
Contextual Impact on SNS Users' Privacy Decisions: A Cross-Cultural Study

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Abstract

Social network users with different cultural backgrounds have different privacy attitudes and behaviors. This study is to explore the mechanisms behind the cultural differences in privacy decisions. The findings have implications on customizing privacy technologies in different cultures.

Author Keywords

Privacy decision; culture; social network system; friend request; information disclosure.

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

Introduction

Privacy is a global phenomenon. By examining a rich set of ethnographic data from several different cultural regions, Altman argued that people in different cultures are universally aware and capable of regulating interpersonal privacy, but their specific behaviors vary from culture to culture [1]. Culture is defined as the collective programming of the mind that distinguishes the members of one group from others [9]. People residing in the same cultural group are guided by similar norms and legal systems that tend to favor shared beliefs, values and interests, which in return influence their behavior. Thus, people's privacy behaviors are also

deeply rooted within beliefs and values that are culturally distinct.

Today, a major focal point of privacy concerns is social networking sites (SNS), on which billions of users share an enormous amount of personal information and make decisions on what to disclose to which SNS contact. Since individual users' social networks increasingly include contacts from different cultures, an investigation of cultural differences of such inter-personal privacy decisions is most warranted.

A number of privacy studies has investigated cultural differences in privacy attitudes and behaviors. Users in individualistic cultures have higher levels of privacy concerns than those in collectivistic cultures, and are thus less likely to disclose personal information while more likely to adopt privacy management behaviors [4, 14, 16, 17, 19, 23]. In the context of SNSs, people in collectivistic countries have greater tendency to self-disclosure [5, 19], but mostly among close ties [5, 11, 20, 24]. They are more likely to be concerned about fake identity [24], and to perceive the susceptibility of others to personal information exposure as a result of their own Facebook activity [10]. Users in individualistic countries are more likely to be concerned with their privacy and less likely to trust the SNS service providers [24]. They usually have a wider variety of social networks [5], and adopt more protective self-presentation [20].¹

Most literature in cross-cultural privacy demonstrates a negative relationship between information disclosure

and individualism. However, the mechanism behind such relationship is still unclear. Most SNSs still provide uniform privacy-related features to users. Our study will explore the contributing factors behind cross-cultural differences in privacy decisions, and suggest ways to customize privacy settings based on such cultural differences. We hypothesize that cross-cultural differences in privacy decisions between individualistic and collectivistic cultures may be partially attributable to differences in the way people react to contextual factors.

Privacy decisions are highly context-dependent. Previous research has shown that the nature of the information audience [6, 7, 13, 15, 25] and one's relationships with the audience [2, 3, 8, 21, 22, 25] are primary contextual predictors of SNS privacy decisions. For example, users are more likely to accept friend requests from those with higher levels of trustworthiness, greater commonalities, or closer ties [7]. They are more likely to disclose information to close ties [2, 6, 21], than distant ones [3], such as strangers and merchants [13], and co-workers [6].

In the present study, we examine two privacy decisions: acceptance of friend requests and information disclosure to the requester. We want to explore: 1) from what type of users are friend requests more acceptable and lead to more information disclosure; 2) and whether there are differences between individualistic and collectivistic cultures. We conducted an interview study with SNS users from US, Korea, and China to qualitatively probe the contextual influence on their privacy decisions. The

¹ One study finds the opposite though, namely that users with individualistic background make more self-disclosures in SNS [12].

contributions of our study are: 1) empirically explaining the cross-cultural differences in privacy behaviors; 2) identifying the primary contextual factors that shape privacy decisions in different cultures; 3) examining how the manner in which users build their online social networks in both cultures affect privacy decisions.

