

## **The impact of social networking services (SNS) on college students' social relationship and private life**

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### **Abstract**

*Social Networking Services (SNS) have played a significant role on the relationship among college students. They benefit a lot from such convenient tools; however, some drawbacks also have emerged. Thus, the purpose of this study was to investigate the advantages and disadvantages of SNS in order to help students take full advantage of such tools, as well as to help students avoid similar problems. A questionnaire was employed to explore this issue and 259 college students participated in the questionnaire. The findings revealed that participating in SNS frequently contribute to students' social capital and social inclusions, and also enhance their self-esteem. Moreover, students are lack of the awareness of privacy protection when using SNS. Finally, more kinds of functions were proposed to be applied to the use of SNS according to the results of the questionnaire.*

**Key words: Social Networking Services (SNS), communication, college students, social life**

### **1. Introduction**

Living in such high-speed society, we can not avoid communicating with people around us. After the Internet entered into our life, Social Networking Services (SNS) have gradually become the focal spot of our communication channel,, especially among college students. For example, according to Mislove, Marcon, & Gummadi, (2007) "MySpace (over 190 million users), Orkut (over 62 million) LinkedIn (over 11 million),

and LiveJournal (over 5.5million) are popular sites built on social networks” (p29). Students acquire benefits from such tools; at the same time, they pay overmuch attention, including time and money, to such process. Therefore, it is necessary to investigate the advantages and disadvantages of using SNS. Moreover, as the interaction between mainland China and Taiwan has become more and more frequent, making a comparison of daily uses of SNS between mainland China and Taiwan students may provide important information about making the most of such tools.

This article is divided into three main parts. First, the literature review provides recent references concerning both positive and negative effects that online social network services have on college students’ social and private relationship. Second, the section of method is concerned with the survey on the comparison between the values of the students in mainland China and Taiwan and their perceptions towards SNS. Furthermore, some recommendations are provided regarding the usages of SNS in a better and more efficient approach.

## **2. Literature Review**

### **2.1 Basic features of online social networking services**

#### **2.1.1 Introduction**

SNS is a kind of services intending to help people build up social connections through networks. It is also known as Social Network Sites. Barnes first came up with the term “social network” (as cited in Gomez-Arias & Genin, 2009). He proposed that online social network consisting of around 100 to 150 people drawing people’s attention by family, work or common hobbies. So far, SNS has developed into web-based services requiring people to first set up a profile (public or private) including their basic information. Usually, this process is free of charge to individuals. In recent years, online social network sites like MySpace, Face book, and Twitter are becoming the most popular sites on the Internet, especially for college students. Topics on SNS have been widely discussed.

One good prospect often possesses certain characters which support themselves to be going on. Boyd & Ellison (2007) pointed out that profiles, friends and traversing friends lists are basic features of SNS (as cited in Ahn, 2011). Different from past websites which are organized according to content, SNS concentrates on users who are usually individuals rather than groups. This is a distinction from other online communities. Also, the “friends” in SNS can be interpreted in different ways. According to Mislove et al. (2007), users share links from real-world acquaintances, online acquaintances, or business contacts. According to the kinds of SNS, they include work-related contexts (e.g., LinkedIn.com), romantic relationship initiation (the original goal of Friendster.com), connecting people with shared interests such as music or politics (e.g., MySpace.com), or the college student population (e.g., Facebook.com).

#### **2.1.2 Trends**

Accompanied with the rapid changes of the Internet, online social networks are changing every day. Looking at its development, we can easily figure out that SNS nowadays is not only a simple tool of communication, but a platform to integrate resources.

SNS began with a role as a communication channel. According to Gomez-Arias & Genin (2009), people at first wanted to reconnect with lost school friends through SNS. People can type in their friend’s true name or school which he or she graduated from, then some further information will come up which

could offer access to the person that they are looking for. Then SNS has developed into a platform of sharing information. Individuals share their culture and life interests through sharing messages, music, or videos with other people. During this process, people are offered opportunities to distinguish about the resources. Mislove et al. (2007) claimed that online social networks have already become the core of some very popular web sites. As the technology develops, more applications are likely to emerge. It is predicted that online social networks are likely to enter the areas of future personal and commercial online interaction, as well as the location and organization of information and knowledge.

