

## Research Article

# Is Social Media for Everyone?: The Role of Social Capital and Communication Anxiety in Structuring Use of Social Networking Sites

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**Abstract:** This study examines how social and psychological factors—social capital and communication anxiety - interact to shape individuals' use of social networking sites (SNSs). Using the data of 568 college students in China, results show that both bridging and bonding social capital are positively associated with the intensity of SNS use after controlling for key demographic factors. Communication anxiety is positively related to the intensity of SNS use, and is found to moderate the effect of social capital, both bridging and bonding, on the intensity of SNS use. Although individuals use SNSs more intensively when they have more social capital, the anxiety to communicate weakens the positive relationship between the two. This study contributes to the existing literature where limited attention has been given to how social factors and its interaction with psychological factors structure SNS use.

**Keywords:** Social networking site (SNSs), social capital, communication anxiety, moderation effect

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Social networking sites (SNSs), the most popular form of social media, are widely adopted and used among people to connect and interact with their social ties. Previous studies have investigated the variation of SNS usage by demographics (Hargittai, 2007). More recently, research began to examine how social or psychological factors alone shape the use of SNSs. For instance, social capital—one of the most important social factors defined as the resources embedded in social networks—was identified to positively relate to Internet adoption in general (Campbell & Russo, 2003; Chang & Zhu, 2012; Chen, 2013). As for psychological factors, communication anxiety is an important construct in the studies of SNSs, which people experience almost at any time when communicating with others but to different degrees (Crosby, Bromley & Saxe, 1980). Previous studies have revealed that SNSs are more appealing to those who have difficulty engaging in social communication in the offline world (Campbell, Cumming & Hughes, 2006; Desjarlais & Willoughby, 2010).

Despite the relatively rich literatures with respect to the relationships between social or psychological factors and the use of SNSs, few have examined the possible interaction between social and psychological impacts in structuring the use of social network sites. Such examination is necessary because social and psychological factors do not function alone. Rather, they are often related and affect each other. Therefore, this study contributes to social media research by investigating the variation of SNS use from both social and psychological perspectives as well as integrating their interaction into existing framework. Specifically, this study expects a moderating effect of communication anxiety on the relationship between social capital and SNS

use. Accordingly, this study advances the theory of social media in three ways. First, it uncovers the dynamics between users' social and psychological construction. Second, it helps to explain the inconsistent results regarding the relationship between social capital and social media use in existing literatures. Third, it brings up an important notion that the benefits of social media are contingent and vary among individuals. In a nutshell, this study aims to fill in the critical gaps in literature described above and provides a contribution both theoretically and practically regarding how social and psychological factors interact to shape SNS use.

## **1. Literature review**

### **1.1. Communication anxiety and SNS use**

User's psychological traits may be crucial factors leading them to use social media (Baker & Jeske, 2015). Communication anxiety, an important psychological trait, describes the subjective feelings of tension, apprehension, nervousness and worry that people experience in a range of communication situations, such as speaking in a public space, talking to strangers, or communicating under the intercultural context (McCroskey & Richmond, 1987). It is caused by both biologically-rooted (Beatty, McCroskey, & Heisel, 1998) and social factors (Kiesler, Siegel, & McGuire, 1984). People would claim to have a mental block against face-to-face interaction while they indeed have a very strong desire for communication (Gudykunst & Shapiro, 1997). Thus, they actively seek other possible communication channels beyond the face-to-face one.

Scholars in psychology and communication generally find Internet a helpful tool to release communication anxiety. Although the text-based nature of computer-mediated-communication (CMC) leaves an initial perception that CMC allows little exchange of feelings, this nonverbal nature, in fact, facilitates the interaction among people who suffer from introverted personality or poor social skills (Campbell, Cumming, & Hughes, 2006; Papacharissi & Rubin, 2000). For example, Papacharissi and Rubin (2000) indicated that Internet users who avoided face-to-face interaction chose the Internet as a functional alternative for interpersonal communication. Likewise, "online chat" users who were socially fearful were found to be likely to use the Internet as a low-risk approach to practice social skills (Campbell, Cumming & Hughes, 2006). The practice in turn helped them improve interpersonal interaction within face-to-face environments. Communicating online was even shown as an effective treatment for social anxiety disorders (Erwin, Turk, Heimberg, Fresco & Hantula, 2004).

