

Role of Need to Belong, Social Influences, and Perceived Risks in Social Networking Behaviors

Tejaswini Herath¹, John D'Arcy², Hemantha Herath¹, Shui Yuan¹

¹Brock University, Canada

²University of Delaware, USA

Abstract

Social Networking websites (SNW) provide a platform that allows people to communicate more efficiently with their friends, family, and colleagues. Motivated by the phenomenon of SNW use and the potentially risky behaviors it involves, in this work in progress paper we develop a model to study how SNW users perceive risks and its influence on SNW use behaviors. We integrate the research on individual risk perception and personality to assess the influences of the social versus individual drivers of SNW use.

1. Introduction

Social media use has grown dramatically across all age groups in recent years. The use of social media, however, is not without problems. The use of SNW in the workplace, and along with that the inadvertent disclosure of proprietary information is a major concern, as are other security issues such as the spread of malware [16], and privacy issues [9]. Surveys carried out decades apart identify these concerns. Respondents of Ponemon survey [16] agreed that the use of social media in the workplace is important to achieving business objectives; however, respondents also felt that SNW usage put their organizations at risk and that their organizations lacked the necessary security controls and enforceable policies to address the risk. Similar sentiments were also noted by respondents of Go Verizon [9] survey where more than 81% were concerned about their privacy and more than 69% had deleted their accounts because of the breaches.

Building on prior research, the present study considers the effect of individuals' perceived risk on SNW use and risky SNW behaviors; and how social and peer influences play a role.

2. Research Model

The fundamental motivation for humans to be accepted in to relationships and part of social groups, known as need-to-belong [2], has been examined in SNSs research, and found to play a key role in use of

SNSs. Social bonds keep individuals invested into a particular subculture. SNW users are doing more than just sharing information and connecting with their friends, they are creating a virtual community and forming real bonds with others who are in their network. By discontinuing his or her acts of SNW usage, a SNW user is giving up the ability to share emotions, experiences with other community members but also the ability to fully take part in this subculture and experience the related joys. The SNW user has much to lose - the potential loss of a community of like-minded individuals. In examining the role of Fear of Missing Out (FoMO) in the associations between social needs, Beyens et al. [3] found that increased need to belong and need for popularity were associated with an increased use of Facebook. Another study found that users with higher need to belong disclosed more intimate information in status updates [20]. Thus, we anticipate that:

H1A → Need to Belong will be positively related to SNW regular use.

H1B → Need to Belong will be positively related to insecure SNW behavior Likelihood.

Social media use is highly likely to be affected by the social influence exerted by significant others. While the IT use literature has used a variety of labels for this construct, each of these constructs contains the notion that the individual's behavior is influenced by what the significant others expect her/him to do [19]. If an individual believes that her/his peers, family, parents, etc., do not expect her/him to use or extensively use a SNW, the likely result is reduced SNW usage by that individual. However, if this group of significant others approves or encourages the individual's SNW usage, s/he is more likely to use the SNW.

H2 → Social Influence will be positively related to SNW use.

Similar to the social influence considered in the

section above, prior literature in delinquency informs us that social influence can impact not only positive behaviors but also negative behavior [1]. Associations with those who are deviant provide individuals with “attitudes favorable” to delinquent behavior and have been found to be very powerful influences towards such behavior [1]. These delinquent groups provide social environments in which an individual creates definitions of behavior and is exposed to imitation models and various social reinforcements for deviant behavior. Delinquents conform to the norms of their community. Prior studies have found that when individuals perceive that peers approve of delinquent acts, they are “propelled or pulled” into committing deviant acts in order to fulfill group membership or peer expectations.

If an individual believes that her/his referent group would disapprove of a particular behavior such as posting sensitive information on SNWs, s/he is more likely to refrain from this behavior. On the other hand, if an individual believes that this group of significant others would approve of this behavior, then s/he is more likely to undertake the deviant behavior.

H3 → Peer Influence (approval) will be positively related to SNW insecure behaviors.

