Affording to Exchange: 
Social Capital and Online Information Sharing

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Abstract

The potential harm and benefit associated with sharing personal information online is a topic of debate and discussion. Using survey methods (n = 872), we explore whether attainment of social capital online relates to greater comfort with sharing personal information. We found that perceptions of bridging and bonding social capital earned from using Facebook are significant predictors of overall comfort levels with sharing personal information. This research raises timely questions about how the perceived benefits of social networking sites influence how personal information is shared online.

Introduction

Communication technologies such as social networking sites (SNSs) complicate our management of personal information. Examples exploring the degree to which information is private on SNSs include a debate over whether it is ethical for employers to request employees' Facebook passwords and Federal Trade Commission requests for "do not track" options that allow consumers to control how companies like Facebook can collect and use their data.¹ In light of increased focus on the potential negative effects of sharing personal information, this study explores whether perception of benefits gained through SNS use—specifically Facebook—influences how users manage information online.

Technological advancements related to giving individuals the ability to share information, coupled with the development of technologies allowing for sophisticated collection and storage of that information, have transformed our view of privacy from a right to a commodity.²,³ Sharing information has long been associated with social benefits, and the most salient benefits of Facebook use are those related to social connection,¹⁴ suggesting a particularly social motive for self-disclosure online. The current paper attempts to understand how accrual of social capital through SNS use influences whether users feel comfortable sharing personal information.

Social networks and privacy issues

SNSs are Web sites that allow users to create profiles that include various public or semi-public details, amass lists of "friends" with whom they can share that information, and read profiles posted by these social contacts.² Over time, Facebook privacy settings have been altered so more information is openly available by default,⁷ placing more responsibility with the consumer to manage privacy settings. A recent Pew study found that 65% of SNS users have changed their privacy settings to limit what information is shared with others.⁸ Other surveys have found a third-person effect for information sharing, that users shared more private information than others while also reporting that information control and privacy were significant concerns.⁹ Barnes describes a privacy paradox, where adults worry about privacy invasions yet youth freely share very personal information online.¹⁰

The privacy paradox illustrates the tension between potential loss of privacy through online information sharing and potential social gains through disclosure of personal information.¹¹ Self-disclosure is one strategy used in computer-mediated communication to mitigate uncertainty and achieve intimacy in an online environment that lacks nonverbal cues.¹² SNS users may disclose personal information with the aim of strengthening social relationships. In studies of Facebook use, self-disclosure is both predicted by social attraction and predicts interpersonal trust.³ Relatedly, our study suggests that variance in comfort with sharing personal information on SNSs may be influenced by the perceived benefits people gain from use, in the form of social capital.

Social capital and the Internet

Social capital refers to the resources, or capital, accumulated through social interaction.¹³ In this research, we define social capital at the individual level of analysis, as resources, such as access to information or emotional support, accrued

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through an individual’s relationships with others in a social network. Recent longitudinal surveys among college students confirm the hypothesis that intensity of Facebook use leads to accrual of social capital; this is in contrast to the idea that social capital itself leads to intensity of SNS use.14,15

In much research on SNS use and social capital, a distinction, based on the quality of relationships, is made between bridging and bonding social capital.13 Bridging social capital is characterized by relatively weak ties among individuals. Connections formed through bridging are related to an expansion of world view or the gain of useful information or new perspectives, but not with emotional support.6 In contrast, bonding social capital is associated with strengthening ties that already exist, among close friends or family. In survey research among college students, intensity of Facebook use is related to higher bridging and bonding social capital, but while the bridging social capital model accounted for 46% of the variance, the bonding model accounted for less than half that.6 Because SNSs allow users to maintain weak ties with little investment of time or effort, Donath and boyd16 argue that such sites might increase the number of weak ties in a social network, which is related to bridging social capital.

