

Determinants Affecting Intention to Campus SNS in China

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Abstract

Social networking service (SNS), which is based on the “six degree separation” theory, has gained its popularity in recent years. SNS creates a new way for maintaining relationship and sharing information over the virtual space. As a major branch, campus SNS provides a new platform for student to study as well as build and maintain inter-personal relationships. The highly realness of personal information and relatively strong group cohesion of campus SNS has turned it into an inevitable tool in students’ daily life. The rapid growth of SNS in campus is creating huge academic and commercial benefits. However, little comprehensive research reveals what are determinant factors in driving students’ intention to participate in campus SNS. In this paper, we conceptualize the participation of campus SNS as a social behavior and evaluate the impact made by social factors such as subjective norms and identity, as well as the impact of perceived reality and playfulness through an extended technology acceptance model.

1. Introduction

Social networking service (SNS for abbreviation, also called Social Networking Site), which is based on the “six degree separation” theory, has gained its popularity in recent years. SNS creates a new way for maintaining relationship and sharing information over the virtual space. [1] Speaking from the essence, SNS is a sort of online community that mainly focuses on building and maintaining relationships as well as sharing information and interests. Different with other kinds of SNS and even traditional online communities, campus SNS has its own characteristics. The following table1 shows a detailed comparison between campus SNS and traditional online communities.

	Traditional online communities	Campus SNS
Main users	Various kind of users	Specially designed for students and alumnus
Main Usage	Present oneself, discuss some topics	Maintain relationships, share information
Realness	Low level of realness – nicknames	High level of realness – real names and photos
Relationships	Only online and virtual relationships	Online relationship and offline relationships
Information sharing	Low degree of sharing	High degree of sharing
Membership	Weak membership	Strong membership

Table 1. Differences between traditional online communities and campus SNS

The growth of campus SNS is explosive. From Sep, 2007 to Sep, 2008, registered users of main campus SNS websites in US gained 70% growth and exceed growths of other kinds of SNS such as MySpace and MSN Live Space [2]. As the largest campus SNS of China, XiaoNei.com [3] grows from nothing to 40 million registered users and covers most universities in China within short 3 years. [4] The prosperity of SNS in campus leads to growing commercial and academic interests that aim to provide better service and achieve further success. And how to attract more students to participated in campus SNS will be a key to promote the development of campus SNS. Naturally, there rises a question: why students want to use campus SNS? What drive their intentions to accept it?

The rapid growth of SNS in campus has caught many researchers’ attention by reason of the huge commercial and academic benefits underlying it. Since the emergency of SNS, researchers had looked into this area from various viewpoints, such as the demographic statistic in campus SNS, [5] the graph structure, [6] the importance of information revelation and privacy issue, [7] etc. However, few researches concerned on student’s

acceptance behavior and factors that can drive their intention to use SNS are still unclear. A recent research was carried out trying to explain people's intention of using Facebook as their online communication tool. [8] Nevertheless, this research only revealed the importance of social influences in affecting people's intention to participate in Facebook, but didn't formulate an acceptance model to assess other influencers such as perceived usefulness, perceived ease of use, etc. Some recent researches in China [9, 10, 11] argued about the realness issue in campus SNS and they revealed the importance of it in the special culture atmosphere. Whether this realness issue is a determinant in affecting people's intention to accept campus SNS should be further demonstrated.

The purpose of this research is to use an extended TAM model to explain students' acceptance behavior towards campus SNS and to reveal the determinant factor that drives students' intention to participate in campus SNS. Considering the characteristics of campus SNS, three factors related to social influence (social identity, group norm, subjective norm) and two factors related to students' perception to campus SNS (perceived reality, perceived playfulness) will be added into the original TAM model. By combining these factors, their effects on students' perception of usefulness, ease of use and behavior intention will be examined.

2. Research Model

A review of related researches is listed in this chapter, and the extended TAM model is also proposed with hypotheses listed and explained.

2.1 TAM

TAM, which was firstly proposed by Davis [12], has been widely used in IT fields to predict users' acceptance toward new information technologies. It posits that individual's intention to accept a particular information technology is affected by two rational perceptions: perceived usefulness (PU) and perceived ease of use (PEOU). PU is defined as "the extent to which one

believes that his/her job performance is enhanced by using a particular information technology". PEOU is defined as "the extent to which one believes that using a particular information technology is free of effort". PU was considered and had been confirmed to be a strong influential factor in affecting individual's intention to accept a particular IT product. TAM also posits that PEOU has significant impact on PU, and influences intention through one's attitude towards this information technology.

Based on these understandings, we made the following hypotheses:

H1: PEOU has a direct and positive effect on student's intention to use campus SNS;

H2: PU has a direct and positive effect on student's intention to use campus SNS;

H3: PEOU has a direct and positive effect on PU.