In differentiated association, groups also provide an opportunity to imitate behavior [1]. Theory also suggests that imitation, although most important in the initial stages, continues to have some effect in maintaining behavior. A similar notion is considered under the umbrella of descriptive norms. Descriptive norms, referred to as the extent to which one believes others are performing a behavior, increases a propensity an individual may have to indirectly reciprocate the believed behavior of others [18]. Here the individual’s behavior is motivated by observing what the typical or normal thing to do is. It is what most people do and “if everyone is doing it, it must be sensible thing to do” [6]. People often do (or believe in) certain actions or non-actions because many other people do (or believe) the same. The technology acceptance literature has found support for the role of peer behaviors as a motivational source for performing a behavior [19] Similarly, in the context of security policy compliance, Herath and Rao [11] find that employees’ perceptions of others’ compliance with security policies were significant contributors to their own compliance intentions. This influence has also been found to be an influential source for negative behaviors. In a paper titled “Monkey see monkey do...,” Robinson and O’Leary-Kelly [17] found that antisocial behaviors at work are shaped by the antisocial behaviors of coworkers. Similarly, much evidence in

digital piracy literature shows that if individuals believe others are pirating, they do not fear sanctions. Turning to our insecure SNW behaviors, if an individual believes that others are doing the same, s/he is likely to cognitively diminish or reduce the level and possibility of sanctions imposed and thus will lean toward continuing the act. Conversely, if an individual thinks that nobody else is carrying out such acts, s/he is more likely to refrain from the act.

H4 → Peer Likelihood will be positively related to SNW insecure behaviors.

The IS security literature has posited that by staying aware of the current state of activities and threats related to environments, people adjust their behavior. Existing empirical studies suggest that when people perceive a threat as severe and likely, they undertake measures that they think are effective in preventing that threat, such as taking protective action or abstaining from the risky behavior [4, 10, 12].

In the context of SNW use, if the user feels that in general the SNW environment poses a threat, s/he is more likely to avoid SNW use, while if the user perceives the risk to be low, s/he is likely to continue the frequent SNW usage. In terms of the risky SNW behaviors in our study, individuals who perceive higher levels of risks in information sharing activities are likely to abstain from carrying out such acts compared to those who do not perceive such acts as risky. Messages and links sent via SNWs may at times pose considerable risks as they are frequently employed by malicious parties as attack vectors to spread malicious code such as virus, worms, and other malware. We expect that individuals who believe that these types of messages are harmful will be reluctant to forward these messages.

H5 → Perceived SNW Threats will be negatively related to SNW Regular Use

H6 → Risk in Insecure SNW Behavior will be negatively related to Insecure SNW Behavior Likelihood

Based on the preceding arguments, we propose the research model presented in Figure 1.

3. Methodology

The survey first presented respondents with questions related to their computer use and social network site use along with some demographic questions. Respondents answered a series of questions designed to measure the frequency of their *SNW use* adapted from [14, 15]. Items for *Need to belong* were adapted from Leary et al. [13], *Social*

influence were adapted from Pee et al. [15]. We also wanted to examine the harmful consequences of such SNW use. This study used scenarios to evaluate various *social networking insecure behaviors*. Following the section on the SNW use we presented the scenarios and related questions following [7].

Scenarios are common in IS security studies (e.g., [7]) so as to provide a nonintrusive and unthreatening way to respond to sensitive issues. We developed two scenarios of information sharing for each of the sample groups – students and employees. The survey instrument is provided in Appendix 1.

