers in unexpected situations. Sharing Privacy was measured by a willingness to reveal personal information to SNS friends or on SNSs. The two privacy variables respectively represented privacy attitudes to strangers and to acquaintances, including close relationships.

This study hypothesized that, depending on interactants, which can be in-or out-group members, users' attitudes to privacy concern and sharing would differ, especially in collectivism. The hypotheses are as follows: a) Given out-group members as interactants, users from collectivistic cultures are more concerned about privacy than

users from individualistic cultures (H6a); and, b) Given in-group members as interactants, users from collectivistic cultures are more likely to open their privacy than users from individualistic cultures (H6b).

This study continued in its use of correlation analyses to assess the relationships between individuals' cultural attitudes and privacy attitudes. The results of the correlational analyses are shown in Table 21. H6a was not supported. This result suggests that on SNSs where personal information is intentionally or unintentionally revealed to the public, users generally tend to be concerned about privacy regardless of cultural attitudes. As the frequency graph (Figure 8) shows, most of SNS users exhibited higher levels of privacy concern. In Figure 8, the horizontal x-axis refers to respondent's additive index for three items of privacy concern variable. Higher scores mean higher levels of privacy concern. The vertical value y-axis refers to percentage of respondents who fall within each value of privacy concern. In all, 111 respondents exhibited a score of 15, the highest value of privacy concern. A total of 48% of respondents exhibited high privacy concerns (they answered strongly agree or agree with three statements of privacy concern). Only 11% of respondents exhibited less concerns for privacy (they chose strongly disagree or disagree with three statements of privacy concern).

On the other hand, H6b was supported, showing a correlation between cultural attitudes and Privacy Sharing on SNSs, $r(594)=.202$, $p < .001$. This implies that those who are more collectivistic have higher levels of privacy sharing on SNSs; this privacy sharing includes trust in interactants on SNSs. When communication situations are specifically defined, including with whom and where, people exhibit higher levels of trust and consequently open private information more than in general situations. The effect of

the particular situation is exerted in collectivistic cultures more than in individualistic cultures, as the significant correlation confirms.

Further Analysis with Additional Explanatory Factors

This study aimed to endorse the assumption that different cultural attitudes of individuals elicited different communicative behaviors on SNSs. As shown earlier, cultural attitudes, from individualistic to collectivistic and from low-context to high-context, were generally associated with communicative behaviors, including the number of friends on friends list, amount, intimacy, and vulnerability of self-disclosure, visual anonymity, self-presentation, and trust in interactants.

These measurements assessed individuals' cultural attitudes rather than reflecting large cultural or social boundaries. That is, this study did not define individuals' cultural attitudes using their group characteristics in advance, but considered that within the same cultural group, individuals could have different types of cultural attitudes: that is, some Americans could be more collectivistic than some Koreans and vice versa. By doing so, this study follows the point of Triandis (1995) that both individualistic and collectivistic tendencies are inherent in cultural attitudes of an individual and, depending on different contexts, one of these tendencies may predominate. This point also pertains to high-and low-context cultures (Hall, 1976).

However, it is also true that national culture is an influential indicator in cross-cultural comparisons (Gudykunst et al., 1996; Hofstede, 2001; Triandis, 1989; Triandis et al., 1988). If social science research seeks general social phenomena and human behaviors rather than uniqueness of individuals, national culture may be a more robust cultural indicator than individuals' cultural tendencies, which may be changeable

depending on situations. Accordingly, this study measured communicative behaviors and attitudes by nationality to confirm cultural effects on SNS behaviors. Nationality is regarded as a generalized cultural indicator.

National culture was divided into two samples, Americans and Koreans. As mentioned earlier, my study recruited data from three national and ethnic samples, American, Korean, and Korean-Americans. Counter to a priori expectation, the Korean-American sample was not consistent as an intermediate on an individualism-collectivism continuum. On the basis of this result, I removed the Korean-American sample from final data analyses.

In addition, samples by nationality overlapped in terms of the type of primary SNSs, which enabled users to specify communicative situations. All Cyworld users were Koreans and all Facebook users were Americans. Unlike Korean Cyworld users, American users were ethnically diverse; nonetheless, the variety of ethnic identities hardly influenced the results found in data analyses (see the sample description before). The American sample also included users from several SNSs, such as MySpace (7%) and LiveJournal (1%) even though Facebook users comprised the majority (93%). The minority users were also included in the American sample. With the minor users, the samples by nationality and by the type of SNSs slightly differed, but were approximately the same in terms of sample size (see Table 24).

Given that communicative situations and behaviors concretize intangible cultures (Geertz, 1973), nationality and the type of primary SNS can be seen as alternative indicators of cultural attitudes. National culture based on history and region provides interactants with tangible situations at a broad range. SNSs also provide concrete

communicative situations where participants specifically take actions. This study

measured communicative behaviors (dependent variables) with the two situational

variables (independent variables), nationality and the type of SNS. The two results did

not dramatically differ but rather presented similarities. Accordingly, this study reports

results by nationality unless the two results show notable differences.

SNS Relationships by Nationality

An independent samples *t* test was conducted to examine the mean differences in

both quality and quantity of SNS relationships among two national user groups. There

were differences in the amount of SNS relationships between Americans and Koreans,

$t(402)= -18.23$, p < .001. Americans had around 352 more friends than those of Koreans

on average. Korean participants, on the other hand, had a higher percentage of close

friends (30%) on their friends list, compared to Americans (20%), $t(435) = 5.81$, p < .001

(see Table 25, which shows mean differences).

These significant differences indicate that national culture showed the social

relationships on SNSs predicted earlier, which indicates that those who are more

individualistic have a greater number of friends (H1a), whereas those who are more

collectivistic maintain more intimate relationships on SNSs (H1b). H1b was not

supported regarding cultural attitudes without a specific cultural gauge, such as

nationality and the type of SNS. Hence, national culture seems to be a more reliable

predictor to show differences between individualistic and collectivistic cultural attitudes.

In addition, Americans and Koreans exhibited significantly different mean values

in the percentage of acquaintances and strangers, while extending the former findings by

individuals' cultural attitudes. Americans included more acquaintances and strangers on

their SNS friends lists than Koreans, $t(546) = 3.23$, p = .001 (27% versus 22% for actuaintances) and $t(540) = 8.13$, p < .001 (8% versus 2% for strangers), respectively. This large portion of acquaintances and strangers may indicate that Americans are more open to develop and increase their SNS relationships than Koreans.

The insignificant results of *just friends* and *family* were the same as the comparison by individuals' cultural attitudes. In friends lists of both Americans and Koreans the percentage of just friends was around 42%. Family proportion also similarly ranged between 4% and 5%.

Self-Disclosure by Nationality

Independent-samples *t* tests were conducted to examine whether there were mean differences in self-disclosure between Koreans and Americans. As a result, Americans self-disclosed more than Koreans, $t(466) = - 2.49$, p < .001, whereas Koreans shared more intimate personal information than Americans, $t(524) = 6.47$, p < .001 (see Table 26). Koreans also exhibited higher levels of vulnerability of self-disclosure than Americans, $t(520) = 12.20$, p < .001. These results reconfirmed those based on individuals' cultural attitudes, which indicated that members of collectivistic cultures disclosed less personal information, but once they did, they willingly shared intimate personal information with others, compared to embers of individualistic cultures. Hypotheses 3a and 3b that assumed culturally different communication styles in self-disclosure were assessed through content analysis.

Anonymity by Nationality

An independent-samples *t* test did not support a mean difference in descriptive anonymity on SNSs between Koreans and Americans. They all used highly identifiable

types of names (M = 4.60 both). As mentioned earlier, such results may be explained by a behavioral norm of SNSs: relating to actual identities authenticated by online profiles and SNS networks (boyd & Ellison, 2007). Technical constraints to use one's real name in Cyworld may influence the anonymity behavior of Cyworld users.

With regard to one's profile photo, Americans and Koreans, as predicted, exhibited a difference in visual anonymity, $t(342)$= -19.55, p < .001. Table 27 displays that Americans used more identifiable pictures for their profile photos than Koreans.

Self-Presentation by Nationality

An independent samples *t* test was conducted to examine the difference in self-presentation between Koreans and Americans. The results indicated that Koreans tended to attend more to self-presentation than Americans, $t(500)$= 4.79, p < .001 (see Table 28). That is, Koreans who are more collectivistic mind others'—in particular, in-group members'—assessment of one's self and, accordingly, are concerned with self-presentation to make a good impression. An ideal image for self-presentation may be closer to how others anticipate one's image rather than how one wants to appear.

Privacy by Nationality

Privacy was also evaluated by an independent samples *t* test. These statistical results found that Koreans were significantly more concerned about privacy invasion by strangers than were Americans, $t(590)$= 3.76, p < .001. The comparison by individuals' cultural attitudes was not significant for privacy concern earlier, while indicating that SNS users were generally concerned with privacy invasion from strangers across cultures. However, given a specific cultural boundary, such as nationality, the degree of concern that strangers could invade privacy significantly differed.

Koreans also exhibited higher levels of privacy sharing with their interactants on SNSs than Americans, t(542)= 3.56, p <.001. The higher level of privacy sharing is indeed related to Hofstede's (2001) argument that members of collectivistic cultures are relatively less interested in privacy. Once interactants are in-group members, members of collectivistic cultures yield their personal needs and share their personal sphere with in-group members. The privacy sharing is tolerated within in-groups.

<div align="center">Content Analysis Findings</div>

The findings of the content analysis supported and enhanced those of the survey data, especially with respect to social relationships and self-disclosure. According to the findings, Facebook users tended to self-disclose more than Cyworld users; yet, Cyworld users disclosed multiple contact information to their SNS friends compared to Facebook users while indicating close relationships with SNS friends.

Content analysis also verified that Cyworld and Facebook users tended to prefer different types of communication styles, while corresponding to high-and low-context cultural traits, respectively. This study expected that when self-disclosing, members of high-context cultures would use more indirect communication styles than members of low-context cultures on SNSs (H3a). Also, it was expected that members of high-context cultures would rely on nonverbal information more than members of low-context cultures (H3b). Although these hypotheses were not supported by survey data, they were confirmed by the results of content analysis.

Basic Personal Information on Online Profiles

First, this study attempted to compare each item in users' online profiles between Facebook and Cyworld. There were a few basic items requested by both SNSs, including

birthday, hometown, email, cell phone number, groups, *About me*, and the use of photo

album. Name and sex were excluded because they were automatically disclosed,

regardless of users' purpose on Cyworld.

As mentioned earlier, the accessibility to a Cyworld profile information has two

different levels, as a SNSs friend and as an outsider. Unlike Facebook profile pages,

everyone can access Cyworld online profile pages and users control accessibility of each

item. As Table 30 shows, depending on the levels of accessibility, the displayed

information noticeably differed across users. Table 30 includes percentage information

that separately reports for only SNS friends' cases and for only outsiders' cases as well as

displaying overall results. Facebook users control the accessibility of the entire online

profile page rather than controlling that of each item and, consequently, once one

becomes an SNS friend, he or she can fully access the user's online profile page and

inside content, including photo album and wall (friends' comments). This study

principally compared fully accessible Facebook cases (*N*=51) and all valid Cyworld cases

(*N*=93) overall.

This study categorized summary information and conducted a two-way

contingency table, cross tabulation analysis to evaluate significant associations between

disclosed information—common items from both SNS profiles—and two SNS user

groups. The sample analyzed included 51 fully accessible Facebook profile pages and 93

partially or fully accessible Cyworld profile pages.

As Table 30 shows, Facebook users disclose more information than Cyworld

users. For birth information, 94% of Facebook users displayed the information

significantly more than Cyworld users (47%), Pearson $\mathcal{X}^2$ (1, *N*=144) = 31.28, *p* < .001,

Cramér's V= .47. Facebook users also displayed hometown information more than Cyworld users: 65% versus 18%, Pearson $\mathcal{X}^2$ (1, N=144) = 31.32, $p < .001$, Cramér's V= .47, and displayed group information significantly more than Cyworld users, Pearson $\mathcal{X}^2$ (1, N=144) = 26.16, $p < .001$, Cramér's V= .43.

This result may be explained by the different percentages of information displayed between SNS friend status and non-friend status on Cyworld profiles. For cell phone information, 41% of Cyworld users disclosed this information to their SNS friends, whereas only 5 % of them disclosed it to outsiders. This indicates that once Cyworld users accept someone as SNS friends, their openness to disclosing personal information is heightened.

For Cyworld, the different levels of disclosure on profile information may not only indicate relationship intimacy but may also be related to narrow in-group boundaries on SNS relationships. Birthday, email, and hometown information also considerably differed between SNS friend status and non-friend status. This information can link to contact information and the information that people use to find their friends via *friend searching* on Cyworld. Therefore, it may be said that by controlling information for searching a friend, they may intend to control how easily SNS friends are located. This is especially critical in a country where many surnames are common. As previous studies have claimed (Ellison et al., 2007; Kim & Yun, 2007), SNS users are afraid of rejecting friend requests. If users do not want to increase the number of SNS friends, they can control access to personal information. This preserves the user's option to create borders around personal identity and not risk rejecting casual contacts.

Next, despite no significance, it could be interesting that a greater number of Cyworld users filled-in *About me* than Facebook users. Superficially, the result seemed to report that Cyworld users disclosed themselves more than Facebook users which would be contrary to expectations established by cultural generalities. However, when examining this content, Cyworld users rarely conveyed personal information on *About me* compared to Facebook users. That is, Cyworld users used *About me*, but they did not provide much information to outsiders. This result is addressed in more detail in the next section with *About me* content analysis.

Finally, both user groups had photo albums on their SNS sites, while indicating that users commonly displayed their personal photos on SNSs across cultures and countries. The next section reports the findings of content analysis on *About me* and profile photo. These two items are common items that all types of SNSs have which can reveal communication styles and self-concept of users.

About Me and Profile Photo

This study closely analyzed *About me* and profile photos that users disclosed to confirm culturally different communication styles and cultural attitude. These two items provide users with flexibility for self-expression compared to other pre-coded items, including birth, email, cell phone, and hobbies, that request users to enumerate relevant words. The flexibility of expression might enable the researcher to find interesting perspectives relating to cultures.

Self-Description of About Me. The findings of self-description on *About me*, supported H3a and H3b by demonstrating that Cyworld users tended to adopt more indirect communication styles and graphics than Facebook users when self-describing.

This study conducted two-way contingency table analyses of cross tabulation to evaluate cultural differences in self-expression by SNS users. The results demonstrated that Facebook users employed explicit self-description significantly more than Cyworld users, Pearson X^2 (1, N=84) = 29.94, $p < .001$, Cramér's V= .60. On the contrary, Cyworld users employed pictures significantly more than Facebook users, Pearson X^2 (1, N=84) = 9.26, $p < .01$, Cramér's V= .33. Despite no statistical significance, it is also notable that Cyworld users preferred implicit self-description (28% versus 17%) and non-self-related information (25% versus 9%) more than Facebook users.

Overall, Facebook users used more explicit self-description, which stands for direct communication styles and low-context cultures, than Cyworld users. For their self-description on *About me* Cyworld users were more likely than Facebook users to display pictures, provide implicit self-description, and offer non-self-related information which represents indirect communication styles and high-context culture. Using pictures on *About me* may generally be contrary to its original usage, yet it also reflects cultural needs of indirect self-expression on Cyworld.

Although there was no significance, it is interesting that Cyworld users provided more listings of personal information than Facebook users as Table 31 shows. This study does not regard the result of descriptive information as evidence to support against theoretical propositions. Instead, it suggests that the result occurs due to SNS user interfaces rather than cultural attitudes. Cyworld provides relatively few pre-coded fields to disclose personal information. Such an interface may be appropriate for the needs of users who do not need much space to self-disclose, yet there can be others who are unsatisfied with the lack of pre-coded items on *About me*. For them, the flexible interface

of *About me* on Cyworld, from unlimited text input to graphic inserts, can be an alternative to convey self-information. On the other hand, they may use *About me* to convey provisional information rather than permanent (or long-term) information of the self. In fact, the information listed on *About me*, was mostly a temporary resident address while studying abroad or conducting military service. This kind of usage of *About me* on Cyworld may indicate that SNS users are not only affected by their cultural orientation but also create their own SNS behavioral norms beyond their cultural orientation.

When integrating the multiple categories only into direct versus indirect communication styles, the results more clearly demonstrated their support of hypotheses 3a and 3b. A two-way contingency table analysis of cross tabulation was conducted while combining categories. The first two categories were combined as direct communication styles (low-context culture) and the remaining three categories were incorporated as indirect communication styles (high-context culture). The test was significant, Pearson X^2 (1, *N*=84) = 18.63, *p* < .001, Cramér's V= .47. Table 32 displays the proportions of communication styles depending on SNSs.

First-Person References on About Me. This study also analyzed the use of first-person references on *About me* to confirm two user groups' cultural orientation based on individualism-collectivism. There are two types of first-person reference: first-person self-reference, e.g., I or my (Na-nun or Na-eui in Korean) and first-person group reference, e.g., we or our (woo-ri in Korean). The use of first-person self-reference parallels I-oriented self-identity in individualistic cultures (Hofstede, 2001). This is also related to independent self-construal, which refers to construing the self independently from situations and relationships (Markus & Kitayama, 1991). The use of a first-person

group-reference indicates a more group-oriented self-identity, while corresponding to interdependent self-construal, which refers to construing the self interdependently from situations and relationships and, accordingly, self-definition is changeable depending on given situations in collectivistic cultures.

Based on the theoretical assumption, it was expected that Facebook users would make more first-person self-references, whereas Cyworld users would use more first-person group-references. The assumption was partially confirmed. Facebook users used significantly more first-person self-references than Cyworld users. Pearson $\mathcal{X}^2$ (1, N=84) = 10.90, $p < .01$, Cramér's V= .36, yet there was no significant difference in the use of group-references between Cyworld and Facebook users. (see Table 33).

According to Hofstede (2001), the basic unit of self-perception in collectivism is family and members of collectivistic cultures tend to perceive the self as one of in-group members rather than an independent individual. The use of first-person group references could reveal such a group-oriented cultural attitude. In Korean language use, it is easy to find uses of group reference instead of self-reference: e.g., "our husband" instead of "my husband."

In *About me* on Cyworld, such language use disappeared. Only one user employed a group reference. Even in this case, the use could be understood as referring to general people rather than in-group members. Given a group reference, her sentimentality is transferred to others: accordingly, her personal feeling turned into "our" feeling:

> Although time flows away, (an omitted subject) cannot forget such warm loneliness and the night sky. Why do we live? Why do (an omitted subject) love someone? It is because we experienced unforgettable moments while living and while loving.

