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Information Sharing and Relationships on Social Networking Sites

Wouter M.P. Steijn, MSc; and Alexander P. Schouten, PhD

Abstract

This article investigates the relationship between sharing personal information and relationship development in the context of social networking sites (SNSs). Information disclosed on these sites could affect relationships in a different manner compared to more traditional interactions, such as instant messaging or face-to-face interaction. Respondents in the age range of 12 to 83 were surveyed about experiences of relationship development as a consequence of contact through Facebook or Hyves—the most popular Dutch SNSs. Results showed a primarily positive effect of information sharing on SNSs on our relationships. Furthermore, relationship development mainly occurs among acquaintances and friends, and public posts are most strongly related to relationship development. These findings suggest that SNSs might affect relationships in a distinct fashion as acquaintances and friends gain access to public self-disclosures that might normally only be reserved for close friends and family. Overall, this study provides an insight into some of the positive aspects of the public nature of SNSs in contrast with the general negative associations.

Introduction

The relationship between sharing personal information (or self-disclosure) and relationship development has been well established both offline1 and online.2 Studies show a primarily positive effect of sharing personal information on various aspects of relationship development. For example, sharing personal information can lead to more closeness or intimacy,3–6 more liking,7 and more trust8 between interaction partners, as well as leading to the development of new relationships.9,10

Nowadays, social interaction increasingly takes place on social networking sites (SNSs) such as Facebook. SNSs distinguish themselves from many other forms of interaction, since they offer one-to-many communication, as opposed to one-to-one communication. Instant messaging, e-mail, and face-to-face interaction often occur between only two persons. SNSs, on the other hand, allow individuals to (a) construct a public or semi-public profile within a bounded system, (b) articulate a list of other users with whom they share a connections, and (c) view and traverse their list of connections.11 The information shared through public posts on these sites is usually available for all connections to see. These connections are sometimes strangers, but are generally people already known12–14 and include both strong (e.g., family) and weak ties (e.g., acquaintances).15,16

How information shared on SNSs may affect relationships and which relationships are likely to be affected have received little attention. Therefore, the goal of this article is to explore if information shared on SNSs is related to relationship development. Specifically, we will investigate whether information shared on Facebook and Hyves—the Dutch equivalent of Facebook—results in an increase or decrease in liking, trust, or intimacy within a relationship, and whether shared information results in the formation of new relationships or the loss of existing relationships.

Several studies have investigated the relationship between relational factors, such as trust and intimacy, and information sharing in online communities.17–20 The current study contributes to these studies in two important ways. First, these studies often took place in the context of online forums with professional contacts or strangers that shared an interest. On SNSs, however, the information shared is accessible by both strong and weak ties, and strangers. As such, this study will investigate whether strong and weak ties are affected differently by the information shared. Second, many of the previous studies investigated how certain relational factors develop in online communities and in turn affect the information that is shared. This study instead investigates how sharing personal information on a SNS might affect these relational factors.

Simultaneously sharing information with people with whom we have different levels of intimacy (family vs. friends

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vs. strangers) can have both positive and negative consequences. In their theory of social penetration, Altman and Taylor\textsuperscript{21(p29)} describe how interactions generally “proceed only generally and systematically from superficial to intimate topics.” On SNSs acquaintances and strangers have access to disclosures normally only shared with friends. Sharing intimate information in such a context may have a negative impact on the relationship.\textsuperscript{21,22} Previous work has investigated how this social overlap on SNSs can strain relationships,\textsuperscript{23,24} as information usually only shared with friends also becomes available for colleagues and family, or vice versa. Generally, users are aware of this social overlap,\textsuperscript{25,26} and several strategies can be used to manage this situation.\textsuperscript{25,27}

Alternatively, the one-to-many interaction on SNSs could also result in positive relationship development that would not occur through just one-to-one interaction. Whereas one-to-one communication primarily takes place with stronger ties due to time constraints—we simply cannot interact with everyone we know—information shared with friends on SNSs automatically becomes available for strangers, colleagues, and acquaintances as well. This could result in an improved relationship with these ties, since they gain access to more information than they would ordinarily have without SNSs. Consider, for example, the niece you normally only see on yearly family gatherings, but who is now constantly reading your self-disclosures to friends and vice versa. This constant exposure to each other could improve the relationship, considering the documented positive effects of self-disclosure on relationships. This suggests that any change in relationship development on SNSs will primarily take place among weak ties,\textsuperscript{28,29} since these ties especially gain increased access to personal information on SNSs.

