

How Anonymity Influence Self-disclosure Tendency on Sina Weibo: An Empirical Study

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ABSTRACT The rapid development of the Internet leads to an increase in the variety and function of web applications. As a result, the relations between network anonymity and users' tendency to self-disclose become more complicated. On the basis of Sina Weibo, this paper explores the relations between network anonymity, risk perception and self-disclosure tendency. The present paper suggests two kinds of network anonymity, one is technical anonymity measured by objective personal information disclosed on Internet; the other is perceived anonymity shown in the subjective perception of agent's anonymity. Four major findings are, namely, firstly, people tend to disclose positive information about themselves on SinaWeibo; secondly, two kinds of network anonymity are related with each other. Specifically, network technical anonymity positively affects perceived anonymity; thirdly, on SinaWeibo, the network technical anonymity has no significant influence on agent's risk perception, while network perceived anonymity has negative influence on it; fourthly, network technical anonymity has negative influence on self-disclosure tendency, while perceived anonymity has positive influence on self-disclosure tendency.

INTRODUCTION

Gone is the era where "Nobody knows you are a dog on Internet."

SNS serves as a platform for people to show themselves, maintain interpersonal relations (Lee 2014) and communicate with others. Facebook and Twitter are the most widely used social networking applications throughout the world, but in China, Sina Weibo, a SNS that combines the function of Twitter and Facebook, is the most popular one (Guan et al. 2014). By the year end of 2015, the number of users of Sina Weibo has reached 2.22 million.

On Sina Weibo, people can obtain information, update life status, share ideas, record the mood, show their life, and interact with others (Gu 2014). According to the requirements stated by the Internet management agency of Chinese government, users of Sina Weibo, need to register their identity with real authentication information; that is to say, the true identity of users should be recorded by service provider of Sina

Weibo. But in the foreground of the platform, users can manage their profile and decide whether to use their real name or nick name on the network (Sullivan 2014). Sina Weibo becomes a typology of forms and potentials of online public spheres in China (Rauchfleisch and Schäfer 2015). In order to improve the reliability of the users who use real name, Sina Weibo provides a VIP service, called "verified users", which puts a mark of "V" after the user's name, representing the user's real identity has been verified.

Self-disclosure refers to people's behavior of expressing their thoughts, ideas and emotions with others (Wheless and Grotz 1976). As a basic social behavior, it plays a significant role in self-development, as well as in building up and maintaining interpersonal relations. The popularization of the Internet has been accompanied by research into net users' self-disclosure on the network that has attracted scholars from various fields (Qian 2007; Hollenbaugh and Ferris 2014; Al-Saggaf and Nielsen 2014; Utz 2015; Kwak et al. 2014; Meixian 2015).

Communication in anonymity was seen as one of the important features of the Internet culture. Compared with the real world, people tend to express their true feelings and thoughts online. It is commonly believed that this tendency

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is due to the different communicative and interactive pattern between the online and the real society (Yin 2015). Compared with face-to-face communication, computer-mediated communication encourages people to disclose thoughts (Min and Kim 2015; Varnali and Toker 2015). On the Internet, everyone can vent their feelings in public. Under this circumstance, self-disclosure is further encouraged (Christopherson 2007). This argument is supported by other relative studies that find one tends to express more of their own thoughts and feelings when the conversation partner cannot identify his or her identity (Joinson et al. 2004).

The effect of network anonymity on user's self-disclosure tendency should be explored further and systematically based on different network applications, platforms, and communication tools. For this purpose, the present paper aims at promoting progress in this area.

The present paper based on the Sina Weibo, aims at exploring the impact of network anonymity on self-disclosure tendency of its users. It has two research questions. First, in the case of Sina Weibo, does less anonymity leads to more self-disclosure? Secondly, does risk perception affect the relationship between anonymity and self-disclosure? The significance of the present research lies in the following aspects.

First of all, it breaks the binary logic which states that the identity of a user is either anonymous or not. The present paper believes that the degree of anonymity on the network can be evaluated through the difficulty of identifying a user. According to Marx (1999), one's real identity will be somewhat revealed; therefore, people can utilize the personal information available for identification to judge how anonymous a user is. Based on this, anonymity on the net can be transformed into measurable variables diverse in degree. This idea serves as the foundation for studies into the relationship between degree of anonymity and other factors.