(A Cyworld user)

It is notable that there were few uses of group-references, such as "we" on Cyworld and this could indicate a cultural shift among younger Koreans. In addition, the fact that Cyworld users also rarely use self-references may imply that a cultural shift, if any, is going on rather than being completed. This study will discuss later how these findings on cultural shifts on SNSs might be integrated.

However, the majority of Cyworld users showed their indirect communication styles by omitting self-subjects, using pictures, and quoting rather than self-describing. Most of all, they tended not to use self-references rather than using self-or group references. In Korean language custom, omitting the subject—especially when self-references, *I* or *my*, are needed—is common. Such an indirect or vague communication style is often related to self-effacing interpersonal attitudes that were important collectivistic cultural values in interpersonal interactions (Gudykunst et al., 1996). Therefore, although Cyworld users rarely use group references for self-description, such behaviors do not mean that Cyworld users dominantly exhibit individualistic cultural traits. Rather, the overall findings indicate collectivistic attitudes of Cyworld users, while they confirm self-oriented individualistic attitudes of Facebook users.

The Type of Profile Photo. The findings of two-way contingency table analyses supported the assumption that Cyworld users who were more collectivistic created more anonymous profiles than Facebook users who were more individualistic. This assumption was generated by culturally different social relationship maintenance.

First, Facebook users mainly adopted photos to represent the self. Facebook users posted *actual photos including family, friends or backgrounds with the user* (43%) more than Cyworld users (14%), Pearson X^2 (1, *N*=150) = 15.79, *p* < .001, Cramér's

V= .32. Facebook users also adopted *actual self-photos including only the user* (47%) more than Cyworld users (4%), Pearson X^2 (1, *N*=150) = 38.65, *p* < .001, Cramér's V= .51. On the contrary, Cyworld users adopted obviously fake photos as profile photos more than Facebook uses, Pearson X^2 (1, *N*=150) = 64.80, *p* < .001, Cramér's V= .66.

As Table 34 shows, the majority of Facebook users adopted actual self-photos that obviously represented the self, whereas more than half of Cyworld users adopted obviously fake photos. These findings indicate that Cyworld and Facebook users have different notions in their usage of profile photos. The majority of Facebook users employed *actual self-photos including family, friends or backgrounds with the user* that enable readers not only to identify the user but also to attain more information about his or her life. Both types of actual self-photos may also more straightly convey information than text-based self-description in certain aspects. In addition, Facebook users use their profile photos to represent their authorship by leaving profile photos next to all messages that they post on Facebook. The hyperlinked profile photos to their SNS profile pages easily induce readers to visit their SNSs.

Compared to Facebook users who mostly use self-representative photos as profile photos, Cyworld users chose anonymous photos. Table 34 shows that the majority of Cyworld users present *obviously fake photos* (69%). Obviously fake photos include animal photos, landscapes, celebrities, and animations. These anonymous profile photos may not only aim to hide users' identity but also attempt to create further impressions in indirect ways. Some users created their own image to use as a profile photo and others used pictures matching the content of their greeting and/or miniroom/storyroom, which are another self-representative device on the profile page of Cyworld. These kinds of

photos indicate that Cyworld users had the intention to use a non-identifiable profile photo. To this point, the main use of profile photos on Cyworld may not be to self-represent but to create an impression of oneself.

These two different uses, fully anonymous photos and obviously identifiable photos, between the two SNS user groups, parallel high-and low-context cultural traits. While relating to other information on profile pages, anonymous profile photos on Cyworld revealed implied information that readers might need additional context to understand, while paralleling high-context cultures. On the contrary, the major photo type on Facebook appears to convey visual information of the user related to no additional context, corresponding to low-context cultures.

Thus, the findings generally reconfirmed theoretical expectations. On the other hand, there was a similar aspect to that indicated from *I*-oriented self-description on *About me*. The second majority of Cyworld users employed actual photos with family and/or friends (14%). These users might be aware of the usage of profile photos as self-representative substance and conform to the SNS usage norm. However, they still revealed their preference for indirect communication styles. Categories for profile photos were defined by the level of anonymity. According to the definition of categories, although actual photos with family and/or friends confer more information about the self, it is also true that these photos decentralize the self by concurrently showing additional information. Such a tendency to implement these kinds of photos more than actual self-photos, therefore, may imply a negotiation between self-representation and self-effacing attitudes to present the self.

Anonymous profile photos on Cyworld may also be related to the preference for visual anonymity to constrict SNS social networks. In fact, the coding categories of content analysis corresponded to items of the survey question and the two findings displayed a concurrence between self-reported survey data and actual behavior through content analysis. To this point, it may lead to the same conclusion as that of the survey data analysis. That is, Cyworld users who are more collectivistic tend to be concerned about an unrestrained increase of social networks through SNSs and, consequently, self-disclose less on their profile pages to manage unanticipated contacts.

Given the self-effacing attitude when self-expressing and the low level of self-disclosure for limited social relationships, anonymous profile photos on Cyworld not only indicate indirect communication styles in high-context cultures but also designate collectivistic cultural attitudes. This point corresponds to the previous perspective that claims an association between high-and low context cultural dimension and individualism-collectivism dimension (Gudykunst et al., 1996). That is, indirect communication styles and high-context expressions can be an ideal communication manner conforming to collectivistic cultural values.

Self- versus Group-Oriented Profile Photos. This study also compared the type of profile photos using the categories of self-and group-oriented photos. Based on the individualism-collectivism theoretical framework, it was expected that Facebook users would adopt more self-oriented pictures, whereas Cyworld users would post more group-oriented pictures for their profile photos. As the findings of *About me* showed, the expectation concerning the profile photo was partially supported as well. As expected, Facebook users used more self-oriented photos than Cyworld users (Pearson $\mathcal{X}^2$ (1,

N=150) = 72.55, $p < .001$, Cramér's V= .70.). Contrary to expectations, no one used

group photos as their profile photos. With the rare use of group reference on *About me*,

this usage on Cyworld profiles may be worthy of considering as a possible indicator of a

cultural shift or a cultural mix.

   High-and Low-Context Cultural Traits Reflected on Profile Design. Cultural

differences were not only indicated in the content of profiles but also exhibited on the

overall configuration of the profile page. The Facebook interface encourages users to fill

out a lot of personal information by displaying many pre-coded fields. Facebook users

filled out items in the following itemized categories: activities (57%), interests (67%),

favorite music (69%), favorite TV shows (50%), favorite movies (52%), favorite books

(50%), and favorite quotations (69%). Although filling in these items is optional, more

than half of the users chose to fill out the information in every category.

   Cyworld users, on the contrary, have relatively few given fields to fill out. Instead,

Cyworld provided users with open-ended space to express the self, such as 42 Q&A,

which encourages users to create their own questions and answers. This flexible format

enables users to create their own method of self-description rather than filling in personal

information into given fields. *Keyword*, a feature on Cyworld that asks users to put

meaningful words to the self, and *history*, a feature that asks users to select the most

important event in a given year, lead users to show the self by using several symbolic

words instead of explicitly listing relevant words.

   Despite the format flexibility available to Cyworld users, few users created

keywords (4%), histories (4%), and 42 Q&As (2%). Such a broad range of self-

determination to express the self may discourage users from employing them, regardless of their cultural orientation.

Correlations among Variables

Table 36 shows correlations among each category of both *About me* and *Profile photo*. There were no significant correlations with the middle levels of anonymity, such as distorted self-photos and non-obviously fake photos. Instead, fully identifiable or fully anonymous profile photos were significantly correlated with the communication styles of *About me*, whose categories also partially exhibited significant correlations: one fully represents direct communication styles that stand for low context cultural aspects and the other represents indirect communication styles that stand for high context cultural aspects.

As Table 37 shows, the types of profile photos correlated with self-reported visual anonymity of survey data. These relatively strong correlations evidenced that the categories of profile photo were based on the level of anonymity. The types of *About me* were correlated to a lesser extent with visual anonymity. Only explicit self-description was negatively correlated with visual anonymity, $r(82)= -.43$, $p <.01$. Neither types of *About me* and *Profile photo* correlated with discursive anonymity. As mentioned earlier, the data of discursive anonymity might be biased by the user interface of Cyworld or by SNS behavioral norms.

In addition, the types of *About me* and *Profile photo* also correlated with other communicative behavioral variables (see Table 37). The results indicated that the levels of anonymity in online profiles were significantly related to communicative behaviors.

Summary

This chapter has presented survey results and content analysis findings of cultural differences in SNS usage. Depending on users' cultural perspectives, they generally showed different behaviors on SNSs even though there was some overlap in patterns across cultures. Importantly, there was consistency within culture and this has direct implications for how SNS sites are structured within a particular national boundary. Assumptions made for users within one culture might not be transferable to other cultures. First, survey results generally confirmed the validity of an individualism-collectivism cultural dimension which helped explain different behaviors and attitudes on SNSs both at the individual level and at the national level. Members of collectivistic cultures maintained fewer SNS friends while revealing a higher level of intimacy with those individuals when compared to members of individualistic cultures. This exclusivity of SNS friendships among members of collectivistic cultures was found with the Korean sample that was comprised of Cyworld users and this was in contrast to findings obtained for the American sample that mostly had Facebook accounts and tended to generally exhibit individualistic attitudes.

In addition, users' cultural orientation between individualistic and collectivistic was significantly associated with communicative behaviors and attitudes regarding self-disclosure, self-presentation, anonymity, and privacy, while verifying previous findings of cultural attitudes in face-to-face settings. Only discursive anonymity and privacy concern did not show significant differences by cultural orientation. This study suggests that the non-significant findings might be due to external factors. An exploration of discursive anonymity found that using a real name as enforced by Cyworld surpassed

American users' voluntary use of their real names, regardless of their cultural affiliation. No differences were found with privacy concerns in both groups and this might indicate that privacy threats perceived by users in online environments were universal beyond cultures.

High-and low context cultural dimensions were examined to explore cultural effects on actors' behaviors and attitudes. No significant differences emerged in the self-reported survey results for the two groups. Instead, findings obtained through content analysis revealed how well high-and low-context cultural dimensions differentiate different behaviors among individuals who have diverse levels of cultural attitudes in observed data compared to self-reports. Basically, the findings demonstrate that members from high-context cultures—in this study, they were represented by Cyworld users—tended to use indirect and visual-oriented communication styles more than members of low-context cultures who were represented by Facebook users in this study. The content analyses generally supported hypotheses but they also uncovered some controversial aspects of SNS users.

The next chapter discusses these results on the basis of cultural values and how they might link to values and attitudes which influence behavior. In addition, indications of cultural shifts or cultural mix will be discussed to provide for a fuller interpretation of the results.

VI. DISCUSSION

This chapter will summarize the purpose and theoretical framework of this study and the research methods employed. It will also discuss main findings and suggest implications, limitations, and future research directions.

Purpose and Theoretical Framework

This study has used individualism-collectivism and high-and low-context cultural dimensions to examine cultural effects, especially those derived from national culture, on SNS use between American and Korean users. This study explores users' cultural attitudes as they relate to SNS usage differences linked to national culture, while noting that representative SNS services tend to develop on a national base of users. The cultural dimensions used in this study have mostly been verified using cross-national comparisons. Although individualism-collectivism has limitations in explaining ever-changing and complicated contemporary societies all over the world, the differences in cultural dimensions are still applicable, especially to the cross-cultural comparison between Western and East Asian countries. It is because their cultural orientation not only relies on the current economic situation of each country but also involves traditional cultural value systems of East Asia and Confucianism as a cultural determinant. As Hofstede (2001) proposed, individualism-collectivism enables us to appreciate attitudes, behaviors, and values of individuals from the individual level to the national level. On the contrary, high-and low-context cultural dimension proposed by Hall (1976) tends to be limited to communication styles, one of which can readily be preferred by actors depending on their cultural attitudes.

SNSs are not the only communication arena where users concretize their cultural attitudes and behaviors. SNSs also serve as communication vehicles to which users apply their communication styles. Therefore, this study employs these two cultural dimensions to explore SNS usage. While a high-and low-context cultural dimension is involved with communication styles, individualism-collectivism is employed to understand diverse communication attitudes and behaviors: e.g., when making and maintaining relationships, self-disclosing, and self-presenting. Users' cultural orientation and perceptions of anonymity and privacy are also investigated in this study as important factors which can influence communication attitudes and behaviors.

Emerging research on SNSs has contributed to defining SNSs and to furthering our understanding of new online socializing patterns (boyd, 2007; Donath & boyd, 2004; Donath, 2007; boyd & Ellison, 2007; Ellison et al., 2007, 2008). However, previous research has mostly focused its attention on the English-speaking world and its findings could be specific to particular cultures. This limitation within prior research helped lead to this study's attempt to extend understanding of SNS usage by comparing users in the United States with those in Korea. The cross-cultural comparison between two national user groups was also enhanced by considering that individuals in the same society and cultural boundary could exhibit different levels of cultural attitudes. That is, this study explores users' cultural attitudes both at the individual and national levels and then compares communicative attitudes and behaviors by such cultural perspectives.

Research Methods

A survey and a content analysis were conducted to examine SNS usage from multiple aspects. The survey data were collected at a major University in Northeast

United States and in Korea respectively during spring semester 2008. All participants were college students who were taking relevant communication classes. They all were also the current users of one or more SNSs. Participants in the United States were composed of diverse ethnic groups, including a relatively large number of Korean-Americans. These ethnic groups rarely showed significant differences on cultural attitudes and other SNS uses. Content analysis was designed to compensate for the self-reported survey data and to maintain data consistency; accordingly, it employed SNS profiles of the survey participants who voluntarily allowed the researcher to analyze their profiles. Two coders analyzed online profiles and this analysis was subjected to an assessment of inter-coder reliability.

<div align="center">Discussion of Findings</div>

SNS Relationships and Cultural Differences

My findings confirmed that members of individualistic cultures tended to have a greater number of friends on their SNS friends lists than did members of collectivistic cultures (H1a). H1b was partially confirmed. The degree of intimacy of friend relationships, which was measured by the percentage of close friends on one's friends list, did not differ by individuals' cultural traits but it significantly differed by nationality. Additionally, this study demonstrated that members of individualistic cultures encompass broader ranges of SNS relationships than members of collectivistic cultures by including significantly more acquaintances and strangers.

Among members of more individualistic cultures, the higher number of friends was consistent with the broader and more loosely defined relationships in such cultures (Triandis, 1989). Similarly, fewer friends on SNS friends lists corresponded to more

closely-knit and intimate friend relationships, typical of collectivistic cultures (French et al., 2006; Triandis, 1989; Triandis et al., 1988). Previous research has argued that having fewer friends implies more intimate relationships with restricted in-group members in collectivistic cultures. Although this study partially confirmed this previous perspective, it also found consistency with individuals' cultural attitudes in other pertinent communicative attitudes and behaviors, including the level of anonymity in online profiles. This will be discussed in more detail.

Further explanation is needed to discuss the weak significance of the association between cultural attitudes and relationship intimacy on SNSs. One possibility for this finding is that common usage within all SNSs might attenuate the degree of intimacy in general. As mentioned earlier, previous studies have verified that SNS users perceive that they have more diverse friends than they have in the physical world because both expected and unexpected contacts often occur due to the universal characteristics of SNS as public or semi-public arenas to self-express (boyd, 2006). The focus of much research in this area has shown that SNS users from the United States mainly distinguish SNSs friends from their actual friends. To be an SNS friend merely requires the acceptance of a friend request. Making actual friends in the physical world requires more effort over time than that expended on SNS sites. But this U.S. finding may, in fact, speak to its culture.

Also, SNS users in both American and Korean cultures generally feel obliged to accept friend requests (boyd, 2006; Ellison et al., 2007; Kim & Yun, 2007). Compared to the low cost of maintaining a wide variety of social relationships, the consequence of rejecting friend requests costs too much in that the rejection may raise a conflict between a requester and a requestee. Thus, considering that SNS users tend to acknowledge

broader ranges of relationships on SNSs than in the physical world, these relationships may induce users to perceive less intimacy in SNS relationships in general. Moreover, due to the public or semi-public characteristics of online communities (Yum & Hara, 2005), users may conceal their intimacy of friends both online and offline.

In this study, similar percentages of *just friends* and *family members* as well as *close friends* on one's friends list were displayed between different cultural groups. The results imply that SNS users keep in contact with close friends but also generally regard *just friends* and *family members* as universal components of a broad range of SNS relationships. Users rarely reject requests of friends or family members of moderate intimacy, whereas less intimate relations are more likely to be rejected. According to previous studies (Ellison et al., 2007; Kim & Yun, 2007), the rejection of friend requests mostly happens in the case of strangers.

Despite these similarities beyond cultural differences, it was notable that, in my study, members of individualistic cultures included a significantly higher proportion of strangers on their SNS friends list than those of collectivistic cultures. These significant differences in the percentage of strangers imply different levels of flexibility in creating relationships between cultures. Members of individualistic cultures are good at making new relationships, whereas members of collectivistic cultures commonly limit their social relationships to existing in-groups, including blood-tied, school-tied, and region-tied groups, rather than creating them (Triandis, 1989). My findings support the claim of Triandis in that the higher percentage of strangers in individualistic cultures implies higher possibility to make new acquaintances and friends. On the contrary, the lower percentage of strangers in collectivistic cultures may be parallel with narrow and closed

social relationships even on SNSs in which the main purpose is to make and maintain social networks.

The difference in the degree of relationship flexibility was more salient in the comparison of nationality. Americans included a broader range of relationships on SNSs when compared to Koreans. More specifically, Americans had significantly more friends, a lower percentage of close friends, and a higher percentage of acquaintances and strangers on their SNS friends lists. Previous studies indeed considered that pre-existing relationships, to which SNS users primarily paid attention, might be differently classified by predominant cultural tendencies of SNS users. Ellison et al. (2007) claimed, in their single-culture study of Facebook users from the United States, that maintaining pre-existing relationships embraced the advantage of weak ties, which referred to diverse information sources from a wide range of relationships. Such an advantage of weak-ties presumes dissimilarities of relationships. On the other hand, Kim and Yun (2007) also found that Cyworld users from Korea were interested in maintaining pre-existing relationships, yet they clarified that solidifying close relationships was emphasized more than gaining social advantage from weak ties. My findings clarified those from these two single-culture studies. In particular, Koreans were less likely to accept strangers and even acquaintances than Americans in order to narrowly keep closeness in relationships.

In sum, this study verified the cultural effect on SNSs with respect to friend relationships. Despite the weakened perception of intimacy on SNSs in general, more collectivistic users tend to use SNSs as a communicative arena where intimate relationships are reinforced, whereas people who are more individualistic are interested in maintaining and consequently increasing valid social networks (weak ties) at a low cost.

Additionally, there are a number of other crucial communicative behaviors associated with social relationships on SNS including self-disclosure, anonymity, self-presentation, and privacy, which I will discuss.