Previous studies have shown both positive and negative consequences for relationship development due to SNSs. Recent findings indicate that 58% of 12 to 17 year olds and 61% of those 18 or older felt closer to another person because of an experience on SNSs, whereas only 22% and 15% respectively had an experience on SNSs that ended their relationship.\textsuperscript{30,31} However, these studies did not link these findings to the information shared on the site.

Studies that have explored the link between self-disclosure and relationship development in the context of SNSs generally report a positive effect.\textsuperscript{4,5,8,29} However, most of these studies were conducted among students, while nowadays SNSs are used by a much wider population.\textsuperscript{32,33} Here, we will study the effect of SNSs among a sample of those aged 12 year and older.

The aim in this article is to explore the link between relationship development and information sharing on SNSs. First, we investigate if SNSs are perceived to affect relationship development positively or negatively. The majority of studies report positive relationship development in terms of liking, trust, and intimacy due to information sharing.\textsuperscript{4,5,8,29}

Therefore, we hypothesize:

\textbf{H1a:} Within the context of SNSs, more relationships are formed as opposed to broken.

\textbf{H1b:} Within the context of SNSs, more relationships progress in terms of liking, trust, and intimacy as opposed to regress.

Since the publicity of shared information is what distinguishes SNSs from other media, public posts are expected to show the strongest association with relationship development. Our next hypothesis is thus:

\textbf{H2:} Of all forms of information sharing on SNSs, public posts will be most strongly related to relationship development.

Moreover, weak ties are expected to gain the most from the available information on SNSs because they may access private information to which they would otherwise never have had. Previous work would support the prediction that relationship development mainly takes place amongst weak ties.\textsuperscript{28,29} Our final hypothesis therefore states:

\textbf{H3:} Within the context of SNSs, relationship development will mainly take place among weak ties.

\section*{Method}

\subsection*{Sample}

The data were collected in the period between July 19 and August 4, 2011, by the research institute TNS-NIPO,\textsuperscript{4} and was part of a large scale survey about SNSs and related privacy attitudes. A stratified sampling procedure across eight age groups was used to obtain the sample. In total 1,008 respondents the aged between 12 and 83 years with a profile on either Facebook or Hyves\textsuperscript{6} completed the questionnaire. Six respondents were dropped from our analysis, as they explicitly stated they had created their profile for a different purpose (e.g., as a requirement for using a different site) and were not using it. Of the remaining 1,002 respondents, 125 (12.5\%) only have a profile on Facebook, 365 (36.4\%) only have a profile on Hyves, and 512 (51.1\%) have a profile on both sites, of which 268 respondents reported that they mainly use Hyves (52.3\%) and 244 mainly Facebook (47.7\%). The mean age of all respondents was 28.7 (SD=15.5), and 40\% were male.