Secondly, the present paper has divided the network anonymity into two different variables, one is network technical anonymity and the other is network perceived anonymity. Network technical anonymity refers to anonymity measured by the personal information disclosed on the Internet, which is the objective existence of anonymity in Internet. Network perceived anonymity refers to the psychological perception of anonymous of identity on the Internet.

Thirdly, this paper presents an empirical examination of how network anonymity influences self-disclosure on Sina Weibo, finding that the network technical anonymity does not promote self-disclosure tendency, but will tend to suppress the self-disclosure tendency on Sina Weibo. However, in terms of how network perceived anonymity affects self-disclosure, the influence is positive. It tells us that, in an era when the Internet is closely related to the real world, the functions of the net have gone through many great changes without us even noticing. Nowadays, most of the friends one has on SNS are maybe those who know that person in the real world (Frampton and Child 2013). Therefore, the way anonymity influences self-disclosure is becoming more and more complex due to different communication channels, intentions and partners.

Research Model

Self-disclosure Tendency

On Sina Weibo, people build their online micro blog pages to show themselves. There are many social elites and opinion leaders using their true identity. They disclose personal thoughts and opinions to guide public opinion, shape personal image, and interact with fans.

Self-disclosure refers to the process of communication through which people express their personal ideas, feelings and thoughts to others. Self-disclosure, as a personal will or ability is of great significance in building up and maintaining interpersonal relations on net (Hollenbaug and Ferris 2014). Self-disclosure also plays an important role in people's social networks. It can help people to build trust and intimacy, and create personal image (Utz 2015).

Self-disclosure can be classified into positive and negative disclosure. Positive self-disclosure mainly reveals one's positive information, whereas the negative self-disclosure discloses information one is trying to conceal or is unwilling to reveal, because once it is revealed, the user's reputation would be affected. More positive self-disclosure adds attraction to a person, which is especially beneficial for the first stages of acquaintance.

Disclosing oneself on the Internet is less likely to be rejected and opposed, thus leading to more self-disclosure. SNS such as blogs and micro blogs have become important platforms for peo-

ple to document their lives (Qiu et al. 2015). Self-disclosure on SNS raises users' degree of satisfaction, facilitates communication and helps maintain interpersonal relationships (Nosko et al. 2010). The present paper aims at exploring the influence of network anonymity on self-disclosure tendency.

Sina Weibo is also a context where people can show themselves and interact with others. This platform is helpful in building an ideal personal image (Nadkarnia and Hofmann 2012). In light of this argument, it is reasonable to assume that people choose to reveal their positive information on Sina Weibo.

Hypothesis 1: Positive self-disclosure appears more than negative self-disclosure on Sina Weibo.

Technical Anonymity and Perceived Anonymity

Anonymity typically refers to the state of an individual's personal identity being publicly unknown. Remaining anonymous has long been a hot issue because of its influence on social interaction (Qian 2007), and when papering interaction on the Internet, anonymity should be taken into account (Etzioni and Etzioni 1999). Incomplete personally identifiable information makes people realize they are anonymous (Qian 2007). Contrary to network anonymity is the real-name system, where people are identified by their real identity (Chen and He 2015). However, there are not only two states of anonymity, but various degrees of anonymity. Users usually tend to leave some information, serving as clues to their identity (Marx 1999), though the amount of information varies from person to person. Therefore, cognitively, the degree of anonymity can be equal to difficulties in tracking and gaining identifiable information – or how little information there is.

There are two types of anonymity, they are, technical anonymity and social anonymity (Marx 1999). Technical anonymity refers to deleting others' identifiable information, such as name, during interchanges of material; so that the other's real identity is concealed. On the Internet, network technical anonymity refers to the difficulty in tracking the true identity of the agent based on information he or she left on the Internet. Therefore, network technical anonymity is the objective existence of anonymity based on

the information available on the network. Social anonymity refers to the state of one being unknown or unable to be identified in social interaction, mainly due to a lack of identifiable information; in other words, a person's real identity will not be totally concealed to all, but only to certain people. The present paper, psychological perception of network anonymity is defined as perceived anonymity in online social activities. Technical anonymity shows a lack of identifiable information, while perceived anonymity demonstrates how people perceive their own degree of anonymity. Being aware of their differences, the researchers regard them as two different variables.

