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Culturally Unique Social Patterns in Computer-Mediated Social Networking

Devan Rosen

University of Hawaii, USA

Michael A. Stefanone

University at Buffalo, USA

Derek Lackaff

University of Texas at Austin, USA

ABSTRACT

People from distinct cultural backgrounds communicate and manage their interpersonal relations in systematically different ways. The current chapter utilizes a survey of young adults to examine the social patterns of culturally influenced differences in online behavior. Results show that individuals that identify with individualistic cultural backgrounds have larger networks of friends on social network sites (SNSs), have a larger proportion of these friends that they have not actually met face-to-face, and share more photos online, opposed to individuals that identify with less individualistic cultural backgrounds. The size of an individuals' offline social support network size was a significant predictor of satisfaction with life, while SNS network size was not. Findings suggest that individuals who identify with more individualistic cultural backgrounds tend to be better connected, self-promote, and are more satisfied with their social lives.

KEYWORDS

Culture, Communication, Social Networks, Communication Networks, Computer-Mediated Communication, Social Networking Sites

INTRODUCTION

As our communicative environment continues to be influenced by the introduction of new computer-mediated communication (CMC) applications, the effects of these applications are impacting the social world in complex ways. Communication technologies, such as social-networking sites (SNS), are being used in a number of ways to navigate and mediate the environment of personal identities and relationships. Since these applications are being used with increased frequency, using technologies like SNS has become an important skill when managing relationships online (Stefanone & Lackaff, 2009, Stefanone, Lackaff, & Rosen, 2008). As a result of the frequency and importance of CMC applications in our relationships, the instrumental decisions one makes when deciding how to behave in these mediated environments becomes an important element in managing our social world.

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A unique aspect of these new computer-mediated technologies is that spatial and geographic boundaries are no longer barriers to interaction, allowing people from a diverse set of cultures to interact with each other with increased ease and frequency. Given that many of the new CMC applications require people to establish an online identity with personal profiles, earlier findings indicating that impressions formed in CMC environments can be more intense than offline (see Hancock & Dunham, 2004), it is important to understanding how individuals who identify with different cultures use the CMC platforms to present their identities. This chapter presents an investigation into the relationship between computer-mediated communicative behaviors and culture to explore whether culturally influenced behaviors normally associated with face-to-face communication emerge as patterned behavior in CMC.

In this chapter, literature on culture-specific communicative styles and behaviors frames an investigation into the use of specific Web 2.0 technologies: SNSs. Literature on broad cultural differences in behavior is reviewed, followed by a review of research on CMC technologies with emphasis on SNSs. The literature review concludes with hypotheses and research questions about the different uses of SNSs as related to culture. Methodological procedures will be discussed, followed by results, discussion of limitations and implications for future research.

LITERATURE REVIEW

Culture as Individualism and Collectivism

There are a number of distinct research streams investigating the various ways that culture can be categorized and conceptualized. Much research has been conducted in an effort to understand how people from different and distinct cultures behave in a plethora of situations, from which several seminal concepts were established. One of the most investigated areas of cultural differences relates to individualism and collectivism as associated with national cultures.

A principle amount of the initial conceptualization of cultural differences was done by Hofstede (1980), who defined four basic dimensions for characterizing cultures: power distance, uncertainty avoidance, masculinity, and individualism / collectivism. Hofstede defined decreased individualism as a tendency to place the needs of one's in-group above one's own needs, and increased individualism as the tendency to place one's own needs above the needs of one's in-group. Triandis and colleagues (Hui & Triandis, 1986; Triandis, 2001) have shown individualism to be multidimensional and identified key features of increased individualism like tendencies toward self-reliance, self-promotion, competition, emotional distance from in-groups and hedonism. Collectivism is also a complex construct and can be characterized by closeness to family, family integrity, and sociability.

National identity has been used to study cultural concepts such as individualism and collectivism and is associated with a diversified field of research, drawing some criticism and parallel methodologies, discussed below. Many researchers have established that individual nation states are broadly associated with a more or less individualistic culture, and have compared countries along the lines of individualism (Hofstede, 1980; Kim, Hunter, Miyahara, Horvath, & Bresnahan, 1994; Shavitt, Lalwani, Zhang & Torelli, 2006; Triandis, 2001). Triandis (2001) found that western societies are considered higher on the individualism scale, whereas Asian societies are considered lower on the individualistic scale.