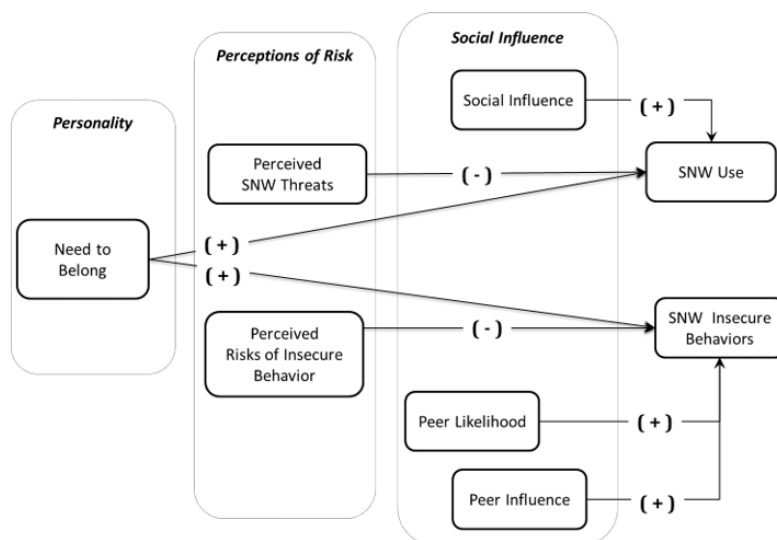


Figure 1. Research Model

3.1. Data Collection

We used a professional market research firm to randomly select and invite employed, computer-using professionals as well as students to take our survey. The final sample consisting of 622 usable responses was used for the data analysis.

4. Analysis and Results

We used SmartPLS 3 as the primary statistical tool to analyze the measurement and structural models because it is well-suited to handle large models with latent constructs. Following standard practice and bootstrap of 500 runs, we carried out preliminary analysis by testing the measurement model followed by the hypothesized structural relationships.

4.1. Measurement Model

We reviewed all study measures using criteria for formative and reflective measures and determined that all constructs were reflective. To assess reflective constructs in our measurement model, we examined construct reliability, convergent validity, and discriminant validity. Measurement reliability is assessed using composite reliability and Cronbach's

alpha. A composite reliability of 0.70 or greater and a Cronbach's alpha of 0.70 is considered acceptable for research [5]. Internal consistencies of all variables were considered acceptable since they exceed 0.70, signifying satisfactory reliability.

Convergent validity assesses consistency across multiple items while discriminant validity examines the extent to which different constructs diverge from one another. To test the convergent and discriminant validity, AVE, latent construct correlations, and indicator loadings were examined. Convergent validity is shown when the PLS indicators load much higher on their hypothesized factor than on other factors (i.e., own loadings are higher than cross loadings). Items should load high (>0.7) on their respective constructs and no item should load higher on constructs other than the one it was intended to measure. All estimated standard loadings were significant ($p < 0.001$) and of acceptable magnitude (above 0.70) [8] (Appendix 3). Also, loadings were found to be much higher than all cross loadings, with cross loadings of items on other latent constructs than their own at least one magnitude smaller [8].

A measurement instrument and dataset are considered to have acceptable discriminant validity if the square-roots of the AVEs for each latent variable are higher than any of the correlations between that latent variable and other latent variables. As shown in Appendix 2, the square root of the AVE of all

constructs was found to be much larger than all other cross-correlations. All AVEs are well above 0.50 suggesting that the principal constructs capture much higher construct-related variance than error variance. The correlations among all constructs are all well below the 0.90 threshold, suggesting that all constructs are distinct from each other.

Convergent and discriminant validity using the criteria: (1) the square root of AVE for each construct is larger than its correlations with the other constructs (i.e., the AVE shared between the construct and its indicators is larger than the AVE shared between the construct and the other items);

(2) all AVEs are greater than .50; and (3) the PLS indicators load much higher on their hypothesized construct than on other constructs (i.e., own loadings are higher than cross loadings) suggested satisfactory validation of measurement properties of principal constructs (Appendix 2 and 3) [5, 8].

4.2. Structural Model

The hypotheses were tested by examining the structural model using a bootstrapping using 500 resamples to determine the significance of the path coefficients. Results of the PLS structural model analysis are shown in Table 1 and Figure 2.