Hypothesis 2: Network technical anonymity has a positive impact on network perceived anonymity.

This paper is based on Sina Weibo. People use Sina Weibo to maintain their friendships, express themselves, and record personal lives. Users and their followers know each other's real identity in the real world. In order to build up personal images, user's need, to some degree, to disclose their identity to their followers. In addition, users may reduce the degree of technical anonymity, because disclosing their real identity betters their self-expression. Thus, technical anonymity hinders one's tendency to express them. On the other hand, the researchers believe that the relation between perceptive anonymity and self-express is very complex for two reasons. Firstly, it is difficult to define one's real identity. Everyone has many social identities. Even if the user is identified, his or her entire social identities will not be disclosed at once. Therefore, the user still perceives themselves as anonymous online. Secondly, even though users show their real identity on Sina Weibo, the image on the Internet is different from the real self in the real life. It is the perception of anonymity on the Internet that provides chances to build a more ideal image. Consequently, the researchers assume that when controlling the influence of technical anonymity, perceived anonymity will positively affect the tendency of self-disclosure.

Hypothesis 3: On Sina Weibo, network technical anonymity has a negative influence on self-disclosure tendency.

Hypothesis 4: On Sina Weibo, network perceived anonymity has a positive influence on self-disclosure tendency.

Intermediary Variable: Risk Perception

Users' behavior is affected by the context and one's own characteristics. Studies analyzing human behavior should take one's bounded rationality and contextual uncertainty into account (Heiner 1982). In a context with higher perceived risks, one's behavior would be more conserved. Similarly, in uncertain circumstances, a person with bounded rationality tends to reveal less personal information. Both uncertainty and bounded rationality determine the agent's risk perception; that is, the Weibo users are concerned about what the risks will be if they reveal personal information. There are three types of risk perception related to self-disclosure. The first type is social risk; this means that revealing personal information will exert a negative influence on one's social relations and personal image; consequently, it may affect one's social life (Crespo et al. 2009). The second is physical and mental risk; this means that self-disclosure brings a sense of uncertainty and worry to a person, and thereby troubles that person physically and mentally (Zlatolas 2015). The third type is safe and security risk, referring to the risk that brings about by certain personal information which, if revealed, would violate one's privacy, or which criminals could make use of to threaten one's safety. As a consequence, it is believed that risk perception is a key factor that affects self-disclosure; the more one perceives risks, the less information he or she discloses.

Hypothesis 5: Risk perception will negatively influence self-disclosure tendency.

Disclosing personal information on the Internet involves some risks, for example, the violation of privacy or the abuse of personal information. The circumstances, contexts and objects are all significant for one's risk perception.

Social penetration theory (SPT) believes that self-disclosure is a form of social exchange. As social relations develop, social exchange goes deeper and wider (Altman 1981). SPT discusses how self-disclosure is reciprocal, and how the information revealed and tendency to reveal it is also reciprocal. According to SPT, self-disclosure is reciprocal, especially for regular users of SNS, which has become a key platform to build up and maintain users' social relations (Lee 2014). Users of micro blogs and other SNS tend to build an ideal image (Min and Kim 2015); revealing a certain amount of identifiable information will

increase the perceived risks, while knowing the identity is unknown will decrease the perceived risks.

Hypothesis 6: On Sina Weibo, network technical anonymity negatively influences risk perception.

Hypothesis 7: On Sina Weibo, network perceived anonymity positively influences risk perception.

Hypothesis 8: Risk perception has mediating effect between network technical anonymity and self-disclosure tendency.

Hypothesis 9: Risk perception has mediating effect between network perceived anonymity and self-disclosure tendency.