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Early research on individualism and collectivism treated the two as polar opposites at two sides of the same scale (Hofstede, 1980). However, recent findings have concluded that individualism and collectivism may indeed be related to different indicators, and should be investigated independent of each other due to several methodological issues. One issue relates to imbalanced keying in the scale producing within-subject standardization (Schimmack, Oishi, & Diener, 2005). Analyzing collectivism has created methodological issues, as well as national variation, whereas individualism has remained more constant through time. As a result of these issues, the research presented in this chapter conceptualizes differences between cultures as more or less individualistic, since this characteristic of culture is not theoretically attached to collectivism and is more stable on the national level.

Although there is much research using nations states as indicative of cultural identity, there is also some criticism of this practice. A meta-analysis by Oyserman, Coon, and Kemmelmeier (2002) suggests that there are problems with the measurement of individualism and collectivism using traditional scales, as there is a lack of convergent validity when comparing their construct findings with that of Hofstede. In response to Oyserman et al.'s analysis, Schimmack et al. (2005) present findings that contradict Oyserman et al, and propose that methodological issues with data collection, such as subjects having varied semantic understanding of wording in the scales. Additionally, the context that the data is collected in (e.g. work, home, university) produced widely different results across research findings. Schimmack et al. also point out that national differences in individualism have remained highly stable in the time since Hofstede (1980) first measured individualism, and that that national differences in individualism will remain in the near future. Along the same lines, Hofstede (2001) updated his earlier findings and found that although individualism has risen over the past decades across the globe, the rank ordering of nations on individualism has remained stable.

In addition to cultural differences between countries, Green, Deschamps, and Páez (2005) found that a lack of consideration for within-country cultural variation could lead to an overgeneralization of attributes. These findings stem from the composition of nations as made up of people from diverse national backgrounds. As such, the research presented in this chapter does not conceptualize all respondents as culturally similar if they are living in a specific country; rather, respondents were asked what ethnic and cultural background they identify themselves with, and to what extent they identify with that culture. As pointed out above, Schimmack et al. (2005) establishes that differences of culture have remained stable on the aggregate, national level, so garnering which culture one identifies with is likely to yield a valid measure of cultural identity. Further, Green et al. (2005) established that the most commonly reported results of within-country variation of individualism concerns gender differences, which controlled for in statistical models, and discussed in the methods section below.

Due to the methodological debate regarding the validity of individualism being measured at the individual level, the exploratory research presented in this chapter uses the more traditional conceptualization of the nation state as indicating a more or less individualistic culture.

There is little to no research on cultural identity and online networking behavior, with the few recent studies mostly related to learning contexts (Lapointe & Gunawardena, 2004). There is a shortage of research aimed at investigating new communication technologies, like SNSs, and the patterns of mediated relationships considering cultural differences regarding social networks and social support.

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Social Support and Social Networks

Social network studies generally focus on the relationships between social entities and the analysis of systematic patterns of social relations between people (Scott, 2000). Social network studies that investigate patterns of interactions between individuals positioned in a network offer predictive abilities regarding individual behaviors and attitudes. Both social and behavioral sciences continue to become increasingly interested in the social network approach as the relation itself is utilized as the unit of analysis, as opposed to analyzing attribute data common in survey research. Social networks map out patterns of relationships which people use to assist a multitude of interpersonal exchange, and at their most basic level function as a mechanism for information transactions.

Similar many other social scientists, CMC researchers are increasingly framing their investigations in the context of social capital, and the relationship between social capital and CMC (for example, Ellison, Steinfield, & Lampe, 2007). Social capital can be an imprecise term, but generally refers to “the ability of actors to secure benefits by virtue of membership in social networks or other social structures” (Portes, 1989, p. 6). Social support is one such form of capital.

