Intensity of Social Network Use by Involvement: A Study of Young Chinese Users

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Abstract

This research focuses on the use of social network sites (SNS) among young Chinese users. There are two objectives of this study. First, the paper examines the characteristics and current situations of SNS in China. The second is to examine the relationship between the types of involvement and the intensity of SNS use. This study uses data from 200 samples, mostly young Chinese users in Beijing, China. Factor analysis suggests four factors: personal involvement in usefulness and usage, physical involvement in trust, and situational involvement in relationships. The total variance explained by all four factors is 67.82 percent. Personal involvement on usefulness accounts for most (33.12%) of the explained variance, followed by physical involvement in trust (13.47%). In general, correlation results show that there are significant relationships between the intensity to use SNS and all types of involvement. Personal involvement in usefulness shows a very strong relationship with the intensity of SNS use(cor=.93).Through regression, the result suggests that only personal involvement in usefulness and physical involvement in trust are in the model, with a value of 88.5 percent for R^2, which significantly explains the intensity of SNS use. The results from this study provide insightful information on how different types of involvement can influence users' intensity of SNS use. The mostly frequently used social network sites among participants for this study are Renren, QQ(Qzone) and Sina Space.

Keywords: social network sites, involvement, adoption, intensity of use, young Chinese people

1. Introduction

Social Networking Sites (SNS) have significantly expanded as a communication tool since 2006. Nowadays, the importance of SNS has become a major issue within society, as well as a significant study topic for many researchers. Social network sites integrate digital communication; in addition, the most important characteristic of SNS is that they enable users to make their social networks visible and build connections among individuals (Shi, Lee, Cheung & Chen, 2010). SNS such as Facebook, Myspace, LinkedIn in the US, Cyworld in Korea, Friendster in Asia, Hi5 in Spanish-speaking countries, and QQ, RenRen, Kaixin001 in China are the most frequently used SNS among people worldwide (Yanqiu, 2011). The 2008 comScore survey regarding global SNS usage showed that Asia has been a part of the world where this phenomenon is flourishing (Lin, Chiu & Lim, 2011). China has its own versions of Facebook and their social networking landscape is much more diverse in terms of users and purposes. Many of Chinese people are motivated to be involved in social network sites for many different reasons, such as connecting with friends and family, socializing with new friends, and accessing information, among many others. China has the largest number of Internet users around the world (Zeng, Huang, & Dou, 2009; Chen & Haley, 2010). According to the China Internet Network Information Center (CNNIC), the total number of "netizens" had reached 485 million within a population of 1.3 billion people, and the number of SNS users had reached 230 million in July 2011 (Zhang, 2011). Furthermore, iUserTracker, a user online behavior measurement system launched by iResearch, reported that the number of social networking services had reached 410 million in second quarter 2012, with a year-by-year growth rate of 9.0% and over 93% user penetration (iResearch report, 2012). They believe that social networking services have become one of the most

frequently used services among Chinese Internet users. Moreover, Chinese society has changed dramatically within the past 30 years (Chen & Haley, 2010), and one distinctive indicator of such societal change in people's lives is the shift in value systems, which can be explained by how people use SNS.

To gain deeper insight into Chinese SNS, it is necessary to explore the current situation of SNS in China, as well as the main users of these SNS. In this research, the first objective focuses on understanding Chinese SNS and their characteristics. The second objective is to explore in detail the characteristics of SNS adoption, especially for the young Chinese generation, which is one of the most active user segments, accounting for approximately 90 percent of those aged between 16 and 30 years (Yanqiu, 2011). Understanding which factors influence online social networking site use will explain users' underling adoption factors, based on the types of involvement toward SNS. However, little research exists in the types of involvement as variables to measure user behavior in relation to the intensity of SNS use. Understanding young Chinese people's involvement in SNS and the relationships between the types of involvement and intensity of SNS use will help to explain and fill the gap from previous research based on some of the underlying adoption factors of SNS in China.