The benefits of CMC to communication anxiety became more obvious after SNSs emerged, which targeted to supplement social connections of face-to-face communication. Empirical studies found communication-anxious individuals use Facebook profiles to facilitate their self-presentation (Fernandez, Levinson, & Rodebaugh, 2012), as interacting with others in the text-based manner allowed those introverted and neurotic individuals to avoid situations they fear, such as blushing and stammering. Also, using social media was found to partially meet the need for social contact for those feeling less valued in their face-to-face interaction (Leung, 2007). For example, one study revealed that anxious individuals used Facebook more intensively than normal people, especially when they experience negative emotions (Oldmeadow, Quinn, & Kowert, 2013). Also, study by Mo et al. (2014) showed a positive relationship between social anxiety and microblog use. Moreover, Soysa and Garner (2013) identified stress, highly related to anxiety, as a consistent predictor for cyber technology adoption including SNSs for male users. In turn, Baker and Jeske (2015) believed active participating in activities on Facebook would reduce the level of anxiety, because communicative-anxious individuals feel being respected and valued more in the online environment than in the offline.

Taken together, previous research has demonstrated that individuals with anxiety problems in face-to-face communication found SNS a very helpful communication tool (Bargh & McKenna, 2004). Thus, we propose a hypothesis that:

H1: Communication anxiety is positively associated with the intensity of SNS use.

### **1.2. Social capital's role in shaping SNS use**

Lin (2001) defined social capital at the individual level as resources embedded in a social structure which are accessed and/or mobilized in purposive actions. It can be categorized into bridging and bonding social capital (Putnam, 2000) based on different degrees of tie strength (Granovette, 1973). Bridging social capital refers to resources embedded in heterogeneous social networks, which are composed and bridged by weak ties, and provides linkages to external assets and information. Bonding social capital, on the contrary, refers to resources in homogeneous social

networks where strong ties share similar characteristics to one another, providing reciprocity, sense of solidarity, and emotional support.

Social capital facilitates SNS use because of its relationship-based nature. Numerous studies have demonstrated that relationship maintenance and social interaction with friends were major motivations for using SNSs (Bonds-Raacke & John Raacke, 2010; Kim, Sohn & Choi, 2011; Smock, Ellison, Lampe & Wohn, 2011). In addition, for younger generation, networks on SNSs were also shown to be overlapped with offline social networks (Reich, Subrahmanyam & Espinoza, 2012; Subrahmanyama, Reich, Waechter & Espinoza, 2008). Thus, people with large networks of contact and accordingly high levels of social capital tend to use the popular relationship maintaining tool more often to maintain or further enlarge their social networks and social capital.

Emerging literature on the variation of individuals' SNS use by social capital has focused on continued intention to use SNSs (Chang & Zhu, 2012; Lin & Lu, 2011). One study revealed that bridging social capital had both direct and indirect positive association with continued intention to use SNSs while bonding social capital did not relate to it either directly or indirectly (Chang & Zhu, 2012). Another study found that social interaction on Facebook fan pages predicted continued intention to use Facebook fan pages directly and indirectly via trust and shared values in a positive way (Lin & Lu, 2011). As trust is one of the major indicators of social capital (Putnam, 2000), the aforementioned study implied a positive relationship between social capital and continued intention to use Facebook (Lin & Lu, 2011).

