

I Think You Know Who I Am: Bloggers' Perceived Identifiability

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Abstract

Bloggers who conduct relational communication via their public posts on the Web have to make decisions regarding the degree to which they would like to reveal their real-world identity. On the one hand, disclosing identity related information online can be risky. On the other hand, being identifiable is essential for positive relational communication. This study explored factors influencing bloggers' decision of identity disclosure. Data were collected via an online survey of 148 randomly selected bloggers. Results showed that self disclosure tendency and targeting blogs at family and close friends were positive predictors to bloggers' perceived identifiability. In addition, extraversion was found to moderate the relationship between bloggers' perceived vulnerability and identifiability.

Introduction

The Internet presents an interesting contrast regarding privacy concerns and relationship development. On the one hand, disclosing identity related information online is risky due to the loss of control on personal information. On the other hand, the Internet provides a unique platform to conduct relational communication which may require the disclosure of personal identity as in the case of social networking sites. Torn between the privacy concerns and the needs for relational communication, users of these Web applications have to make a strategic choice regarding the degree to which they are willing to disclose about themselves. This study is intended to explore the factors that influence this identity disclosure decision.

In particular, we focus on one of the Web 2.0 applications, blogs. Blogs are frequently updated web pages that collect and display posts in reversed chronological order. Reading and authoring blogs have

become increasingly popular among Internet users (Madden et al. 2007). Previous studies found that the majority of blogs are personal in nature (Lenhart and Fox 2006; Nardi et al. 2004; Stefanone and Jang 2008) and people use it for relationship purposes (Stefanone and Jang 2007). This makes bloggers a particular interesting subgroup of Internet users to examine. The risk of self disclosure is higher for personal-journal style bloggers. These blog authors post intimate contents about themselves. They are potentially more vulnerable if their readers can link these intimate contents to bloggers' real-world identities. However, to use blogs as a relational channel for existing social networks, letting your audience know who you are is essential. As a result, authors of personal-journal style blogs have to decide on the degree to which they would like to reveal or conceal their real-world identity. In this paper, we report our study exploring four factors, including self-disclosure tendency, target audience, perceived vulnerability, and extraversion, that may influence bloggers' decisions of identity disclosure.

Literature Review and Hypotheses

Self-disclosure describes the communication conduct by which people reveal their thoughts, feelings and/or needs to others (Archer 1980). Prior research has closely linked self-disclosure to relationship development. It was suggested that relationships begin with superficial exchanges and over time include more personal information (Altman and Taylor 1973). As relationships mature the boundaries of privacy tend to relax.

From the relationship-development perspective, allowing others to know more about oneself is elemental. At the same time, the more people know about you, the more you are recognizable. In the case of blog, higher degree of self-disclosure tendency should lead to exposing more cues about the bloggers to the readers and makes the bloggers more identifiable. Thus,

H1. Self disclosure is positively related to bloggers' perceived identifiability.

Motivations of communication can dictate the decision of disclosing one's identity in computer-mediated communication. In the case of blogosphere, several studies reported the use of blog as an interpersonal channel for relational communication (Nardi et al. 2004; Stefanone and Jang 2007). One of the indicators of this relational motivation is the choice of target audience. According to Lenhart and Fox (2006), about half of the blog authors perceived that their readership was comprised of people in their off-line social network. To make this relational effort effective, bloggers should make themselves identifiable to their audiences in their blog posts. Therefore,

H2. Targeting at family and friends is positively related to bloggers' perceived identifiability.

As discussed above, for personal-journal style bloggers, disclosing their own identities will allow their readers to tell who these intimate blog posts are about. It leads to a more severe damage once the personal posts being exploited. As a result, the more blog authors are conscious about the danger of posting personal information online, the less likely they will make themselves recognizable online. Thus,

H3. Perceived vulnerability is negatively related to perceived identifiability.