The value and qualities of mediated social support has emerged as an important research subject. Discussing earlier research, Bargh and McKenna (2004) argue that CMC appears to have little direct impact on meaningful social interaction with close friends and family, and that there is no apparent decrease in time spent with these strong ties due to Internet use. Rather than substituting for offline social interaction, Bargh and McKenna point to evidence that CMC is actually used to help maintain broader social networks (cf. DiMaggio, Hargittai, Neuman, & Robinson, 2001; Howard, Rainie, & Jones, 2001; Wellman, Haase, Witte, & Hampton, 2001).

Ellison, Steinfield and Lampe (2007) looked at social capital in the framework of SNS use. College students were surveyed about their use of Facebook and a range of behaviors were measured along with psychological traits and social capital. Results indicated a positive correlation between many forms of social capital and Facebook participation; while general Internet use did not predict access to social support (bonding social capital), Facebook use was a significant predictor. Ellison et al. (2007) noted that these findings necessitate the assessment of the particular types of online behaviors to explain the social outcomes.

In the present chapter, we suggest that systematic differences in SNS use result from different cultural identities. Specifically, people who identify with more individualistic cultures are likely to engage in more attention-seeking behaviors via SNS, opposed to those who identify with less individualistic cultures. A review of research on CMC and Web2.0 as applied culture is presented below, followed by hypotheses and research questions.

Computer-Mediated Communication and Web 2.0

There has been a wide range of research on communication technologies since the advent of the Internet (for a review of research see Walther & Parks, 2002), and much of this research has compared face-to-face (F2F) communication to CMC to better understand how the two forms of communication may differ. However, some research has concentrated on the social contexts created by CMC as uniquely different from F2F interaction. Spears and Lea (1992) found that the general social context in CMC could be seen as the actual subject matter of the interaction. They

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also differentiate personal identity and social identity, where personal identity is an individual's multifaceted understanding of their self and one's social identity derives from people's presentation of identity as part of group membership, or the taking on of a social role within the interaction. Thus, CMC can be treated as a medium that heightens consciousness of the social and socially constructed identities. Such added self-awareness produces differing results dependent upon the social context, and is particularly important to consider given the richness of emerging communication technologies, discussed below.

More recently, research attention has shifted towards use of CMC to support existing relationships, like weblogs (Stefanone & Jang, 2007) and social networking sites (boyd, 2007, Ellison, Steinfield, & Lampe, 2007, Kim & Yun, 2007). This parallels a shift in the way Internet users are afforded more opportunity to create and actively manage online content, often referred to as Web 2.0 (O'Reilly, 2005).

Traditionally media content has been the product of media companies, but new user-created and user-focused online platforms such as wikis, blogs, social networking sites and media sharing sites allow for an increased notion of individual media ownership, and thus personal investment in media content. Lenhart and Madden (2005), for example, found that over half of Internet-using teens are creating content in the form of blogs and are sharing photos and videos through a variety of other online services like Facebook, Flickr and YouTube.

SNSs such as Facebook and MySpace have emerged as a focal point for content creation and social interaction, and over 95% of college students have SNS profiles (PACS survey, 2007). boyd (2007, 2008) found that SNS users are modeling identity through social network profiles so that they can write themselves and their community into being in networked publics. More specifically, "[a process of] articulated expression supports critical peer-based sociality because, by allowing youth to hang out amongst their friends and classmates, social network sites are providing teens with a space to work out identity and status, make sense of cultural cues, and negotiate public life" (boyd, 2007, p.2). boyd's research frequently discussed notions of culture, and how SNSs allow users to both learn and perpetuate cultural norms and cues, but has exclusively focused on subcultures such as youth or gay culture.

A SNS provides a multifunctional platform for personal online content creation, including photo and video sharing, text messaging, commenting on other users' content, blogging, and the main functionality, displaying with whom one is "friends." This so-called friending allows users to visualize their social network of connections in a photo-based display. SNS friends have access to the content of each other's personal profile, which is often not visible to non-friends through the use of privacy settings. The profile may contain photos, videos, personal messages "posted" by other friends, and other personal information such as interests and contact information.

Research interest in SNS use has grown recently, with topics including the study of online self-representation from a sociological perspective (boyd, 2007; Donath & boyd, 2004) and within specific cultural groups (Byrne, 2007; Kim & Yun, 2007). However, given the widespread international usage of many different SNSs, research on how different cultures utilize the large array of behavioral and communicative functionalities of SNS is called for.