Self-Disclosure and Cultural Differences

My findings supported hypothesis 2a and 2b that individualism-collectivism cultural differences were associated with self-disclosure. Specifically, members of individualistic cultures were willing to perform higher amount of self-disclosure to others than members of collectivistic cultures (H2a). This corresponds with collectivistic cultural values that restrain people from directly expressing the self, including personal opinions and emotions in public (Chen, 1995; Hofstede & Bond, 1987; Yum, 1988; Yum & Hara, 2005). In collectivistic cultures, humility is highly valued. Such a cultural value leads to lower self-disclosure with self-effacing attitudes. On the contrary, individualistic cultures tend to value the expression of high self-esteem, which encourages members to disclose personal information more openly in order to introduce their uniqueness.

In addition, the smaller amount of self-disclosure in collectivistic cultures may be related to interdependent self-construal, whereby one construes the self referring to others'—usually a reference group— thoughts, feelings, and actions rather than referring to one's own internal thoughts, feelings, and actions (Markus & Kitayama, 1991). This interdependent self-construal in collectivistic cultures may discourage members from providing personal information on SNS online profiles that generally ask users to fill out personal self-disclosure rather than relational self-disclosure. Personal self-disclosure refers to disclosing about the self, whereas relational self-disclosure refers to disclosing one's relationships or one's self through significant relationships (Derlega, Metts,

Petronio, & Margulis, 1993). Members of collectivistic cultures, who tend to identify themselves through significant relationships (interdependent self-construal) may feel uneasy about filling out their online profile. In contrast, people from individualistic cultures, where independent self-construal is highlighted, may find defining themselves via online profiles more acceptable. Thus, given independent or interdependent self-construal, my findings clarify culturally different attitudes to amount of self-disclosure.

There is another explanation of individualism-collectivism cultural differences with respect to the level of self-disclosure. According to Ting-Toomey (1988), members of collectivistic cultures tend to be more concerned about the disadvantages of self-disclosure, which refer to face-threat situations, than its advantages, which refer to relationship development. Self-disclosure can accompany conflicts due to exposure of vulnerable personal information. If members of collectivistic cultures rely on relational self-disclosure more than personal self-disclosure, their self-disclosure may more easily affect face of significant others and, consequently, they may attempt to reduce a possible risk to negatively influence face-saving of both self and others. Such concern is hardly detected in individualism.

In addition, considering that self-disclosure is an important factor to initiate a relationship (Altman & Taylor, 1983), different attitudes of making a new relationship in individualistic and collectivistic cultures, as discussed earlier, can explain the higher levels of self-disclosure found in individualistic cultures: more self-disclosure in individualism can be related to such openness to new relationships. If members of collectivistic cultures pay less attention in developing new relationships, motivation of self-disclosure lowers, which is supported by my earlier findings.

This study also verified that intimacy and vulnerability of self-disclosure varied between individualistic and collectivistic cultures (H2b). Although many cross-cultural studies make arguments for cultural differences in self-disclosure, they usually focus on the amount of self-disclosure. Few studies examine cultural effects on self-disclosure using other dimensions of self-disclosure, including depth of self-disclosure (Wheeless et al., 1986). This study added an empirical finding with the extended dimensions of self-disclosure in a CMC setting, by demonstrating that members of collectivistic cultures exhibit higher levels of depth of self-disclosure (including both intimacy and vulnerability of self-disclosure) than members of individualistic cultures.

One main proposition has its basis on the theoretical perspective that a higher degree of relationship closeness heightens the depth of self-disclosure. This study did, in fact, find positive correlations between depth of self-disclosure and collectivistic cultural attitudes among SNS users indicating that members of collectivistic cultures maintain more intimate relationships on SNSs compared to members of individualistic cultures.

In concluding this section, it can be noted that this study provided evidence that culturally different self-disclosure attitudes that were mostly confirmed in a physical world were replicated in a virtual world and these different attitudes of self-disclosure on SNSs across cultures indicate different SNS usage behaviors. Since the amount of self-disclosure is involved with positive self-introduction and socializing, members of individualistic cultures may increase their social networks through SNS activities more than members of collectivistic cultures. Creating a persona of an open, sociable attitude to a broader range of people affirms the presence of an individualistic culture and this can be contrasted with the members of collectivistic cultures. These collectivistic individuals

were found to be less likely to seek out a larger scale of social networks with less self-disclosing and they were more likely to use SNSs as private or semi-private communication vehicles by disclosing intimate and even vulnerable personal information. Regardless of media characteristics of SNS, users thus create their own usage patterns while corresponding to their cultural orientation.

With respect to self-disclosure, this study also had hypotheses with high-and low-context cultural dimension. Hypothesis 3a assumed that members of high-context cultures tended to use more indirect communication styles to self-disclose than members of low-context cultures. Hypothesis 3b predicted that members of high-context cultures tended to rely on nonverbal information, whereas members of low-context cultures tended to rely on verbal information. Survey data could not test these hypotheses. Content analysis however indicated that users adopted different communication styles depending on their cultural orientation. Facebook users tended to adopted direct communication styles and text-oriented information more than Cyworld users, whereas Cyworld users preferred indirect communication styles and graphics to self-disclose on their SNS pages. Interestingly, these different communication styles of self-disclosure were related to more identifiable online profiles on Facebook and more anonymous profiles on Cyworld. The findings of content analysis are also discussed in the next section.

Anonymity and Cultural Differences

Hypothesis 4 predicted that members of collectivistic cultures exhibited higher levels of anonymity on their front page than members of individualistic cultures. The hypothesis received overall support. This study measured both discursive and visual types

of anonymity. Legal names were used to measure the degree of discursive anonymity and profile photos were used to measure levels of visual anonymity. As expected, cultural attitudes significantly correlated with anonymity attitudes. However, compared to results for visual anonymity, results for discursive anonymity were the opposite of what was expected, as members of collectivistic cultures exhibited significantly lower levels of discursive anonymity than members of individualistic cultures. In the comparison by nationality, the level of discursive anonymity did not differ between Americans and Koreans.

Regarding these inconsistent results, there may be an external bias. As mentioned earlier, Cyworld, which includes all Korean participants, has required users to use their full legal name since 2005. As a result, regardless of cultural attitudes, some Cyworld users might involuntarily disclose their full name to follow this regulation. This requirement may help to explain why the results oppose my hypothesis. That is, even though the users prefer being anonymous, they have no choice but to be discursively identifiable.

The system bias, however, may not entirely explain the result of discursive anonymity. Rather, behavioral norms of SNSs may affect the low level of discursive anonymity overall. According to demographic information from the survey data, although 72% of Cyworld participants created their account before the second half of the year of 2005, all Cyworld participants had used their real name. For Facebook, even though there is no technical limitation, Facebook users have mostly used their real names. Thus, regardless of cultural orientation, both Facebook and Cyworld users tend to mostly use their real names to authenticate their identity. This is contrasted to MySpace which has

had a bad reputation for misbehavior through fake identities. In light of these facts, the type of SNSs may affect the level of discursive anonymity on SNSs beyond cultural orientations of users.

Although this study measured discursive anonymity with only the type of SNS user name, the degree of such anonymity can be controlled by other identity information, including demographic, school, and contact information (Mark, 1999). If discursive anonymity is extended to all types of identity information, the anonymity on an SNS profile can be assessed by the degree of self-disclosure in online profiles and, based on the findings, it becomes obvious that members of collectivistic cultures tend to disclose less personal information and stay more anonymous in their profiles. The content analysis findings supported those of the survey: Cyworld users who were more collectivistic tended to disclose less identity information than more individualistic Facebook users.

The results for visual anonymity also demonstrated that members of collectivistic cultures were likely to be more anonymous on SNSs than members of individualistic cultures. This finding is emphasized more in the comparison between Americans and Koreans. The content analysis of Cyworld and Facebook also reconfirmed the findings. Content analysis of profile photos was conducted with the same scale as that of the level of visual anonymity in the survey. As will be discussed in more detail later, 90% of Facebook users used highly identifiable photos and the majority of Cyworld users (69%) used obviously fake photos while 4% used non-obviously fake photos. 4% did not post any photo. Only 18% used identifiable photos.

Such preference of anonymity on SNSs in collectivism may relate to a desire for SNS relationships. The higher level of anonymity isolates users from random contacts by

unexpected people, including strangers: i.e., dissociation from out-group members. On the contrary, members of individualistic cultures are associated with a freer attitude toward forming social relationships as individuals. Compared to their more collectivistic counterparts, they are more open-minded about others' initial contacts and more likely to want to have contact with as many people as they can through SNSs. This is explained by social penetration theory, which refers to relationship development processes (Altman & Taylor, 1983): greater self-disclosure enables relationship development, especially in the initial stages. On the contrary, members of collectivistic cultures, such as Cyworld users, are likely to reveal their intention to maintain closed SNS relationships. They can prevent relationships from developing by limiting full disclosure of their identity on their SNS front page publicly available to others. Unexpected relationship development is averted by use of highly anonymous front and profile pages on Cyworld. Moreover, once others are accepted as SNS friends, Cyworld users tend to disclose more intimate information. That is, relationship development occurs with selected SNS friends. In all, this study reports that highly identifiable Facebook front and profile pages lead to relatively open relationships while highly anonymous Cyworld front and profile pages lead to relatively closed relationships on SNSs.

Similarly, visual anonymity also discourages searchers from finding friends. Both Cyworld and Facebook put their photos on the front page in order for searchers to easily identify the user for whom they are looking. Highly identifiable photos on Facebook tend to make it easier to identify the user, whereas highly anonymous profile photos on Cyworld seem to prevent searchers from finding friends on SNSs: visual anonymity decreases searchability and friends lists remain controllable.

A research question was also posed relating to the type of anonymity based on high-and low-context cultures. It asked if there were cultural differences in the use of visual versus discursive anonymity on SNSs (RQ1). This study found statistically significant evidence of visual anonymity. In terms of discursive anonymity, behavioral norms on SNSs could encourage users to reveal their real name or SNS technical system forced users to do so. In point of fact, Cyworld requires the use of real names to register a user account. This external factor may have created some uncertainty given users' inclination for public anonymity. Pictures of users placed on those web pages were often masked to conceal further identification of individuals.

In fact, one's online profile photo could directly and evidently identify the user by showing one's visual appearance. However, the survey result revealed that members of high-context cultures were more likely to evade such an assistance of online profile photo and further implied that members of high-context cultures employed anonymous profile photos that could indirectly express the self or self-image. Relevant short captions under profile photos in Cyworld supported such inference, i.e., indirect self-expression with anonymous profile photos.

Self-Presentation and Cultural Differences

Hypothesis 5 predicted that members of collectivistic cultures tended to pay more attention to self-presentation than did the members of individualistic cultures on their SNSs. This hypothesis was confirmed. The findings from the survey data demonstrated that members of collectivistic cultures engaged in more explicit self-presentation behaviors than members of individualistic cultures. These culturally different attitudes were more salient between Koreans and Americans.

Although the findings indicate that differing cultural values are reflected in the ways in which individuals self-present on different SNS sites, it does not mean that there is no common aspect of self-presentation on SNSs across cultures. As a goal-driven social behavior, self-presentation is based on factual information and relies on situations, including actors' goals and audiences' expectations (Goffman, 1959; Schlenker & Weigold, 1992). Anticipated future interactions can work to prompt actors to disclose themselves in more realistic ways (Gibbs et al., 2006). Additionally, SNS media characteristics may promote users to self-present in more realistic ways because the majority of SNS relationships are based on offline relationships. That is, SNS users mostly communicate with their known identities on SNSs (Donath & boyd, 2004). Accordingly, they may consciously or unconsciously use their SNS profiles to create a hyperpersonal image, which refers to an exaggerated image to enhance visual anonymity for asynchronous CMC interactions (Walther, 1996). Facebook systemically supports users to find and be connected with old and current friends by creating virtual borders for users' pre-existing social networks, while other SNSs tend to assign users to develop SNS networks by themselves. In fact, depending on the type of SNSs, fake online profiles are created regardless of culture. For example, MySpace users are less involved with their existing relationships and more likely to create fake identities than Facebook users.

Although users generally disclosed their actual information on their SNSs, their perceptions of communicative situations differed depending on their cultural orientations, especially regarding audiences' expectations. In collectivistic cultures, actors' behaviors rely highly on situational and relational factors (Ting-Toomey, 1988). Such cultural attitudes, including self-construal by their social roles and the higher level of concern of

other-face saving, readily lead actors to pay more attention to audiences' expectations. The finding of the survey data that members of collectivistic cultures were more attuned to their self-presentation behavior than members of individualistic cultures reflects these cultural values.

Audience is a critical factor for initiating self-presentation behaviors (Goffman, 1976; Schlenker & Weigold, 1992). Buffardi and Cambell (2008) stated that superficial relationships encouraged self-presentation behaviors. A hyperpersonal effect in CMC (Walther, 1996) is likely to be displayed with unknown identities of interactants. This study suggests that in collectivistic cultures the known identities of users motivate actors to pay more attention to self-presentation strategies. By forming their identities consistent with their group, they feel responsibility for their behaviors and reputation as a group member rather than as independent individuals. In addition, as a group member, actors perceive in-groups' expectation of the self and try to satisfy their expectation. Such an attitude parallels the pursuit of group goals because the in-groups' expectation of the self is based on group goals.

This self-presentation based on audiences' expectations was shown in my pretested interview data. In the finding, American students were more likely to deny their self-presentation on SNSs, whereas Korean students revealed how much they were concerned about the needs of their audiences as the reason for their self-presentation. For example, an interviewee confessed that even though she had had a hard time adjusting to her new living environment while studying abroad in Canada, she posted happy-face photos on her Cyworld. She was concerned about her parents' apprehension and friends' envy. Her awareness of audience expectations was based on her perceptions rather than

actual social feedback. Following responses from friends to her postings became another basis for understanding audience expectations. This interview exemplified how strongly Cyworld users perceived their behaviors of self-presentation.

Thus, members of collectivistic cultures as group members have external motivations for self-presentation more than members of individualistic cultures. The collectivistic culture members have a responsibility to protect group expectations and also reputation from out-group members as well as tending to their internal needs. Members of individualistic cultures may have less motivation for self-presentation because their main motivation is mostly based on internal needs. For them, their needs for self-presentation tend to be for self-satisfaction more than for the audience's expectation of the self.

The more active self-presentation on Cyworld found among Koreans may have been enhanced by Cyworld's interface tools. For example, when uploading personal photos to photo albums, which are mostly managed as a private space, users are able to embellish the photos using a mini-photoshop tool that is equipped on photo album, including filtering, screen effects, and frame tools.

Multi-layered topics of Cyworld photo albums also reveal users' attention to self-presentation. Unlike Facebook, Cyworld's photo album is served as a web-board style, whereby users upload several photos with a title and a storyline on the web board. Korean Cyworld users select and modify favorable pictures following specified themes and storylines. Such user interface tools compensate for a lack of situational-based self-presentation on Facebook (Zarghooni, 2007).

Folders in the Cyworld photo album not only reveal the main topic of an album but also clarify the target audience. The topics of folders were usually named by affiliation, such as high school, university, church, and workplace, or by life events, such as graduation, internship, and study abroad. Cyworld users also have more detailed privacy settings for accessibility. They not only filter access but also determine which postings the selected audience can view—at the level of a single posting or at the level of a folder. Such multi-layered topics of photo albums on Cyworld—some users created hierarchical topic layers to show their life history—represent multiple self-identities defined by various contexts.

The Facebook interface, on the other hand, facilitates the uploading and presentation of many photos simultaneously. Topics of photos are discontinuously classified depending on when and where photos are taken. Although grouped Facebook photos are also collected per folder, there are no detailed sub-themes and storylines; only the tool's effectiveness to upload photos at once is highlighted. This feature of the photo album directs users to conduct generally integrated self-presentation rather than multifaceted self-presentation for segregated audiences.

Although this study confirms that collectivistic cultural values lead members to strategically self-present more than those in individualistic cultures on SNSs, it also indicates that the style of self-presentation exhibits more individualistic styles in contrast to previous research (Kim, Kim, Kam, & Shin, 2003). The process of selecting and embellishing photos on Cyworld heightens self-enhancement rather than self-effacing self-presentation styles. Such mixed cultural traits in self-presentation may be caused by the clash between users' cultural orientations and SNS behavioral norms. As will be

discussed later, the usage of SNSs tends to make users more individualistic across cultures.

Unlike other communicative variables, self-presentation was significantly correlated with High-Context Culture. The findings indicate that people who engage in more self-presentation behavior, adopt indirect and implicit communication styles and vice versa. It may be assumed that, by avoiding direct self-expression, users may intend to cover their self-presentation, yet there were no previous findings to explain this assumption.

The media characteristics of SNSs may be engaged in this result. Zarghooni (2007) indicates that indirect communication styles, including non-verbal behaviors, are related to CMC environments. According to his study, indirect self-description on Facebook elicits interactions with others in order to articulate the indirect self-description. The use of non-verbal equipment, including emoticons and graphics, is a process of selective self-presentation to compensate for a lack of physical attractiveness. In light of his findings, users may consent to the efficacy of indirect communication styles in SNS self-presentation. In fact, my pretest interview included pertinent conversations. A Korean interviewee introduced his abstract profile image (he inserted black into the space for his profile photo). He intended others to have a curiosity for the picture. Another Korean interviewee uploaded a picture composed of 16 small pieces of his pictures. People could recognize that all of the small pictures were the user's photos, but they might not be able to see the faces clearly. The interview data also demonstrated that some Korean users filled the space for greetings with abstract sentences and they revealed their interest in friends' responses. These data indicate that people tend to adopt indirect

communications styles for a self-presentation strategy to elicit receivers' responses. Interviews with Facebook users did not have similar cases.

The positive correlation between high-context cultural attitude and users' perception of self-presentation behavior may be partly due to the mediating effect of national cultures which can also be partly explained using Zarghooni's (2007) findings. Although this study did not verify a different high-and low-context cultural tendency by nationality, previous research has shown that Korean culture is represented as a high-context culture and American culture is closer to a low-context culture (Gudykunst et al., 1996; Kim, Pan, & Park, 1998). Given such cultural assumptions, national culture could be a mediator variable: that is, it can be described that Koreans who predominantly belong to high-context cultures pay more attention to self-presentation than Americans who predominantly belong to low-context cultures. This assumption implies that members of high-context cultures not only adopt indirect communication styles for expression but also tend to use indirect communication styles for eliciting interactions. Despite this interesting assumption, however, there is no theoretical support for it. But such a notion may have merit and this study proposes that future research explore such a possibility.

Beyond culture, SNSs are acknowledged as a communicative stage of self-presentation (Ahn & Chun, 2008). SNS users have more specific target audiences than those in predating online communities, where online-to-online relationships are dominant. Although there are unknown target audiences, including lurkers and cyber stalkers, SNS users generally perceive their audiences based on SNS friends. Moreover, SNS users may be more concerned with audiences' expectation of the self since they are also in contact

with most of audience offline. In addition, SNS online profiles seem to be preserved permanently, while representing the user online. Such usage may encourage users to enhance their presentation of self to maintain a good impression on SNS profiles. Accordingly, users could pay more attention to create a good self-image befitting the situation overall.