2. Literature Review

2.1 Definition of Social Network

The network approach can be explained by sociology, anthropology and role theory. First, sociology emphasizes patterns of interaction and communication as the key to understanding social life. Second, in Anthropology, exchange theory emphasizes the content of relationships joining individuals. Finally, role theory defines organizations as "fish nets" of interrelated offices. Furthermore, the social network approach views organizations in society as a system of objects (e.g., people, groups, organization) joined by a variety of relationships (Tichy, Tushman & Fombrun, 2012). An important characteristic of SNS is that they enable users to make their social networks visible and build connections among individuals (Shi, Lee, Cheung & Chen, 2010). Social networks exist in a cyber space, thereby allowing individuals to build their profiles and share texts, images, photos, videos, blogs and links with other website members; in fact, they are currently the world's fastest growing personal networking tools (Lin & Lu, 2011; Sledgianowsky & Kulviwat, 2009). Boyd and Ellison (2008) define social network sites as web-based services that allow individuals to construct public or semi-public profiles so that users can share connections, view and traverse their connections within a system.

2.2 Social Network Sites in China and Relevant Literatures

The Chinese government maintains relatively strict control over information flows on the Internet and some popular social network sites, such as Facebook, which is not available in mainland China (Chen & Haley, 2010). Even though some popular international social networking sites such as Facebook, Myspace, Twitter and others are not accessible, young Chinese people have alternatives in China's versions of Facebook, Twitter and You Tube such as Renren, Kaisin001, and many others that are available (Yanqiu, 2011). The various Chinese social network sites established since 2007 and China's top social networks sites are Qzone (Tencent), Renren, Pengyou, SinaWeibo, Kaixin001, and 51.com,among others (Appendix 1). Qzone is China's largest social network, with 637 million active users for Tencent's QQ Messenger, and Renren is China's leading real-name social network, which is currently setting the gold standard for SNS in China (Techrice, 2011). In terms of segmentation, Renren is most popular with university students (Yanqiu, 2011). In 2005, Renren was initially a clone of Facebook called Xiaonei (校内); however, since 2009, the site's name was switched to Renren, as well as its strategy with the aim to target college students as the main users, just as Facebook was before opening the site to the general public. Chinese SNS can be divided into several categories in terms of different target groups with its orientations. Such types are as follows: college student-oriented, entertainment-oriented, business-oriented, and dating or marriage matching-oriented (Zhong, 2010). Also, unlike Facebook, a handful of social networks have attracted segmented audiences, ranging from upscale urban youth to university students and migrant workers (*The China Business Review*, 2011).

In recent years, researchers have conducted comparison studies based on cultural differences and motivations of SNS use among China, Korea and the United States (Ji, Hwangbo, Yi, Rau, Fang & Ling, 2010; Kwon & Kim, 2011; Lee Y, 2011). Moreover, Yanjqui (2011) studied political issues shared in a leading domestic SNS site in China and concluded that SNS creates an alternative community space for political discussions that have never existed in the mass media before. Business models of Chinese SNS (Zhong, 2010) and campus SNS in China have been explored by using an extended TAM model (Hou, Fan, Lee & Suh, 2009). Also, the relationships among the big five personality factors, self-esteem, narcissism and sensation seeking have been examined via Chinese university students' SNS use (Wang, Jackson, Zhang & Su, 2012). Lin and Lu(2011) explored factors affecting users' behavior of continuously joining SNS by applying network externalities and motivation theory

by using structural equation modeling(SEM): enjoyment, the number of peers, and usefulness were identified as important influential factors for continued intention to use SNS.

The previous studies examined the relationship between students' demographic characteristics and SNS experiences among SNS users and non-users. Results showed no significant relationship between the two variables (Hargittai, 2007). The actual usage of SNS examined was based on the hedonic perspective, such as perceived trust, playfulness, critical mass, ease of use, usefulness and adoption intention (Sledgianowski & Kulviwat, 2009). The adoption and non-adoption factors of social network sites for Singapore's working adults were identified (Lin, Chiu & Lim, 2011). Cheung, Chiu and Lee (2011) explained why students use SNS (Facebook) by social influence theory, the gratifications paradigm and social presence theory.