2.2 Social influence

Subjective norm is defined as "a person's perception that most people who are important to him think he should or should not perform the behavior in question". [13] People's behavior will be somewhat influenced by others recommendations, especially when these recommendations are made by the person who is important (boss, expert, best friends, professors, etc.) In the context of campus SNS, it means the influences made by those campus SNS users who are important to a person. Those influences are mainly recommendations or prescriptions that consider this person should use campus SNS to maintain relationships. As a result, two hypotheses are proposed:

H4a: Subjective norm is assumed to significantly influence people's intention to accept campus SNS.

H4b: Subjective norm is assumed to significantly influence people's perceived usefulness towards campus SNS.

Social identity, another social influence, in this research is defined as a self awareness of one's existence in his group, as well as other emotional significances such as one's value, position, membership, etc. [14] These emotional

significances are important to a person and as a result, when he sees others are using campus SNS to maintain relationships, he will adopt the same behavior, in order to be blended into his group but not to be excluded. And this behavior intention will be stronger if he perceived himself as an important, valuable person in his group; or the group membership is cohesive; or in other condition, the feeling of belongingness to his group is strong.

H5a: Social identity is assumed to significantly influence people’s intention to accept campus SNS.

H5b: Social identity is assumed to significantly influence people’s perceived usefulness towards campus SNS.

Group norm is another sort of social influence that can affect people’s behavior intention. People will make a decision to do something based on the similarity of one’s values or goals with the values or goals of other group members. [15] In this research, it is defined as a kind of influence made by group members’ common behavior norm, which is an understanding of the consistency between a person’s own goal and other groups members’ common goals when using campus SNS. If this consistency is high, this person will be tendentious to use campus SNS in order to keep concord with other group members. So, two hypotheses are:

H6a: Group norm is assumed to significantly influence people’s intention to accept campus SNS.

H6b: Group norm is assumed to significantly influence people’s perceived usefulness towards campus SNS.

2.3 The realness in campus SNS

Perceived reality was defined as “The extent to which a medium approximates reality, and it affects the extent of media interaction.” [16] In the context of campus SNS, the definition of perceived reality is “the perception to the realness of personal information and inter-personal relationships in campus SNS.” This realness on campus SNS is measured by evaluating the information relevance between virtual online world and from the real offline world. If a person perceives the online relationships on campus SNS is highly related to offline relationships, he will feel the campus SNS is no longer a totally virtual

communities, but a real social communities that are “moved” to online world. Consequently, he will use campus SNS when he wants to maintain his relationships with other group members.

H7a: Perceived reality significantly influence people’s intention to use campus SNS.

H7b: Perceived reality significantly influence perceived usefulness towards campus SNS.

2.4. Perceived Playfulness

Perceived playfulness was widely used in computer field and internet field. [17] In this research, it is defined as “The extent to which the individual perceives that his or her attention is focused on the interaction with the campus SNS: is curious during the interaction; and finds the interaction intrinsically enjoyable or interesting.” It is one’s perception of enjoyment, playfulness and attractiveness when using campus SNS. In campus SNS, there are many additional interesting functions that can attractive people and assistance people to maintain relationship. When one feeling the using of campus SNS is enjoyable and attractive, and rises his curiosity as well as exploration, his perception of playfulness will be high. Based on these considerations, two hypotheses are:

H8a: Perceived playfulness is significantly influence people’s intention to accept campus SNS.

H8b: Perceived playfulness is significantly influence people’s perception of ease of use towards campus SNS.

In all, research model of this paper is showed as Fig. 2.

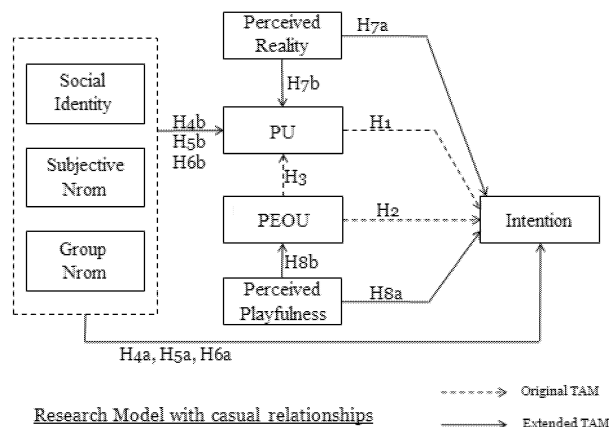


Fig 2. Research Model

3. Research Method

Since this research is an empirical study, a questionnaire survey will be made and the target will be current campus SNS users. All items on questionnaire are referred to previous studies and the reliability of this questionnaire has been confirmed through a pilot test, in which 30 campus SNS users were involved. After this initial phase is finished, a formal online survey will be carried through and all participators are campus SNS users with the identity of students and graduated students. Then, data collected from this survey will be filtered and valid data will be used for further analysis to test mode and hypotheses by using structured equation modeling. SPSS and AMOS are used in analysis procedure. After a month's online survey a total number of 387 responses were collected and 365 valid ones were kept. And other 51 invalid ones were excluded.