Facebook also has implications for bonding social capital. Most users of Facebook use the site to connect with people they already know offline, rather than forging connections with strangers.17 Though Ellison et al.4 found a weaker relationship for bonding versus bridging social capital and intensity of Facebook use, student respondents in their survey viewed the primary audience for their site profiles as those with whom they have existing offline relationships. Finally, how Facebook users employ the site to interact online also influences perceived social capital. A random sample of college students who reported using Facebook for social information seeking, or discovering more information about weak ties, such as a classmate or new neighbor, also reported greater bridging and bonding social capital associated with the site relative to those students who were using the site to initiate new relationships or to maintain existing strong ties.15

Existing research views the relationship between SNSs and perceived social capital, measured with the bonding and bridging scales, as fairly unidirectional, in which site use leads to accrual of social capital as an outcome. However, bridging and bonding social capital are both measured as user perceptions of what they do or do not gain from site use. Uses and gratifications theory applied to SNSs suggest that the amount and character of Facebook use can be predicted from perceived gains.19 Recent experimental work has explored how perceived benefits from SNS usage can be both the gratification sought and the benefit gained. Specifically, Facebook use is proposed as both a motive for seeking connection with others and a benefit of doing so.20 In this study, we apply this bidirectional model of gratifications sought and gained from Facebook use to social capital. We view social capital as a perceived benefit that also provides a potential motive for sharing personal information online. We test this assumption specifically by parsing differences in how bonding versus bridging social capital predict information sharing.

The research on social capital and sites such as Facebook suggests that while the affordances of SNSs may be more strongly linked to development of bridging social capital, use of the site also leads to development of bonding social capital, in which existing offline relationships are strengthened through online contact. In this study, we explore not which type of social capital is more likely to be accrued through SNS use, but more specifically how accrual of bridging versus bonding social capital predicts sharing personal information. We suggest that those who see gains in bridging social capital will be likely to forfeit some privacy by sharing information with their online social network, but that those who perceive greater gains of bonding social capital will also be more likely to share personal information than those who see the site as creating a bridging network of weak ties.

We contend, therefore, that perceived bridging and bonding social capital accrued through Facebook use will be linked to how comfortable people feel with sharing personal information online. In addition to having the ability to post profile information to Facebook, users often post photos and other material about themselves and friends to their own and others’ pages. Therefore, users’ perceptions of building bridging and bonding social capital should positively relate to reported comfort levels with posting photos.

H1: Students’ perception of building bonding social capital through Facebook use will be positively related to comfort levels with sharing personal information and posting photos of themselves and others on Facebook.

H2: Students’ perception of building bridging social capital through Facebook use will be positively related to comfort levels with sharing personal information and posting photos of themselves and others on Facebook.

Beyond examining the effect of perceptions of social capital on comfort levels with sharing personal information and photos, we also expect to see a relationship between perceptions of building bridging and bonding capital and amount of information shared on Facebook.

H3: Students’ perception of building bonding social capital through Facebook use will be positively related to the number of personal pieces of information shared on participants’ Facebook profiles.

H4: Students’ perception of building bridging social capital through Facebook use will be positively related to the number of personal pieces of information shared on participants’ Facebook profiles.

Methods

Survey procedure

A total of 931 journalism students at a large Midwestern university completed an online survey in exchange for extra credit in October 2009. Of these, 19 respondents reporting having no Facebook account, and 44 who completed less than half of the survey were excluded, leaving a total sample of 872 cases upon which analyses were performed. Most respondents were freshmen (35.8%) and sophomores (29.2%), with fewer juniors (23.6%), seniors (10.5%), and graduate students (1%) responding. The mean age was 19.53 years (SD = 1.70). Most respondents were women (65.4%).

Measures

The first dependent variable—comfort levels with sharing certain types of personal information online—was assessed by asking respondents to rate their comfort levels on a 7-point Likert scale. Categories of information shared in online social
networks corresponded to the types of information that can be shared in a profile on Facebook, including gender and birth date, relationship status, sexual orientation, and political affiliation. In total, we assessed about comfort levels relating to 18 different types of information. A mean score of these items was calculated to make one variable that represented overall comfort level with sharing personal information on Facebook (Cronbach’s α = 0.875). The second dependent variable, which asked about comfort with posting photos, was assessed by two questions: one about comfort with posting photos of oneself and another about posting photos of friends. These two items were highly related (r = 0.912, p < 0.001), and therefore a mean score was computed for data reduction purposes.