Online social networking site netizens use SNS for many purposes. Social networking sites typically provide users with a profile space, facilities for uploading content (e.g., photos, music), messaging in various forms and the ability to make connections with other people (Joinson, 2008). In addition, SNS give individuals a venue to identify with others and gain a sense of belonging, such as connecting with family, friends and society (Vanlenzuela, Park & Kee, 2009). For the young generation, users spend a significant amount of time on selected social network sites and have relatively positive attitudes toward those sites (Chen & Haley, 2010). A previous study identified the intensity of SNS use. From this study, it was found that Facebook intensity suggested Facebook use as important for bonding social capital; specifically, positive relationships between life satisfaction, social trust, and participation in civic and political activities among college students were identified. Yet, associations between Facebook variables and social capital were small (Ellion, Steinfield & Lampe, 2007; Valenzuela, Park & Kee, 2009).Understanding users' SNS adoption factors can be explained by gender and age (Mantsumitrchai, Park & Chiu, 2012).Also, the popularity of social networking has resulted in a significant decrease in time spent elsewhere online (Chiu, Lin & Silverman, 2012), A Boston Consulting Group study found that Chinese Internet users are online for an average of 2.7 hours per day, considerably more than other developing countries, and more on par with usage patterns in Japan and the United States (*The China Business Review,* 2011).

3. Hypostheses and Research Design

3.1 Hypotheses

3.1.1 Involvement

In previous research, many of the different definitions of involvement, such as involvement in advertisements, products, purchases and brands have been identified; the reasons for such diverse definitions and measures of involvement are perhaps due to the different applications of the term "involvement." There are three categories in which to classify involvement, such as personal, physical and situational (Zachkowsky, 1985). The important characteristic of SNS is that they enable users to experience an amount of involvement with social networks and build connections among individuals. This research tries to identify the three different categories of involvement in order to explain the underlying factors involving the relationship between an individual's involvement and the intensity of SNS use.

H1: There are relationships between the intensity of SNS use and the types of involvement (personal, physical, and situational).

3.1.2 Personal Involvement

According to Zachkowsky (1985), personal involvement basically concerns inherent interests, values, or needs that motivate one toward an object; in other words, when an individual feels that a system is useful, he or she will think positively about it. Thus, the usefulness of a system has great influence and is positively related to the adoption of information technology (Lin & Lu, 2011).The perceived usefulness of SNS affects positive intentions to use them (Kang & Lee, 2010). Usefulness, such as the benefits of SNS use interact with the society, community and events, and trends for SNS use were found among females and young people (Mantsumitrchai, Park & Chiu, 2012). Such usefulness has been considered as important in determining an individual's acceptance and usage of information technology (Sledgianowski & Kulviwat, 2009).

H2a: Personal involvement in usefulness positively influences the intensity of SNS use.

For SNS use, activities such as sending and receiving messages, finding people, posting and sharing pictures, viewing profiles, chatting and joining groups were identified, and users liked to share photos and videos on SNS; in particular, females and younger generations engaged much more actively in these activities (Joinson, 2008; Mantsumitrchai, Park & Chiu, 2012;Lin & Lu, 2011; Boyd & Ellison, 2008).

H2b: Personal involvement in usage positively influences the intensity of SNS use.

3.1.3 Physical Involvement

The definition of physical involvement concerns the characteristics of the object that cause differentiation and increase interest (Zachkowsky, 1985). Trust represents a willingness to be placed in a position of vulnerability, based on having positive expectations of another party's future behavior (Zhou, Lu & Liu, 2010). Trust in or reliability of SNS is considered to be another important physical factor to increase the rate of SNS adoption (Mantsumitrchai, Park & Chiu, 2012), even though users' perceived risks of using SNS are low. Social network sites have privacy control settings built into the profile options, which enable users to choose who can view and add content to their personal websites, and perceived trust is a significant predictor of intent for SNS use (Sledgianowski & Kulviwat, 2009).