Table 1. Hypothesis Testing Results

Hypothesized Relationship	P-value	Testing Result
H1A: Need to Belong will be positively related to SNW regular use	0.174*** (p <0.001)	Strongly Supported
H1B: Need to Belong will be positively related to insecure SNW behavior Likelihood	0.124*** (p <0.001)	Strongly Supported
H2: Social Influence will be positively related to SNW use.	0.425***(p <0.001)	Strongly Supported
H3: Peer Influence (approval) will be positively related to SNW insecure behaviors.	0.368*** (p <0.001)	Strongly Supported
H4: Peer Likelihood will be positively related to SNW insecure behaviors.	0.332*** (p <0.001)	Strongly Supported
H5: Perceived SNW Threats will be negatively related to SNW Regular Use.	-0.118** (p <0.01)	Supported
H6: Risk in Insecure SNW Behavior will be negatively related to Insecure SNW Behavior Likelihood	-0.188*** (p <0.001)	Strongly Supported

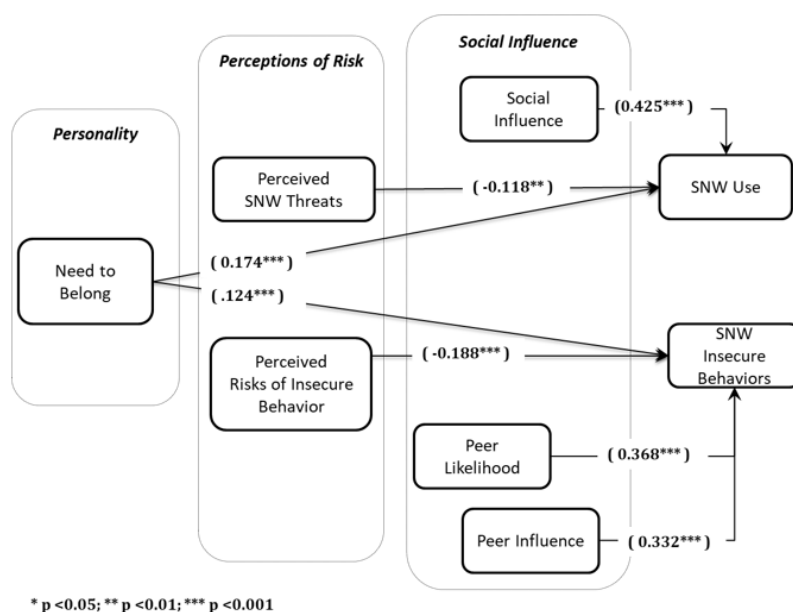


Figure 2. Results

The results suggest that the constructs considered in this study explain approximately 39 percent variance in the SNW regular usage and 58 percent variance in the delinquent behavior likelihood.

Testing the hypotheses 1A and 1B, *Need to Belong* was found to be positively related to *SNW regular use* ($\beta = 0.174$, $p < 0.001$: H1A), thus strongly supporting hypothesis 1A; and it was also found to be positively related to *insecure SNW behavior Likelihood* ($\beta = 0.124$, $p < 0.001$: H1B), strongly supporting hypothesis 1B.

In examining the role of social and peer influences in SNW behaviors, hypotheses 2, 3 and 4 were tested. As anticipated *social influence* was found to have significant positive effect on the *SNW use* ($\beta = 0.425$, $p < 0.001$), strongly supporting hypothesis 2. Testing the role of *peer influence*, peer approval of engaging in such behaviors was found to have significant positive effect ($\beta = 0.368$, $p < 0.001$) on the likelihood of individuals engaging in *SNW insecure behaviors*. Thus hypothesis 3 was supported. We also tested whether the likelihood of peers engaging in such behaviors will impact the user likelihood of engaging in SNW insecure behaviors. Our hypothesis was strongly supported ($\beta = 0.332$, $p < 0.001$, hypothesis 4).

Finally examining the role of perceived risks and their effect in SNW behaviors, general perceptions of *SNW threats* was found to be negatively related to *SNW regular use* ($\beta = -0.118$, $p < 0.01$: H5), supporting hypothesis 5. While examining particular scenarios of insecure behaviors, *perceived risk in insecure SNW behavior* was found to be negatively related to *insecure SNW behavior likelihood* ($\beta = -0.188$, $p < 0.001$: H6), strongly supporting hypothesis 6.

5. Discussion

Motivated by the growth in social networks usage and the potential security implications, we developed and empirically tested a model of SNW use and engagement in risky SNW behaviors. We wanted to examine the role of personality attributes, namely need-to-belong, and social influences, in individuals' engagement in SNW use. We also wanted to examine how risk perception, both general awareness of threats of SNW use as well as risk perceptions related to more specific SNW behaviors will impact user engagement in SNW behaviors.