Extraversion is one of the most studied personal traits and is included in many measures of personality (Watson and Clark 1997). Extraverted persons are typically characterized by sociability, gregariousness, exhibitionism, and assertion (Morrone-Strupinsky and Lane 2007). They are enthusiastic about establishing social links. Following the discussion above related to self disclosure and relationship development, extraverted people should be more comfortable in starting initial self disclosure for relationship purposes. Accordingly, extraverted people should have a looser privacy boundary and are more willing to offer personal identity related information.

H4. Extraversion is positively related to perceived identifiability.

However, the looser privacy boundary of extraverted individuals also indicates a lower valuation of personal privacy. In contrast, as Zweig and Webster (2003) suggested, introverted individuals tend to have greater concerns for personal privacy and, therefore, for example, are less likely to accept monitoring systems that make personal information available to others. In other words, introverted persons tend to have stronger response to possible privacy invasion than their extraverted counterparts. This trend suggests a moderating effect of extraversion on the relationship between perceived

vulnerability and the degree of identity disclosure. When perceived danger in exposing identity online is at the same level, introverted individuals should respond to it more strongly by making themselves less recognizable. Thus,

H5. Extraversion moderates the relationship between perceived vulnerability and perceived identifiability.

METHOD

Data Collection

To address these hypotheses, the authors conducted an online survey. An initial list of one thousand unique blogs was randomly generated via blogger.com, which was the only major blog host service offering a random blog pointer. Since the focus of this project is on active personal blogs by individual bloggers, the following types of blogs were excluded: blogs with multiple authors, blogs containing pictures only, blogs with less than three posts on two different dates in the last three months, and blogs used strictly for commercial or organizational purposes (i.e., marketing particular products or office coordination services). In addition, blogs with authors younger than 18 years old were eliminated.

After the above restrictions, 700 qualified blogs remained. The authors then delivered a survey invitation to 622 of the 700 selected bloggers via emails or comments posted on their blogs. The other 78 bloggers did not provide their email address or the comment option on their blogs and did not receive the invitation.

A total of 148 completed surveys were for this study, which yielded to a 23.8% response rate. Among the respondents, 53.4% were male. The education level distribution of the respondents is as follows: high school (10%), some college classes (20%), bachelor's degree (39%), and graduate-level degree (31%). The respondents were from 32 countries. About one third came from the USA, about 30% came from Europe, 25% came from Asia and Australia, and the rest (about 12%) came from a variety of other regions. The average age of the respondents was 31.3 (SD = 10.6).

Measures

All measures below were based on 7-point Likert scale items which ranged from strongly disagree (1) to strongly agree (7). For each variable, the mean (M) and standard deviation (SD) were also reported.

Perceived identifiability: It measured blog authors' perception of how easily their readers could tell who they were from their blog content. Three items were developed to measure identifiability: "It is easy for my readers to tell who I am from my blog posts," "I think people who know me would be able to determine my identity from the contents of my blog," and "I think if a stranger read my blog, he or she could determine my identity." Cronbach's α

for this scale was .76. Factor analysis showed that the three items load onto a single factor, explaining approximately 70% of the variance. (M=4.4, SD=1.5)

Self-disclosure tendency: To measure self-disclosure, three items were adopted from the generalized self-disclosure scale developed by (Wheless and Grotz 1976). Participants were asked to rate the following statements: "I usually talk about myself for fairly long periods of time," "Once I get started, I intimately and fully reveal myself," and "I often disclose intimate, personal things about myself without hesitation." (Cronbach's α = .81, M=3.2, SD=1.5)

Targeting STN: Participants were asked whether they agreed or disagreed with the following statements: "My blog is directed at an audience of my close friends," and "My blog is directed at an audience of my family members." These two items were combined to form the "Targeting STN" variable to incorporate the two primary dimensions of STN audiences which are typically comprised of both friends and family members (Cronbach's α = .76, M = 3.65, SD = 1.84).