While acknowledging that SNS users were closely involved with self-presentation (Haferkamp & Krämer, 2008; Zarghooni, 2007), this study focused more on the cultural effects on self-presentation behaviors. Although Kim et al. (2003) conducted cross-cultural studies comparing self-presentation strategies, no research to date has compared the extent of self-presentation across cultures. In this study, however, it was found that collectivistic cultural values tended to promote self-presentation behaviors, whereas more preferred self-presentation styles in collectivism tended to be counterbalanced by the media characteristics of SNSs and, as a result, individualistic self-presentation styles tended to be reinforced even in predominantly collectivistic cultures. Finally, this study unexpectedly found a positive correlation between high-and low-cultural attitudes and attention to self-presentation behaviors. For this unexpected finding, future studies may need to explore if such a link is related to SNS media characteristics and whether or not self-presentation strategies to adopt direct or indirect communication styles is involved with national cultures. Beyond national culture, the assumption that members of high-context cultures pay more attention to self-presentation behaviors than members of low-context cultures may be worthwhile for further study.

Privacy and Cultural Differences

This study posed research question 2 about the effect of individualistic and

collectivistic cultural values on privacy attitudes on SNSs. There was an insignificant correlation between cultural attitudes and privacy concerns. This suggests that SNS users are highly concerned about privacy invasion by strangers, regardless of their cultural orientations. SNS attributes referring to the openness of private information to the public may heighten privacy concern among users. Although SNSs come with tools that clearly allow users to choose which information remains public or private through privacy settings, there are other grey areas where public and private boundaries are not so clear. This not only leaves much of the ambiguity to the discretion of the user but also increases the perception of potential invasion of privacy.

Despite the universal privacy concern on SNSs across cultures, national samples from Korea and the United States significantly correlated with concerns about privacy. In fact, previous studies have shown irregular results of privacy concerns across cultures. Hofstede (2001) claimed that members of collectivistic cultures were more likely to disregard privacy as a human right than members of individualistic cultures. Milberg et al. (2000) demonstrated that members of individualistic cultures exhibited higher levels of privacy concerns than members of collectivistic cultures in a commercial website setting which supported Hofstede's (2001) argument. Bellman et al. (2004) attempted to analyze commercial websites with the same theoretical framework as Milberg et al.'s (2000) but the results did not correspond to findings reported by Milberg et al. Bellman et al. suggested that the absence of a hierarchical relationship among respondents elicited different results from Milberg et al.'s. Privacy concern from others could be more heightened when hierarchical relationships were involved which might generate an unfair privacy invasion.

Bellman et al. also argued that the willingness to self-disclose in individualistic cultures was associated with a low level of privacy concern. This argument may be supported by the recent findings of the association between self-disclosure and privacy concerns in an online environment. Livingstone (2008) demonstrated that teenagers willingly sacrificed their privacy to satisfy their desire to self-disclose on SNSs. Tufekci (2008b) claimed that the increase of privacy awareness did not result in a lesser amount of self-disclosure but rather that users tended to discount privacy threats on SNSs to compensate for a gap between privacy concerns and the desire for self-disclosure. Such attitudes may also relate to the users' lower levels of privacy concern than non-users even though users have indicated some concern with privacy.

The attributes of privacy as a multimodal process and its involvement with various mechanisms (Altman & Chemers, 1984) may partly explain these inconsistent findings regarding privacy concern. Conflicting feelings about privacy and self-disclosure may also account for some of this explanation. Correlations among key variables (Table 38) show that privacy concerns discourage users from disclosing intimate information while also indicating slightly positive correlation between privacy concern and amount of self-disclosure. In light of previous research (Livingstone, 2008; Tufekci, 2008b), these results may imply that SNS users tend to consciously or unconsciously negotiate their desire to self-disclose with their privacy concern. The unclear and interactive association between privacy and self-disclosure found in previous studies was also reproduced in this study.

Privacy sharing can be contrasted with privacy concerns where the former generated consistent results with cultural attitudes and nationality. This was reinforced

with correlations reported regarding the self-disclosure dimensions. Collectivistic cultural attitudes positively correlated with high levels of privacy sharing and, similarly, Korean users exhibited higher levels of privacy sharing than Americans users on SNSs.

In this study, the indication of extended privacy boundaries was verified by privacy sharing, which refers to users' willingness to share both personal demographic and narrative information assuming the trust of interactants. Members of collectivistic cultures constructed collective privacy boundaries on SNSs more than members of individualistic cultures. As mentioned earlier, such behaviors corresponded to collectivistic cultural values.

However, it is notable that their positive attitudes to sharing private informatioin with SNS friends in collectivistic cultures were not developed with a large amount of self-disclosure. Such a consequence implies that cultural norms may overwhelm behavioral norms in interpersonal communications. It seems, then, despite trust in interactants, members of collectivistic cultures evade considerable self-disclosure in order to reduce the risk of face-saving, including both self-face and other-face. Their positive attitude toward sharing what is private does not necessarily result in a higher level of self-disclosure. Rather, disclosure of intimate and vulnerable information may better indicate their willingness to share that which is private with SNS friends in collectivistic cultures.

This study also demonstrated that SNS users clarified their privacy territory by creating online profiles and by changing privacy settings across cultures. More than 90% of both American and Korean users controlled accessibility of visitors to their personal information and changed privacy settings. Such results opposed previous findings that SNS users revealed a low level of confidence in their ability to use privacy settings

(Acquisti & Gross, 2006). The different results may be caused by different phases of SNS use, such as the initial and stable phases. Unlike the initial period, users have enhanced their ability to use privacy settings and clarify privacy territory across cultures.

Generally, this study demonstrated that SNS usage leads to a high level of privacy concern across cultures at the individual level. At a national level, however, cultural effects were more salient. This study suggests that collectivistic cultural values encourage users to build collective privacy boundaries and promotes the sharing of personal information with in-group members. In addition, the collective privacy boundary with in-group members may make members more concerned about privacy invasion by out-group members. On the contrary, in individualistic cultures, although members are strongly aware of their privacy rights, they are less concerned about privacy on SNSs and willingly disclose personal information on SNSs. Such behaviors may be associated with the advantage of self-disclosure on SNSs (i.e., users sacrifice privacy for the potential of social network extension). Such behaviors may be premised on trust in SNS networks and users' ability to manage privacy settings.

This study measured SNS usage patterns by both individuals' cultural orientation and nationality. The results did not really differ overall. Koreans exhibited comparable patterns of SNS usage to those of members of collectivistic cultures and Americans exhibited comparable patterns to those of members of individualistic cultures. In addition, as the findings of content analysis showed, Koreans tended to use indirect communication styles more and rely more on internalized context, communication styles which reflect high-context cultural attitudes. Americans tended to use direct communication more and articulated what they communicated, attitudes which

corresponded to low-context cultural ones. These results indicate that national culture is parallel to the predominant cultural attitude of the members despite individual diversities.

The increase in global interactions through communication technology requires individuals to learn and accept traditional customs from other cultures and adjust their communicative behaviors and attitudes to newly imported cultural aspects. As a result, individuals in current society may vary more in their range of cultural orientations than in an earlier homogeneous society. However, the findings of this study asserted that individuals' cultural attitudes that were reflected in their communicative behaviors and attitudes on SNSs tended to correspond to their national culture. That is, the findings demonstrated that national culture significantly affected users' various communicative behaviors rather than being attenuated by globalization.

Triandis (Hui & Triandis, 1986; Triandis, 1989, 1995) and Hall (1976) proposed diversity of individuals' cultural attitudes in a society and, based on the theoretical assumption, scholars have conducted cross-cultural comparisons both at individual and at national levels in a study (Triandis et al., 1988; Cocroft & Ting-Toomey, 1994). The findings interestingly concluded that national culture provided a stronger explanation than individuals' cultural orientation. This study agreed with the previous conclusion. The comparison between two cultural groups from different nationalities provided a clear explanation of the different attitudes and behaviors. Despite slight vagueness, there was an insignificant result in the comparison at the individual level, e.g., privacy concern. It may because behavioral norms of domestic SNSs may affect individuals' behaviors as well.

SNS services are based mainly on their domestic markets and national cultures. The users' cultural attitudes also have been reinforced while adopting the SNS tools. Such reciprocal influences between users' needs and the domestic communication tool will solidify and be solidified by national culture. In this study, the findings of content analysis in fact revealed that SNS tools reflected national culture on main interfaces. National culture supported by domestic SNS tools therefore provides a stronger explanation than individuals' cultural orientations.

<div align="center">Implications</div>

Theoretical Implications

Although there are common SNS usage patterns across cultures, the findings obtained here suggest that individuals' communicative behaviors and attitudes may also be a function of their predominant cultural disposition. Users' cultural attitudes may overwhelm common SNS behavioral norms. SNSs tend to play a role as an individual-oriented contact point. Comparing interactions in other online communities, SNS users interact with others not as group members but as independent individuals: they are not together in a group but in an individual-to-individual network, which is reminiscent of networked individualism (Wellman, 2002). As a result, unique SNS behavioral norms may be less cultivated on SNSs and rather users' cultural orientation may strongly affect SNS usage. Given that there are few cross-cultural studies on SNS usage, this study will add to existing empirical research by revealing the cultural effects on communicative behaviors in an SNS environment.

Through cross-cultural comparison, this study suggests reconsidering SNS behavioral patterns and norms, which are tacitly assumed to be universal in much of the

mainstream research on SNS use in the United States (boyd & Ellison, 2007; Donath & boyd, 2004; Donath, 2007; Ellison et al., 2007). In terms of relational aspects, the findings revealed that cultural differences produce dissimilar attitudes and SNS communicative behaviors in each culture. The cultural differences support previous findings of inter-and cross-cultural studies and, at the same time, challenge previous understanding of SNS usage.

Implications for Relationship Formation and Maintenance

Regarding SNS *friending*, these findings suggest that cultural attributes lead to different characteristics of SNS *friending*. First, boyd (2006) reported that SNS users tended to distinguish SNS friends from their actual friends offline, yet my finding suggests that, depending on individuals' cultural orientations, the characteristics of SNS friends can be different: members of collectivistic cultures maintain relatively closed SNS relationships—a smaller number of friends and a higher percentage of close friends—whereas members of individualistic cultures tend to have broader social relationships. The interview data of my pilot study also reveals this aspect: American college students tended to regard an in-person encounter as sufficient reason to be an SNS friend, whereas Koreans mostly included long-term and group-based relationships on their SNS friends lists.

Next, despite similar approaches to rejecting friend requests across cultures, different SNS friends may indicate that cultural norms are involved in advance of friend requests. Given collectivistic cultural norms of friendship, friend requests may be filtered out by requesters in advance: since both requesters and requestees socialize less while relying more on pre-existing in-group relationships. They may be cautious when

assessing the fairness of friend requests: they might not readily request friends to save the others' face. On the contrary, more sociable members of individualistic cultures may vigorously request and accept SNS friends. This underscores the importance of cultural variables in understanding extended SNS behaviors in that, although common SNS behavioral norms are constructed across cultures, the consequences from practical use may differ depending on actors' cultural orientations.

Similarly, this study suggests re-illuminating SNSs as the useful instrument of social capital by adding cultural variables. Through observation of *facebooking* among American college students, Ellison et al. (2007) found that users efficiently bridged, bonded, and maintained their social capital through SNSs. Given different cultures, however, this argument may differ. In fact, social capital is increased by participation in many groups and associations (Putnam, 2000) and, therefore, the increase of in-groups leads to the decrease of loyalty to each in-group and hence the growth of individualism (Triandis, 1989, 1995). Considering that social capital is positively associated with individualistic cultural values (Allik & Realo, 2004), members of collectivistic cultures may not use SNS networks for social capital.

The findings support these assumptions. For example, in the content analysis, Facebook users disclosed groups more than Cyworld users. Also, the average number of groups to which Facebook users subscribed was more than that of Cyworld users. This indicates that Facebook users engage more in social capital through SNSs than Cyworld users. Thus, my findings imply that members of individualistic cultures bridge, bond, and maintain their social capitals through SNSs, whereas members of collectivistic cultures

manage their SNSs in a more limited way, such as bonding and maintaining existing relationships.

There were several indications that members of collectivistic cultures created structures that might reinforce bonding social capital and inhibit an increase in bridging social capital by constructing closed SNS boundaries. First, the higher level of visual anonymity on profile photos could have negative effects on the augmentation of social capital. In fact, a profile photo enables visitors to easily identify the users of SNS pages even though the visitors are not able to access personal information. If users do not post their profile photos or if they use distorted or anonymous photos, visitors are not able to identify the users and may give up requesting friends. Both Facebook and Cyworld can allow visitors to look at the profile photos, regardless of whether or not the visitor is an SNS friend. Thus, the profile photo apparently facilitates identifying the user and can invite others to see that person as an SNS friend. In my study, members of individualistic cultures tended to employ obviously identifiable profile photos to represent themselves, whereas members of collectivistic cultures seemed to isolate their SNS pages by using mostly anonymous photos. The higher level of anonymity on profile photos may lead to a lower level of reunion with old friends.

Next, the lower level of self-disclosure in more collectivistic cultures may also negatively influence the increase of bridging social capital because self-disclosure is closely involved with relationship development in initial stages. If profiles convey lots of personal information, interactants may find more motivation for contact. If there is less information in online profiles, limited interactions may occur mostly among people who

can gain personal information via alternative channels. Such limitation of interactions may easily result in a low level of social capital.

The large number of SNS friends in individualism may be a relevant consequence of the role of SNSs to efficiently make and maintain social capital. At the same time, the smaller number of SNS friends in more collectivistic cultures may be evidence of stronger in-group bonds. The higher percentage of close friends on Koreans' friends lists also supports strong in-group bonds and enhance bonding social capital, while the higher percentage of acquaintances and strangers on Americans' SNSs indicates broader SNS relationships for bridging social capital.

Although there is lots of potential for SNSs to grow social capital, my findings assert that members of individualistic cultures tend to employ SNS networks mostly for bridging social capital and then for bonding social capital, whereas members of collectivistic cultures tend to pay more attention to bonding social capital. Regarding the usage of SNSs in collectivism, it is notable that, despite technical support of SNSs, cultural values predominate over SNS usage.

High-and low-context cultural dimension, on the other hand, was less significant to verify cultural differences with survey data both at individual levels and at national levels. However, the results of content analysis showed that Cyworld and Facebook supported the use of different communication styles through their user interfaces in high- and low-context cultural perspectives. Employing SNS instruments, users highlighted their preferred communication styles based on their cultural orientation.

Implications for Intercultural Communication

This study demonstrates that the cultural orientations of SNS users influence their SNS usage patterns overall; consequently, the results obtained here provide support to confirm that glocalization occurs on the Internet, which refers to the effect of local culture on global interactions (Wellman, 2002; Ess & Sudweeks, 2005; Kim et al., 2009). Although the popularity of SNSs as a newer form of online socializing is a global phenomenon, the initial success of SNSs was based mostly on domestic markets and, accordingly, SNS interactions mostly occurred among people who share the same cultural boundary. Compared to temporary and changeable online identities in other online communities, SNS online identity is less likely to change due to its connection with a pre-existing, close audience on SNS friends lists. While anchoring their online identities to actual ones through online profiles and friends lists, users hold their cultural orientations within their SNS activities. By affirming these cultural effects in two representative domestic SNSs, this study confirms the influence of local culture on SNSs and proposes that understanding SNS usage starts with understanding the national or local cultures of users.

This study thus claims that the awareness of cultural effects on SNS usage can heighten understanding of global interactions through SNSs. In fact, SNSs not only efficiently connect users with distant friends all over the world but also facilitate the creation of global interactions beyond cultural boundaries. Given the growth of global interactions on SNSs, understanding of diverse local cultures is important. In fact, controversy about this globalization has been raised by two different camps. One camp argues that globalization leads to social and cultural homogenization while the other

claims that globalization elicits greater social and cultural polarization (Held & McGrew, 2003). Although this study does not totally agree with either perspective, it proposes that the increase of global interactions on SNSs may heighten the value of understanding local cultures rather than addressing the assumption of cultural convergence. Without cultural understanding of the partner, global interactions between people who are from different cultures may result in disconnected or incomplete interactions.

With the suggestion of cross-cultural studies in newer communicative settings, this study notes that few studies have explored cultural differences in CMC settings compared to cross-cultural studies in face-to-face settings. The increase of uncertainty of the existing cultural dimension, individualism-collectivism, may discourage researchers to explore cross-cultural communicative influences within dramatically globalized societies. In fact, individualism-collectivism has been criticized because of its simplicity (Oyserman et al., 2002). If economic development leads a society toward a more individualistic one (Hofstede, 2001), then globalization may result in cultural convergence toward individualism. When compared between two individualistic cultures, such as between two western countries, the cultural dimension may be less significant than the comparison between a high level of individualistic and a high level of collectivistic cultures (Gudykunst et al., 1996; Kim & Papacharissi, 2003; Triandis et al., 1988). In this regard, the existing cultural dimension reveals its limitation.

Scholars however have rarely suggested alternative cultural dimensions. Banczyk et al. (2008) found differences in self-presentation by American and German MySpace users, who might predominantly exhibit individualistic cultural attitudes; nonetheless, they did not have an appropriate theoretical framework to clarify this difference. For

comparisons between countries in collectivistic cultures, Hofstede's cultural dimension

has shown a similar limitation to that found in the comparison between two national

cultures in individualistic cultures. Ishii and Wu (2006) found that despite similar

national cultures, communicative behaviors between Taiwanese and Japanese varied.

Gudykunst et al. (1987) also revealed culturally different aspects between Japanese and

Koreans in traditionally collectivistic cultures. As an alternative of simplicity of the

cultural dimension, Triandis (1995) suggested sub-dimensions of individualism-

collectivism by adding another axis, horizontal-vertical. Despite such attempts to develop

sub-dimensions, these approaches rarely had consistent support in later investigations.

As some scholars have criticized (Oyserman et al., 2002; Schimmck et al., 2005),

individualism-collectivism cultural dimension may be too simple to clarify cultural

differences in various nations or to explain ongoing cultural shifts (e.g., cultural

convergence toward individualistic or westernized societies with economic development).

Despite statistically non-significant findings, this study partially revealed self-oriented

SNS usage of Korean users. However, such results are not substantive at this point in

time.

The overall findings do confirm that individualism-collectivism is a robust and

comprehensive platform for cross-cultural studies. That is, while acknowledging

fractionized cultural differences from different histories and regional features, the

understanding of actors' cultural orientation, individual-centered or group-centered, is

significant in explaining communicative behaviors and attitudes in newer CMC settings.