H3: Physical involvement in trust positively influences the intensity of SNS use.

3.1.4 Situational Involvement

Situational involvement is something that temporarily increases relevance or interest toward an object, which refers to how an individual reacts in different situations upon evaluation (Zachkowsky, 1985). Females and younger people are more likely to show their personal information only to their friends and relatives (Mantsumitrchai, Park & Chiu, 2012). Such a characteristic on SNS, relevant to the relationships among people, can influence the intensity of SNS use.

H4: Situational involvement in relationships positively influences the intensity of SNS use.

3.1.5 Intensity of SNS Use

Valenzuela, Park and Kee (2009) used an intensity measurement scale as a dependent variable, which was adapted and modified from Ellison, Steinfield and Lampe (2007).The scale was based on level of agreement with several statements related to users' emotional attachment to sites. In this research, three items from questionnaires related to attachment were used to measure intensity: "I feel I am part of the SNS community"; "I am proud to tell people I am on SNS"; and, "Using SNS is part of my daily activity, and I will keep on using SNSs," were added to increase the validity of the questionnaires. The categories used 1=strongly disagree to 5=strongly agree Likert scales.

3.2 Research Design

Stage 1: Qualitative Method

To understand which factors motivate people to use social network sites by level of involvement, this research used a questionnaire from previous research (Mantsumitrchai, Park & Chiu, 2012; Lin & Lu, 2011). The research questionnaire had items that were modified and deleted in order to fit this study by using a pretest on 12 Chinese students currently studying at Keimyung University in Daegu, Korea. This pretest helped identify some of the factors that would be relevant to characteristics of young Chinese people in mainland China. Some demographic factors, such as income level and behavioral factors in the number of years of SNS use, along with the names of social network sites commonly used in China and intensity factors, were identified. In order to recognize a relationship between the involvement factors and the intensity in social network site use, the intensity measurement items –"I'm proud to tell people I am using SNS"; "Using social networks is part of my daily activity": and "I feel I am part of the SNS community" (Valenzuela, Park & Kee, 2009) – were adopted and modified. In addition, the item, "I will keep on using SNSs," was added to measure intensity. Even though previous research questionnaires have been based on targeted specific social network sites, such as Facebook users, the pretest of the adopted and modified questionnaire for this research made the instrument appropriate for use. Based on previous studies, there are many reasons why people use SNS, but for this study, after the pretest, 26 questions were used to measure underlying factors, and four questions were asked to measure the intensity of SNS use.

Due to the language barrier, at first the survey was created in Korean and was then translated into Chinese by the parallel translation method. The translation had been done by second- and third-generation Chinese and Korean bilingual students from S University and a professor from D University in Korea. These translated surveys were used for the pretest for this study, as well. The parallel translation means that more than two translators were used for the back translation; the results were compared, and differences were discussed (Cateora, Gilly& Graham, 2009).

Stage 2. Quantitative Method

The purpose of this research was to target Chinese SNS users. Surveys were collected from mainland China. The

26 questions, and four questions to measure intensity of use, using a 5-point Likert scale, and other demographic and behavioral questions were finalized in Chinese. Due to the distance barrier; data were collected by the O Research Company in Beijing. Two hundred data were collected between October 15 to 21, 2012 for one week, and the main target sample were university students who studied in the Beijing area. The most representative population of this study consisted of university students who using social network sites. The data were delivered in Excel format via email for analysis. For this research, the SPSS statistics version 20 was used in the analysis.