A problem we have encountered recently is that since Social Networking Services vary with the changes of places, there exist obstructions for users to get used to another new type of SNS when moving to a new location. For example, Renren Net is popular in mainland China while Facebook is popular in Taiwan. It was quite inconvenient for Chinese students to use Facebook when they are in Taiwan, and they will feel also uncomfortable when they leave Taiwan and lose contact with their new friends in Taiwan. From the perspective of manufacturers of SNS, it is to some extent difficult for them to enlarge global market.

Why do people use SNS? Online social networks spread among people of different ages. And they bear distinct reasons to make use of these sites. According to Gomez-Arias & Genin (2009), a recent research study conducted by Microsoft revealed some of the reasons for using online social networking sites. One of the reasons was that SNS use had become a driving force. Some people intent to increase their social, intellectual, and cultural capital. Moreover, the prime purpose was still to keep in touch with family and friends, expressing opinions and views as well as meeting people with similar interests.

## **2.2 The effects of SNS on college students**

### **2.2.1 Increasing social capital**

In the society, there are different understandings of social capital. Bourdieu (1986) first used the concept of social capital to explain the reproduction of societal inequality (as cited in Vergeer & Pelzer 2009). Here, a kind of relations between people and others who are in other social strata that may be beneficial for one's social position has emerged. In that sense, Bourdieu is mainly interested in vertical social relations between social classes. Although many approaches to social capital exist, they have common ground: All focus on people's relations with each other and utilizing these relations for certain purposes (e.g. social support, companionship, or upward mobility).

Being a member of online social networks means one has created a complicated interpersonal net involving himself. If one is a member of a group with many resources, such as sharing links, business acquaints or large number of net visitors every day, he or she can acquire benefits financially, culturally, or socially from having that access. A series of studies with college students and Facebook test the social capital hypotheses that online social networks may provide a better avenue for valuable resources, information, and social support. For example, Ellison, Steinfield, and Lampe (2007) find that higher Facebook use is positively correlated with bridging and bonding social capital in a sample of college students. According to Vergeer & Pelzer (2009), "A study conducted by Ofcom (2008) shows that people on Social Network Sites (SNS) predominantly bring their offline social network online, and uses SNS to revitalize old relations" (p195).

Emerging studies show that SNS may also be helpful to connect younger teenagers to the broader community. For example, Ahn (2011) found that high school students who were members of Facebook and

MySpace reported substantially larger levels of social capital than their peers who were not members. However, further research was still needed to find out whether and how the participants in SNS connect themselves to their broader community. Besides, it is important to know whether SNS can offer college students some better ways in their job application, or internship as far as work is concerned.

### **2.2.2 Social Inclusions**

Social inclusion is a concept in many parts of the world to characterize contemporary forms of social advantages. It refers to an access to competition, opportunities and resources including housing, employment, healthcare, civic engagement, democratic, participation, and due process. Online social networks also provide chances to make people change from social exclusion to social inclusion. In Australia, social inclusion was first exploited as a policy concept by the incumbent Rudd Labor government during its 2007 election campaign (ALP, 2007) and it has since been assigned its own Ministry (Gillard, 2007)(as cited in Notley 2009). According to Saunders, Naidoo, & Griffiths, (2007), “While related, social exclusion is different from poverty which exists when people’s income is so inadequate as to prevent them from having an acceptable standard of living and from deprivation. Instead it exists when people “do not or can not participate in key activities in society” (p.11).

Notley (2009) conducted a research and found that online networks provided participants with valuable opportunities for social inclusion. Vergeer & Pelzer (2009) proposed that online network capital challenged offline network capital and web surfing coincides offering more online socializing. For instance, Facebook offers opportunities for extracurricular activities, peer group interactions, social integration, and faculty-staff interactions.