Culture and CMC

Hecht, Warren, Jung, & Krieger's (2004) communication theory of identity posits that an individual's identity is not only projected through communication, but that the communication act

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is part of the self. Thus, communicative behavior should expose some of the uniqueness constituting cultural identity of the self, regardless of medium. Yet, there are few studies that investigate the impact of culture on SNS use. boyd and Ellison (2007) note that further work in the area of culture and SNS behavior is needed.

Systematic differences in language use due to cultural identity are consistent with previously outlined differences regarding the range of individualism in cultures (Ellis & Wittenbaum, 2000). In particular, the verbal endorsement of individuals differed depending on their self-perception. Ellis and Wittenbaum (2000) found a positive correlation between independent scores (which are similar to more individualistic tendencies) and self-promotion, and a negative correlation between interdependent scores (which are similar to less individualistic tendencies) and self-promotion. Broader analysis of computer-mediated communicative behavior has also found cultural differences.

Kim and Yun (2007) found that a Korean SNS reflected many of the collectivistic notions of Korean culture. The bulk of participants utilized the SNS to preserve close relationships with a small number of ties instead of creating new associations with people. Their results are similar to previous constructions of collectivistic culture. Conversely, maintaining large numbers of friends in SNS that one has not actually met in person, known as promiscuous friending (Stefanone, Lackaff, & Rosen, 2008) may characterize the aspiration to meet new people or be seen by many people, rather than purely to maintain relationships. Friending behavior of this type would be consistent with more individualistic cultural identities. Promiscuous friending sacrifices the privacy of the other friends and family in exchange for instrumental personal gains, thus representing a more self-focused behavior.

This evidence suggests that systematic differences in behavior that manifest online should be apparent among people from different cultures, and that these differences correspond to cultural identity. Considering that people from more individualistic cultures behave in more self-serving ways and are generally more likely to pursue attention, the following hypotheses are proposed:

H1. SNS users who identify with more individualistic cultures have larger networks of friends online, opposed to users who identify with less individualistic cultures.

H2. SNS users who identify with more individualistic cultures have larger proportions of friends not met online, opposed to users who identify with less individualistic cultures.

The following research question is included to address the impact of offline social network characteristics on online behavior:

RQ1: What is the relationship between traditional STN size and behavior on SNSs?

Because cultural identity should result in different structural properties of online social networks, it is likely that users will dedicate different levels of cognitive and temporal resources to these relationships. Yet, it is uncertain what the weight of SNS relationships may be considering many of these online “friends” may actually be strangers, consistent with H2. Thus, the following research question is proposed:

RQ2: What is the effect of identifying with a more or less individualistic culture on time spent maintaining profiles on SNSs?

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Even though SNS users engage in friending behavior online, these CMC platforms also make possible photo sharing among ones network. Sharing photos online is a form of self-promotion, as it is a method for people to signal aspects of their identity and connection to others. It is expected that people that identify with more individualistic cultural identities are more likely to engage in this self-promotion (see Hui & Triandis, 1986). Thus,

H3. SNS users who identify with more individualistic cultures share more photos of themselves online, opposed to users who identify with less individualistic cultures.

Finally, the following research question is proposed to explore outcomes associated with social networks and SNS use. Taking into consideration Ellison et al.'s (2007) findings which suggest social benefits accrue to SNS users, the current study explores the comparative contributions of conventional, offline social support networks and networks mediated via SNSs as related to different cultural identities. Thus,

RQ3: What is the relationship between the online and traditional network characteristics and satisfaction of SNS users who identify with more individualistic cultures, opposed to users who identify with less individualistic cultures?

METHOD

Online surveys were voluntarily completed by a sample of university students (N=452), and the University Institutional Review Board for Human Subjects approved all materials. Data was obtained from two separate universities to obtain more authentic cultural identities from a larger variety of individuals. One of the universities was a large, multicultural university in the Pacific basin with a majority proportion of students representing Asian culture and identity, and the other was a large university in the northeastern United States with a majority population representing North American culture and identity. The student population at the pacific university resides in a city that is more that 50% Asian with a very strong Asian culture.