METHODOLOGY

First, the researchers describe the process we went through to develop our research instrument. Then, the researchers discuss the instrument's reliability and validation. Finally, the researchers report the hypothesis testing results.

Instrument Development

The anonymity has different degrees. Therefore, the researchers hold that "real-name" and "anonymous" are not the only two states of Internet users' identities. For most users, they do not solely use their real names on the Internet, nor are they completely anonymous. Whether a user is "real-name" or "anonymous" is decided by the cost of obtaining the user's real-life social identity; the higher the cost, the higher the degree of anonymity; conversely, the lower the cost, the higher the degree of someone using their real name. The researchers think that measuring the degree of anonymity can be conducted by referring to the difficulty of tracing the indicators. These assessment indicators are from identification factors of social identity proposed by Marx (1999).

The measurement used for risk perception and self-disclosure tendency is taken from previous studies. For translated works, back translation is used to ensure the translation's correctness. The testing item "risk perception" is from the research of Crespo et al. (2009). For the measurement of self-disclosure tendency, the researchers use the corresponding testing item in the questionnaire designed by Wheelless and Grotz (1976) for the measurement of self-disclo-

sure. In addition, the item for testing the positive or negative tendency of self-disclosure is also taken from the same questionnaire. The final questionnaire of this research is put in Appendix A. This questionnaire uses the five-point scale, in which 1 represents “totally disagree” and 5 represents “totally agree”. Network technical anonymity is evaluated by reverse scoring, in which 1 represents “totally agree”, 5 represents “totally disagree”.

At the design stage, the researchers discussed the rationality of the questions in this questionnaire several times with more than 20 Internet researchers and users of Sina Weibo, so as to make this questionnaire clear and easy to understand. Before formally using this questionnaire to carry out our research, the researchers had to get some sample questionnaires (with answers) in order to conduct a preliminary research and further improve the questionnaire based on the results of our preliminary research. Finally, the researchers designed the formal scale. To ensure the quality of the questionnaires when completed with answers, the researchers designed two questions in converse logic concerning the same issue. If the answers obviously go against the converse logic, the questionnaire will be seen as invalid.

Data Collection

The present paper employed an online survey on a network platform for the acquisition of data from Sina Weibo users. The questionnaire was developed on the biggest electronic questionnaire survey center of China, www.sojump.com, which provides professional third party survey service. The present paper employed the professional questionnaire collection services provided by the platform, which obtained all kinds of users’ data in a large scale. The researchers sent the questionnaires to specific users via email, invited them to fill in the questionnaire, and screened effective questionnaire according to specific criteria.

The researchers finally received 428 effective questionnaires. In the sample, women account for 61.45 percent and men account for 38.55 percent. Besides, the majority of the sample group is young people under 34 years old, and the age distribution of the sample is in accordance with that of the Sina Weibo users. Most interviewees have received a high level of education and have used the Internet for more than five years. Interviewees who have used the Sina Weibo for less than one year account for 3.74 percent of the whole sample. Most of the interviewees have used Sina Weibo for more than two years, which basically indicates that the interviewees are those who are familiar with Sina Weibo. In general, most of the interviewees use microblogs frequently, and those who choose “rarely use my microblog” only account for 5 percent.

RESULTS AND DISCUSSION

This research uses the Amos20 and SPSS 16 software to test the validity and reliability of the sample, to conduct the confirmatory factor analysis and to build the structural equation model. In addition, it uses kurtosis and skew tests to examine the normal distribution of the sample. The results of skew and kurtosis tests both approach zero, thus the data accords with the normal distribution of the single variable (Hopkins and Weeks 1990). On the whole, the data of the sample basically conforms to the hypothesis of normal distribution. Thus, the data is suitable for further statistical treatment and statistical analysis.

Positive and Negative Self-disclosure on Weibo

T-tests of the significance of the mean value difference are used to examine differences between the sample’s positive self-disclosure and negative self-disclosure, as shown in Table 1.