Nevertheless, do people show their real style in SNS compared with their daily activities? Or maybe in SNS people show their real performances which are blocked by daily communication embarrassment? It is possible that SNS provide users with a new way to get acquainted with friends avoiding confronting embarrassment in face-to-face communication. It may help people to find out the new area they have in common with others (e.g. interests, goals, experience, etc) that they have never considered before. Therefore, it may enlarge the circle of friends and promotes social inclusions.

### **2.2.3 Self-esteem**

According to Ahn (2011), adolescents who frequently use an SNS had more friends on the site and also more reactions on their profile (i.e., friends posted more comments and wall posts). Instead of broad Internet use, new findings showed that online interactions contributed to more positive outcomes for youth. For example, Valkenburg, Peter, and Schouten (2006) found that within a sample of over 800 Dutch adolescents, SNS use is related to self-esteem and psychological well-being.

Ahn (2011) also found interactions between Facebook use, measures of self-esteem (SE) and life satisfaction (LS). Participants who were low in self-esteem, but frequently used Facebook, had higher bridging social capital than their peers who were already high in self-esteem. The results suggested that college students who had low self-esteem or life satisfaction might benefit more from Facebook usage. In addition, the researchers reported that having more positive reactions on one’s SNS profiles is correlated with higher self-esteem, and higher self-esteem is significantly correlated with satisfaction with life.

#### **2.2.4 Social isolation**

There's no doubt that we have enjoyed plenty of pleasure and benefited from online social networks. However, the drawbacks of online social networks inevitably appear, one of which is social isolation. Psychological well-being often refers to various measures that capture an individual's satisfaction with life. SNS captured the concentration of people and may lead to their social isolation which has a negative effect on people's well-being. Scholars used a variety of scales that included measures of loneliness, depression, and overall life satisfaction (Kraut, Patterson, Lundmark, Kiesler, and Mukopadhyay, 1998). Kraut et al. (1998) recorded the number of hours individuals spent on the Internet and its relationship with future measures of social involvement and psychological well-being. The researchers found that longer use of the Internet was related to increased depression, loneliness, and smaller social circles. The results suggested that Internet use isolated individuals from their friends and family, and had a negative impact on one's psychological well-being. This effect was known as the reduction hypothesis (Valkenburg, Peter & Schouten, 2006). The results highlighted the emerging sense that the use of SNS itself could not produce the feelings of well-being.

Self-disclosure also plays a significant role in SNS effects on well-being. Specifically, researchers proposed that when youth disclosed and expressed more information about themselves, the quality of their relationships with other people would be enhanced (Valkenburg, Peter & Schouten, 2006). Therefore, it remains uncertain whether SNS really cause users' social isolation and whether SNS use or individuals' self-disclosure affects their daily activities with other people.

#### **2.2.5 Flaws in privacy**

Another negative outcome of SNS use is flaws in privacy safety. Approximately 70% of school districts blocked access to SNS, and this trend was caused by the fears about student safety (Lemke, Coughlin, Garcia, Reifsneider & Baas, 2009). Jones and Soltren (2005) identified serious flaws in Facebook's set-up that would facilitate privacy breaches and data mining. At the time, nearly 2 years after Facebook's setting up, privacy accidents still happened. Concerning technological methods, a simple algorithm could also be used to download 1 public profiles at a school, since Facebook used predictable URLs for profile pages (Jones & Soltren, 2005). The authors also noted that it is possible to grasp information through Facebook about its users from other sources unless the users employ specific method to protect their information. As we can see, SNS offer users degree of freedom to control the privacy settings. For the consequences this brings about, we are curious about whether users have enough awareness to protect their own information and we also wonder what expectations they bear in mind when providing their private information.