To garner cultural information, the participants were asked, "Which of the following BEST describes your ethnic or racial background?" The majority of participants identified their ethnic background as Caucasian (approximately 62%). About 16% were Asian, 6% were African-American, and 3% were Hispanic. The rest (about 13%) identified with a variety of other ethnicities. In terms of cultural identity, however, when asked "Which of the following best describes the cultural background you most identify with?," 319 participants identified with Mainland America (MNA), while only 96 participants identified with the Asia-Pacific Region (APR). To be consistent with cultural tendencies, respondents who identified with Japan, China, and the Philippines were selected to represent APR. The rest of the participants (n = 38) identified from a variety of other cultural backgrounds and were eliminated from the analyses. To check for the strength of participants' identity with their cultural backgrounds, they were asked on a 7-point likert scale, "To what extent do you identify with this cultural background?" (MNA, M=5.35, SD=1.62; APR, M=5.53, SD=1.49), indicating that participants were strongly associated with their cultural backgrounds. In a conservative approach to balance cell sizes for the analyses, a random sample of MNA cases were selected from the data. This resulted in MNA and APR group sizes of 98 and 96, respectively. Upon randomly sampling from the larger MNA population, approximately 60% of the sample was female; the average age of participants remained at 20.3 years (SD = 2.6). 58.5 per cent of participants identified their ethnic background as Caucasian.

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About 20% were Asian, 6% were African-American, and 3% were Hispanic. The rest (about 11%) identified with a variety of other ethnicities.

People have the capacity to accurately identify people they have frequent interaction with (Marsden, 1990), so offline (traditional) strong tie network STN size was measured using a single item that specifically explained the detailed uniqueness of strong tie affiliations. The question stated, "A strong tie is defined as a person you have known for a long time, have frequent communication with, and positive feelings for. Strong tie relationships include your immediate family members, as well as close friends. How many strong ties would you say you have?" SNS use was measured by asking participants to report the size of their online networks, the proportion of those SNS contacts not met, the number of photos of themselves shared, and how much time on an average day they spend online managing their SNS profiles (in hours and minutes). Satisfaction with social life (Deiner, Emmons, Larsen, & Griffin, 1985) assesses the extent to which individuals feel they have adequate communication with friends and family, and was measured with 5 items (Cronbach's $\alpha = .76$), and Deiner et al.'s (1985) general satisfaction with life scale (4 items) demonstrated a reliability of .74.

Results

Correlations, means, and standard deviations for all items are available in Table 1. Participants also indicated having an average of 248.9 (SD = 217.1) SNS friends, spent an average of 56.3 minutes per session (SD = 51.1) logged into their accounts, and reported that 11 percent (SD = .20) of their SNS friends had not been met in person. This variable was heavily skewed to the right and was log transformed to normalize the distribution for analysis (transformed M = 1.02, SD = .59). For the traditional STN variable, participants reported an average of 9.0 strong tie contacts (SD = 6.3). Finally, the photo-sharing variable was greatly skewed right (M = 71.9, SD = 68.6) and was log transformed to normalize the distribution (transformed M and SD = 1.57 and .79, respectively).

T-tests were used to determine whether participants from both cultural groups were comparable in terms of age and education; these tests resulted in non-significant differences. MNA participants reported a mean age of 20.5 (SD = 2.9) and educational level of 1.6 (SD = 1.0), and APR participants reported a mean age of 19.9 (SD = 1.6) and educational level of 1.1 (SD = 1.0). Cultural differences in social network structure were apparent, however, as MNA participants reported an average STN size of 10.1 (SD = 7.5) while APR participants claimed only 7.8 strong ties (SD = 6.1, $t(194) = 4.74$, $p < .01$). Further, APR participants reported significantly fewer SNS friends (M = 172.5, SD = 162.4) than did MNA participants (M = 310.5, SD = 237.2, $t(194) = 2.70$, $p < .001$).