In this study, high-and low context cultural dimension (Hall, 1976) partially

illuminates cultural effects on SNS usage, especially the adoption of communication

styles in self-expression. Previous research has adopted the cultural dimension to clarify cultural differences in the usage of a website that individualism-collectivism could not elucidate (Kim & Papacharissi, 2003). Moreover, this cultural dimension does not simply divide the world into Western and Asian cultures, unlike individualism-collectivism. In this study, however, the cultural dimension lacked a comprehensive explanation to account for diverse communicative behaviors and attitudes.

This study also demonstrated the advantage of multi-mode methodology when conducting cross-cultural comparisons. Most prior studies analyzed websites while limiting cultural aspects to the fixed national culture of each sample (Callahan, 2005; Cho & Cheon, 2005; Kim et al., 2009; Würtz, 2005). By adopting a dual method exploring more than one culture and by using survey and content analysis, this study was able to access users' behaviors and attitudes at two different levels, individual and national. This provided for a deeper understanding of the role of culture in influencing SNS behaviors. Increasing our understanding of SNS behaviors at the individual level can have direct implications for global Internet services.

For the matter of methodology, this study also suggests that selective adoption of Hofstede's (2001) cultural dimensions may heighten reliability to explore cultural differences. Ensuing research tended to adopt all five dimensions of Hofstede in their research designs (Bellman et al., 2004; Callahan, 2005), while Hall's dimensions have independently been adopted depending on overall research purposes (Kaya & Weber, 2003; Kim & Papacharissi, 2003; Kim et al., 2009). The results obtained varied depending on cultural dimensions. Some dimensions were not sufficiently evident to present a substantive explanation of the results. This study instead adopted his most

robust dimension—individualism-collectivism—and applied it to diverse communicative situations. In doing so, this study acquired generally consistent results with the cultural dimension and also offered supporting evidence consistent with results found using diverse situations.

In addition, other unexpected findings might not be attributed to cultural shift but instead to intervention of SNS behavioral norms, age, and/or length of experience with SNSs. Callahan (2005) suggests that the effects of factors other than culture emerged from her findings. Livingstone (2008) claims age effect on SNS usage patterns. The different results of privacy attitudes between early findings (Barnes, 2006; Stutzman, 2006) and recent findings (Tufekci, 2008b) reflect the effect of length of experience with SNSs. Accordingly, this study suggests that non-significant results in cultural differences might be due to other factors. For example, some Cyworld users might follow SNS behavioral norms (as an ego-centered online arena) regardless of their cultural orientation when they implemented their self description and profile photos[12]. Privacy issues on SNSs prominently noted by offline media might heighten privacy concerns beyond cultural orientation. Therefore, such non-significant results do not preclude the influence of cultural effects on SNS usage but may, in fact, be productive in identifying, intervening, and moderating influences over users' behaviors.

Practical Implications

This study revealed that users' cultural orientation influenced their SNS relationships and activities. The findings suggest that for the development of SNS services, including designs and features, culture should be considered an important

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[12] The statistically insignificant results still support the overall cultural effect on SNSs.

variable. As mentioned earlier, a number of popular domestic SNS services have failed to sustain users in their overseas expansions. Cyworld US is a representative case of this. SK Communications, which is a parent company of Cyworld, decided to withdraw investment in Cyworld US in 2008 due to low revenue. In 2006, the business world noted Cyworld US not only because Cyworld had been a remarkable success in the Korean domestic market but also because it had successful business model[13]. For all the positive prospects for its business success, no one mentioned cultural issues. Two years later, the positive prospects did not come true and Cyworld US was degraded as an insignificant SNS service in the United States. If cultural issues were considered at that time, the prospects for Cyworld US would have been more realistic.

For the sales of virtual items on Cyworld, which was assessed as a successful business model, tight and intimate SNS relationships on Cyworld might promote the sale of virtual items because the exchange of virtual gifts between close friends would heighten the value of their ties. However, for Americans who have different levels of friendship between SNSs and actual worlds, spending money for virtual relationships might be less attractive. Therefore, Cyworld US could not exert its unique advantage due to cultural differences despite its advantage to overcome its late launching.

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[13] A large proportion of Cyworld revenue has been generated from the sale of virtual items, such as wallpapers and virtual items to decorate minime (avatar) , minihome, and storyroom. Background music files on online profiles were being sold at a rate of around 200,000 music files per day (SK Communications Annual report, 2009). In 2006 when Cyworld US launched in the United States, Cyworld Korea made profits from the SNS services and MySpace was suffering because of low revenue (Schonfeld, 2006). In contrast, Facebook still had the problem of low revenue despite 300 million users (McIntyre, 2009).

If culture is a consistent influence that is not always isomorphically linked to a fixed national culture, then it may be considered for a SNS model to incorporate a business incentive. This study indicated that cultural attitudes varied in a society by measuring individuals' cultural attitudes beyond nationality. Therefore, if marketing for the cultural majority is not sufficient, then SNS services may need to explore alternative models within and across cultural boundaries, while encompassing the interactions of one culture with another. Even so, the findings here reveal identifiable distinctions of how culture influences SNS behaviors.

Recently, Facebook announced that it started generating revenue from the sale of virtual items (Carlson, July 2, 2009) despite it being a low proportion of its total revenue. This may be a positive signal that Facebook encompasses cultural-minority user groups who may be welcoming diverse virtual items. This new feature might not have been successful two years ago when Facebook users were more homogenous within a certain culture. Since Facebook has dramatically increased international users all over the world, especially during the last couple of years, the cultural minority on Facebook may be as significant as a major customer group.

Even for SNS services that have a relatively homogeneous user population, cultural influences may suggest alternatives for business models. After its initial astonishing increase in new user accounts, Cyworld has shown a relatively stagnant growth rate since 2007. Cyworld had provided functions forming a closed communication system to satisfy the needs of its Korean cultural majority and it may have captured its market share within that population. It is probably too early to determine the causes of Cyworld's stagnant growth but it might be productive to examine

how its definition of culture created the type of individuals expected to use its SNS interface. As Triandis (1995) pointed out, individuals have both extremes in a cultural continuum. Alternatives for an SNS system may not be based on only a predominant cultural tendency.

The findings here suggest that globalization does not mean that local cultures diminish. Rather, in a global environment, diverse local cultures have dynamically become mixed. Many SNS services have attempted overseas expansion. The boundary-less Internet allows SNS services to readily collect international users and allows SNS users to readily participate in or move to other global SNS networks. In this regard, understanding of local culture will be required.

<div align="center">Limitations and Future Research</div>

There are several limitations to this study with regard to the measurement of cultural variables. In addition, the sampling methodology used in this study places restrictions on the generality of results.

One of the main limitations of this study is a lack of consistency of an individualism-collectivism scale. This cultural dimension has been controversial and many scholars have attempted to find reliable measurement scales for such a concept. Previous studies have suggested multimodal measurement and multi-dimensional scales (Triandis, 1995) to bridge the gap between dynamically changing individuals' perspectives and attitudes in diverse societies. Of special note here are populations from developing countries with cultural orientations which may be more specific than those of developed countries with open channels of communication across their boundaries. This study found low levels of reliability for the various sub-dimensions of individualism-

collectivism. In the case uncovered here it might be better to use the overall measure without partitioning it to sub-dimensions.

Next, high-and low-context cultural attitudes were not significantly found in the self-reported survey data and, consequently, this study did not contribute to explaining the variability in expected cultural differences. Nonetheless, the subsequent content analysis provided a more robust explanation of such users' behaviors where cultural attitudes were a significant explanatory factor to articulate how Facebook and Cyworld users showed different usages on their SNSs. One tentative but supported conclusion from this is that high-and low-context cultural dimensions may be better explained from actual behaviors than from attitudes self-reported by actors regarding their cultural values and beliefs. In fact, previous studies have mainly used this dimension for content analysis rather than explored it via survey analysis. Despite such an internal limitation of this cultural dimension, a future study may need to explore what prompts a considerable gap between self-reported behaviors and measured actual ones. This, in turn, can be compared using individualism-collectivism cultural dimensions in order to clarify whether or not there are external biases or internal inconsistencies between intentions and behavior.

The third limitation involves this study's attempt to explore cultural effects both at an individual level and a national level. The study used an open approach and allowed for an overlap between the nationality and the type of SNSs. This sampling of users might enlarge the uncertainty of the cultural effects found at the national level. Since this study did not limit participants by the type of SNSs, the respective samples revealed that 97% of American users were Facebook members and 100% of Korean users were

Cyworld members. As a result, this study could not effectively remove ambiguous points between the effect of national cultures and that of behavioral norms in each SNS type. To evade such ambiguous aspects, a future study may need to compare behaviors and attitudes from different national and cultural user groups within single types of SNSs. For example, as this study attempted to explore Korean-Americans, minor ethnic and cultural groups in a nation can be crucial samples. A minor national group within a global SNS service, such as Koreans in Facebook, is also worthwhile to be considered for a future study.

As this study demonstrated, comparisons between national groups from different cultural orientations within each primary domestic SNS service are continuously needed even though different types of SNS tools cause different communicative conditions. It is because, as the findings of this study indicated, SNS tools could be developed while reflecting cultural attitudes of the major user groups. Future research will be conducted between national groups, as this study compared. It will also be conducted between national groups from the same cultural orientations, such as among Chinese in QQ, Japanese in Mixi, and Koreans in Cyworld.

Regarding the measurement of national culture, this study in fact revealed not only low levels of correlation between nationality and individualism-collectivism variables but also an insignificant relationship between nationality and high-and low-context cultures. Among the three cultural variables of individualism-collectivism, the opposite results to those expected for two of the variables could be due to measurement bias, as mentioned earlier. The scales employed had not appreciably been verified by following studies. However, this study also suggests a caveat in measuring national

culture. As shown in the results, the measurement of national culture with existing cultural dimensions may have limitations due to complex external factors. Scholars have attempted to discuss why survey results were less likely to significantly reveal national cultures despite the evidence of national cultures shown in many cross-cultural studies (Gudykunst et al., 1987, 1996; Kim & Papacharissi, 2003; Würtz. 2005; Triandis et al, 1988). Future research may need to consider an effective measurement of national culture.

Cultural shift, which especially occurs in economically developing countries, will also be a crucial consideration to understand cultural effects on SNS use. Although Korean culture is more collectivistic cultures than Americans, it is true that Korean younger generation exhibits more individualistic cultural attitudes than Korean older generation (Cha, 1994). As the findings of this study indicated, Korean younger SNS users tend to more or less exhibit individualistic-oriented attitudes on their SNS usage even though Americans exhibit the kind of attitudes more strongly.

The fourth concern is that there might be sampling biases. This study employed not random sampling but convenience sampling. Due to the recruitment of participants in a university in each country, the sample has a limitation to represent lager SNS user groups. In addition, although college students are a major population of SNSs, age limitation, which could offset the effect of participants' cultural orientations on SNS behaviors and attitudes, is also posed. Given cultural dynamics of younger generations, the results might be susceptible to some bias when comparing results of the two samples. Half of the American sample were first-year college students and more than half of the Korean sample were juniors and seniors. If a study cannot comprehensively include all strata from each population, it may create new problems when trying to compare groups

that are not homogeneous across their major characteristics. Future research might design the two sampling frames to be consistent with each other to allow for more straightforward comparability between the samples.

Cross-sectional data from any survey places an additional limitation on the ultimate interpretation of the results. It is possible that snap shot data from a survey presents a static picture of behaviors at one point in time. Such behaviors might not be representative of patterns studied over longer periods of time and it is with caution that cross-sectional data is not over-generalized. This study does not purport to present causality links nor does it assume that such findings will continue to be present as SNS communities evolve. Nonetheless, the findings obtained here reflect remarkable consistency within the theoretical structure posited for this investigation. Moreover, there was some reinforcement of survey findings with the content analyses of the websites. Yet, it is recognized that cross-sectional data concerns are valid for samples such as the one used here. It was collected at one point in time with a limited subpopulation. Although this study provides some clear evidence on the cultural influences over SNS usage, the findings are issued with a caveat that the results could be bound by time and place.

Finally, there is a limitation to achieve statistical significance with using multiple tests. This brings up two issues: the use of multiple statistical tests and the interpretation and limitations due to the effect sizes which explain variability in the dependent measures. This study ran 14 separate t-tests with 10 of these achieving statistical significance and all of these at $p < .05$. Adjusting the alpha level prior to each test would then compensate for the likelihood that multiple tests achieved significance by chance alone. Had the t-tests used a Bonferroni adjustment for this, then setting α (alpha) less than .05 would

compensate for the multiple tests. The Bonferroni adjustment needed would move the significance level for each test from $\alpha=.05$ to $\alpha=.0036$; that is, Bonferroni is equal to $[\alpha/\text{no. of t-tests}]$ or, in this case: $[.05/14]$. All results reported in this study for significant t-tests were achieved at $p < .001$, which indicates that the significance of the results obtained did not change after making the Bonferroni adjustment. Thus, statistical significance for interpretation of the t-tests remains as stated in explanations of the results. However, more than half of the results obtained in the correlation analyses were significant at $p < .05$ of five correlation analyses to $p < .01$ of one correlation so the interpretation of the results requires a caveat that they may suffer from the use of multiple correlations. Ideally, if the same dependent measure were used, then multiple regression would have accounted for such a problem. An additional way to address this issue relates to effect size issues. Of concern is the limitation in generalizing results due to the mid to low effect sizes achieved, especially with larger sample sizes. This issue could be resolved in future studies by testing for the accuracy of predicting dependent variable scores with new cases.

This study also includes diverse possibilities to develop research topics. First, this study explored only the degree of attention to self-presentation, yet cross-cultural studies have shown different types of self-presentation between individualistic and collectivistic cultures (Kim et al., 2003). A future study may explore culturally different types of self-presentation on SNSs. Next, gender may be a significant indicator as influential as culture because previous studies have shown that women tend to show greater concern over social relationships than men, and SNSs are closely involved with social relationships. Finally, a future study may build a model to integrate diverse variables derived from

communication behaviors. This study successfully indicated that major variables related to communication behaviors are consistently associated with cultural variables and it suggests how each variable is organically involved with one another. If a future study constructs such a model, then its findings might help authenticate the results obtained here while pointing to the design of a research program to understand how the broader aspects of culture interact with the latest methods of interpersonal communication.

Conclusion

This study explored SNS usage patterns across two cultures and uncovered distinct differences and several similarities. Although the Internet is heralded as decreasing cultural barriers, culture was found here to still be a significant factor that influences users' behaviors. SNS services that assume they can make simple extensions of their markets by recruiting international users and by launching international versions of their services should consider the role of culture as it shapes behavior.

This study also verified the validity of cultural dimensions. In particular, individualism-collectivism, which began with organizational settings, was viewed here as a productive concept with its emphasis on communication behaviors for socializing in everyday life. The findings obtained here revealed that the cultural dimension was not restricted to a bifurcated definition of national culture as one extreme or another; instead, within a nation, individuals' cultural attitudes varied on a cultural continuum. Within a theoretical framework, this cultural dimension also implied that Korean society was possibly in a cultural shift.

Although high-and low context cultural dimension was significant in limited communicative aspects, it also explained that users preferred a communication style

consistent with their cultural orientation. These findings suggest that when developing user interfaces and additional applications, SNS services should consider cultural aspects of the major user groups or target user groups.

Thus, this study revealed that culture was an important factor in furthering our understanding of SNS usage patterns, and this has implications for developing SNS services in the future. This study responds to several salient issues within SNS research and adds to the results obtained from the few studies reported in this area. Hopefully, this study raises important issues which will now encourage others to explore the impact of culture on SNS usage by examining additional cultures and comparing cross-national similarities and differences.

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Appendix: Tables

Table 1

Ethnicity of American Sample

| | Group Harmony | | High-Context Culture | |
	N	Mean	*N*	Mean
Caucasian/European	221	3.09	215	2.88
African American/Black	33	2.68	34	2.82
Hispanic/Latino	30	3.02	30	2.91
Asian American	74	3.00	72	2.85
Native American	1	2.33	1	3.46
Total	359	3.03	352	2.87

Table 2

Current Use of SNSs among Americans (%)

	MySpace	Facebook	Friendster	LiveJournal	CyworldUS	Other
Ownership	61	98	5	10	1	10
Primary use	7	93	0	1	0	0

Table 3

Current Use of SNSs among Koreans (%)

	MySpace	Facebook	Friendster	CyworldUS	Cyworld Korea	Other
Ownership	5	5	1	0	100	7
Primary use	0	0	0	0	100	0

Table 4

Current Use of SNSs among Korean-Americans (%)

	MySpace	Facebook	Friendster	LiveJournal	CyworldUS	Cyworld Korea	Other
Ownership	36	98	4	4	7	23	10
Primary use	0	97	0	0	0	3	0

Table 5

Description of Three Sample Groups

	American		Korean-American		Korean	
	Male	Female	Male	Female	Male	Female
Gender (%)	40 (*N*=146)	60 (*N*=215)	49 (*N*=47)	52 (*N*=50)	38 (*N*=91)	62 (*N*=150)
Average age	20		20		22	
Percentage of who have had an SNS account for more than two years (%)	20		26		72	
Total number of SNS friends	446		349		94	
Percentage of close friends (%)	20		21		30	
Amount of time spent on SNS (mins.) (percentage of SNS use while being online)	70 (33%)		64 (29%)		47 (31%)	
Amount of time spent on the Internet (mins.)	212		224		150	

Table 6

Factor Analysis of Individualism-Collectivism Items

	Factors		
Items	Group Harmony	Problem-Solving	Friend Involvement
Group Harmony			
I usually sacrifice my self-interest for the benefit of my group.	**.40**		
It is important for me to maintain harmony within my group.	**.91**		
I hate to disagree with others in my group.	**.49**		
Problem-Solving			
When faced with a difficult personal problem, one should consult widely one's friends and relatives.		**.40**	
When faced with a difficult personal problem, it is better to decide what to do yourself, rather than follow the advice of others (reversed).		**.61**	
I would rather struggle through a personal problem by myself, than discuss it with my friends (reversed).		**.60**	
Friend Involvement			
I allow my close friends to interfere in my private life.			**.99**
Close friends allow me to interfere in their private life.			**.63**

Table 7

Factor Analysis of High-and Low-Context Cultural Items

	Factors	
	High-	Low-
Items	context	context
	culture	culture
High-Context Culture		
I communicate in an indirect fashion.	**.58**	
My communication with others is ritualistic	.44	.39
(dropped)		
I use silence to avoid upsetting others when we	**.64**	
communicate.		
I am ambiguous when I communicate with others.	**.68**	
I avoid clear-cut expressions of feelings when I	**.69**	
communicate with others.		
I am evasive when I communicate with others.	**.70**	
I qualify (e.g., use "maybe," "perhaps") my	**.58**	
language when I communicate.		
I use silence to imply my opinions.	**.64**	
It is better to risk not speaking enough than to risk	**.44**	
speaking too much.		
Low-Context Culture		
A person cannot think unless he/she can put it into		**.71**
words.		
It is usually more important to say things clearly		**.64**
rather than politely.		