#### **2.2.6 Other concerns about SNS**

In addition to the above-mentioned advantages and disadvantages of SNS, there are still some other concerns about SNS. For most parents, they are concerned much about children's academic performance after seeing their children spend quite amount of time browsing social network websites. Researches on social networking sites and learning achievement are particularly limited compared to studies of privacy, safety, social capital, and psychological well-being. Karpinski's paper (2009) received much attention with findings that college Facebook users had relative low GPAs than students who were not users of the site (as

cited in Ahn, 2011). However, one limitation of Karpinski's study was that the sample students were limited in regions and the analysis was lack of variable control.

Many psychologists pay attention to the psychological problems that SNS may bring to people. They are concerned that SNS let people produce fear and maladjustment which may affect their daily networks with people. We might as well assume that SNS users depend too much on online networks and feel uncomfortable in communicating with others in daily lives. Based on the literature review, three hypotheses are proposed in this study:

### **3. Hypotheses:**

- 1). College students who use SNS will benefit from social capital, social inclusions, and self-esteem.
- 2). College students who use SNS will be negatively affected in social isolation, flaws in privacy and some other concerns.
- 3). College students in mainland China and in Taiwan bear distinct values towards the using of SNS.

## **4. Methodology**

### **4.1 Participants:**

For the present study, total of 259 college students (156 from mainland China, 101 from Taiwan and 2 from other places) were invited to do the questionnaire. Among them 120 were males and 139 were females. As a demographic study revealed in the questionnaire, 4.25% of participants were freshmen, 25.1% of them were sophomore, 55.98% were junior, 11.58% were senior and 3.09% were graduate students. Among them, the use of Facebook occupies 44.79%, Twitter occupies 1.16%, RenRen occupies 49.42%, QQ-zone occupies 50.97% and others occupy 17.76%. As for the duration of using SNS, 5.02% answered that they had used SNS for no more than 1 year, 62.55% had used for 1~5 years and 32.43% had used for more than 5 years.

### **4.2 Instrument**

The research technique applied in the present study was a questionnaire using 5-point Likert scale, from 1 (indicating strongly disagree) to 5 (indicating strongly agree). A total of 39 questions were contained in the questionnaire including seven factors, including social capital (questions 1 to 5), social capital (questions 6 to 10), self-esteem (questions 10-13), social isolation (questions 14-16), flows in privacy (questions 17-22), other concerns about SNS (questions 23 to 29) and value and recommendations (questions 30-39).

### **4.3 Procedure**

The questionnaire was posted on a free on-line system ([www.sojump.com](http://www.sojump.com)). When conducting the questionnaire, people were asked to provide their basic information first; then answered questions in each factor accordingly. Because the questionnaire was set up that each question must be answered before submitting the questionnaire, all the questionnaires collected by current research were complete.

## 5. Results

Hypothesis 1: College students who use SNS will benefit from social capital, social inclusions, and self-esteem.

As shown in Table 1, the factor of social capital ( $M = 3.26$ ,  $SD = 0.82$ ) contains number 1 to number 5, social inclusions ( $M = 3.36$ ,  $SD = 0.59$ ) contains number 6 to number 10, and self-esteem ( $M = 3.43$ ,  $SD = 0.73$ ) contains number 11 to number 13. The mean of each factor was between 3 and 4, which means participants' answers were between neutral and agree. In other words, college students who use SNS tend to benefit from social capital, social inclusions and self-esteem. Moreover, the mean of each question from number 1 to number 5 in the factor of social capital was from 2.71 to 3.70. The participants showed negative reaction to question 5 "how many friends do you have in SNS". Most students responded that they only had 50 to 200 friends in SNS. As for the part of social inclusions, the mean of each question from number 6 to number 10 was from 3.06 to 3.62. The mean of each question from number 11 to 13 in the factor of self-esteem was from 3.31 to 3.65. According to these findings, the results support hypothesis 1.