The absolute values of skewness of the two measuring factors are less than 1, and they meet

Table 1: Positive–negative self-disclosure tendency on SinaWeibo

<i>Questions</i>	<i>Mean value</i>	<i>Standard deviation</i>	<i>t-test</i>	<i>Correlation coefficient</i>
<i>Negative Self-disclosure Tendency</i>	2.24	1.09	t=-26.78***	r=-0.318***
<i>Positive Self-disclosure Tendency</i>	4.11	.651		

***p<0.001

the requirement of the t-test, namely the normal distribution of data. The negative self-disclosure tendency appears in the left-skewed distribution, while the positive self-disclosure tendency appears in the right-skewed distribution. The mean value of the data of the negative self-disclosure tendency is 2.24. That of the positive self-disclosure tendency is 4.11, which is remarkably higher than the mean value of the negative self-disclosure tendency. It is obvious that the difference between users' positive and negative self-disclosure on the micro blog is significant, and users tend to self-disclose positively more than they do negatively. Therefore, hypothesis H1 is supported.

Analysis of Reliability and Validity

In academia, the value of the coefficient of internal consistency – Cronbach's alpha – is widely used to test the reliability of data. The judging criteria of reliability put forward by Cronbach in 1951 are as follows: "a<0.35" represents low reliability; "0.35<a<0.7" represents medium reliability; and "a>0.7" represents high reliability. If the values of Cronbach's alpha for all factors are higher than 0.7, it means that the data and scale of this research are of high reliability. Meanwhile, this research's models and hypotheses are based on previous researches and studies. Therefore, testing of this model's reliability is conducted by using a confirmatory factor analysis method.

Related testing items, including the standardized load, the average variance extraction

(AVE) and the value of composite reliability (CR), are put in Table 2. All the CR values are greater than 0.7, which indicates that the scale is of high composite reliability. The AVE of all the variables (except the technical anonymity) are greater than 0.5, indicating that the scale is of good convergent validity (despite the AVE value of the technical anonymity is 0.486, it is still acceptable). On the whole, the scale and the data are of good convergent validity.

The correlation coefficient and the mean square root of the AVE of those variables are listed in the following Table 3. The square root of the AVE values of those variables are greater than the correlation coefficient values; this means that the scale is of good discriminated validity.

Table 3: Correlation matrix and square roots of AVEs

	TA	PA	RS	SD
TA	0.486			
PA	0.484	0.654		
RS	0.181	0.212	0.608	
SD	0.466	0.206	0.221	0.548

If the KMO value of Bartlett's test of sphericity of the data is 0.841, and is at a remarkable level of $p < 0.001$, the data is suitable for factorial analysis. Since the data is collected through users' self-statements, it is necessary to test the common method bias. Therefore, the researchers adopt Hannan's single factor testing method. The researchers put all the questions in this

Table 2: Results of reliability and validity analysis

Factors	Items	Standard loading	Cronbach's alpha	Average Variance Extraction (AVE)	Composite Reliability (CR)
Technical Anonymity (TA)	TA_1	0.756	0.755	0.486	0.824
	TA_2	0.692			
	TA_3	0.602			
	TA_4	0.697			
	TA_5	0.728			
Perceived Anonymity (PA)	PA_1	0.832	0.848	0.654	0.850
	PA_2	0.865			
	PA_3	0.723			
Risk Perception (RS)	RS_1	0.65	0.845	0.608	0.885
	RS_2	0.822			
	RS_3	0.757			
	RS_4	0.825			
	RS_5	0.83			
Self-disclosure (SD)	SD_1	0.608	0.746	0.548	0.746
	SD_2	0.79			
	SD_3	0.806			

questionnaire for factorial analysis and determined the first principal component before revolving it to see whether it explains the majority of variances. If a single factor explains more than fifty percent of the variances, then a common method bias exists (Podsakoff et al. 2003). Among the four common factors which are gained from the factorial analysis and whose Eigen values are greater than 1, the factor with the greatest Eigen value can explain 28.9 percent of the variances. This proportion is within the acceptable scope; this means the common method bias is not significant.

Model Testing

The researchers tested our research model, and summarized the results using the AMOS20 coefficient, as shown in Figure 1.