4. Analysis and Results

There were two hundred students who participated in the survey. By gender, 63 percent of the participants were female, and 65 percent of the respondents were between 20-23 years old. The majority of the participants were undergraduate students (n=141, 70.5%). Approximately 52% of the participants had no income. Eighty-eight percent of the respondents had been using social network sites (SNS) recently. A total of 75.5% of users reported spending less than two hours per day on SNS, and 11.5% reported spending more than 3 hours per day on SNS. Additionally, nearly 67% of the participants reported using SNS for less than three years. Most of the SNS respondents used were Renren, QQ(Qzone) and SinaSpace. Table 1 provides a profile of the respondents for this study.

Table 1. Demographic information of respondents and their SNS use

	Frequency	Percent	Cumulative Percent
Gender			
Male	74	37.0	37.0
Female	126	63.0	63.0
Total	200	100.0	
Age			
Less than 19	6	3.0	3.0
20-23	131	65.5	68.5
Above 23	63	31.5	100.0
Total	200	100.0	
Education			
High school	13	6.5	6.5
Undergraduate	141	70.5	77.0
Graduate	29	14.5	91.5
Ph.D.	2	1.0	92.5
Missing	15	7.5	100.0
Income per month (Chinese yuen)			
Less than 1,500	34	17.0	17.0
1,501-3,000	23	11.5	28.5
3,001-5,000	22	11.0	39.5
5,001-8,000	11	5.5	45.0
More than 8,000	6	3.0	48.0
Have no income	104	52.0	100.0
Total	200	100.0	
Have you been using SNS recently?			
Yes	176	88.0	88.0
No	24	12.0	100.0
Total	200	100.0	
How much time do you spend on SNS per day on average?			
< 30 minutes	58	29.0	29.0
30 mins-1 hr	46	23.0	52.0
1-2 hrs	47	23.5	75.5

2-3 hrs	26	13.0	88.5
More than 3 hrs	23	11.5	100.0
Total	200		
How many friends do you have on SNS?			
Less than 49	46	23.0	23.0
50-99	31	15.5	38.5
100-299	63	31.5	70.0
300-399	26	13.0	83.0
400-499	12	6.0	89.0
More than 500	22	11.0	100.0
Total	200		
How long have you been using SNS?			
< 6 months	29	14.5	14.5
6-12 months	13	6.5	21.0
1-3 years	92	46.0	67.0
4-6 years	52	26.0	93.0
More than 7 years	14	7.0	100.0
Total	200		
The SNS most used by respondents			
Sina Space	53	26.5	26.5
Renren	73	36.5	63.0
Kaixin	5	2.5	65.5
QQ	61	30.5	96.0
Douban	4	2.0	98.0
Kakaotalk	2	1.0	99.0
Pengyou	0	0	99.0
Other	2	1.0	100.0
Total	200		

4.1 Reliability of Measures

The reliability test was used to ensure the degree of consistency among the measures for all 26 questions. Cronbach's alpha for the reliability test was .961 (Table 2). For the internal consistency evaluation, the corrected item to the total correlation for each of the 26 items was above .30, indicating the reliability for each construct. Thus, the reliability measure met the requirement (see Hair et al., 1998). Hotelling's T-square (Table 3) showed a significant level with the calculated F-value of 7.80. Thus, the set of variables met the fundamental requirements for the factor analysis.

Table 2. Result in reliability statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.961	.962	26

Table 3. Hotelling's T-squared test

Hotelling's T-Squared	F	df1	df2	Sig
221.838	7.803	25	175	.000

4.2 Factor Analysis

Factor analysis with varimax rotation as an extraction was used to identify the factors. The Kaiser-Meyer-Olkin

Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity showed statistical significance at the .01 level. Following Hair's (1998) suggestion, the cutoff point of at least .60 was used for the factor loadings. The result indicated four factors with an eigenvalue greater than 1 (see Table 4). The entire explanation of all four factors was 67.82 percent.