Table 1. The Mean and Standard Deviation (SD) of Social Capital, Social Inclusions and Self-esteem

Factors		
Social capital	M.	SD
I have known a lot of friends through using SNS.	3.38	1.25
Friends on SNS have helped me deal solve many practical problems.	3.20	1.06
I think using SNS is an effective way to broaden social networks.	3.70	0.98
SNS is helpful in job applying and internship.	3.29	0.97
5 How many friends do you have in SNS? (Under 50/ 50~200/ 200~400/ 400~700/ Over 700)	2.71	0.95
Social inclusions		
6 I think I am outgoing.	3.34	1.08
I have different speaking styles in SNS and daily life.	3.06	1.08
SNS is helpful for us to know a person from different perspectives.	3.57	0.94
SNS is helpful for us to find friends in the same community.	3.62	0.85
I am more active in SNS than in real life.	3.19	0.97
Self-esteem		
The positive image in SNS enhances my social self-esteem.	3.31	0.99
More friends on the site and more reactions on the profile help me enhance my self-esteem.	3.65	0.96
When I am down in spirits, I would like to express my feelings in SNS.	3.32	1.14

Hypothesis 2: College students who use SNS will be affected in social isolation, flaws in privacy and some other concerns.

As shown in Table 2, the factor of social isolation ( $M = 2.93$ ,  $SD = 0.76$ ) includes number 14 to number 16, and the factor of flaws in privacy ( $M = 3.45$ ,  $SD = 0.54$ ) includes number 17 to number 22, and

the factor of other concerns ( $M = 3.29$ ,  $SD = 0.52$ ) includes number 23 to number 29. In the part of social isolation, the mean of each question from number 14 to number 16 was from 2.61 to 3.56. Most participants agreed with item 14, but the means of number 15 and number 16 were 2.61. With regard to the factor of flaws in privacy, the mean of each question from number 17 to number 22 was from 3.28 to 3.68. As for the part of other concerns, the mean of each question from number 23 to number 29 was from 2.63 to 4.02. The means of question number 28 “Using SNS reduces my capability of social intercourse.” and number 29 “Without SNS, I would have no contact with my friends and lack of the sense of security.” were under 3. It means SNS doesn’t affect students’ capability of social intercourse and they would not feel insecure in mind without using SNS. Besides these two items, there is significance among other items in the factor of other concerns. Therefore, social isolation, flaws in privacy and other concern are some negative effects SNS bring to college students. The results also support hypothesis 2.

Table 2. The Mean and Standard Deviation (SD) of Social Isolation, Flaws in Privacy and Other Concerns

Factors		
Social isolation	M.	SD
I often use hidden mode when in SNS.	3.56	1.33
SNS reduce the communication between my real friends and me.	2.61	1.07
Over using SNS makes me neglect real friends, which makes me feel lonely.	2.61	1.07
Flaws in privacy		
I think the privacy in SNS is lack of security.	3.28	1.00
I think personal information can draw others’ attention.	3.28	0.96
I fill in my personal information just because of the requirements.	3.54	0.96
I think it is unsafe to fill in personal information in SNS.	3.37	1.14
I think I have better awareness of privacy protection.	3.68	1.00
think individuals should be mainly responsible for privacy protection.	3.55	1.02
Other concerns about SNS		
I use SNS every day.	4.02	1.04
I often spend more time on SNS than expected.	3.90	1.01
SNS have negative effects on my study.	3.12	0.97
I often can use SNS with certain purpose as planned.	3.10	0.96
I rely on SNS quite a lot.	3.31	0.98
Using SNS reduces my capability of social interaction.	2.63	0.93
Without SNS, I would have no contact with my friends and lack of the sense of security.	2.97	1.12

Hypothesis 3: College students in mainland China and in Taiwan bear distinct values towards the using of SNS.