In testing the personality related construct – *need to belong*, the results were as anticipated. Need-to-belong positively influenced regular use of social networks by individuals. People who have more need to maintain interpersonal relationships and social bonds will tend to engage in social networking on a more regular basis. We also believed that people who are more keen in staying connected will be more likely to forward messages or share information even

if it might be little riskier behavior. The results indicated this to be true.

Social network usage is obviously encouraged by individual's own need to be connected, but it is also driven by the push to be connected by similar others in their friends, family, or social circles. Examining the role of risks, first we tested user understanding of the threats generally known to plague the social networking platforms and how it might impact users' usage of the networks. We found that higher perceptions of risks in networking environments would reduce the overall regular use of social networks by individuals.

We also wanted to test if that would be the case in specific scenarios of such risky situations. Thus, we tested two commonly observed scenarios. Our data suggests that the individuals who perceived higher risks in those situational scenarios indicated that they would be less likely to engage in those behaviors. For example, in case of a spam message containing a joke with a link, if an individual perceives higher levels of risks in forwarding such message, a person is less likely to forward such message. In another instance, the scenario captured sharing of a project related information. If an individual perceived that posting such information is more risky, then s/he will be less likely to post such information.

However, approval or disapproval of such behaviors can have significant implications. Our data reveals that peer influence (approval) of such behaviors was positively related to SNW insecure behaviors. Thus, if the peers do not disapprove of such behaviors, individuals are likely to continue engaging in such behaviors. Similarly, beliefs of whether peers also engage in similar behaviors was also significant contributor to individuals engaging in such risky behaviors.

5.1. Limitations and Opportunities for Future Research

The limitations of this study provide additional prospects for future research. First, the phenomenon of risky SNW behaviors in this study is limited to two common incident types. Although we chose these scenarios based on the literature and feedback from our practitioner panel, there may be other possibilities. Future research should test our model on additional forms of risky SNW usage to further validate our findings.

This study did not examine the role of habit in SNW use. This presents another potential avenue for future work. Prior research and case studies have highlighted the strength of habit in technology related behaviors. On this point, future research can explore the interactive effects of habit and interventions in shaping SNW behaviors. This study used cross-sectional data collection which has

several shortcomings. Thus, future studies that incorporate longitudinal investigations as well as many other additional inquiries can be useful addition to the literature on this important technological and societal phenomenon.

6. Conclusion

The phenomenon of social networking, while extant, is relatively new, and mainstream IS research in this area is burgeoning. With extensive use of social networks various SNW behaviors plague our society with various security concerns. While some research has tried to understand the SNW usage, risky SNW behaviors have much scope to be examined in the literature. People's need to maintain interpersonal relationships and social bonds is a significant contributor not only in their regular use of these platforms, but also in their engagement in insecure of risky behaviors on these platforms. We found evidence that social and peer influences play a vital role not only in SNW use but also is likely to result in risky behaviors on SNWs. However, understanding of various SNW threats and risks in particular kind of SNW situations can help reduce individuals engaging in insecure SNW behaviors.