Perceived vulnerability: Participants were asked the degree to which they agreed or disagreed with the following statements: "It is dangerous to post personal contact information online" and "Personal information available online is easily exploited". These two items were converged to measure perceived vulnerability with a Cronbach's α of .91. (M=5.3, SD=1.7)

Extraversion: Following previous research (McCrae and Costa 1996), four items were used as a general measure of extraversion. Participants were asked to rate the extent to which they agree or disagree with each of the following statements on a 7-point scale, where 7=strongly agree: "I like to have a lot of people around me," "I really enjoy talking to people," "I like to be where the action is," and "I usually prefer to do things alone" (reverse coded). Cronbach's α for this scale was .70. (M=4.6, SD=1.1)

Results

To test the hypotheses, two regression models were assessed (see Table 1). Age, gender, and education level, were included to examine the effects of demographical differences. The normality of distribution was checked and variance inflation factors were also calculated to examine multicollinearity. They were all within the accepted range.

Model 1 assessed the main effects of extraversion, self disclosure, perceived vulnerability, and targeting at STN on perceived identifiability. The results showed that self disclosure tendency (β = .23, $p < .01$) and targeting STN (β = .23, $p < .01$) were both significant contributors. Both hypotheses 1 and 2 were supported. Additionally, age (β = .20, $p < .05$) was also a positive predictor. Older bloggers reported higher degree of perceived identifiability. Extraversion and perceived vulnerability did not make

significant contribution in this model. Overall, this model was statistically significant ($F=3.08$, $p < 0.1$) and explained about 13% of the variance in bloggers' perceived identifiability.

Table 1. Regression Analysis of perceived Identifiability

Model	1	2
Age	.20*	.21*
Gender	-.07	-.09
Education	.02	.00
Extraversion	-.01	-.55*
Self Disclosure	.23**	.23**
Vulnerability	-.09	-.76*
Target STN	.23**	.23**
Interaction: Extraversion x Vulnerability		.91*
F	3.08**	3.28**
R ²	.13	.16
Adjusted R ²	.09	.11

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

To examine the interaction between extraversion and perceived vulnerability, the product of these two variables was added in Model 2. The results showed that age (β = .21, $p < .05$), self disclosure tendency (β = .23, $p < .01$), and the selection of strong-tie network as target audience (β = .23, $p < .01$) were all still statistically significant predictors as in Model 1. In addition, extraversion (β = -.55, $p < .05$), perceived vulnerability (β = -.76, $p < .05$), and their interaction (β = .91, $p < .05$) also made significant contribution in this model. H5 was supported. Overall, this model was statistically significant ($F=3.28$, $p < 0.1$) and explained more variance (16% vs. 13%) than Model 1. The inclusion of extraversion-vulnerability interaction produced a slightly better model.

Discussion and Conclusion

The average score of perceived identifiability was a little higher than the midpoint of the 7-point Likert scale at 4.4. Considering the distribution of the scores (SD=1.5), it indicated that bloggers made a range of choices regarding the degree to which they would like to be recognized by their readers. Our results showed that self-disclosure tendency was positively related to bloggers' perceived identifiability. It indicated that bloggers were conscious about what they wrote on their blogs and, at the same time, aware of the personal information they revealed. Another positive predictor of identifiability was bloggers' choice of targeting audience. Those bloggers who directed their blogs to family and close friends were more likely to think they could be identified by their audience. This result confirmed the relational motivation as significant factor for bloggers to disclose their identity.

The perceived danger of disclosing personal identity was relatively high at 5.3 (SD=1.7). It suggested that the majority of the participants tend to think it is vulnerable to expose their identity online. However, that belief did not necessarily result in reduced identity disclosure. The regression analyses showed that extraversion moderated the relationship between perceived vulnerability and perceived identifiability. Introverted bloggers were more sensitive to perceived risks than their extraverted peers. The results indicated that the higher the perceived danger in disclosing identity online was, the less likely introverted bloggers would make themselves recognizable. This finding was consistent with the literature that introverted people pay more attention to privacy protection (Zweig and Webster 2003). It implied that the relational benefit may not outweigh privacy concerns for introverted individuals. It also suggested that an informational campaign on online privacy risk will likely to be more effective among introverted than extraverted people.