The goodness of fit indicator of structural equation RMSEA is less than 0.08. Meanwhile, NFI, NNFI, CFI and GFI are all greater than 0.90, as Table 4. The t value is distinctive among the variances. The structural equation model has a high fitting degree; thus the model proposed is valid and indicates a good fit between the theoretical model and the data.

The standardized path coefficient are significant except the effect between network technical anonymity and the risk perception, and the

Table 4: Model fit indices and their acceptable ranges

Fit indices	Values	Acceptable threshold
χ^2/df	207.046/96=2.157	<3
RMSEA	0.052	<0.08
NFI	0.931	>0.90
NNFI	0.952	>0.90
CFI	0.961	>0.90
GFI	0.942	>0.90

effect between risk perception and self-disclosure tendency.

Test of Hypotheses

In this research, on Sina Weibo, positive self-disclosure of users appears more than negative self-disclosure ($t=26.78, P<0.01$), which verifies hypothesis H1. The network technical anonymity has a significant and positive influence on network perceived anonymity of Sina Weibo users. Network technical anonymity explains 23.5 percent of the variances in network perceived anonymity, and its standardized path coefficient is 0.63. Also, the value of p is less than 0.01, which verifies hypothesis H2. The combined value of network technical anonymity, network perceived anonymity and risk perception explains 23.8 percent of variances in self-disclo-

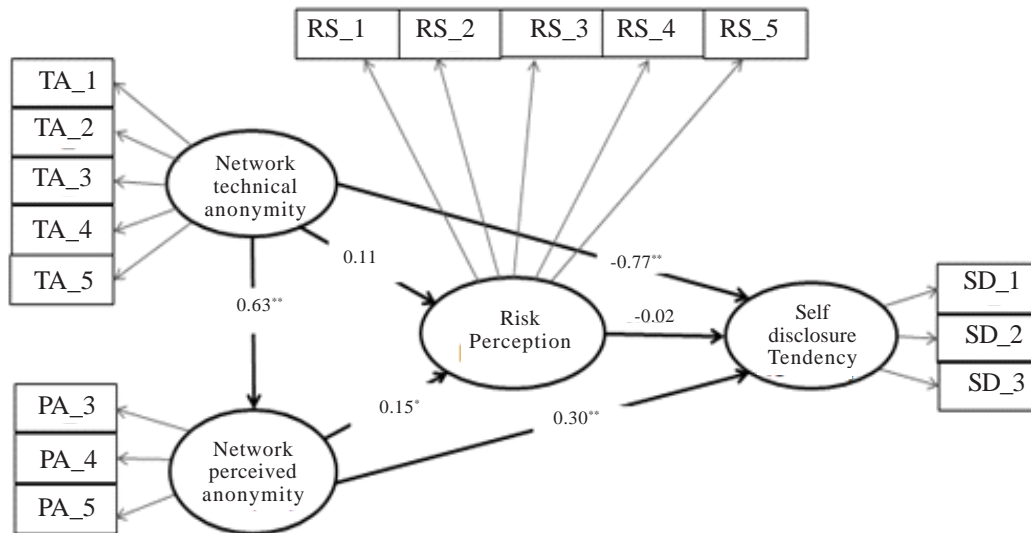


Fig. 1. Testing figure of the structural equation model
Source: Author

sure tendency. Network technical anonymity has a negative influence on users' self-disclosure tendency; the standardized path coefficient is -0.77 and p is less than 0.01; thus hypothesis H3 is verified. Network perceived anonymity has a positive influence on the users' self-disclosure tendency; the standardized path coefficient is -0.30 and p is less than 0.01; as such, hypothesis H4 is verified. Then influence of users' risk perception on users' self-disclosure is negative, which is in accordance with our hypothesis, but the result is not significant; the standardized path coefficient is -0.02 and p is 0.46; therefore hypothesis H5 is not verified.

The combination of network technical anonymity and network perceived anonymity explains 8.3 percent of variances in risk perception. Network technical anonymity has a positive influence on users' risk perception, but the result is not significant; the standardized path coefficient is 0.11 and p is 0.412; so hypothesis H6 is not verified. Network perceived anonymity has a positive influence on users' risk perception; the standardized path coefficient is 0.15 and p is less than 0.05; as a result, hypothesis H7 can be verified. While the verification result of H4 and H6 are not significant, the mediating effect of risk perception between networks perceived anonymity and self-disclosure tendency is not significant.