7. References

- [1] R.L. Akers, G.F. Jensen, *Social Learning Theory: Process and Structure in Criminal and Deviant Behavior*, The SAGE Handbook of Criminological Theory, 2010, pp. 56-72.
- [2] R.F. Baumeister, M.R. Leary, The need to belong: desire for interpersonal attachments as a fundamental human motivation, *Psychological bulletin*, 117(3), 1995, pp. 497-529.
- [3] I. Beyens, E. Frison, S. Eggermont, "I don't want to miss a thing": Adolescents' fear of missing out and its relationship to adolescents' social needs, Facebook use, and Facebook related stress, *Computers in Human Behavior*, 64(2016), pp. 1-8.
- [4] R. Chen, J. Wang, T. Herath, H.R. Rao, An investigation of email processing from a risky decision-making perspective, *Decision support systems*, 52(1), 2011, pp. 73-81.
- [5] W.W. Chin, *Issues and Opinion on Structure Equation Modeling*, *MIS Quarterly*, 22(1), 1998, pp. vii – xvi.
- [6] R.B. Cialdini, R.R. Reno, C.A. Kallgren, A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places, *Journal of Personality and Social Psychology*, 58(6), 1990, pp. 1015-1026.
- [7] J. D'Arcy, T. Herath, M.K. Shoss, Understanding employee responses to stressful information security requirements: A coping perspective, *Journal of management information systems*, 31(2), 2014, pp. 285-318.
- [8] D. Gefen, D. Straub, *A Practical Guide to Factorial Validity Using PLS-Graph: Tutorial and Annotated Example*, *Communications of the Association for Information Systems*, 16(2005), pp. 91-109.
- [9] Go Verizon, *Verizon Specials Social Privacy Survey Report 2022*, in, (2022).
- [10] T. Herath, R. Chen, J. Wang, K. Banjara, J. Wilbur, H.R. Rao, Security services as coping mechanisms: an investigation into user intention to adopt an email authentication service, *Information Systems Journal*, 24(1), 2014, pp. 61-84.
- [11] T. Herath, H.R. Rao, Encouraging information security behaviors in organizations: Role of penalties, pressures and perceived effectiveness, *Decision support systems*, 47(2), 2009, pp. 154-165.
- [12] T. Herath, H.R. Rao, Protection motivation and deterrence: a framework for security policy compliance in organisations, *European Journal of Information Systems*, 18(2), 2009, pp. 106-125.
- [13] M.R. Leary, K.M. Kelly, C.A. Cottrell, L.S. Schreindorfer, Construct validity of the need to belong scale: Mapping the nomological network, *Journal of personality assessment*, 95(6), 2013, pp. 610-624.
- [14] M. Limayem, C.M. Cheung, Understanding information systems continuance: The case of Internet-based learning technologies, *Information & Management*, 45(4), 2008, pp. 227-232.
- [15] L.G. Pee, I.M. Woon, A. Kankanhalli, Explaining non-work-related computing in the workplace: A comparison of alternative models, *Information & Management*, 45(2), 2008, pp. 120-130.
- [16] Ponemon Institute, *Ponemon Institute Research Report: Global Survey on Social Media Risks (Survey of IT & IT Security Practitioners)*, in, (2011).
- [17] S.L. Robinson, A.M. O'Leary-Kelly, Monkey see, monkey do: The influence of work groups on the antisocial behavior of employees, *Academy of Management Journal*, 41(6), 1998, pp. 658-672.
- [18] P. Sheeran, S. Orbell, Augmenting the Theory of Planned Behavior: Roles for Anticipated Regret and Descriptive Norms, *Journal of Applied Social Psychology*, 29(10), 1999, pp. 2107-2142.
- [19] V. Venkatesh, M.G. Morris, G.B. Davis, F.D. Davis, *User Acceptance of Information Technology: Toward a Unified View*, *MIS Quarterly*, 27(3), 2003, pp. 425-478.
- [20] S. Winter, G. Neubaum, S.C. Eimler, V. Gordon, J. Theil, J. Herrmann, J. Meinert, N.C. Krämer, Another brick in the Facebook wall—How personality traits relate to the content of status updates, *Computers in Human Behavior*, 34(2014), pp. 194-202.