The first factor, personal involvement in usefulness, consisted of eleven items with an eigenvalue of 8.612, which accounted for 33.12 percent of the total variance. The second factor, physical involvement in trust, included three items that accounted for 13.47 percent of the variance. The third factor, situational involvement (relationships), contained four items, contributing to 11.42 percent of the variance. The last factor, personal involvement (usage), consisted of two items, which contributed 9.81 percent to the total variance explained. Table 5 shows the results of the means and standard deviations for the factors and their items

Table 4. Factor analysis results

	F1	F2	F3	F4
1. Personal Involvement (Usefulness)				
1. Using SNS is entertaining.	.68			
2. I will use SNS if my family and relatives are using them.	.69			
3. SNS is a good way to keep in touch with friends.	.62			
4. It is interesting to check others' status and information through SNS.	.71			
5. SNS are a form of interaction with society, the community, and events.	.78			
6. SNS let me connect with my family, friends and relatives.	.77			
7. SNS are useful.	.80			
8. SNS are a way to express myself.	.71			
9. I enjoy chatting with people through SNS.	.79			
10. It is a trend to use SNS.	.83			
11. I will use SNS if my friends are using them.	.78			
2: Physical Involvement(Trust)				
1. I am willing to share personal information on SNS.		.61		
2. Using SNS is safe and secure.		.79		
3. People using SNS are trustworthy.		.62		
3: Situational Involvement (Relationships)				
1. I like face-to-face communication rather than using the Internet.			.74	
2. I prefer to show my personal information only to my friends.			.63	
3. I prefer to show my personal information only with to relatives.			.66	
4. SNS can harm relationships. (couples/friends)			.67	
4: Personal Involvement (Usage)				
1. I like sharing photos through SNS.				.68
2. I like sharing videos through SNS.				.66
Eigenvalues	8.16	3.50	2.96	2.55
% variance	33.12	13.47	11.42	9.81
Cumulative variance	33.12	46.59	58.01	67.83
Cronbach Alphas	.958	.960	.961	.959

Table 5. Means and standard deviations for the factors and items (n=200)

Factors	Mean	S.D.
Usefulness (Factor 1)-Independent Variables	3.46	.917(Cronbach's alpha = .96)
Using SNS is entertaining.	3.42	1.1
I will use SNS if my family and relatives are using them.	3.57	1.12
SNS is a good way to keep in touch with friends.	3.25	1.17
It is interesting to check others' status and information through SNS.	3.59	1.1
SNS are a form of interaction with society, the community, and events.	3.53	1.07
SNS lets me connect with my family, friends and relatives.	3.42	1.11
SNS are useful.	3.43	1.04
SNS are a way to express myself.	3.42	1.01
I enjoy chatting with people through SNS.	3.37	1.05
It is a trend to use SNS.	3.64	1.12
I will use SNS if my friends are using them.	3.51	1.08
Trust (Factor 2)	2.79	.90(Cronbach's alpha =.74)
I am willing to share personal information on SNS.	2.85	1.13
Using SNS is safe and secure.	2.66	1.1
People using SNS are trustworthy.	2.89	1.08
Relationship (Factor 3)	3.35	0.87
(Cronbach's alpha = .76)		
I like face-to-face communication rather than using the Internet.	3.31	1.12
I prefer to show my personal information only to my friends.	3.64	1.18
I prefer to show my personal information only to my relatives.	3.32	1.18
SNS can harm relationship. (couples/friends)	3.16	1.1
Usage (Factor 4)	3.22	1.09
(Cronbach's alpha = .79)		
I like sharing photos through SNS.	3.21	1.17
I like sharing videos through SNS.	3.16	1.15
tensity of Social Network Site Use (Dependent Variables)	3.31	.94 (Cronbach's alpha = .88)
I am proud to tell people I am on SNS.	2.96	1.02
Using SNS is part of my daily activity.	3.39	1.12
I will keep on using SNS.	3.54	1.14
I feel I am part of the SNS community.	3.35	1.11

Note: A value of "5" indicates "strongly agree," and a value of "1" indicates "strongly disagree" on Likert scales.