Yet, there has been a lack of studies examining the role social capital plays in shaping general use of SNSs and even fewer tapping into the variation of SNS use among individuals by different types of social capital. Regarding who access and use the Internet more often, previous studies have generated mixed results. Socially isolated adolescents were shown to use digital communication less (Bryant, Sanders-Jackson & Smallwood, 2006), supporting the normalization thesis emphasizing that technology primarily benefits those who are already active (Hirzalla, van Zoonen & de Ridder, 2011). Scholars further suggested that bridging and bonding social capital structure Internet access and use differently. On one hand, the more weak-tie based bridging social capital people have, the more likely people get exposure to innovations and start using those (Rogers, 1995). Based on this assumption, one study found that bridging social capital was positively associated with Internet access but was not related to Internet use and online communication (Chen, 2013). On the other hand, people's perception and use of a new communication technology was largely affected by feedback from their strong ties' (Campbell & Russo, 2003; Chen, 2013). It suggests a relationship between strong-tie based bonding social capital and use of communication technologies.

Although the existing literature has examined social capital's role in promoting continued intention to use SNSs and in shaping Internet access and use in general, very few studies have explored how social capital structure actual SNS use in particular. It is likely that those who have higher levels of social capital tend to use SNSs more according to the normalization thesis (Hirzalla et al., 2011). Due to limited research on the role bridging and bonding social capital play in structuring SNS use, we propose the following research question to address the relation between social capital and SNS use:

RQ1: How are bridging social capital (RQ1a) and bonding social capital (RQ1b) related to the intensity of SNS use?

### **1.3. Communication anxiety: Does it moderate social capital's effect on SNS use?**

It has been demonstrated that individual differences, including personality and psychological variation, have an effect on communicatory behaviors. In this study, highly communicative anxious individuals are more likely to rely on SNSs for social support and opinion expressing than less anxious ones (Erwin et al., 2004). As such, we know that there is a positive effect of communication anxiety on SNS use. Previous research has also suggested that different levels and types of social capital possessed by individuals might determine their SNS use patterns. Yet, there is a lack of understanding about synthesis of psychological traits and social factors. As psychological and social factors do not stand alone to shape individuals' media consumption behaviors, an understanding of variation of SNS use by the main effects of the two factors and their interaction is necessary.

Although there is strikingly lack of research taking into account the roles of both communication anxiety and social capital in structuring SNS use, previous research has implied indirectly a possible variation of the relationships between social capital and SNS use by anxiety. For instance, studies by Ellison, Steinfield and Lampe. (2007) and Steinfield, Ellison and Lampe

(2008) illustrated that individual differences in cognition and attitude would result in different gains of social capital on SNSs. Mo et al. (2014) explored the relationship among social anxiety, microblog use and social capital, who found a suppression effect of the intensity of microblog use between social anxiety and bonding social capital. It indicated, the effect of the intensity of microblog use suppressed the negative effect of social anxiety on bonding social capital. Moreover, a group of psychologists found that attachment anxiety, a psychological condition in which an individual experienced excessive anxiety regarding separation from home or closely related people, moderated the relationship between the intensity of SNS use and social capital (Liu et al., 2013). Although no studies have empirically tested the role of communication anxiety in moderating how social capital shapes social media use, it is suggested by previous literature described above that an interaction effect between communication anxiety and social capital on SNS use is possible. Therefore the following research question is formulated:

R2: Does communication anxiety moderate the relationship between bridging (R2a) or bonding (R2b) social capital and the intensity of SNS use, respectively?

## 2. Methods

### 2.1. Sampling

An online survey was conducted with university students aged 16 to 29 in China. University and college students were sampled because they are the major target population for Renren. Through snowball sampling technique, participants from universities across China and from various majors were invited through emails, text messages, social media and interpersonal communication. In turn, all of the respondents were encouraged to send the link of the survey to their social networks after completion.

Realizing the limitations of not using a random sample, the data were weighted by gender and major<sup>1</sup> to resemble the distribution of these two demographic variables as reported by the Census conducted by the Department of Education in China of the same year. The final sample size was 568 with all incomplete questionnaires eliminated. Among the 568 respondents, 318 (56.0%) were male, and 250 (44.0%) were female. 11.2% respondents came from science major, 37.7% from engineering, 1.6% from medicine, 4.4% from agriculture, and 45.1% came from humanity/social science background.