\subsection*{Measures}

Based on the findings from previous studies, we were interested in whether information shared on SNSs results in the formation of new relationships\textsuperscript{7,10} or the loss of existing ones. Moreover, we investigated whether information shared on SNSs affects liking,\textsuperscript{7} trust,\textsuperscript{8} or intimacy\textsuperscript{3-6} within existing relationships, since these form key characteristics of relationships. To assess the relative occurrence of these different indicators of relationship development, the following eight yes/no questions were created: “Due to contact through your Facebook/Hyves profile, do you (a) like someone more; (b) like someone less; (c) trust someone more; (d) trust someone less; (e) feel more involved with someone; (f) feel less involved with someone; (g) have gained a new friendship; (h) have lost a friendship.” If answered positively, two items followed. First, they were asked what information caused the change in relationship development: profile information, public posts, chat, private messages, or other. Second, for the first six indicators, respondents were asked who the relationship development affected: people known from the Internet, friends of a friend, friends (including sport, hobby, and college friends), close friends, family, colleagues, acquaintances, or other. For the last two indicators (i.e., gained/lost a friendship), the second item asked what the strongest friendship lost or gained was:
acquaintance, friend, close friend, partner (or girl/boyfriend), or other.

In addition, data were obtained concerning what respondents share publicly on their profile. Respondents were asked to select which items they revealed (profile information) from a list of 12 options (e.g., name, address, interests). Next, they were asked how often they shared a public post (post frequency). Response possibilities were never, once a month, several times a month, once a week, several times a week, once a day, or several times a day. Finally, respondents reported which topics from a list with 11 options (e.g., health, family, or parties) they addressed in these posts (post content).

Results

Of all respondents, 574 (57.3%) reported that they had experienced at least one of the relationship developments due to contact through Facebook or Hyves. Specifically, 19.1% \((n=191)\) formed a new relationship, 12.2% \((n=122)\) lost a relationship, 22.6% \((n=226)\) liked someone better, 14.0% \((n=140)\) liked someone less, 7.9% \((n=79)\) trusted someone more, and 6.0% \((n=60)\) trusted someone less. More specifically, respondents with a Facebook profile were more likely to report having lost a relationship, more involved with someone, and less involved with someone. New relationships have been met in person in 76.4% \((n=146)\) of all reported occurrences. No consistent differences were found in the reporting of relationship development between respondents with only a Hyves profile, only a Facebook profile, or both. Respondents with a Hyves profile were more likely to report having lost a relationship \((15.3\%)\) compared to respondents with a Facebook profile \((8.0\%)\) or both \((10.9\%)\). McNemar analyses were used to test the significance of these differences. Significantly more respondents reported to have gained rather than lost a relationship, \(\chi^2(1,1002)=22.34, p<0.001\); to like someone better \(\chi^2(1,1002)=30.61, p<0.001\); and to feel more involved with someone as opposed to less, \(\chi^2(1,1002)=229.49, p<0.001\). No significant difference was found between the positive and negative change in trust.

The second hypothesis predicted that public posts would mainly take place among weak ties. Table 2 shows that relationships formed or lost concerned weak ties, such as friends or acquaintances, more often than strong ties, such as close friends and partners. One sample t test between percentages confirmed that weak ties were reported more often than strong ties for both forming a relationship, \(t(190)=11.40, p<0.001\), and losing a relationship, \(t(121)=4.819, p<0.001\). Similarly, McNemar analysis confirmed that compared to close friends and family, mainly relationships with friends and acquaintances experienced a positive or negative change in liking, trust, and involvement in a relationship (Table 3).

Finally, a logistic regression analysis was conducted for each indicator of relationship development with profile information, post frequency, and post content as independent variables to find further support for hypothesis 2. Gender and age were added as control variables. Table 4 gives an overview of the results.

Younger respondents were more likely to report forming a new relationship \((b=-0.013, p=0.037)\) and liking someone more \((b=-0.014, p=0.024)\), whereas older respondents reported feeling more involved with someone else \((b=0.012, p=0.011)\). Gender had a significant effect on trusting someone less \((b=-0.613, p=0.048)\) and feeling more involved with someone \((b=-0.301, p=0.043)\). In both situations, women were more likely to report the relationship development than men.

In further support of hypothesis 2, both post content and post frequency had a positive relationship with almost all relationship developments. This indicates that respondents who address more topics in their posts are more likely to report an increase or decrease of liking the other, trust, or involvement in a relationship more often as cause for all forms of relationship development.

McNemar analysis confirmed that the differences are statistically significant in the majority of the cases.