4. Result

Once this research model is verified and proved to be reliable, an equation model was built in AMOS to test hypotheses using linear regression weight. The result of this test is shown in table 5. From this table we can see that, Social identity has the strongest effect on people's intentions to use campus SNS. And Subjective norm is in the second place. Perceived Reality also has significant effect on people's intentions. The direct effect of perceived playfulness on intention is not significant. However, through PEOU, it can influence people's intention. The effect of group norm on PU is not significant.

			Estimate	S.E.	C.R.	P
PP	→	PEOU	0.521	0.065	8.038	***
SI	→	PU	0.248	0.078	3.195	**
GN	→X	PU	0.095	0.06	1.567	0.117
PR	→	PU	0.208	0.071	2.911	**
PEOU	→	PU	0.289	0.064	4.486	***
SN	→	PU	0.17	0.086	1.975	*

PEOU	→	BI	0.185	0.073	2.541	*
PU	→	BI	0.172	0.076	2.268	*
SI	→	BI	0.228	0.091	2.516	*
SN	→	BI	0.214	0.089	2.411	*
GN	→	BI	0.125	0.059	2.116	*
PR	→	BI	0.156	0.075	2.087	*
PP	→X	BI	0.049	0.106	0.465	0.642

Table 5: Hypotheses test result (*: 0.05; **: 0.01; ***: 0.001)

5. Conclusion

The result of this empirical study confirmed the availability of TAM in campus SNS and a new acceptance for this field was developed. Moreover, there are some interesting findings.

Firstly, the use of campus SNS is a social activity that involves lots of people. As a result, participation in campus SNS is a group behavior that is quite different with the individual behavior. In relation to this point, the effects made by social influence is significant in determining people's intention to accept campus SNS. In the context of campus SNS, recommendations made by others may have a very strong impact on student's behavior intention. And this impact is especially strong in East Asian's collective culture. Some western researches concerned on mass SNS such as Facebook [8] found the weak influence made by subjective norm. And most of them consider this result was caused by the voluntary environment. [13, 18] However, the powerful inter-personal relationships may be another reason. Even if in voluntary environment, people will consider others' recommendation seriously when they are closely related to others.

Moreover, as a sort of social influence, some previous researches confirmed social identity's notable impact on people's intention and perceived usefulness towards using a technology in many other fields, but some did not. In a study of Facebook [8], social identity was tested as a non-significant influence upon people's intention to use Facebook. Authors thought this might be caused by the number of groups people attended – people on Facebook always join too many groups. However, people in campus SNS do not have so much groups, since they are normally grouped by study

experiences. And when a person sees other group members are using campus SNS to maintain relationships, he will adopt the same behavior, in order to be blended into his group but not to be excluded. And this behavior intention will be stronger if he perceived himself as an important, valuable person in his group; or the group membership is cohesive; or in other condition, the feeling of belongingness to his group is strong.

Group norm, in another side, don't related too much on people's perception towards the usefulness of campus SNS. This may be caused by diverse usage of campus SNS. Even though most people (2/3) treat campus SNS as a tool for maintaining relationships, there are quite a number of people use campus SNS as a place for fun and presenting oneself. Therefore, these diverse usage of campus SNS leads people's definitions towards useful are not the same. And perhaps this is also the reason why the effect of group norm is less than other social factors.

Perceived reality is also another significant factor that can drive people's intention to use campus SNS. Relationships in campus SNS are not completely virtual, but related to real world closely, such as with previous classmates. The more personal information is real, the more reliable of the relationships. The main usage of campus SNS is to maintain inter-personal relationships from the real world. As a result, people are more willing to accept campus SNS when the relationships are real and reliable. Moreover, people's goal of using campus SNS is to maintain relationship from the real world. As a result, a basic requirement is that personal information should be true. The more truthfulness of personal information, the more realistic relationships one will perceive, and the more useful of campus SNS he will consider, since campus SNS can really help him to maintain relationships from the real world.

However, this research also has some limitations. Firstly, the research only targeted Chinese users. And the research result many not be generalized to other territories. Chinese culture is much different with

western cultures. Because Chinese culture is a collective culture, in which social factors are important to people's life. However, western culture is individualism in which social factor may not so significant. Secondly, the factor loading of social identity indicated that this factor needs to be further considered. This element contains three components and they should better be considered separately.

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