### 2.2. Measures: Dependent variable

**Intensity of Renren Use.** The intensity of Renren use was measured using the adapted intensity of use scale created by Ellison et al. (2007). The intensity scale includes two parts, attitudinal and behavioral assessments, which makes a more robust and comprehensive measurement (Ellison et al., 2007). Six items, "Renren has become part of my daily routine", "I am proud to tell people I'm on Renren", "Renren has become part of my daily routine", "I feel out of touch when I haven't logged onto Renren for a while", "I feel I am part of the Renren community", and "I would be sorry if Renren shut down" were adopted to measure the extent to which users were emotionally associated with Renren, with 1 representing "strongly disagree" and 5 representing "strongly agree". The number of Renren "friends" and the daily average amount of time spent on Renren were recoded on 5-point scales to measure how active students engaged in Renren activities. Then these two parts (eight items) were standardized and then combined to generate the intensity of Renren use scale (Cronbach's  $\alpha = 0.88$ ,  $M = -0.00$ ,  $S.D. = 0.74$ ).

### 2.3. Measures: Independent variables

**Bridging and bonding social capital.** The measures of bridging and bonding social capital were adapted from the scale created by Williams (2006) and adapted by Ellison et al. (2007). All of the social capital items were measured using a 5-point Likert scale. A principal components factor analysis with varimax rotation was used to ensure that the items reflect two distinct forms of social capital (see Table 1).

For *bridging social capital* (Cronbach's  $\alpha = 0.77$ ,  $M = 3.76$ ,  $S.D. = 0.80$ ), items included "I am interested in what goes on with friends who are geographically separated", "Interacting with people makes me want to try new things", "I come into contact with new people all the time", "I

<sup>1</sup> Usually age is weighted to match the distribution of demographic variables of the sample with the population. Yet for this study, our targeted population is the Net-geners who are in the same age range. Thus, age is not the main concern in this study. Besides, research have shown that major division (science and liberal arts) is an essential factor to predict college students' internet use behavior (Anderson, 2001). Therefore, the data were weighted by gender and major.

feel I am part of a larger community”, and “Interacting with people reminds me that everyone in the world is connected”. For *bonding social capital* (Cronbach’s  $\alpha = 0.72$ ,  $M = 3.68$  S.D. = 0.80), items included “There are several people I can turn to for advice about making important decisions”, “I cannot find people to talk about intimate personal problems (revised)”, “When I feel lonely, there are several people I can talk to”, “If I needed an emergency loan of 1000RMB (around 200 U.S. dollars), I know someone I can turn to”, and “The people I interact with would be good job references for me”.

Table 1. Factor Analysis Results for Bridging and Bonding Social Capital

Individual Items and Scales	M	S.D.	Factor Loadings	
			Bridging Social Capital	Bonding Social Capital
Bridging Social Capital (Cronbach’s $\alpha = 0.77$ )	3.76	0.80		
Talking with people makes me curious about other places and what happened in the world.	3.89	0.90	<b>.838</b>	.332
Interacting with people makes me want to try new things.	3.84	0.91	<b>.846</b>	.300
I come into contact with new people all the time.	3.40	1.03	<b>.660</b>	.235
I feel I am part of a larger community.	3.77	0.92	<b>.835</b>	.267
Interacting with people reminds me that everyone in the world is connected.	3.89	0.93	<b>.820</b>	.310
Bonding Social Capital (Cronbach’s $\alpha = 0.72$ )	3.68	0.80		
There are several people I can turn to for advice about making important decisions.	3.68	0.98	.446	<b>.645</b>
I cannot find people to talk about intimate personal problems (revised).	3.58	1.11	.106	<b>.824</b>
When I feel lonely, there are several people I can talk to.	3.64	1.06	.332	<b>.746</b>
If I needed an emergency loan of 1000RMB, I know someone I can turn to.	3.81	1.03	.328	<b>.714</b>
The people I interact with would be good job references for me.	3.67	0.95	.467	<b>.563</b>
Eigenvalues			5.72	1.05
% of Variance			57.22	10.50