Table 8

Factor Analysis of Self-Disclosure Items

	Factors		
Items	Intimacy	Amount	Vulnerability
Amount of Self-Disclosure		.65	
I do not often disclose about myself.		.59	
My statements of my feelings are usually brief.		.49	
Only infrequently do I express my personal beliefs and opinions.			
Intimacy of Self-Disclosure	.49		
I often disclose my feelings.	.68		
I intimately disclose who I really am, openly and fully.			
	.78		
I often disclose intimate, personal things about myself without hesitation.			
Dropped item			
I am often not confident that my expressions of my own feelings, emotions, and experiences are true reflections of myself.			
Vulnerability of Self-Disclosure			.54
To what extent do you show your softer, more sensitive side on your social network site?			
To what extent do you reveal things about yourself that you are ashamed of on your social network site?			.69
To what extent do you write things that secretly make you feel anxious or afraid on your social network site?			.66
To what extent do you write something intimate about yourself on your social network site?			.63

Table 9

Factor Analysis of Self-Presentation Items

Items	Factor Self-Presentation Behavior
Self-Presentation Behavior	
I tell others about my positive qualities.	**.37**
I express the same attitudes as others so they will accept me.	**.61**
When telling others about past events, I claim more credit for doing positive things than was warranted by the actual events.	**.86**
I exaggerate the value of my accomplishments	**.77**
I act in ways I think others should act.	**.40**

Table 10

Factor Analysis of Privacy Items

	Factor	
Items	Privacy Concern	Privacy Sharing
Privacy Concern		
A stranger knew where you lived and your address.	**.69**	
Five years from now, complete strangers would be able to find out easily the name of your current partner and your current school information (e.g., school name, department, major, classes you took).	**.80**	
A friend of a friend that you do not even know knew your name, your email, your home phone number, and your instant messaging nickname.	**.72**	
Privacy Sharing		
I like to reveal information about myself to others through my social network site.		**.57**
I trust the people I interact with on my social network site.		**.56**
I can share my personal thoughts with others on my social network site.		**.71**
I have included identifiable personal information in my profile.		**.45**

Table 11

Reliability of Created Variables

Variable Name	Number of Items	Standardized Alpha
Individualism-Collectivism		
Group Harmony	3	.59
Problem-Solving	3	.60
Friend Involvement	2	.76
High-and Low Context Culture	11	.73
Self-Disclosure		
Amount of Self-Disclosure	3	.60
Intimacy of Self-Disclosure	3	.74
Vulnerability of Self-Disclosure	4	.72
Self-Presentation Behavior	5	.73
Privacy		
Privacy Concern	3	.79
Privacy Sharing	4	.66

Table 12

Valid Cases for Content Analysis [a]

Accessibility	Full access, including profile pages and inside content	Partial access to profile information and profile photo	Access only to profile photo	Inacces siblity	Total
Facebook	51	0	7	20	78
Cyworld	54	39	0	17	110

[a] unit: the applicable number of profile pages

Table 13

Sample Sizes of Content Analysis Subjects

Sample size	Common items	About me	Profile photo
Facebook	51	23	58
Cyworld	93	61	92

Table 14

Examples of About Me (taken verbatim from Facebook and translated from Cyworld).

	Facebook	Cyworld
Explicit self-description	● My name is Deanne, but I go by Joy. Whatever you feel more comfortable calling me is fine. I like a lil' bit of everything, people just have to be madd cool when they are around me. *(continuing)* ● I like anything fast. ● I love my family, friends, women, and Jesus. I think I should rephrase that order… ● I am one of the most impulsive people you will ever encounter.	● Me? Do-hun… Kim do-hum…Dec. 26th, 1980… (My) house is Seoul, hyo-chang-dong…near Suk Univ… I am studying at Korea Univ. after ending military service… (My) personality is *(continuing)* ● I am an ordinary person who seeks 'love' and 'peace'.
Listing personal information	● frieNdly, OpeN mindED, doWn to eArth!	●Korean culture & Journalism, born 1985, B blood type *(these information is listed with a picture)* ●glad to see you, Call Me Babe 010 2**3 7**2, nate on : dae***@nate.com
Implicit self-description	● I am too young to be jaded! ● Always on the grind.....Catch me where im at... ● A mess. I probably don't like you. Anti-girl... unless you're interested	● 3 pm. This time is too late or too early to do something. Equivocal time. Today, it makes *(omitted object)* impatient. *(continuing)* ● Only focus on 'Relationship' I know I am foolish but... ● *(omitted subject)* wish to go and see an elephant. ● The reason I like writing is to live well. When writing, my life is the best. The harder and more difficult, the happier I am. Whenever I start writing a new writing, I am wondering "how much can I endure *(omitted object)*?"
Non-self-related information	● Poopie	● The happiest person: A newspaper company opened a prize list of essays: who is the happiest person in this world. The winner was a kid who was making a sand castle with its family. *(continuing)*
Using pictures		Female models, Che Guevara, A parade, An animated rabbit etc.
Other	● Hey, If you know me, you should already know most of what I can put here. If not, all you gotta do is ask! ● H'okay, so this is Riza here. And I'm gonna tell you a little bit about Hans. Cause I dig him like that. ;D *(continuing; the user's girlfriend introduced him)*	● my words may not convey just what i'm feelin' ● How dare [omitted subject] asks me to introduce myself.. ● Ten years later, to be proud of my profile, hard training.

Table 15-1

Inter-Coder Reliability of About Me (Cohen's Kappa)

About me	Facebook	Cyworld
Individualism-Collectivism Categories		
First-person self-reference	0.64	0.76
First-person group-reference	[a]	0.66
High-and Low Context Categories		
Explicit self-description	1.00	1.00
Listing personal information	1.00	0.88
Implicit self-description	0.83	0.92
Non-self-related information	0.62	0.83
Using pictures	[a]	1.00

[a] No measure of association for incomplete 2-way table

Table 15-2

Inter-Coder Reliability of Profile Photo (Cohen's Kappa)

Profile photo	Facebook	Cyworld
Revealing actual photos about one's life and/or family/friends	0.93	0.96
Actual photo	1.00	1.00
Distorted actual photo	1.00	1.00
Non-obvious fake photo	[a]	0.65
Obvious fake photo	1.00	0.95
No photo	[a]	1.00

[a] No measure of association for incomplete 2-way table

Table 16

ANOVA of Group Harmony by Nationality

	Sum of Squares	df	Mean Square	F
Between Groups	31.181	2	15.590	30.809
Within Groups	350.681	693	.506	
Total	381.862	695		

$p < 0.01$

Table 17

ANOVA of Problem-Solving by Nationality

	Sum of Squares	df	Mean Square	F
Between Groups	7.736	2	3.868	6.743
Within Groups	397.576	693	.574	
Total	405.312	695		

$p < 0.05$

Table 18

ANOVA of Friend Involvement by Nationality

	Sum of Squares	df	Mean Square	F
Between Groups	9.808	2	4.904	6.649
Within Groups	512.663	695	.738	
Total	522.471	697		

$p < 0.05$

Table 19

Individualism-Collectivism and Friend Relationships

	The number of friends	The percentage of close friends	The percentage of strangers
Group Harmony	-.084*	.027	-.101*

* *p* <.05

Table 20

Correlations among Cultural Traits and Self-Disclosure Attitude

	Amount	Intimacy	Vulnerability
Group Harmony	-.084*	.163***	.226***

* *p* <.05 *** *p* <.001

Table 21

Correlations among Cultural Attitudes and Visual Anonymity

	Discursive Anonymity	Visual Anonymity
Group Harmony	- .098*	. 174***
High-Context Culture	- .017	.086*

* *p* <.05 *** *p* <.001

Table 22

Correlations among Cultural Attitudes and Self-Presentation

	Self-Presentation
Group Harmony	.212***
High-Context Culture	.130**

** p < .01 *** p < .001

Table 23

Correlations among Cultural Traits and Privacy Attitudes

	Privacy concern	Privacy sharing
Group Harmony	-.010	.202***

*** p <.001

Table 24

Primary SNS in the American Sample

Primary SNS in the American Sample	Participants	
	Frequency	%
Facebook	332	93%
MySpace	24	7%
LiveJournal	3	1%
Missing	2	-
Total	361	100%

Table 25

Descriptive Statistics for SNS Relationships by Nationality

	Total number of friends	Percentage of close friends	Percentage of Acquaintances	Percentage of Strangers
	M (SD)	M (SD)	M (SD)	M (SD)
Koreans	93.98 (75.01)	30.10 (22.89)	21.77 (17.13)	2.13 (5.80)
Americans	445.62 (352.41)	19.81 (18.46)	26.60 (19.10)	8.34 (12.62)

p <.001

Table 26

Descriptive Statistics for Self-Disclosure by Nationality

	Amount of self-disclosure	Intimacy of self-disclosure	Vulnerability of self-disclosure
	M (SD)	*M* (SD)	*M* (SD)
Koreans	9.97 (2.43)	7.33 (2.37)	18.96 (4.56)
Americans	10.45 (2.15)	6.01 (2.50)	14.23 (4.64)

p <.001

Table 27

Description of Visual Anonymity by Nationality

	M	*SD*
Visual anonymity		
Koreans	3.97	1.65
Americans	1.68	0.93

p <.001

Table 28

Descriptive Statistics for Self-Presentation by Nationality

	M	*SD*
Self-presentation		
Koreans	13.35	3.60
Americans	11.92	3.52

p <.001

Table 29

Descriptive Statistics for Privacy by Nationality

	Privacy concern	Privacy sharing
	M (*SD*)	*M* (*SD*)
Koreans	12.34 (2.28)	12.06 (2.69)
Americans	11.52 (3.05)	11.23 (2.97)

p <.001

Table 30

Common Basic Information on Online Profiles (%)

Only to SNS friends	χ^{2a}	Facebook	Cyworld[b]		
Qualification of the researcher		SNS friend(*N*=51)	Total (*N*=93)	SNS friend (*N*=54)	Not SNS friend (*N*=39)
Birthday	31.28***	94	47	80	3
Hometown	31.32***	65	18	30	3
Email	2.73	63	48	82	3
Cell phone	5.24*	10	26	41	5
Group	26.16***	75	30	30	31
About me	3.27	49	65	67	62
Photo album	2.21	89	78	81	75[c]

p <.05 **p* <.01 ***p* <.001
[a] Cyworld online profile page is generally open to everyone. Users change its accessibility depending on relationship status if they want. For Facebook, once people are accepted as SNS friends, one's profile page is fully open to them.
[b] These cross-tabulation results were generated using 51 Facebook SNS friend cases and 93 Cyworld cases.
[c] The researcher recognized that users had photo albums but she could not access their content.

Table 31

Cross Tabulation Table of About Me^a

	Facebook users (*N*=23)	Cyworld users (*N*=61)	Total	x^2
Explicit self-description	15 (65%)	5 (8%)	20 (24%)	29.94***
Listing personal information	1 (4%)	9 (15%)	10 (12%)	1.73
Implicit self-description	4 (17%)	17(28%)	21 (25%)	.98
Non-self-related information	2 (9%)	15 (25%)	17 (20%)	2.61
Using pictures	0 (0%)	19 (31%)	19 (23%)	9.26**

** *p* < .01 *** *p* < .001
^a The reported numbers and percentages were rounded. Therefore, the results may slightly differ from the actual numbers and percentages.

Table 32

Direct and Indirect Communication Styles of About Me on Cross Tabulation Table

	Facebook users (*N*=23)	Cyworld users (*N*=61)	Total	x^2
Direct communication style	17 (74%)	14 (23%)	31 (37%)	18.63***
Indirect communication style	6 (26%)	47 (77%)	53 (63%)	

*** *p* < .001

Table 33

Cross Tabulation Table of Reference Use on About Me

	Facebook users (*N*=23)	Cyworld users (*N*=61)	Total	x^2
Self reference	15 (65%)	16 (26%)	31 (37%)	10.90**
Group reference	0 (0%)	1 (2%)	1 (1%)	.38

** *p* < .01

Table 34

Cross Tabulation Table of Profile Photo [a]

	Facebook users (N=58)	Cyworld users (N=92)	Total	X^2
Actual photos including family, friends or backgrounds with the user	25 (43%)	13 (14%)	38 (25%)	15.79***
Actual self-photos including only the self	27 (47%)	4 (4%)	31 (21%)	38.65***
Distorted actual photos	3 (5%)	4 (4%)	7 (5%)	.05
Non-obviously fake photos	2 (3%)	4(4%)	6 (4%)	.08
Obviously fake photos	1 (2%)	63 (69%)	64 (43%)	64.80***
No photo	0 (0%)	4(4%)	4 (3%)	2.59

*** $p < .001$

[a] The reported numbers and percentages were rounded. Therefore, the totals may slightly differ from actual values.

Table 35

Cross Tabulation Table of Self-and Group-Oriented Profile Photo

	Facebook users (N=58)	Cyworld users (N=92)	Total	X^2
Self-oriented photo	52 (90%)	17 (26%)	69 (37%)	72.55***

*** $p < .001$

Table 36

Correlations between Types of About Me and Profile Photo

	Explicit self-description	Using pictures
Self-photos with personal relationships and backgrounds	.27*	
Actual self-photo	.32**	-.26*
Obviously fake photo	-.44**	.27*

* *p* < .05 ** *p* < .01

Table 37

Correlations between Types of About Me and Profile Photo and Communicative

Behavioral Variables

	Visual	Privacy concern	Self-presentation	Amount self-disclosure	Intimate self-disclosure	Vulnerable self-disclosure
Self-photo with personal relationships	-.33**					
Self-photo	-.31**				-.18*	
Distorted Non-obviously fake			-.19*			
Obviously fake	.55**	.20*	.22**		.19*	
No photo				-.19*		.17*
Explicit self-description	-.43**	-.26*			-.25*	

* *p* < .05 ** *p* < .01

Table 38

Intercorrelations Among Study Variables (N=602)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Group harmony																
2. High-context	.229**															
3. Nationality	.305**	.055														
4. Friend numbers	-.084*	-.069	-.530**													
5. Close friends	.027	-.057	.241**	-.227**												
6. Just friends	.007	.014	.000	-.043	-.377**											
7. Family	-.032	.048	-.064	-.018	-.011	-.098*										
8. Acquaintances	-.010	.025	-.128**	.123**	-.452**	-.297**	-.073									
9. Strangers	-.101*	-.007	-.280**	.296**	-.226**	-.211**	-.021	-.027								
10. Amount of SD	-.084*	.035	-.104	.066	-.009	.013	.024	.025	-.025							
11. Intimacy of SD	.163**	.001	.256	-.119**	.047	.020	-.017	-.073	-.042	-.466						
12. Vulnerability of SD	.251**	.125**	.596**	-.335**	.058	.040	-.029	-.085	-.101	-.308	.437**					
13. Visible anonymity	.174**	.086*	.663**	-.410**	.143**	-.015	-.079	-.086	-.139	-.037	.124**	.452**				
14. Discursive anonymity	-.098*	-.023	-.022	-.057	.096*	-.068	.133**	-.098*	.053	-.014	-.013	.041	.132**			
15. Self-presentation	.212**	.130**	.194**	-.083*	-.040	.070	.000	.037	-.082*	-.142**	.257**	.344**	.117**	-.043		
16. Privacy concern	-.010	.096*	.144**	-.022	-.020	-.015	.053	.048	-.039	.068	-.135**	.043	.121**	.033	.003	
17. Privacy sharing	.202**	-.059	.141**	-.072	.029	-.007	-.080*	.019	-.078	-.298**	.309**	.230**	-.014	-.14**	.168**	-.129**