Method

As a pilot study, we conducted 28 interviews with SNS users in US, Korea, and China (US: 12, KR: 4, CN: 12). US is considered to be more culturally individualistic compared to Korea and China, which are more collectivistic countries [9]. We used snowball sampling to recruit the interviewees. All the US interviews were conducted face-to-face in English, while the Korean and Chinese interviews were through online audio chat in the respective native languages. The average length of the interviews was 30 minutes. We started interviews with general questions, such as length of SNS use, frequency of usage, and number of the users' primary SNS friends. We then proceeded to ask about what type of friend requests they perceived acceptable, what is not, and what information in a friend request led to their decisions. We also asked about what personal information they chose to disclose to the requester after their decisions.

We used grounded theory to analyze the interview data. Two researchers worked on a subset of the data through rounds of discussion to develop a codebook, where we identified the themes along contextual influence. Then, we completed coding for the remaining interviews and agreed that no new theme had emerged.

Preliminary Findings

We found that the contextual factors impacting users' privacy decisions about friend requests can be grouped into 4 categories:

Offline connections: if users know the requester from offline interactions, they are more likely to accept their friend request. Participants figure out whether they know the requesters offline based on their SNS name, photo, posts, mutual friends, etc. However, if offline interactions were unpleasant, some users feel more comfortable adjusting their privacy settings to make their profiles only partially visible rather than directly rejecting the friend request.

Mutual friends: if users do not know the requester offline, they are more likely to accept requesters with whom they share mutual friends.

Commonalities: if the user is in the same college, city, or SNS group as the requester, they are more likely to accept the friend request.

Purpose: if the user knows the requester's purpose of sending a friend request, such as to borrow a book or sublease a room, they are more likely to accept. But if the purpose is to advertise, users are more reluctant. Participants figure out the purpose of a friend request based on the requesters' greeting messages and SNS posts.

Comparing the responses between US, Korean and Chinese interviewees, we find that all the Korean and Chinese interviewees, and 10 of 12 US interviewees believe offline connection is the primary basis behind whether to accept or deny friend requests. If the

requester is unknown, 8/16 Chinese and Korean interviewees think the specific purpose is important for them to decide on a friend request, but they will restrict information disclosure, such their post history and profile. 6/16 Chinese and Korean interviewees think that they will accept the unknown requesters with whom they share mutual friends, especially the trusted mutual friends, because the mutual connections make the requesters more trustworthy. However, some Korean interviewees felt compelled to accept unwanted friend requests, because they shared mutual friends with the requester. For US interviewees, 10/12 mentioned mutual friends, 8/12 mentioned commonalities in terms of city, college, and company, are more important. Even if they do not know the requester offline, they are willing to accept the friend requests to expand their social networks if they have mutual friends or commonalities.

Discussion and Future Work

Based on a preliminary analysis of our interview data, we find that participants from US, Korea and China all regard offline connections as an important contextual factor in their friend request decisions. However, they seem to react differently to unknown requesters: participants from Korea and China consider purpose and mutual friends to be more important, while participants from US consider commonalities in terms of city, college, and company more often.

The theory of contextual integrity states that privacy is dependent on the contextual information norms [18]. Our findings extend the theory by exploring the cultural differences in contextual information norms in friend request decisions. Based on these results, we can hypothesize that the cultural differences in privacy decisions may be partially due to the cultural differences

in contextual information norms. In collectivistic cultures, users feel more comfortable accepting requests from those who are perceived as less risky – namely those who clearly indicate the purpose of the friend request or those who share close mutual friends. On the other hand, users from individualistic countries use commonalities, such as same college, company, and city shared with the friend requester to make their decisions. As a consequence, their online social networks may include people that they hardly know, which may raise their privacy concerns and risk of information disclosure. We will further test these hypotheses in our future research. We hope to run a scenario-based survey study that randomly manipulates the contextual factors found in the interview study, to causally test these hypotheses.

Our study also suggests that privacy settings and friend recommendation systems in SNSs should include different sets of features in different cultures. For example, SNSs in collectivistic culture may allow users to indicate their purpose in their friend requests, whereas in individualistic culture, features that discover commonalities should be implemented.

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