**Communication anxiety.** Booth-Butterfield and Gould’s (1986) Communication Anxiety Inventory (CAI) was revised and adopted in this study. While the original inventory have two separate but related scales to measure Trait and State communication apprehension, this study only adopted the Trait scale because the State scale required a controlled situation measurement which is more proper for an experiment design (Booth-Butterfield & Gould, 1986). Nine items, “I enjoy speaking in public”, “I avoid talking with individuals I don’t know very well”, “I feel disappointed in myself after speaking”, “My body feels tense when I talk with someone I don’t know very well”, “I am terrified at the thought of speaking in public”, “My heart beats faster than usual when I talk with someone I’ve just met”, “I make a good impression when I speak in public”, “My body feels tense and stiff when I speak in public”, and “When conversing with someone on a one-to-one basis, I prefer to listen rather than to talk”, were adopted and measured on a 5-point Likert scale with 1 = strongly disagree and 5 = strongly agree. (Cronbach’s  $\alpha = 0.81$ ,  $M = 2.83$ , S.D. = 0.62).

## 2.4. Measures: Control variables

**Demographics.** A variety of demographic variables—gender, average monthly spend, and years of Internet use were included in the analysis to control for potential confounds, given that they were found to be related to the intensity of SNS use (Lenhard, et al., 2010).

## 3. Results

### 3.1. Statistical analysis

To test the hypotheses and answer the research questions, a series of regressions were conducted. These analyses allowed us to test the effects of key independent variables while controlling for the effects of a set of previously identified influential variables (gender, monthly spend, and years of Internet use). When running regression, we put bonding and bridging social capital in separate models because of a relatively high correlation between the two variables ( $r = .69, p < .01$ ). Three models were used to analyze how bridging and bonding social capital were related to the intensity of use, respectively, which was moderated by communication anxiety. In Model 1, only demographics were entered. In Model 2, communication anxiety and social capital (bridging or bonding) were entered as a block following the block of demographics. In Model 3, interaction between communication anxiety and social capital (bridging or bonding) was entered in the third block. When testing the interaction effects between bridging or bonding social capital and communication anxiety on social media use, communication anxiety, bridging social capital, bonding social capital and the intensity of SNS use were all centered before entering into the regression models.

### 3.2. Statistical results

Hypothesis 1 was about the positive relationship between communication anxiety and the intensity of SNS use. Model 2 in Table 2 and 3 showed that communication anxiety was positively associated with intensity of SNS use (when bridging social capital was controlled,  $\beta = .10, p < .01$ ; when bonding social capital was controlled,  $\beta = .10, p < .05$ ). The results suggested that those who were more anxious in communication tended to be more active using SNSs. Therefore H1 was supported.

Table 2. Hierarchical Regression of Communication Anxiety and Bridging Social Capital on Intensity of SNS Use

	Model 1	Model 2	Model 3
	$\beta$	$\beta$	$\beta$
<b>Block 1</b>			
Gender (Male = 1)	-.08*	-.04	-.04
Average monthly spend	.16***	.11**	.12**
Years of Internet use	.16***	.14**	.13**
<b>Block 2</b>			
Communication anxiety		.10**	.10*
Bridging social capital		.40***	.36***
<b>Block 3</b>			
Anxiety × Bridging			-.09*
$\Delta R^2$		.15***	.01*
Adjusted Total $R^2$	.08	.24	.25

Notes: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ,  $N = 556$ .

Research question 1a (RQ1a) explored the relationship between bridging social capital and the intensity of SNS use. Results (Model 2, Table 2) indicated that bridging social capital was positively related to the intensity of SNS use ( $\beta = .40, p < .001$ ). RQ1b explores the relationship between

bonding social capital and SNS use. The regression model (Model 2, Table 3) revealed a positive relationship ( $\beta = .29, p < .001$ ). Results indicated that people who had higher level of bridging or bonding social capital tended to use SNSs more often.