Cultural differences regarding well being were apparent between groups in this study. MNA participants reported higher general satisfaction than APR participants (M = 4.6, SD = 1.2 vs. M = 4.2, SD = 1.1, $t(194) = 2.93$, $p < .01$) and with their social lives in particular (M = 4.8, SD = 1.2 vs. M = 4.5, SD = 1.1, $t(194) = 2.68$, $p < .01$). Finally, the cultural groups exhibited differences in their use of social web applications. MNA participants indicated that 14.7% of their listed "friends" on social network sites have not been met in person, in contrast to the 5.7% of unmet friends in APR participants' friend lists ($t(194) = 3.42$, $p < .001$).

Table 1. Correlations (means and standard deviations in parentheses along diagonal).

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| | Age | Gender | Edu | STN | SNS Size | Time | Not Met | Photo | Gen Sat | Soc Sat |
|----------------------|-------------|--------|------------|------------|----------------|--------------|------------|------------|------------|------------|
| Age | (20.1, 2.4) | 0.06 | 0.64** | -0.04 | -0.14** | -0.14* | 0.10* | -0.18** | -0.06 | -0.05 |
| Gender | | - | 0.13** | -0.02 | -0.08* | -0.15* | 0.00 | -0.22** | -0.23** | -0.15** |
| Education | | | (1.4, 1.0) | -0.02 | -0.03 | -0.15* | 0.06 | 0.04 | 0.03 | 0.10* |
| STN | | | | (9.0, 6.3) | 0.21** | -0.08 | 0.07 | 0.18** | 0.19** | 0.23** |
| SNS Size | | | | | (248.9, 217.1) | 0.14* | 0.16** | 0.52** | 0.13** | 0.10* |
| Time Online | | | | | | (56.3, 51.1) | 0.09* | 0.12* | -0.06 | 0.01 |
| Prop. Not Met [log] | | | | | | | (1.0, .58) | 0.01 | -0.05 | -0.08* |
| Photo [log] | | | | | | | | (1.6, .79) | 0.23** | 0.22** |
| General Satisfaction | | | | | | | | | (4.4, 1.2) | 0.63** |
| Social Satisfaction | | | | | | | | | | (4.6, 1.2) |

Note: * = $p < .05$; ** = $p < .01$

To test the hypotheses and address the research questions, a series of ordinary least squares (OLS) regression models were calculated to control for a set of demographic variables including age, gender and STN size (or, traditional social support network). Results for both sets of analyses are presented in Tables 2 and 3.

Results presented in table 2 suggest that although MNA participants do not spend more time managing their profiles, providing results to answer research question 2, they do have significantly larger mediated networks ($\beta = -.291$, $p < .001$), and have larger proportions of those network relationships not actually met face-to-face ($\beta = -.274$, $p < .001$). Both models predicting time management and SNS size were significant, and explained 4 and 15 percent of variance, respectively. Both hypotheses 1 and 2 were supported. In this model cultural identity functions as a unique predictor of friending behavior online; this variable demonstrated a significant relationship with the dependent variable in three out of four models presented in table 2. Further, younger participants spend significantly more time managing their networks, have larger networks and engage in photo sharing to a greater extent than older participants.

Research question 1 addressed the relationship between offline networks and behavior on SNSs. The results suggest that larger STN networks are not significantly related to time spent online managing SNS profiles ($\beta = -.085$, ns), but positively related to SNS network size ($\beta = .167$, $p < .01$) and photo sharing ($\beta = .097$, $p < .05$). STN network size did not have a significant relationship with the proportion of friends not met on SNSs.

Results in Table 2 also suggest that participants who identify with more individualistic cultures share significantly more photos online, as hypothesis 3 predicted ($\beta = -.362$, $p < .001$). This model explained 20 per cent of the variance in photo sharing via SNSs.

Table 2. Standardized Betas for Models Predicting SNS Behavior.

Model 1 Model 2 Model 3 Model 4

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| | <i>Time Managing Profile</i> | <i>SNS Network Size</i> | <i>Proportion not Met</i> | <i>Photo Sharing</i> |
|--|----------------------------------|-------------------------|-------------------------------|----------------------|
| Age | -.112* | -.151** | .017 | -.099* |
| Gender | -.153** | .079 | -.033 | -.196*** |
| STN Size | -.085 | .167** | .044 | .097* |
| Cultural Identity | .080 | -.291*** | -.274*** | -.362*** |
| <i>F</i> (4, 194), Adj. <i>R</i> ² | 3.91, .04** | 14.27, .15*** | 7.53, .06*** | 24.17, .20*** |

Note: * = $p \leq .05$, ** = $p \leq .01$, *** = $p \leq .001$. For Gender, $F=1$, $M=2$; Cultural Identity, $1=MNA$, $2=APR$.