* *p* < .05 ** p < .01

Appendix: Figures

Figure 1

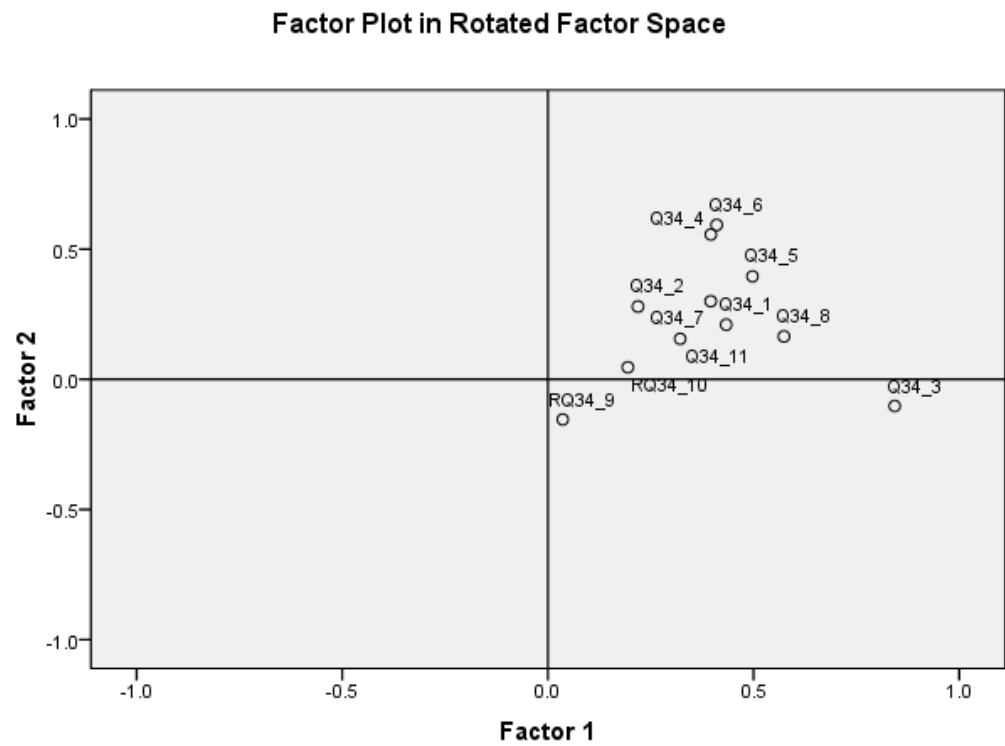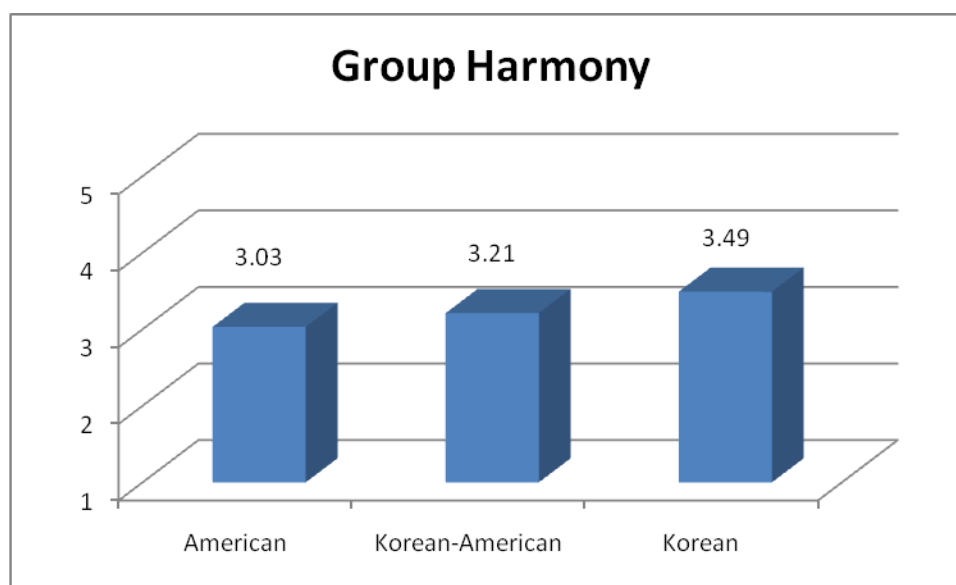*Factor Plot in Rotated Factor Space by High-and Low-Context Items*
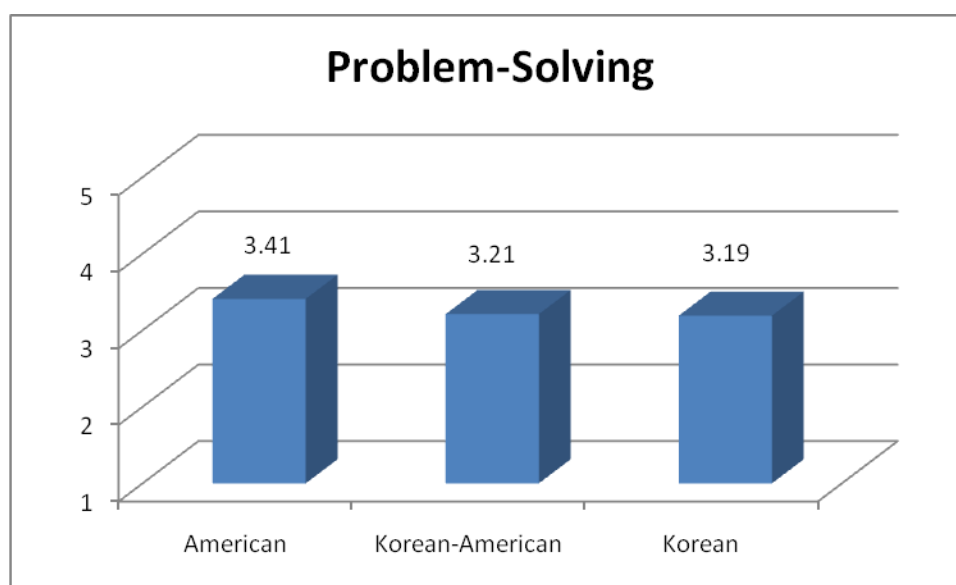
Figure 2

Mean Comparison of Group Harmony by Nationality [a]

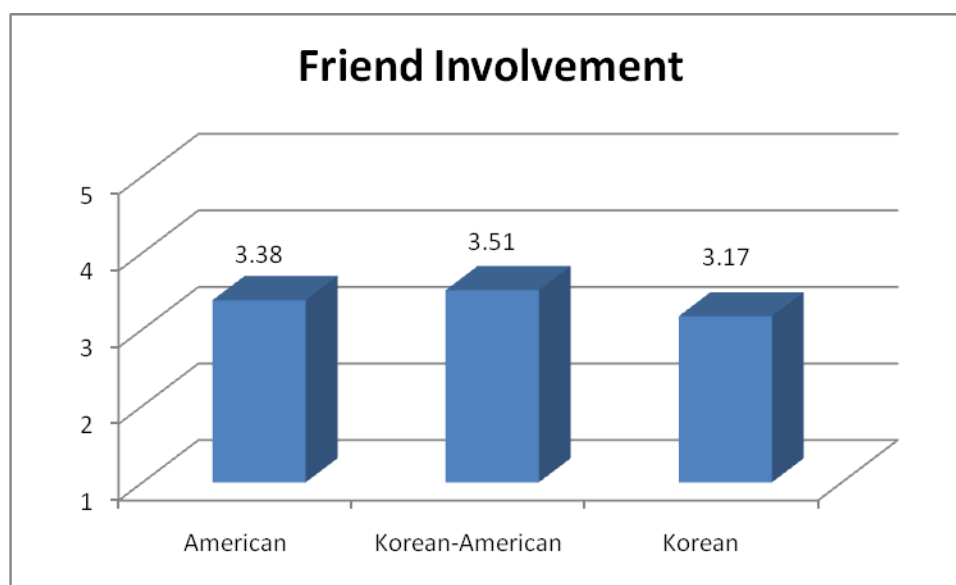[a]1 = strongly disagree 5 = strongly agree

Figure 3

Description of Problem-Solving by Nationality [a]

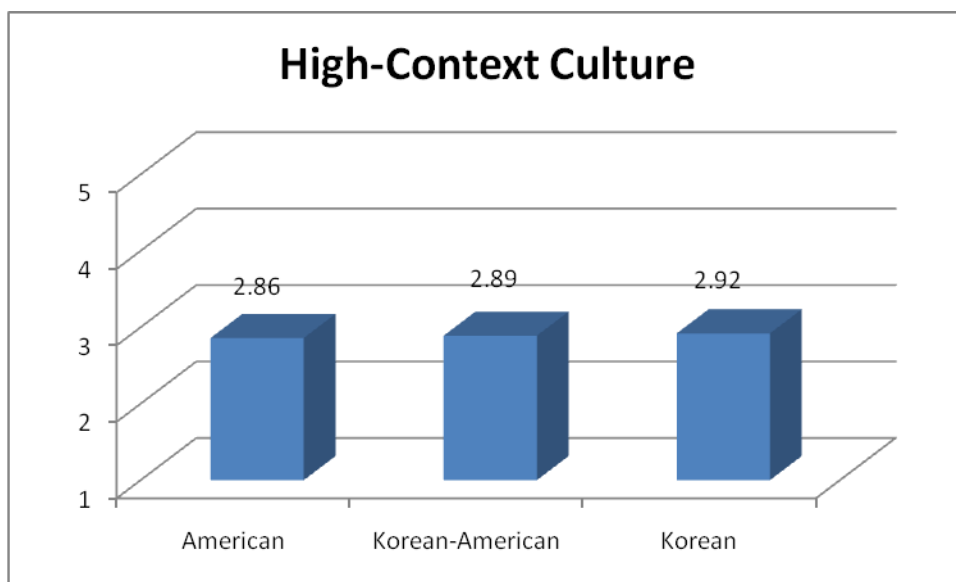[a]1 = strongly disagree 5 = strongly agree

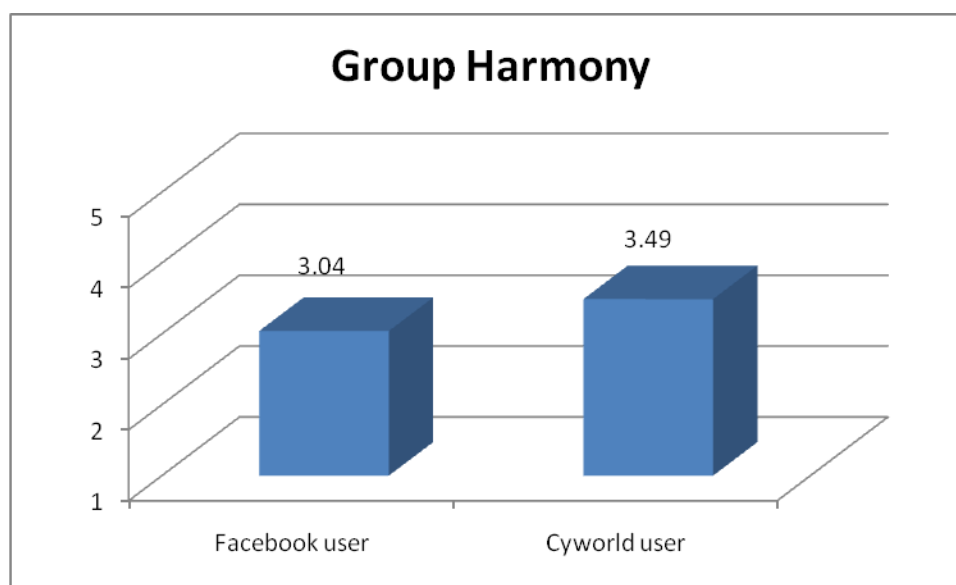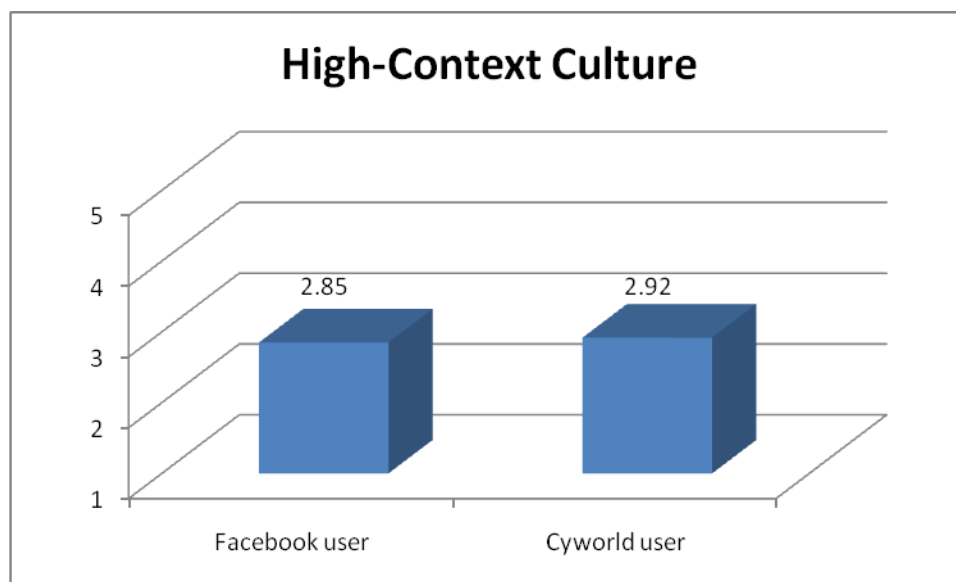Figure 4

Description of Friend Involvement by Nationality [a]

Friend Involvement

3.38 — American
3.51 — Korean-American
3.17 — Korean

[a]1 = strongly disagree 5 = strongly agree

Figure 5

Description of High-Context Culture by Nationality [a]

High-Context Culture

2.86 — American
2.89 — Korean-American
2.92 — Korean

[a]1 = strongly disagree 5 = strongly agree

Figure 6

Description of Group Harmony by the Type of Primary SNS [a]

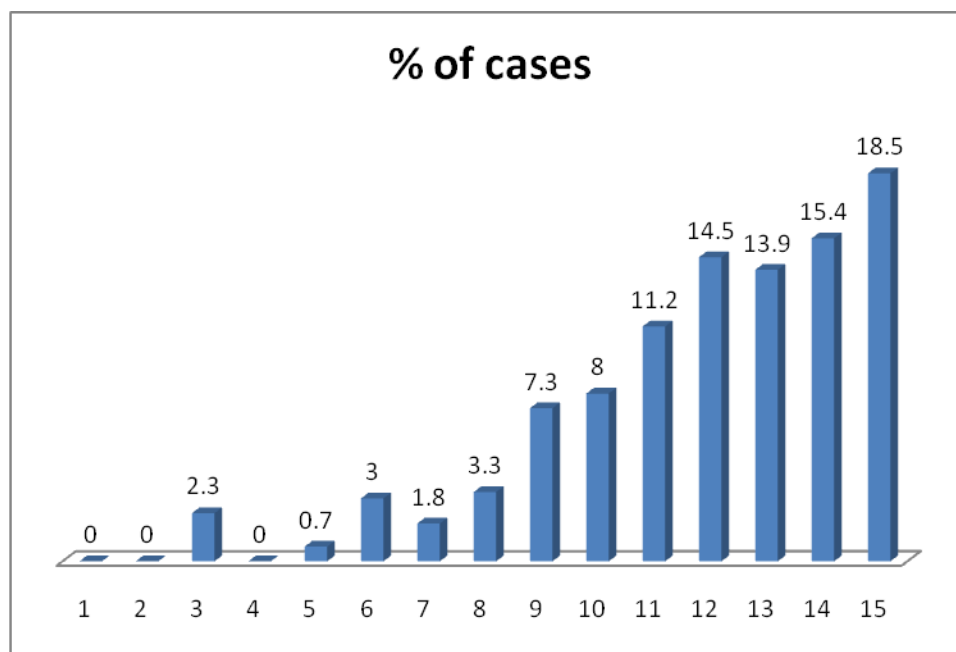[a] 1 = strongly disagree 5 = strongly agree

Figure 7

Description of High-Context Culture by the Type of Primary SNS [a]

[a] 1 = strongly disagree 5 = strongly agree

Figure 8

Frequency of Privacy Concern [abc]

[a] x-axis refers to respondent's additive index for three Items of privacy concern variable.
[b] y-axis refers to percentage of respondents
[c] $M=11.85$, $SD=2.79$, $N=599$

Appendix: Hypotheses and Research Questions

	Hypotheses and Research Questions	
H1 Social relationships	a. Users from individualistic cultures are likely to have more friends on their SNS friends lists than users from collectivistic cultures.	Confirmed
	b. Users from collectivistic cultures are likely to have more intimate SNS friends (on average) than users from individualistic cultures on their SNSs.	Partially confirmed
H2 Self-disclosure	a. Users from individualistic cultures tend to exhibit a greater amount of self-disclosure than users from collectivistic cultures on their SNS profiles.	Confirmed
	b. Users from collectivistic cultures tend to exhibit a greater depth of self-disclosure than users from individualistic cultures on their SNSs.	Confirmed
H3 Communication styles	a. Users from high-context cultures tend to use more indirect communication styles to disclose the self on their SNSs than users from low-context cultures.	Confirmed
	b. Users from high-context cultures tend to rely on nonverbal information more, whereas users from low-context cultures tend to rely on verbal information more in their SNSs.	Confirmed
H4 Anonymity	Users from collectivistic cultures will display more anonymity on their front page than users from individualistic cultures.	Partially confirmed
RQ1 Anonymity	Are cultural differences evident in the use of visual versus discursive anonymity on SNSs?	
H5 Self-presentation	Users from collectivistic cultures tend to pay more attention to self-presentation on their SNSs than users from individualistic cultures.	Confirmed
RQ2 Privacy	How do individualistic or collectivistic cultural values influence privacy attitudes on SNSs?	

Appendix: Results and Discussion

	Individualistic cultures	Collectivistic cultures	Cultural implications
SNS friends	A larger number and a broader range of friends	A small size of friends list and a limited SNS relationship	Being good at forming relationships in individualistic cultures vs. maintaining in-group oriented and closed social relationships in collectivistic cultures
Self disclosure	A greater amount of self-disclosure	Higher levels of intimacy and vulnerability with self-disclosure	· Encouraged self-esteem and an emphasis on individuals' uniqueness in individualistic cultures vs. discouraged self-disclosure with the emphasis on a self-effacing attitude and group harmony in collectivistic cultures · A broader range of social interactions in individualistic cultures vs. limited social interactions within in-groups in collectivistic cultures
Anonymity	High levels of identification through online profiles	Higher levels of visual anonymity	· Online profile for identification in individualistic cultures vs. evasion of showing off the self in collectivistic cultures. · Isolating themselves from random contacts by unexpected people in collectivistic cultures.
Self-Presentation	Less concern about self-presentation strategies	Built-in tools to polish photos in Cyworld	Internal motivation in individualistic cultures vs. both internal and external motivation in collectivistic cultures
Privacy	Generally high levels of privacy concern across cultures		Perception of privacy as an individual's right in individualistic cultures vs. A sacrifice of the individual's privacy for group harmony in collectivistic cultures

Appendix: Results and Discussions

	Low-context cultures	High-context cultures	Cultural Implications
SNS friends	No significant differences and no theoretical implications		
Self disclosure	Direct communication styles Text-oriented online profiles	Indirect communication styles Greater use of graphics	Culturally different communication styles to introduce the self on SNSs
Anonymity	Identifiable self-description and profile photos (direct communication styles)	Indirectly expressed self and more anonymous profile photos	Culturally different communication styles
Self-Presentation	Relatively straight self-presentation	More manipulating self-image using other tools	No theoretical support
Privacy	No significant differences and no theoretical implications		

Appendix: Facebook Online Profile

facebook   Home   Profile   Friends   Inbox 14   Seong Eun Cho   Settings   Logout

Stephanie Correia up early and feeling good XD 9 hours ago

Wall   **Info**   Photos   Boxes

View Photos of Stephanie (53)
Send Stephanie a Message
Poke Stephanie

_(ˉ ˉ ロ ˉ)＿＿
いつも眠い。それは私の生活だよ。

Information

Networks:
Rutgers
Relationship Status:
It's Complicated
Birthday:
June 24

Mutual Friends

1 friend in common   See All

Diana
Francis

Friends

74 friends   See All

Terri B   Carla Ayers   Arelis Perez

Jeen Smith   Roxana Olivera   Sabrina Georges

Music

Basic Information

Networks:	Rutgers
Sex:	Female
Birthday:	June 24
Hometown:	Newark, NJ
Relationship Status:	It's Complicated
Interested In:	Men
Looking For:	Friendship
Political Views:	other
Religious Views:	:)

Personal Information

Activities: television, movies, reading, hanging out with my buddies, videogames, procrastinating, drinking tea, singing with passion

Interests: Movies, books, manga, comedy, Korean movies/dramas, foreign languages

Favorite Music: Queen, Jeff Buckley, Dir en grey, Southern All Stars, Brown Eyes, Super Junior, Clazziquai, THE BACK HORN, Epik High, Hata Motohiro

Favorite TV Shows: 30 Rock, It's Always Sunny in Philadelphia, True Blood, Arrested Development, Flight of the Conchords, Avatar, Lost, Home Movies, The Office

Favorite Movies: Oldboy, Shaun of the Dead, Hot Fuzz, Lady Vengeance, Battle Royale, Harry Potter, Lion King, The Host, Fight Club, Donnie Darko, Talledega Nights, Memories of Murder, Infernal Affairs, Tale of Two Sisters, Transformers, Pulp Fiction, Akira, There Will Be Blood, Harold and Kumar Go to White Castle, Anchorman, A Bittersweet Life, The Iron Giant, Save the Green Planet, The Assassination of Jesse James by the Coward Robert Ford, The Good the Bad the Weird, Memento, 우리 동네, 멋진 하루, 영화는 영화다, Survive Style 5+, サマー タイム マシン ブルース, Lilo & Stitch

Favorite Books: Harry Potter, Battle Royale, The Metamorphosis, The Trial, Coin Locker Babies, The Catcher in the Rye, The Count of Monte Cristo, Catch 22, The Clockwork Orange, The Wind-Up Bird Chronicles, 'salem's Lot, Lord of the Flies, My Custom Van

Favorite Quotations: "You see, they say that people shrivel up because they have an imagination. So, don't imagine anything, you'll become brave as hell." -- Oldboy

About Me: I ♥ internet. Yeah~
I am amused by senseless crap.