APPENDICES

Appendix 1. Survey Instrument

Social Network Use	
SNUseFrq1	During the past month, I used Facebook: (Not at all; Less than once a week; about once a week; 2 or three times a week; several times a week; about once a day; several times each day)
SNUseFrq2	In the past week, on average, approximately how many minutes per day have you spent on Facebook? (less than 10; 10–30; 31-60; 1-2 Hours; 2-3 Hours; More than 3 hours)
SNUseFrq3	On average, I use Facebook while I am at home about... _____ times a day
SNUseFrq4	On average, I use Facebook while I am at home about... _____ times a week.
SNUseFrq5	On average, I use Facebook while I am at the workplace about... _____ times a day.
SNUseFrq6	On average, I use Facebook while I am at the workplace about... _____ times a week.
NeedBelong_5	I want other people to accept me.
NeedBelong_6	I do not like being alone.
NeedBelong_8	I have a strong need to belong.
NeedBelong_9	It bothers me a great deal when I am not included in other people’s plans.
NeedBelong_10	My feelings are easily hurt when I feel that others do not accept me.
PerThreat_3	Information I post on social media websites could be made available to unknown individuals and entities without my knowledge.
PerThreat_4	I feel the information I post to social media websites is vulnerable to misuse.
PerThreat_5	It is possible that personal information I share on social media websites will be used in a way which I would not approve.
PerThreat_6	I believe sharing information on online social media websites could have negative consequences.
SocInf_1	People who are important to me think I should use Facebook.
SocInf_2	My family thinks it is good for me to use Facebook.
SocInf_3	My friends expect me to use Facebook.
SocInf_4	Most of my colleagues use Facebook.

Social Network (In)Secure Behaviors	
Taylor has a Facebook account that he uses to keep in touch with many of his coworkers, friends and family. One day Taylor received a Facebook message from a friend with a link to a jokes site. The friend mentioned in the message that the jokes were hilarious. After reading the message, Taylor clicked on the link and went to the site. He found the jokes to be very funny. Taylor immediately thought of some friends that would also enjoy the jokes, so he sent them a Facebook message that contained the link to the jokes site.	
Craig's company recently received a multi-million dollar contract to provide their services to ABC Corporation. Craig is chosen to work as a member of a team on this project. Excited for the company's new business and to be chosen to work on this endeavor, Craig updated his Facebook status to "Great day for me and my company! I am now a team member on Project Alpha for our company's new contract with ABC Corporation."	
Realism	How realistic do you think this scenario is? (highly unrealistic/highly realistic)
SNInsLike1	If you were Taylor, what is the likelihood that you would have sent the Facebook message? (very unlikely ... very likely)
SNInsLike2	I could see myself sending the message just as Taylor did: (very low ... very high)
PerScRisk_1	I think that sending such a message does NOT lead to considerable risks:
PerScRisk_2	There is high potential risk in sending such a message:

PerScRisk_3	There are potential negative consequences of sending such a message:
peerLikelihood_1	The likelihood that a typical student within your university would have sent the message, just as Taylor did is:
peerLikelihood_2	Most of your other Facebook friends would have sent the message, just as Taylor did is:
peerLikelihood_3	I am convinced that the many of my other Facebook friends would have sent a message, just as Taylor did:
PeerInf_1	If you sent the message as Taylor did, your friends would: (disapprove/approve)
PeerInf_2	If you sent the message as Taylor did, fellow colleagues would: (disapprove/approve)
PeerInf_3	If you sent the message as Taylor did, your family would: (disapprove/approve)
Notes: (1) Following the general SN site use items, the scenarios and scenario specific above items followed in scrambled order; (2) the items above pertain to the message forwarding scenario - item wordings were slightly modified to fit the other scenario	

Appendix 2. Measurement Model – Reliability and Validity Testing

Constructs	Composite Reliability	Cronbach Alpha	AVE	Construct Cross Correlations								
				11	12	21	22	23	3	4	5	
11_SNWThreat	0.89	0.85	0.67	0.82								
12_PerRisk	0.82	0.73	0.61	0.17	0.78							
21_SocInf	0.91	0.86	0.70	0.06	-0.05	0.84						
22_PeerInf	0.92	0.87	0.79	0.01	-0.50	0.33	0.89					
23_PeerLikelihood	0.89	0.82	0.74	0.05	-0.26	0.32	0.66	0.86				
3_NTB	0.89	0.84	0.62	0.15	-0.07	0.39	0.20	0.20	0.78			
4_RegUse	0.92	0.90	0.67	-0.07	-0.12	0.56	0.30	0.27	0.36	0.82		
5_InsLikelihood	0.94	0.87	0.89	-0.03	-0.47	0.31	0.69	0.64	0.26	0.29	0.94	
Bold values in diagonal cells are square root of AVE values.												