4.3 Correlation

Correlations were used to test the relationship between the dependent variable (intensity of SNS use) and the independent variables, which were the four factors. Pearson correlations showed that there were significant correlations between the intensity of SNS use and all of the four factors at the .01 level. Among the four factors, the findings show that personal involvement in usefulness, the first factor, had the strongest correlation (cor=.933) with the intensity of SNS use. The second strongest correlation (cor=.719) with the intensity of SNS use was personal involvement in usage, which was the fourth factor identified by the factor analysis. In summary, the intensity of SNS use had significant relationships with all types of involvement. Thus, the first hypothesis (H1) was supported. Table 6 shows the correlation results.

Table 6. Pearson correlations

	Intensity	Usefulness	Trust	Relationship	Useful
Intensity	1	.933**	.703**	.592**	.719**
Usefulness	.933**	1	.668**	.607**	.724**
Trust	.703**	.668**	1	.402**	.587**
Relationship	.592**	.607**	.402**	1	.519**
Usage	.719**	.724**	.587**	.519**	1

** Correlation is significant at the 0.01 level (2-tailed)

4.4 Regression Analysis

To test all of the hypotheses, regression analysis was performed. The criterion variable was the intensity of SNS use, and the predictive variables were all of the four factors: personal involvement in usefulness and usage, physical involvement in trust, and situation involvement in relationships.

An ANOVA indicated that the model as a whole (which included two variables) was significant (F=374.94, p < .01). The regression analysis showed that only two independent variables, usefulness and trust, were significant predictor variables with an R square of .885. The regression coefficient of the first independent variable, usefulness, was .803, and the coefficient for the second independent variable, trust, was .139.

In conclusion, the two hypotheses, H2a and H3, were supported. Personal involvement in usefulness and physical involvement (trust) influenced the intensity of SNS use. Two hypotheses, H2b and H4, were rejected. Personal involvement in usage and situational involvement in relationships were not significant predictor variables. Table 7 shows the results of the regression model. Table 8 summarizes the hypothesis testing.

Table 7. Regressions predicting the intensity of SNS use from personal involvement, physical involvement, and situational involvement

Independent Variables	Unstandardized Coefficient (Beta)	t	Sig.
(Constant)	-0.135	-1.327	0.186
Usefulness	0.803	18.59	0
Trust	0.139	3.987	0
Relationship	0.036	1.066	0.288
Usage	0.049	1.563	0.12
N = 200	R square = .885		
	Adj. R square = .883		

Dependent Variable: Intensity of SNS use

Table 8. Summary of hypothesis testing

Hypotheses	Results
H1: There were relationships between the intensity of SNS use and the types of involvement (personal, physical, and situation).	Supported
H2a: Personal involvement in usefulness positively Influences the intensity of SNS use.	Supported
H2b: Personal involvement in usage positively influences the intensity of SNS use.	Not supported
H3: Physical involvement in trust positively influences the intensity of SNS use.	Supported
H4: Situational involvement in relationships positively Influences the intensity of SNS use.	Not supported

5. Discussion

China has been the fastest-growing market for social network sites for the past few years and will continue to grow. Understanding the Chinese people's perceived usefulness of SNS use will provide insightful ideas about the behaviors of users and perceptions toward SNS in China. Social networking services have become one of the most frequently used services among Chinese Internet users, as they are developing their personal networks through social networking sites (SNS). The underlying adoption factors of users, based on the types of involvement and relationships between the intensity of SNS use, are explored in this paper. The empirical results demonstrate that the intensity of SNS use is significantly affected by the types of involvement. The relationships between personal, physical, situational involvement and intensity of SNS use were significantly correlated, but the regression results identified that only personal involvement in usefulness and physical involvement in trust were the influencing factors of the intensity of SNS use. The factor of personal involvement in usage shows an association with intensity of SNS use, but it was not statically significant in terms of explaining the factors contributing to the intensity of SNS use in China. Even though sharing photos and videos are represented as good usage reasoning for SNS, such activities do not significantly influence intensity. Physical involvement in trust ("Information shared on SNS is reliable"; "I am willing to share personal information on SNS"; "Using SNS is safe and secure"; and, "People using SNS are trustworthy") is an important factor to explain the intensity of SNS use, but the results show that users in general do not think that social network sites are reliable or trustworthy. From the results, users do not strongly trust information sharing on SNS and do not think that SNS are safe and secure. Nevertheless, users are willing to use social networks sites because of their usefulness. It is quite interesting to find a relationship between the intensity of SNS use and trust. Also, the situational involvement factor of relationship did not significantly influence intensity. Users prefer to show their own personal information only to friends, and relatives, thereby explaining why users prefer face-to-face communication to using the Internet. Users also think that SNS can harm relationships with couples and friends. If users do not have strong connections with friends and relatives through SNS, it possibly may decrease their intensity of SNS use.