The third dependent variable measured the number of personal pieces of information shared via Facebook profile. Participants were asked to check boxes next to the items that they shared, including relationship status, political views, address, and phone number. In total, 16 such categories of information were listed. An index was created by summing these 16 individual variables, and participants shared an average of 9.73 (SD = 3.12) items.

The two independent variables were the extent to which one perceives that Facebook builds bridging and bonding social capital. To measure these perceptions, we used items adapted from Williams’ scales for measuring social capital. Both scales showed a high degree of reliability (bridging, Cronbach’s z = 0.904; bonding, Cronbach’s z = 0.876).

Several variables were assessed to provide statistical control, including willingness to self-censor (WTSC) and intensity of Facebook use. WTSC—an individual difference that measures the degree to which individuals are willing to speak out when they fear social isolation related to the content of their speech—has been shown to be related to self-censorship on Facebook. The 8-item WTSC scale included such items as “It is difficult for me to express my opinion if I think others won’t agree with what I say” and “I tend speak my opinion only around friends or other people I trust” (Cronbach’s z = 0.851).

Intensity of Facebook use was measured with the Facebook Intensity Scale developed by Ellison et al. The Likert scale includes statements such as “Facebook has become part of my daily routine” and “I would be sorry if Facebook shut down.” Additionally, the scale includes two continuous interval variables, one that asks the number of Facebook friends and one that asks for the minutes per day respondents spend on Facebook. After collection, data from these two variables and the six scale variables were standardized to compute new variables (Cronbach’s z = 0.833). Additionally, gender (0 = male, 1 = female), age, and year in school (1 = freshman through 4 = senior) were all measured as additional controls. (See Table 1 for bivariate correlations between all variables.)

The 872 Facebook users included in the analysis spent an average of nearly 2 hours on the service each day (mean = 108.52 minutes; SD = 129.37). The mean number of friends reported was 681 (SD = 440.71).

| Table 2. Summary of OLS Linear Regression Analysis for Variables Predicting Comfort with Sharing Personal Information in a Facebook Profile |
|-----------------|-----------------|-----------------|-----------------|
|                   | Female          | Age             | Year in school  |
|                   |                 |                 |                 |
| β                 |                 |                 |                 |
| Female            | −0.216***       | −0.012          | −0.067          |
| Age               |                 |                 |                 |
| Year in school    |                 |                 |                 |
| Willingness to self-censor | −0.057 |                 |                 |
| Facebook intensity| 0.150***        |                 |                 |
| Bridging social capital | 0.128*** |                 |                 |
| Bonding social capital | 0.206*** |                 |                 |
| n = 851           |                 |                 | R² = 0.179      |

* * * p < 0.01; ** * * p < 0.001.
Table 3. Summary of OLS Linear Regression Analysis for Variables Predicting Comfort with Sharing Photos of Oneself and Friends Online

<table>
<thead>
<tr>
<th></th>
<th>β</th>
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<tbody>
<tr>
<td>Female</td>
<td>−0.005</td>
</tr>
<tr>
<td>Age</td>
<td>−0.009</td>
</tr>
<tr>
<td>Year in school</td>
<td>−0.110*</td>
</tr>
<tr>
<td>Willingness to self-censor</td>
<td>−0.095**</td>
</tr>
<tr>
<td>Facebook intensity</td>
<td>0.240***</td>
</tr>
<tr>
<td>Bridging social capital</td>
<td>0.092*</td>
</tr>
<tr>
<td>Bonding social capital</td>
<td>0.156***</td>
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n = 851, R² = 0.178

*p < 0.05; **p < 0.01; ***p < 0.001.