In order to understand the relationship between college students’ values in mainland China and in Taiwan, independent sample *t*-test was conducted. As shown in Table 3, significant relationship is found

between college students in two areas in item no. 30 ( $t=-3.759$ ,  $p<0.05$ ), no.32 ( $t=-4.510$ ,  $p<0.05$ ), no. 33 ( $t=-4.981$ ,  $p<0.05$ ), no. 34 ( $t=-3.738$ ,  $p<0.05$ ), no. 35 ( $t=-3.392$ ,  $p<0.05$ ), and no. 37 ( $t=-2.752$ ,  $p<0.05$ ), but no significant difference in no. 31 ( $t=-1.379$ ,  $p>0.05$ ) “I hope SNS will have the function of linking students between mainland China and Taiwan.”, no. 36 ( $t=-1.667$ ,  $p>0.05$ ) “The most attractive feature of SNS for me is rapid in contact.”, and no. 38 ( $t=-0.611$ ,  $p>0.05$ ) “The most attractive feature of SNS for me is extensive information”. It shows college students in mainland China and Taiwan bear different values in most of the questions regarding their value of using SNS.

Table 3. Comparison between values of college students in mainland China and in Taiwan

Items		
	<i>t</i>	<i>p</i>
I think the present SNS are already perfect.	-3.759	0.000*
I hope SNS will have the function of linking students between mainland China and Taiwan.	-1.379	0.169
I use SNS mainly for the purpose of searching friends and later contact.	-4.510	0.000*
I use SNS mainly for useful links.	-4.981	0.000*
I use SNS just for keeping pace with trends.	-3.738	0.000*
The most attractive feature of SNS for me is convenient in usages.	-3.392	0.001*
The most attractive feature of SNS for me is rapid in contact.	-1.667	0.097
The most attractive feature of SNS for me is free of charge.	-2.752	0.006*
The most attractive feature of SNS for me is extensive information.	-0.611	0.542

\*:  $P<0.05$

## 6. Discussions and conclusion

According to the results of the this study, several major findings can be revealed. First, college students who have more frequent participation in SNS benefit more in social capitals and also enjoy broader community. Also, online social networks provide chances to make people change from social exclusion to social inclusion. Moreover, self-esteem is another positive outcome of the frequent usage of SNS. Having more positive reactions on one’s profiles is correlated with higher self-esteem. Besides, the finding in the research shows that SNS is helpful in job applying and internship which is so important for college students. What’s more, since college students are more active in SNS, they are more likely to utilize SNS to find friends in the same community according to question 9(Mean=3.62).

Second, the research also shows that SNS, to some extent, isolates individuals from their friends and family. Also, flows in privacy are still hanging in SNS use which may harm self benefit of users. However, according to question 15 ( $M=2.61$ ) and question 16 ( $M=2.61$ ), SNS doesn’t reduce the communication between students and their friends and they don’t feel lonely without contacting with friends in SNS. It reveals that the problem of psychology is not serious. Therefore, students are not lack of sense of security without SNS according to question 29 ( $M=2.97$ ) and they still have capability of social interaction according to question 28 ( $M=2.63$ ). Negative effect of SNS on students’ GPAs was found in the results according to

question 24 (M=3.90) and question 25 (M=3.12). This result is in accordance with the previous study of Ahn (2011).

Third, college students in mainland China and in Taiwan bear distinct values towards the using of SNS. According to question 31, college students in mainland China and in Taiwan both want to have the function of linking themselves together, which seems to be a drawback of SNS and also is a good recommendation for the manufacturers. What's more, college students in both areas think the attractive feature of SNS is providing rapid contact and extensive information according to question 36 and question 38. It is suggested to make the most of such features of SNS in a more efficient way.

Thus, according to the findings of the study from the questionnaire, some recommendations are also provided. Some students suggest that SNS can be connected with mobile phone and they also want a much nearer connection between mainland China and Taiwan. The results show us the positive sides of SNS—social capital, social inclusions and self-esteem; however, we can not neglect that the disadvantages, especially privacy flows should receive more attention. When it comes to the limitation of the study, since the present study adopts the on-line questionnaire, the range of the departments at school was very broad. And also because the number of participants in Taiwan was limited, the comparison between students from mainland China and Taiwan should be treated with caution. Therefore, future research should include more participants and narrow the range when conducting a similar study.

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