Appendix 3. Item Loadings, Cross Loadings, and Significance

Constructs: 11_SNWThreat; 12_PerRisk; 21_SocInf; 22_PeerInf; 23_PeerLikelihood; 3_NTB; 4_RegUse; 5_InsLikelihood										
	11	12	21	22	23	3	4	5	T Stat	P value
PerThreat_3	0.77	0.09	0.07	0.02	0.02	0.15	-0.03	-0.02	4.07	0.001
PerThreat_4	0.79	0.12	0.04	0.02	0.07	0.22	-0.05	0.02	3.82	0.001
PerThreat_5	0.83	0.13	0.07	0.03	0.10	0.15	-0.03	-0.02	4.57	0.001
PerThreat_6	0.88	0.18	0.04	-0.01	0.01	0.05	-0.08	-0.06	3.86	0.001
PerScRisk_1_R	0.00	0.84	-0.15	-0.56	-0.38	-0.20	-0.18	-0.50	29.46	0.001
PerScRisk_2	0.26	0.75	0.07	-0.22	-0.02	0.12	-0.01	-0.22	14.33	0.001
PerScRisk_3	0.31	0.75	0.08	-0.21	-0.04	0.08	0.00	-0.24	14.32	0.001
SocInf_1	0.04	-0.08	0.86	0.30	0.24	0.35	0.47	0.29	58.49	0.001
SocInf_2	0.02	-0.02	0.81	0.25	0.21	0.34	0.44	0.24	42.76	0.001
SocInf_3	0.09	-0.01	0.86	0.23	0.28	0.33	0.48	0.23	56.02	0.001
SocInf_4	0.05	-0.06	0.82	0.32	0.33	0.29	0.49	0.28	45.91	0.001

PeerInf_1	0.07	-0.39	0.30	0.88	0.62	0.15	0.25	0.65	68.11	0.001
PeerInf_2	-0.02	-0.46	0.31	0.92	0.64	0.18	0.27	0.61	100.24	0.001
PeerInf_3	-0.04	-0.48	0.27	0.86	0.50	0.20	0.29	0.58	65.31	0.001
peerLikelihood_1	0.00	-0.16	0.27	0.51	0.84	0.16	0.23	0.50	53.15	0.001
peerLikelihood_2	0.04	-0.24	0.26	0.59	0.89	0.15	0.21	0.55	88.18	0.001
peerLikelihood_3	0.07	-0.27	0.29	0.60	0.85	0.20	0.26	0.60	63.22	0.001
NeedBelong_10	0.10	-0.04	0.25	0.09	0.11	0.80	0.25	0.14	34.17	0.001
NeedBelong_5	0.20	-0.06	0.29	0.14	0.14	0.69	0.23	0.15	21.62	0.001
NeedBelong_6	0.07	-0.09	0.30	0.21	0.18	0.75	0.29	0.26	32.67	0.001
NeedBelong_8	0.12	-0.05	0.36	0.18	0.16	0.85	0.29	0.25	66.38	0.001
NeedBelong_9	0.12	-0.03	0.31	0.15	0.18	0.83	0.32	0.20	39.78	0.001
UseLstMonth	-0.09	-0.08	0.54	0.23	0.18	0.34	0.88	0.21	102.12	0.001
UsePerDay	-0.05	-0.11	0.45	0.28	0.24	0.32	0.79	0.29	49.77	0.001
UseTimesDayHome_7	-0.05	-0.10	0.48	0.25	0.29	0.33	0.88	0.27	107.23	0.001
UseTimesDayOff_7	-0.04	-0.09	0.35	0.25	0.21	0.21	0.71	0.22	30.30	0.001
UseTimesWeekHome_7	-0.10	-0.10	0.53	0.22	0.20	0.31	0.88	0.23	102.18	0.001
UseTimesWeekOff_7	0.00	-0.10	0.37	0.25	0.21	0.22	0.73	0.20	32.97	0.001
likleihood_1	-0.02	-0.42	0.25	0.61	0.57	0.24	0.23	0.94	130.55	0.001
likleihood_2	-0.04	-0.45	0.33	0.69	0.64	0.25	0.32	0.95	204.90	0.001