To test all hypotheses, we used ordinary least squared (OLS) linear regression. With the tests that examined the effects of social capital on comfort levels with sharing personal information, the entire model accounted for about 18% of the variance (adjusted R² = 0.172). Perception of building bonding capital (β = 0.206, t(844) = 5.562, p < 0.001) was a significant, positive predictor of overall comfort levels with sharing information online. In addition, perception of building bridging social capital (β = 0.128, t(844) = 3.371, p < 0.001) was also a significant predictor of comfort levels (see Table 2). In other words, controlling for all other variables, increases in the extent to which respondents believe they are building either bridging or bonding social capital are associated with comfort levels with sharing private information.

The first two hypotheses also suggested a positive relationship between social capital and comfort with posting photos of oneself and friends online. The entire model accounted for about 18% of the variance (adjusted R² = 0.171). Perceptions of building bonding capital (β = 0.156, t(844) = 4.220, p < 0.001) as well as bridging (β = 0.092, t(844) = 2.410, p < 0.05) social capital were both significant, positive predictors of comfort levels with sharing photos (see Table 3). Therefore, the first hypothesis, which stated that students’ perception of building bonding social capital would be positively related with comfort levels of sharing personal information and photos on Facebook, and the second hypothesis, which posited a similar relationship with bridging social capital, were both supported.

The final set of hypotheses posited that bridging and bonding social capital would be significant predictors of actual Facebook sharing. The entire model accounted for about 14% of the variance (adjusted R² = 0.131). Perception of building bonding capital (β = 0.095, t(844) = 2.514, p < 0.05) was a significant, positive predictor of the number of personal items shared on Facebook. However, perception of building bridging social capital (β = 0.052, t(844) = 1.324, p = 0.19) was not a significant predictor (see Table 4).

Discussion

The variable most often linked with benefits from SNS use is social capital, a measure of resources people gain from social interaction. Recent surveys link SNS use with social capital, and longitudinal research shows that the SNS use builds perceptions of received bonding and bridging social capital. In this study, we begin with the assumption, based on past empirical research, that user-perceived social capital is indeed built through use of Facebook. We sought to determine how users’ perceptions of social capital gained from Facebook use influence their comfort with sharing personal information and posting photos online, as well as the information they actually report sharing. In this study, we view social capital as a perceived benefit that provides a motive for disclosing personal information online.

The first aim was to show that perceptions of social capital are indeed linked with likelihood of sharing information. Our analysis verifies this hypothesis. Facebook users who perceived greater social capital built through the site were more comfortable with sharing personal information online. Of interest, this relationship held for both types of social capital: bonding, which makes existing social ties stronger, and bridging, which leads to new, weaker ties. Although past research suggests that the affordances of the Internet and of SNSs in particular are theorized to promote bonding social capital, results of our survey demonstrate that people who see Facebook as a venue for creating bridging social capital are also more willing to share personal information. In considering why this may be so, we suggest that personal information is perceived as a resource shared for some social benefit. Theories of information sharing posit that Facebook users may be sharing personal information in the hope that sharing these resources will lead to more social capital gained through Facebook use. Those who seek to build bridging social capital might expect that sharing information about their political persuasion or favorite films might allow them to connect with other users who share those preferences, while those who report building bonding social capital might perceive information sharing as a way to strengthen existing ties. Specifically, sharing one’s own preferences might be half of an exchange in which users expect reciprocity for divulging information.

The most interesting finding in this study is that the type of social capital users report accruing from use is related to how they use the site. For example, the number of pieces of personal information is significantly related only to bonding social capital. This suggests that those who see Facebook as a venue for strengthening existing ties are more likely to provide access to personal information.

Though we document a relationship between perceived social capital and sharing information on Facebook, our cross-sectional survey does not explain the direction or causal links in this relationship. One significant question is whether...
people build social capital primarily through sharing personal information, or whether they share information because they have built that capital. Future research should further explore this relationship and should also explore how different needs satisfied by Facebook participation relate to accrual of perceived social capital. Studies such as these will help explain how young adult users characterize the benefits of SNS use and how those perceived benefits inform the way their identities are constructed and shared online.

Author Disclosure Statement

No competing financial interests exist.

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