Table 3. Hierarchical Regression of Communication Anxiety and Bonding Social Capital on Intensity of SNS Use

	Model 1	Model 2	Model 3
	$\beta$	$\beta$	$\beta$
<b>Block 1</b>			
Gender (Male = 1)	-.08*	-.02	-.03
Average monthly spend	.16***	.14**	.14**
Years of Internet use	.16***	.15***	.14**
<b>Block 2</b>			
Communication anxiety		.10*	.10*
Bonding social capital		.29***	.25***
<b>Block 3</b>			
Anxiety $\times$ Bonding			-.10*
$\Delta R^2$		.09***	0.01*
Adjusted Total $R^2$	.08	.17	.17

Notes: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ,  $N = 556$ .

R2 asked if the relationship between bridging (R2a) or bonding social capital (R2b) and the intensity of SNS use is moderated by the level of communication anxiety. After controlling for gender, average monthly allowance, years of Internet use, communication anxiety, and bridging social capital, the interaction effect was found between bridging social capital and communication anxiety on the intensity of SNS use ( $\beta = -.09, p < .05$ , in Model 3, Table 2). The result indicated that the relationship between bridging social capital and the intensity of SNS use depended on the levels of communication anxiety. Similarly, Model 3 in Table 3 showed a significant moderating effect ( $\beta = -.10, p < .05$ ) of communication anxiety on the relationship between bonding social capital and SNSs use.

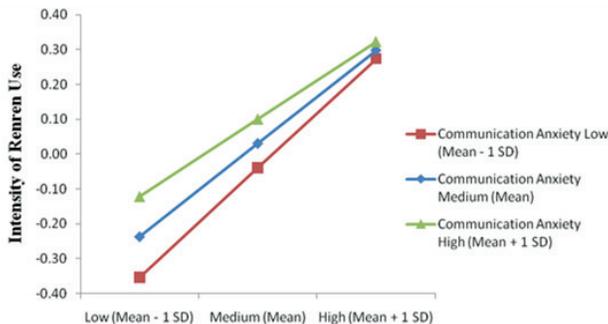


Figure 1. Interaction between Bridging Social Capital and Communication Anxiety on the Intensity of SNS Use

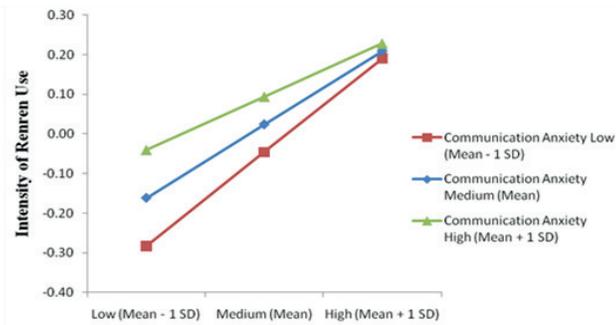


Figure 2. Interaction between Bonding Social Capital and Communication Anxiety on the Intensity of SNS Use

The interactions were plotted as in Figure 1 and Figure 2. For both more-anxious and less-anxious people, the more bridging and bonding social capital they had, the more intensely they would use social media. Yet the positive relationship between either bridging or bonding social capital and the intensity of SNS use was stronger among people who were less anxious in communication.

#### 4. Discussion and conclusion

##### 4.1. Communication anxiety and social capital's role in structuring SNS use

Drawing upon the literature on communication anxiety, social capital, and SNS use, this research examined how psychological factor and social factor interacted to shape the use of SNSs among Chinese users. In short, it advances literatures on social media by examining the main effects of communication anxiety and social capital (both bridging and bonding),—and more importantly, their interaction effects on the usage of social media sites. It sheds light on our understanding of who uses SNSs more beyond basic demographics.

This research has significant scholarly implications. First, it resonates with existing literature that communication anxiety was positively related to SNS use as SNSs served as venues where individuals could release their fear of communication (Fernandez et al., 2012). Second, previous literature suggests that people who score high on *bridging social capital*, which is weak-tie based, would be more likely to make new friends and mobilize new resources (Rogers, 1995). At the same time, people who score high on bonding social capital, which is strong-tie based, are more likely to be influenced by their network peers in many social domains (Campbell & Russo, 2003). If the close friends and relatives of an individual use social media very often, it is very likely that the person would use social media more intensively. Results from our study confirm the hypotheses that individuals with high social capital, both bridging and bonding, are more active and intense users of SNSs, whereas individuals with relatively low social capital might not find SNSs that much useful, making them use the media less intensively. Generally, this research further supports the normalization thesis that emerging media technologies mainly benefit those who are already active (Hirzalla et al., 2011). Social media seems to be used more among those who already have higher levels of social resources.