Overall, the results suggest that personal involvement in SNS usefulness and physical involvement in trust are the most important factors to explain the intensity of SNS use among young Chinese people. Even though trust in SNS is not strongly shown in this research, Chinese users tend to feel that their inherent interests and values, which are reflected in SNS, motivate them to keep on using SNS. Identifying with others and gaining a sense of enjoyment, social interaction, connecting with family, friends, and society, and gaining insight into the circumstances of others are all reasons that can motivate people to use SNS (Valenzuela, Park & KEE, 2009). This study extends the previous literature about the relationship between adoption factors by using types of involvement and intensity of SNS use to explain the adoption behavior of Chinese people. Understanding the most vibrant market segment in China will lead to more international SNS enterprises that will be able to gain more access to the Chinese market. For the limitations of this research, the study mainly uses university students, who are a homogenous group; thus, the findings of this study may not be generalizable to the Chinese population as a whole.

For future research, conducting surveys from other cities in China will help us have a better understanding of Chinese social network site users' behaviors. Such comparison studies in Beijing, Shanghai and Guangzhou would be interesting, since the top three cities with most users compare to other areas in China (Yanqiu, 2011). And, the meanings of social network sites are relatively broad, since China's social networking landscape is much more diverse in users and purposes; therefore, investigating diverse social network sites or comparing different types of SNS may offer a better understanding of Chinese users.

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Appendix

Appendix 1. China's top 15 social networks

China's Top 15 Social Networks

		Type	User Demographics	Active Users (millions)	Reg. Users (millions)	Alexa CN Rank
1	Qzone (Tencent)	Nickname SNS	Teens	190 [2]	481 [3]	#12 (Qzone only est.)
2	RenRen	Real-name SNS	Students, white-collars	95 [1]	170 [1]	#16
3	Pengyou	Real-name SNS	Students, white-collars	80 [2]	131 [3]	#36
4	Sina Weibo	Microblog	White-collars	65	120	-
5	Kaixin001	Real-name SNS	White-collars	40 [1]	95	#19
6	51.com	Real-name SNS	Lesser-tier cities, rural users	40	178	#51
7	Douban	Nickname SNS	Urban youth	20	40	#22
8	Taomee (Seer, Mole, etc.)	Children's SNS / Games	Children, mothers	20 [2]	180	-
9	Tencent Weibo	Microblog	Lesser-tier cities	20 [2]	100	-
10	Jiayuan	Dating SNS	White-collars	11 [2]	30	#43
11	Tao Jianghu (Taobao)	E-commerce SNS	All	10 [2]	1200 (all Taobao)	-
12	Bai Shehui (Sohu)	Real-name SNS	White-collars	5 [2]	30	-
13	Zhenai	Dating SNS	White-collars	3 [2]	26	#370
14	Baihe	Dating SNS	White-collars	2 [2]	23	#412
15	iPartment	Avatar / dating SNS	Urban youth	1 [2]	20	#514
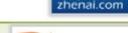
1 - iResearch iUserTracker   2 - TechRice Estimate (via reports, traffic, experts, and guesswork)
3 – Tencent claims these as "actives", but TechRice believes this is closer to registered users
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