CONCLUSION

With the rapid development of the Internet, it is widely held that anonymity on the Internet has provided people with protection to a certain degree and enabled people to express their opinions freely. The rise of SNS applications has offered people a new place to communicate and interact with other people, and they also become new platforms for people to show themselves. On Sina Weibo, people often use their real identities to show themselves and participate in social activities, indicating that on Sina Weibo applications, the relationship between network anonymity and self-disclosure tendency is becoming more complicated. Based on the above analysis, this research tests network anonymity's influence on self-disclosure tendency.

Firstly, on the whole, users tend to disclose positive personal information on Sina Weibo. Their positive self-disclosure tendency is much higher than their negative self-disclosure ten-

dency, this positive information is good for users who wish to create their personal image.

Secondly, this research divides anonymity on the Internet into network technical anonymity and network perceived anonymity. In fact, the technical anonymity represents objective existence of anonymity constituted by digital information in network society; while network perceived anonymity reflects on the psychological perception of anonymous of the user. Network technical anonymity and network perceived anonymity are highly related, the former having a positive impact on the latter.

Thirdly, on Sina Weibo, the two types of anonymity influence self-disclosure in two opposite ways. Technical anonymity positively affects self-disclosure, while perceptive anonymity has the reverse impact. It can be implied that users tend to disclose positive information about themselves on Sina Weibo, and more personal information disclosed means more advantages when expressing themselves. In other words, the more real personal information is disclosed on Sina Weibo, the smoother they express themselves. The relation between perceived anonymity and self-disclosure is comparatively complex. There is a negative correlation between the two variables, and meanwhile after control the influence of technical anonymity and risk perception, perceived anonymity has positive influence on self-disclosure. In this paper, technical anonymity hinders self-disclosure, while perceived anonymity facilitates self-disclosure. When registering a new account, a real-name authentication is a must. Besides, many users have already posted their personal information on the foreground of Weibo, but they can still perceive how anonymous they are. To some degree, real personal information does not equal to one's real identity, which is a very complex concept. Therefore, users can be anonymous to some extent. In addition, since people do not communicate face to face, users feel that they are still communicating anonymously.

Fourthly, risk perception is closely related to self-disclosure. To be more precise, it is a negative correlation. However, the path coefficient in the structural equation model is not that significant, the influence of risk perception to self-disclosure reduces to an insignificant level. Further researches are necessary to explain this phenomenon.

APPENDIX A. SCALE

Positive and Negative Aspects of Self-disclosure

SD-P – I often express positive feelings and opinions.

SD-N – I often express negative feelings and opinions.

Network Technical Anonymity (TA)

(Reversed scoring rules)

TA.1 – I post my real name and identity on my microblog.

TA.2 – I post my effective address on my microblog.

TA.3 – I use my frequently-used network nickname.

TA.4 – The content on my microblog has strong personal characteristics, and it is easy to identify who I am.

TA.5 – I post some of my social information on my microblog, including my company, age, career, hobbies and so on.

Network perceived Anonymity (PA)

PA.1 – Those who can see my microblog can hardly know my real social identity.

PA.2 – It is difficult to find my real identity.

PA.3 – It is unlikely that the information I post on my microblog will be seen by acquaintances.

Risk Perception (RS)

RS.1 – I have a sense of insecurity when I am posting a message.

RS.2 – I am very worried that my personal information on my microblog will be stolen and misused, and it will bring harm to my mind and body.

RS.3 – It is highly likely that my real identity and personal information will leak, and will have a negative impact on my work, life or studies.

RS.4 – I am very worried that my personal information will be used by criminals.

RS.5 – I am very worried that “Internet mass hunting” and other network incidents of violence will happen.

Self-disclosure Tendency (SD)

SD.1 – I post all my opinions, life experiences and feelings on my microblog.

SD.2 – I tend to honestly and completely express my feelings and experiences.

SD.3 – I often express my true opinions and feelings.

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