The third hypothesis predicted that relationship development would mainly take place among weak ties. Table 2 shows that relationships formed or lost concerned weak ties, such as friends or acquaintances, more often than strong ties, such as close friends and partners. One sample t test between percentages confirmed that weak ties were reported more often than strong ties for both forming a relationship, \(t(190)=11.40, p<0.001\), and losing a relationship, \(t(121)=4.819, p<0.001\). Similarly, McNemar analysis confirmed that compared to close friends and family, mainly relationships with friends and acquaintances experienced a positive or negative change in liking, trust, and involvement in a relationship (Table 3).

Table 2. Reported Strength of Newly Formed or Lost Relationship

<table>
<thead>
<tr>
<th>Gain relationship</th>
<th>Lost relationship</th>
<th>Positive like</th>
<th>Negative like</th>
<th>Positive trust</th>
<th>Negative trust</th>
<th>Positive involved</th>
<th>Negative involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>191</td>
<td>122</td>
<td>226</td>
<td>140</td>
<td>79</td>
<td>60</td>
<td>318</td>
</tr>
<tr>
<td>Acquaintances</td>
<td>39.8%</td>
<td>41.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends</td>
<td>40.3%</td>
<td>24.6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Close friends</td>
<td>9.4%</td>
<td>16.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner (girl/boyfriend)</td>
<td>7.9%</td>
<td>10.7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>2.6%</td>
<td>7.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. McNemar significances are reported for differences in relation to public posts. *\(p<0.05\); **\(p<0.01\); ***\(p<0.001\).
intimacy within a relationship, or the formation of a new relationship, or loss of an existing relationship. Posting more frequently had a similar effect except for a decrease in trust and intimacy. See Table 4 for the regression values.

Finally, profile information had a negative relationship with liking someone less ($b = -0.100$, $p = 0.033$), trusting someone less ($b = -0.136$, $p = 0.037$), or feeling less involved with someone ($b = -0.140$, $p = 0.043$). In other words, these three negative relationship developments were less likely to be reported by respondents who revealed more profile information.

### Discussion

The main aim of this study was to explore the relationship between relationship development and information sharing on SNSs. Respondents were asked to report whether changes in intimacy, liking, trust, involvement, and relationships lost/gained had occurred due to contact through Facebook or Hyves. The results provide evidence that information shared on SNSs have a primarily positive effect on relationship development. This supports existing research that information shared on SNSs has a positive effect on relationship development.

A strong relationship was found between sharing information through public posts and relationship development. Respondents consistently reported public posts as the main cause of relationship development, and logistic regressions showed that relationship development is consistently predicted by the frequency of public posts and the amount of topics addressed in these posts. The finding that frequency and content of the information shared are important for relationship development is in line with previous findings.

Although we did specifically ask respondents what caused the change in relationship development, we cannot make causal inferences based on the nature of our data. Future research could further test the causality of the relationships we uncovered.

Results showed that relationship development happened more often among weak ties than strong ties, in support of the existing literature. Relationship development was more likely to occur with friends and acquaintances than with close friends and family. This supports the assumption that simultaneously sharing with both weak and strong ties on SNSs through public posts can also be beneficial. We often lack the resources to maintain all our relationships through one-to-one channels, and most information is limited to our closest friends and relatives. Through sharing information through public posts on SNSs, weak ties gain access to information that would otherwise not be available to them. This may help strengthen relationships with weak ties.

Another finding was that respondents who shared more information on their profile were less likely to report negative relationship development such as decreases in trust and intimacy. This seems related to the argument made by Ellison et al.34(p24) that profile information can support relationships, as individuals are able to establish a common ground between them. Individuals who create a more elaborate image of who they are, where they live, and what their interests are have less risk that a relationship might discover an unpleasant surprise.