Table 3 reports standardized betas for OLS regression models predicting two dimensions of participants' satisfaction. These models were calculated to address research question 3 and differentiate between general satisfaction in life and satisfaction with one's social life, as well as social resources accessible via either traditional STNs (i.e., offline friends) and relationships facilitated by SNSs between SNS users who identify with more individualistic cultures, opposed to users who identify with less individualistic cultures.

Table 3. Standardized Betas for Models Predicting Satisfaction.

| | <u>General Satisfaction with Life</u> | | <u>Satisfaction with Social Life</u> | |
|--|---|-----------------|--|-----------------|
| | <i>Traditional</i> | <i>SNS</i> | <i>Traditional</i> | <i>SNS</i> |
| Age | -.064 | -.053 | -.105* | -.125* |
| Gender | -.261*** | -.259*** | -.202*** | -.206*** |
| Cultural Identity | -.168*** | -.125* | -.117** | -.121* |
| <i>Network Size</i> | .127*** | .069 | .193*** | .005 |
| <i>F</i> (4, 194), Adj. <i>R</i> ² | 14.65, .13*** | 8.70, .09*** | 12.58, .11*** | 5.83, .06*** |

Note: * = $p \leq .05$, ** = $p \leq .01$, *** = $p \leq .001$. For Gender, $F=1$, $M=2$; Cultural Identity, $1=MNA$, $2=APR$

The models in Table 3 suggest that STN size had the strongest relationship with both general satisfaction ($\beta = .127$, $p < .001$) and satisfaction with social life ($\beta = .193$, $p < .001$). These models explained 13 and 11 percent of the total variance respectively. Interestingly, SNS network

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size was not significant in either model. MNA participants reported higher satisfaction in each model, as well.

DISCUSSION

Results presented in this chapter show that there are indeed differences in the way that people who identify with different cultures handle their communicative behaviors within SNSs. All hypotheses were supported and several significant findings help to better understand these cultural differences.

Several hypotheses were offered regarding SNS friending behavior. Hypothesis 1, which proposed that SNS users who identify with more individualistic cultures have larger networks of friends online, opposed to users who identify with less individualistic cultures, was supported. The support of hypothesis 1 indicates that people who identify with more individualistic cultures maintain larger available pools of mediated ties. Individualistic cultures tend to place greater importance on individual achievement, and the maintenance of a larger network catalyzes an increased ability to leverage resources.

The behavior of SNS friending behavior of promiscuous friending, i.e. the proportion of friends not met, has emerged as a unique communicative behavior largely enabled by SNSs. Many people keep in touch with large numbers of their friends and family in a variety of ways (which would be represented by the raw number of friends online), but until communication technologies became more common it was far less common to share directed contact and private information with people that one had not met in person. Further, the measure of promiscuous friending in this study is a proportion, and therefore controls for network size.

To address the promiscuous friending behavior, hypothesis 2 proposed that SNS users who identify with more individualistic cultures have larger proportions of friends not met online in contrast to those who identify with less individualistic cultures, and was supported. When friending people that one does not know, SNS users are sacrificing the personal privacy of anyone in their SNS network that does not have the maximum privacy setting on their profile. These behaviors can be understood as promoting an individualistic objective by increasing the size of the personal social network at the expense of the collective by exposing the existing personal network to unknown and potentially unwelcome social contacts. With most SNSs, one cannot view the contents of someone's personal profile unless friended by them, or sharing a mutual friend; general browsing does not result in access to personal profile contents.

Findings in support of hypotheses 1 and 2 indicate that earlier research on the cultural tendency of more individualistic cultures to engage in personal self-promotion in offline contexts has been mirrored online. SNS users in the current study who identify with more individualistic cultures engaged in personal self-promotion through large friendship networks as well as more promiscuous friending. A potential explanation of these findings is that personal self-promotion is closely related to creating ties with unknown people. On the other hand, it also make sense that people who identify with less individualistic cultures, valuing family and in-group ties, are less likely to sacrifice their in-groups' private information to extend their online network.