Interestingly, age was a significant predictor of bloggers' perceived identifiability. Comparing to younger respondents, older bloggers thought they were more recognizable by their audience. It is possible that people loosen their privacy boundary as they grow. As a result, privacy issues does not weight as much for older bloggers. The PEW study on teens' use of social media also reported that teens restrict access to their photos and videos online more frequently than adults do (Lenhart et al. 2007). Alternatively, older bloggers could be more realistic in evaluating the possibility of being recognized online. More research is necessary to examine the effect of age.

In conclusion, the findings shed light on bloggers' decision on personal identity disclosure. To make the decision, they have to weigh, among other things, the benefit of relationship maintenance and the costs of privacy invasion. Our results showed a positive effect of relationship considerations. Both self disclosure and targeting at close-tie social network positively contributed to bloggers' perceived identifiability. On the other hand, the perceived danger of exposing personal identity demonstrated its effect primarily on the introverted subgroup. These results should contribute to the continuous discussion of privacy management and self disclosure via computer-mediated means.

References

- Altman, I., and Taylor, D. A. 1973. *Social Penetration: The Development of Interpersonal Relationships*. New York: Holt, Rinehart & Winston.
- Archer, J. L. 1980. Self-Disclosure. In D. M. Wegner and R. R. Vallacher (Eds.), *The Self in Social Psychology* (pp. 183-204). London: Oxford University Press.
- Herring, S. C.; Scheidt, L. A.; Bonus, S., and Wright, E. 2004. *Bridging the Gap: A Genre Analysis of Weblogs*. In Proceedings of the 37th Hawaii International Conference on System Sciences. IEEE Press.
- Lenhart, A., and Fox, S. 2006. *Bloggers: A Portrait of the Internet's New Storytellers*. Washington, D.C.: Pew Internet & American Life Project.
- Lenhart, A.; Madden, M.; Macgill, A. R., and Smith, A. 2007. *Teens and Social Media*. Washington, D.C.: Pew Internet & American Life Project.
- Madden, M.; Fox, S.; Smith, A., and Vitak, J. 2007. *Digital Footprints: Online Identity Management and Search in the Age of Transparency*. Washington, D.C.: Pew Internet & American Life Project.
- McCrae, R. R., and Costa, P. T. 1996. Toward a New Generation of Personality Theories: Theoretical Contexts for the Five-Factor Model. In J. S. Wiggins (Ed.), *The Five Factor Model of Personality: Theoretical Perspectives* (pp. 51-87). New York: Guilford.
- Morrone-Strupinsky, J. V., and Lane, R. D. 2007. Parsing Positive Emotion in Relation to Agentic and Affiliative Components of Extraversion. *Personality and Individual Differences*, 42(7): 1267-1278.
- Nardi, B. A.; Schiano, D. J.; Gumbrecht, M., and Swartz, L. 2004. Why We Blog. *Communication of the ACM*, 47(12): 41-46.
- Stefanone, M. A., and Jang, C.-Y. 2007. Writing for Friends and Family: The Interpersonal Nature of Blogs. *Journal of Computer-Mediated Communication*, 13(1): 123-140.
- Stefanone, M. A., and Jang, C. Y. 2008. Social Exchange Online: Public Conversations in the Blogosphere. In Proceedings of the 41st Annual Hawaii International Conference on System Sciences. IEEE Press.
- Watson, D., and Clark, L. A. 1997. Extraversion and Its Positive Emotional Core. In J. J. R. Hogan, & S. Briggs (Ed.), *Handbook of Personality Psychology* (pp. 767-793). San Diego, CA: Academic Press.
- Wheless, L. R., and Grotz, J. 1976. Conceptualization and Measurement of Reported Self-Disclosure. *Human Communication Research*, 2: 338-346.
- Zweig, D., and Webster, J. 2003. Personality as a Moderator of Monitoring Acceptance. *Computers in Human Behavior*, 19(4): 479-493.