Some limitations apply to the current research. A major limitation of this study is that we used a simple yes or no scale to measure relationship development. It would have been better if our constructs could have been measured at a higher level of measurement, so we could test the relationship between public posts on SNS and relationship development with regression analysis. This may impact the validity of our findings, as the current design allowed for less variance in the responses. Future research should consider using measurement with other response scales.

A second limitation concerns the lack of data on chat or private messaging behavior on SNSs by the respondents. Therefore, the logistic regressions only included data concerning posting behavior and the profile information respondents had filled in. Although logistic regressions indeed confirmed that public posts are related to relationship development, this could not be compared to the possible effects of chatting or private messages. Future research may wish to compare both the relationship between public posts and relationship development and private posts and relationship development.

With the increasing role that SNSs are playing in daily life—Hyves has 9.7 million Dutch and Belgian users, and Facebook has more than one billion users worldwide—it is important to understand how SNSs affect our lives. The public nature of SNSs has often been associated with several negative consequences such as the loss of privacy and tension in relationships, both due to the presence of many different social relationships and the explicit and public accepting or rejecting of friend requests. However, the popularity of the sites suggests that they are not without merits as well, and users of SNSs are continuously balancing

### Table 3. Reported Type of Relationship Changed

<table>
<thead>
<tr>
<th></th>
<th>Positive like</th>
<th>Negative like</th>
<th>Positive trust</th>
<th>Negative trust</th>
<th>Positive involved</th>
<th>Negative involved</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N</strong></td>
<td>226</td>
<td>140</td>
<td>79</td>
<td>60</td>
<td>318</td>
<td>52</td>
</tr>
<tr>
<td><strong>Friends</strong></td>
<td>57.1%</td>
<td>46.4%</td>
<td>57.0%</td>
<td>46.7%</td>
<td>54.7%</td>
<td>53.8%</td>
</tr>
<tr>
<td><strong>Acquaintances</strong></td>
<td>38.9%</td>
<td>35.0%</td>
<td>22.8%</td>
<td>31.7%</td>
<td>31.1%</td>
<td>26.9%</td>
</tr>
<tr>
<td><strong>Only known from the Internet</strong></td>
<td>11.5%</td>
<td>8.6%</td>
<td>7.6%</td>
<td>6.7%</td>
<td>6.9%</td>
<td>15.4%</td>
</tr>
<tr>
<td><strong>Colleagues</strong></td>
<td>12.4%</td>
<td>9.3%</td>
<td>12.7%</td>
<td>5.0%</td>
<td>13.2%</td>
<td>15.4%</td>
</tr>
<tr>
<td><strong>Friends of friends</strong></td>
<td>24.3%</td>
<td>23.6%</td>
<td>15.2%</td>
<td>25.0%</td>
<td>14.2%</td>
<td>21.2%</td>
</tr>
<tr>
<td><strong>Close friends</strong></td>
<td>8.4%</td>
<td>4.3%</td>
<td>20.3%</td>
<td>11.7%</td>
<td>19.5%</td>
<td>11.5%</td>
</tr>
<tr>
<td><strong>Family</strong></td>
<td>11.5%</td>
<td>10.0%</td>
<td>22.8%</td>
<td>10.0%</td>
<td>22.3%</td>
<td>13.5%</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>1.3%</td>
<td>0.7%</td>
<td>0.0%</td>
<td>1.7%</td>
<td>1.3%</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

Note. *p < 0.05 in relation to friends; *p < 0.05 in relation to acquaintances.
the risks and benefits from making use of their profiles. This article has addressed one such possible merit of sharing information on SNSs; public sharing of personal information, opinions, and thoughts on SNSs can lead to positive developments in our relationships.

Notes

a. www.tns-nipo.com
b. Hyves is the most popular Dutch SNS (www.hyves.nl). Hyves is similar to Facebook, as it allows its users to create a profile and subsequently add other profiles as contacts. Users can leave messages at each other’s profile or post a message on a more general newsfeed that can be seen by all contacts.
c. www.hyves.nl
d. Newsroom.fb.com

Author Disclosure Statement

No competing financial interests exist.

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