Hypothesis 3, which indicated that SNS users who identify with more individualistic cultures share more photos of themselves online, opposed to users who identify with less individualistic cultures, was supported. This finding indicates that individuals who identified with mainland

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American culture made use of Web 2.0 technology to engage in more self-promotion than those that identified with Asian culture. Online photo sharing is a form of self-promotion and established a great personal presence amongst networked contacts. Paired with the findings from H1 and H2, this finding established an understanding of online cultural behavior that supports earlier theory and research on individualistic cultures. People that identify with more individualistic cultures tend to engage in self-promotion, are more likely to place the needs of the self above the needs of the in-group for the purpose of resource attainment.

Research question 1 queried the relationship between traditional STN size and behavior on SNSs, since one of the main goals of the current research is to investigate the degree to which offline behaviors persist online. The main finding is that SNS users who maintain larger offline strong-tie networks have larger online networks, indicating that their F2F networking behavior is indicative of their use of networking Web 2.0 technologies. These findings are in line with research on social capital, but expand our understanding of people's use of communication technologies to network their resources. Online social interactions are not simply scaled-up representations of individuals and ties, and do not unconditionally reflect offline behavior (Garton, Haythornthwaite, & Wellman, 1997). It is important for both information technology developers and researchers to understand how offline relations affect online relations, and how computer-mediated communication may or may not change behavior. SNS represent one of the most widely used networking tools to emerge in recent years, and it is an interesting finding that SNS users online network size is positively related to their STN size. It certainly could have been reasonable to expect that people who retain larger offline networks would not seek larger online ones, as they already have a rich access to resources, but this was not the case.

Research question 2 addresses the amount of time one spends maintaining SNS profiles regarding cultural differences. There were no cultural differences, but significant difference between the genders, a finding that warrants further research.

Research question 3 queried the relationship between SNS users' online and traditional network characteristics, and satisfaction. STN size was only predictor of both general satisfaction as well as social satisfaction, which is in line with prior social network research that indicates better-connected people are more successful in their relationships, life, and business. What is also interesting is that those who identify with North American (MNA) cultures were more satisfied than those who identify with Asian or Pacific Rim (APR) cultures. SNS network size was not significant which suggests that face-to-face contacts are more significant to satisfaction than computer-mediated social contacts. Online social support is indeed a very important and fitting use of this technology, but given a general life context, offline networks seem to be more important than online networks. Regarding satisfaction with social life both STN and culture were significant. MNA respondents were more satisfied than APR ones, and those with larger STN were more satisfied, which is consistent for both traditional as well as SNS network sizes.

The research presented in this chapter was exploratory and possesses several limitations that we hope to address in future research. The equivalence of identifying with a national background with having more or less individualistic cultural values, while present in scholarly cultural analyses, represents a somewhat rough categorization of a nuanced phenomenon. The measurement of culture using the more complex constructs advocated by Triandis and others (Triandis, 2001; Triandis & Gelfand, 1998) may yield more nuanced results. Yet, as presented in the literature section, there are several methodological issues with many of the more specific measures of culture as well. Further, the cultural identities of others in the social network should

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be taken into account: Facebook remains a predominantly North American social networking site, in contrast to other platforms such as CyWorld and Orkut, which may have unique technical structures leading to different behaviors. Additionally, using a greater number of measures used to determine SNS behavior will strengthen future research. Ellison et al.'s (2007) Facebook Intensity Scale provides an interesting example of an effort to summarize the very broad range of behaviors and attitudes that may point to the intensity of SNS use. Finally, individuals' offline behaviors may differ from their online behaviors, and using self-report data only allows for inferences to be made regarding the association between the two contexts.

Cultural differences can manifest in many forms, and the research in this chapter has found that people who identify with different cultural orientations behave and communicate differently. The current research investigated the extent to which cultural norms, such as individualistic cultures, persist in online behavior. Findings presented in this chapter maintain the notion that people of different cultures do indeed behave in different ways when using communication technologies like social networking sites.

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