##### 4.2. The Interaction between social capital and communication anxiety on SNS Use

The interaction of communication anxiety with social capital (both bridging and bonding) brings more insights into the exploration regarding who uses SNS more. Given that the relationships between social capital and SNS use and between communication anxiety and SNS use are both positive, researchers may expect an add-on effect of communication anxiety on social capital-SNS use relation. However, although the intensity of SNS use will grow as social capital increases, the anxiety to talk would whittle the relationship. SNSs are used as an alternative communication tool for people who are unsatisfied in interpersonal environment, however, the assistance of technology cannot entirely offset the negative effects of communication anxiety. As suggested in the literature, communication anxiety is related to both neo-biological factors and social settings (Beatty, McCroskey, & Heisel, 1998; Kiesler, Siegel, & McGuire, 1984). It is possible that SNS use reduces the anxiety of face-to-face interaction caused by social settings. However, it is

overwhelming to expect SNSs to thoroughly remove introversion and neuroticism from one's personality. As a result, the positive role of social capital in shaping SNS use is likely to be weakened among people with higher levels of communication anxiety.

In addition, taking into account the cultural context makes the interaction pattern on this particular Chinese social media platform more comprehensible. China is generally believed being a country with high collectivism culture (Earley, 1989; Oyserman & Kimmelmeier, 2002). Comparing with people from individualism culture, such as the Americans, Chinese people are more society-centered and situation-centered (Hsu, 1981) and feel more attached to groups (Parsons, 1951). Connection and relationship is a central idea in Chinese society, and therefore even in the online environment, people care about how others think of them (Hui & Triandis, 1986) and regard social relationship as interdependence (Hsu, 1981) as in the offline environment. Consequently, people who are more anxious in communication would be more concerned and careful in managing their online resources and relationship, which lead to a weakened interaction between social capital and SNS use for people with more communication anxiety.

## 5. Limitations and suggestions for future study

To conclude, this paper has advanced existing analytical framework threefold. Firstly, it introduced the interaction between social and psychological factors, namely social capital and communication anxiety, to examine social media usage. The two variables have been repeatedly examined separately in previous literatures, yet few have taking them into account jointly as in this study. Secondly, this study identified the interaction effect, which provided an explanation for the inconsistency in existing literature regarding the variation of SNS use by social capital. Thirdly, that the effect of social capital and anxiety on social media use revealed the dynamic and constrain of such usage: social media is not for everyone, but is constructed by social and psychological condition of each individual.

The present study has several limitations that future research should address. First, convenient sampling is not as representative as random sample, although the sample has been weighted to represent the diversity of the target population and is comparable to national census. We expect future research to confirm results from this study with a random national sample. Second, in this study, we examine the usage of one particular social media platform: Renren. Although Renren is widely adopted and is among the most popular social media for Net-generations in China, we need to admit that there exist other social media platforms such as WeChat and Weibo<sup>2</sup>. Second, this study relied on cross-sectional data. Future research should continue to examine both lagged and synchronous models when testing these relationships. In addition, this study focuses on the specific population of Chinese college students. It sheds light on the cultural difference in social media use between the East and the West, yet this finding would be even more solid if future research would make a comparative study using the same set of survey. Despite these limitations, this study explores who uses SNSs more beyond the basic demographics and shows that both social capital and communication anxiety play critically important roles in structuring SNS use.

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<sup>2</sup> WeChat, literally micro message, is a mobile text and voice messaging communication service. It was first released in 2011 and is now the largest standalone messaging app for active social media users. Sina Weibo (NASDAQ: WB) is a popular Chinese microblogging website used by over 30% of Internet users. It has a market penetration similar to Twitter in the United States.

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