Contact Information

Email: stephreu:@pogoxxx.rutgers.edu
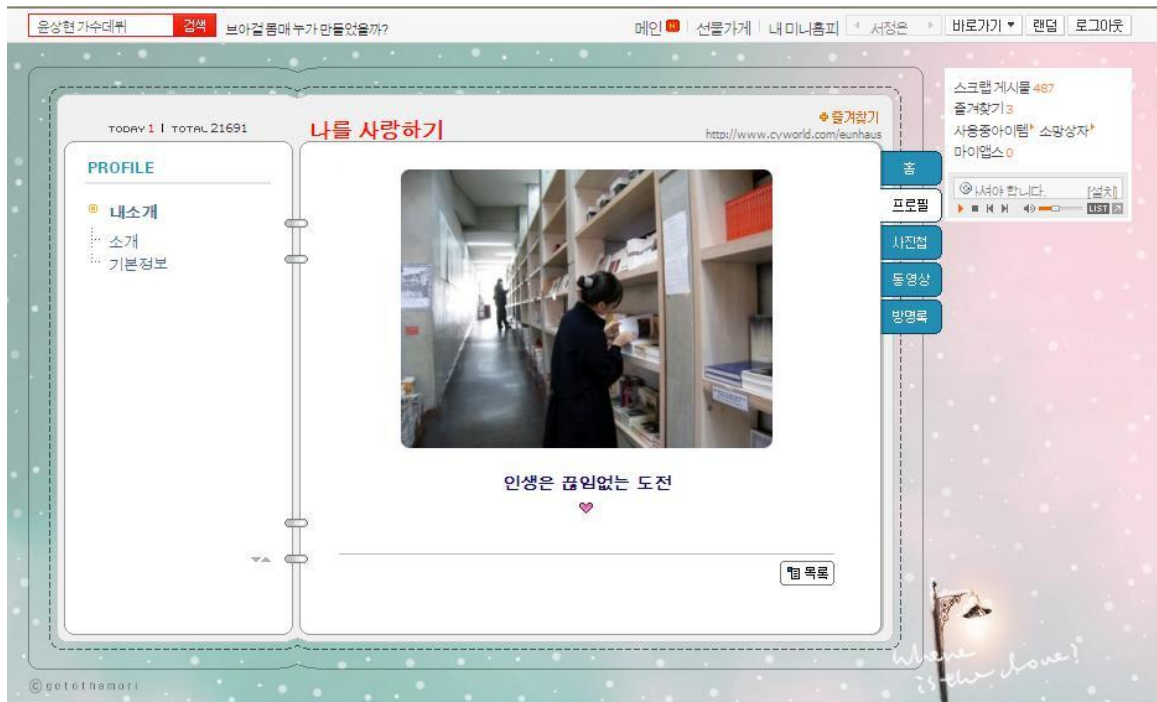Windows Live: Dragon_cup

Education and Work

College: Rutgers '11
East Asian Languages & Area Studies
High School: St. Vincent Academy '06

Appendix: Cyworld Front Page

Cyworld Online Profile Page

Appendix: Survey Questionnaire

Social Network Site Survey

This study investigates how individuals use social network sites, such as MySpace, Facebook, and Cyworld.

[Ownership of Social Network Site]
1. Do you have a social network site (SNS)? For example, do you have a site on MySpace, Facebook, or Cyworld? (Please circle appropriate response below.)
      [1] Yes
      [2] I used to have an SNS, but not anymore
      [3] No, I never had an SNS

If you circled [1] above, please answer the following questions. If you circled [2] or [3], please stop answering the questions.

2. Which site(s) are you using? (Please circle all you have)
      [a] MySpace
      [b] Facebook
      [c] Friendster
      [d] LiveJournal
      [e] Cyworld
      [f] Others (please specify): _____

3. Which is your primary SNS (the one you use most frequently)? (Please circle only one)
      [a] MySpace
      [b] Facebook
      [c] Friendster
      [d] LiveJournal
      [e] Cyworld
      [f] Other (please specify): _____

Please answer the following questions about *your primary SNS* (the one you use most frequently).

4. What was your motivation for creating a social network site?

5. Approximately how long have you had this site?
      [a] Less than one year
      [b] One year to less than two years
      [c] Two years to less than three years
      [d] Three years or more

6. Approximately how many people do you have on your friend list?

7. Please indicate what percentage of your friends in your social network site is made up of the following? (This should sum to 100%.)

<div align="center">Percent **(%)**</div>

    a.   Close or best friends
        (including a romantic partner)   _____

    b.   Just friends   _____

    c.   Family Members   _____

    d.   Acquaintances   _____

    e.   Strangers   _____ (Strangers include people
        who you met online and have never met offline.)

    Total   ____100%

[General Usage of Social Network Site]

8. How much time do you usually spend managing your social network site per day on average?

9. How much time do you usually spend online (on the Internet) per day on average?

10. How much time do you usually spend offline socializing per day on average?

11. How many times do you visit your social network site per day on average?

12. Approximately how many people do you consider close friends of those on your SNS friend list?

[Privacy]
The following questions are about the privacy settings on your social network site. Please circle the most appropriate response.

13. Can you control the access that visitors have to your identifiable information on your social network site?
    [a] Yes
    [b] No
    [c] I don't know

14. Have you ever changed the privacy settings on your social network site?
    [a] Yes
    [b] No
    [c] I don't know

15. Why or why not? Please explain why you decided to change or not to change privacy settings.

    _____

16. Which privacy settings have you changed? (please circle all that apply) *If you have not changed the settings, please skip this question.*
      [a] Who can see my profile
      [b] Who can find me in searches
      [c] Notification of what I've edited or updated
      [d] Information to display on my profile
      [e] Allowance of sharing my photos and postings
      [f] Other (please specify):

      _____

17. How much have privacy concerns prevented you from posting personal information on your social network site?

      Not at all   1   2   3   4   5   An extreme amount

18. **The following statements are about your attitudes toward privacy in social network sites.**

1	2	3	4	5
Not at all		Neutral		Very worried

How worried would you be if:	Not at all ----------------------------- Very worried				
	1	2	3	4	5
A stranger knew where you lived and your address					
Five years from now, complete strangers would be able to find out easily the name of your current partner and your current school information (e.g., school name, department, major, classes you took)					
A friend of a friend that you do not even know knew your name, your email, your home phone number, and your instant messaging nickname					

1	2	3	4	5
Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree

How much do you agree or disagree:	Strongly --------------------------- Strongly disagree agree				
	1	2	3	4	5
I like to reveal information about myself to others through my social network site.					
I trust the people I interact with on my social network site.					
I can share my personal thoughts with others on my social network site.					
I have included identifiable personal information in my profile.					

[Disclosing Personal Information]

19. The following items are about the types of information you disclose on your social network site. Please answer how your personal information is available on your social network sites.

The personal information below is available or published:	Public	Only to people on my friend list	NOT filled in	NOT specified by the site
My real name				
My nick name				
My age				
My birthday				
My gender				
My email account				
My cell phone number				
My IM screen name				
My place of residence				
My personal characteristics (e.g., About me)				
My hobbies				
My interests				
My religion				
My political views				
My school				
My marital status (relationship)				
My sexual orientation				
My dating preference				
My music preference				
My private photos in a photo album				
My online diary				
My romantic partner				
My family members				
Other personal favorite things				

[Self-disclosure]

20. Please think about when you reveal yourself through your social network site and mark how much you agree or disagree with each statement.

1	2	3	4	5
Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree

| **When I reveal myself through my social network site:**	Strongly --------------------------- Strongly disagree agree				
	1	2	3	4	5
I do not often disclose about myself.					
My statements of my feelings are usually brief.					
I often disclose my feelings about myself.					
Only infrequently do I express my personal beliefs and opinions.					
I intimately disclose who I really am, openly and fully on my social network site.					
I often disclose intimate, personal things about myself without hesitation.					
I am often not confident that my expressions of my own feelings, emotions, and experiences are true reflections of myself.					

[Self-presentation]

21. Please mark the number on the scale which most closely represents your behavior when revealing yourself through your social network site.

1	2	3	4	5
Very Infrequently	Somewhat infrequently	Sometimes	Somewhat frequently	Very frequently

When I reveal myself on my social network site:	Very ------------------------------------ Very infrequently frequently				
	1	2	3	4	5
I tell others about my positive qualities.					
I express the same attitudes as others so they will accept me.					
When telling others about past events, I claim more credit for doing positive things than was warranted by the actual events.					
I exaggerate the value of my accomplishments.					
I act in ways I think others should act.					

22. When you present yourself on your social network site (e.g., posting personal photos or life episodes), how much do you agree or disagree with each of the following goals you may have:
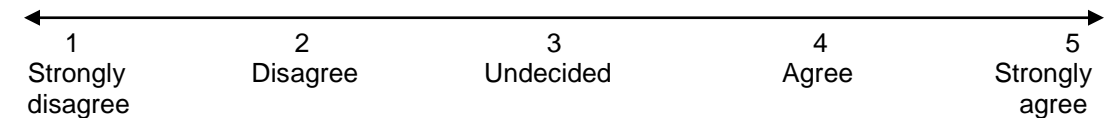
1	2	3	4	5
Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree
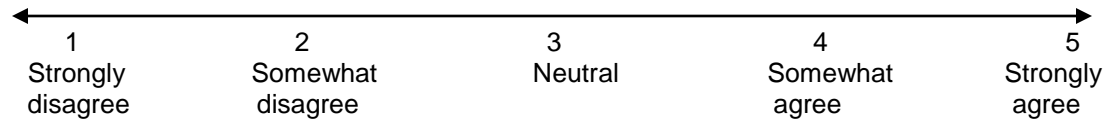
	Strongly -------------------------- Strongly disagree agree				
	1	2	3	4	5
Establishing a sense of social belonging					
Advertising myself					
Sharing my personal life with my friends and family					
My own entertainment					

[Finding a friend]

23. If friends/acquaintances who do not know your exact profile address tried to find your social network profile, how easily would they find you using *friend search*? (If you have no idea about how easily they would find you using friend search, please circle "I don't know")

Not easily at all   1   2   3   4   5   Very easily // I don't know

24. Which of the following reasons explain your response to Q23? Please indicate:

1	2	3	4	5
Strongly disagree	Disagree	Undecided	Agree	Strongly agree

	Strongly -------------------------- Strongly disagree agree				
	1	2	3	4	5
I posted my own photo, which was pretty identifiable, on my profile.					
I did not provide sufficient basic information (e.g., email, sex, birth, and school) to find my profile using the search function.					
The SNS system does not serve adequate function to find a person's profile.					

	Yes	Not Available	No
I did not correctly provide my name.			
I did not allow people to search me through SNS in public.			
I did not allow the SNS system to show my profile photo on the list of search results.			

[Online Profile]

25. What name do you use for yourself on your online profile?

[a] I remain totally anonymous *(no name, no personal information at all)*
[b] I use an obvious pseudonym *(e.g., graveyard or catlover)*
[c] I use a non-obvious pseudonym *(e.g., John Philips, which sounds like a real name but is not your real name)*
[d] I use a partial real name *(like your real first name, or last name, or initials only)*
[e] I use my full real name

26. What type of photo do you use as your current profile picture? (Please select only one)

[a] I do not use any photo
[b] I use an obviously fake picture *(e.g., a borrowed picture of a celebrity or other image)*
[c] I use a non-obviously fake picture *(readers may mistake it for a real photo of me)*
[d] I use a partial actual *picture (e.g., my real picture but with my face doctored or hidden in the shadow)*
[e] I use an actual picture *(a real picture but not quite revealing about my life)*
[f] I use a revealing actual picture *(a real picture about myself in my real life, either alone or with my family or friends included)*

27. Which of the following best describes your current main profile photo?

[a] Individual photo *(e.g., me alone or me with a couple of my friends)*
[b] Group photo *(e.g., with my current social group/community members, such as family or classmates, etc.)*
[c] Other

28. Approximately how often do you change your photo and/or update your profile? (please pick the best response)

[a] I have never changed it since I created the account and profile
[b] Once a year
[c] Once every six months
[d] Once every three months
[e] Once a month
[f] More than once a month
[g] Other (please specify):
_____

Answer the following questions using the scale provided:

29. To what extent are you concerned that your postings or photos may be seen by people who you know offline (in real life) and who are not in your current friends' list?

Not concerned at all   1   2   3   4   5   Extremely concerned

30. To what extent do you think you are anonymous on your social network site to random visitors?

Totally anonymous   1   2   3   4   5   Totally identifiable

31. To what extent do you write something intimate about yourself on your social network site?

Not at all intimate   1   2   3   4   5   Extremely intimate

32. The following statements are about your behaviors of disclosing yourself on your social network site. Please indicate how much or how often you usually do the following:

1	2	3	4	5
Never		Sometimes		Always

	Never ------------------------------Always				
	1	2	3	4	5
To what extent do you show your softer, more sensitive side on your social network site					
To what extent do you reveal things about yourself that you are ashamed of on your social network site					
To what extent do you let down your protective "outer shell" on your social network site					
To what extent do you write things that secretly make you feel anxious or afraid on your social network site					

1	2	3	4	5
Not willing at all		Somewhat identifiable		Totally identifiable

	Not willing ---------------------------Totally at all identifiable				
	1	2	3	4	5
To what extent are you willing to reveal that you like someone you know in your social network site					
To what extent are you willing to reveal that you love someone you know in your social network site					
Imagine you had kept a personal diary or journal that is exactly the same as your social network site, to what extent were you willing to show it to people you know					

[General Values and Attitudes]
33. The following questions relate to your general values and attitudes. Please choose the response that best corresponds with how you feel.

1	2	3	4	5
Strongly disagree	Disagree	Undecided	Agree	Strongly agree

	Strongly disagree			Strongly agree	
	1	2	3	4	5
What happens to me is my own doing					
I usually sacrifice my self-interest for the benefit of my group					
It is important for me to maintain harmony within my group					
I enjoy being unique and different from others in many ways					
I am the same person at home that I am at school					
I would sacrifice an activity that I enjoy very much if my family did not approve of it					
I hate to disagree with others in my group					
When I succeed, it is usually because of my abilities					
When faced with a difficult personal problem, one should consult widely one's friends and relatives.					
When faced with a difficult personal problem, it is better to decide what to do yourself, rather than follow the advice of others.					
The most important thing in my life is to make myself happy.					
I would rather struggle through a personal problem by myself, than discuss it with my friends.					
I allow my close friends to interfere in my private life.					
Close friends allow me to interfere in their private life.					

34. The following questions relate to your general attitudes about communication styles. Please choose the response that best corresponds with how you feel.

1	2	3	4	5
Strongly disagree	Disagree	Undecided	Agree	Strongly agree

| | Strongly ------------------------- Strongly | | | | |
| | disagree | | | agree | |
	1	2	3	4	5
I communicate in an indirect fashion.					
My communication with others is ritualistic.					
I use silence to avoid upsetting others when we communicate.					
I am ambiguous when I communicate with others.					
I avoid clear-cut expressions of feelings when I communicate with others.					
I am evasive when I communicate with others.					
I qualify (e.g., use "maybe," "perhaps") my language when I communicate.					
I use silence to imply my opinions.					
A person cannot think unless he/she can put it into words.					
It is usually more important to say things clearly rather than politely.					
It is better to risk not speaking enough than to risk speaking too much.					

[Demographic Information]
Please answer the following questions about yourself. Remember that your responses here will not be linked to you personally, so please be honest.

35. Please indicate your gender:
     [a] Male
     [b] Female

36. Your age (Please fill in): _____ years old.

37. What year are you in at your current University?
     [a] I am a freshman
     [b] I am s sophomore
     [c] I am a junior
     [d] I am a senior
     [e] I am a graduate student
     [f] Other (please specify): _____

38. What is your academic major?
     [a]   Communication
     [b]   Double major/minor
     [c]   in SCILS
     [d]   Other
     [e]   Undecided

39. Your race/ethnicity (Please check one):
     [a] Caucasian/European American
     [b] African American/Black
     [c] Hispanic/Latino American
     [d] Asian American
     [e] Native American
     [f] Other (please specify): _____

40. Would you be willing to let us study your social network site? Note: This is purely optional. If you agree, you will be entered into a raffle to receive a cyber gift in Facebook or a fixed gift in MySpace (50 total gifts will be given).
     [1]   Yes
     [0]   No

41. If you answered "yes" to the previous questions, please list your SNS address or your screen name and the primary site you use. (Only accurate information is valid for the raffle)

_____

42. Do you have any further comments about this survey or about social network sites?

    _____

    _____

Thank you for completing this survey!

Curriculum Vita

Seong Eun Cho

EDUCATION

August 2003 - January 2010	**Ph.D.** School of Communication and Information Studies, Rutgers University, NJ, USA.
February 1998	**M.A.**, School of Journalism & Mass Communication, Korea University, Seoul, Korea.
February 1996	**B.A.**, School of Journalism & Mass Communication, Korea University, Seoul, Korea.

TEACHING EXPERIENCE

Spring 2008 - Fall 2009	**Part-Time Instructor** Department of Asian Languages & Cultures, Rutgers University, New Brunswick, NJ, USA.
Summer 2008	**Part-Time Instructor** Department of Mass Communication, Korea University, Seoul, Korea.
Fall 2007 - Fall 2009	**Guest Lecturer and Reader** Department of Communication, Rutgers University, New Brunswick, NJ, USA.
Fall 2008	**Guest Lecturer and Reader** Department of Asian Languages & Cultures, Rutgers University, New Brunswick, NJ, USA.

RESEARCH EXPERIENCE

Oct. 2009 - the present	ONE COMMON GOAL: Transforming school libraries in New Jersey, Center for International Scholarship in School Libraries (CISSL), Rutgers University.
Aug. 2004- Dec. 2007	Project Deception Detection and Project Hostile Intent, Rutgers University.
Nov. 2004- Feb.2005	Delaware Governor's Task Force 2004-05, Rutgers University.
Sep. 2003- Sep.2004	Medical doctors' attitude on the Internet and Smoke free law