Chapter 4

The Use of Social Network Sites for Relationship Maintenance in Long-Distance and Geographically-Close Romantic Relationships

This chapter is published as:
https://doi.org/10.1089/cyber.2014.0469
Abstract

Social networking sites (SNS) play an increasingly important role in maintaining geographically close romantic relationships (GCRR). However, knowledge about SNS use in long-distance romantic relationships (LDRR) is still lacking. The present study examined the relative importance of SNS in maintaining LDRR compared to GCRR, particularly with regard to the use of SNS to express involvement (via relational maintenance behaviors) and to gauge a partner’s involvement (via partner surveillance and jealousy) in the relationship. An online survey was conducted among predominantly young adult Facebook users who were in a romantic relationship (N = 272). Results showed that participants who were in a LDRR reported higher levels of relational maintenance behaviors through SNS than participants who were in a GCRR. Also, as compared to participants who were in a GCRR, participants who were in a LDRR used SNS more for partner surveillance and experienced higher levels of SNS jealousy.
Long-distance romantic relationships (LDRR) are defined as relationships in which geographic distance limits daily physical togetherness between partners and prevents them from being with each other as much as they would like (Pistole & Roberts, 2011). Geographic distance is a challenge to relationship maintenance. LDRR require more effort to maintain than geographically close romantic relationships (GCRR) (Aylor, 2003).

In GCRR, computer-mediated communication (CMC) is used as a supplement to face-to-face communication to maintain the relationship (Rabby & Walther, 2003). In LDRR, the use of CMC is more urgent: geographic separation requires partners to use a technological medium to communicate and sustain the relationship (Stephen, 1986).

Among the various forms of CMC, social networking sites (SNS) play an increasingly important role in maintaining relationships (Papp, Danielewicz, & Cayemberg, 2012). Facebook is the most popular SNS, with 1.5 billion users and five new accounts being created every second (Noyes, 2013). Recently, there has been an increase in research investigating the implications of SNS for romantic relationships. These studies are generally on GCRR (Clayton, Nagurney, & Smith, 2013; Craig & Wright, 2012; Dainton, 2013; Darvell, Walsh, & White, 2011; Emery, Muise, Dix, & Le, 2014; Fox & Warber, 2013; Hand, Thomas, Buboltz, Deemer, & Buyanjargal, 2013; Marshall, Bejanyan, Di Castro, & Lee, 2012; McEwan, 2013; Muise, Christofides, & Desmarais, 2009; Papp et al., 2012; Saslow, Muise, Impett, & Dubin, 2013; Stewart, Dainton, & Goodboy, 2014; Tokunaga, 2011; Utz & Beukeboom, 2011). Moreover, studies investigating the role of CMC in LDRR have often been limited to private, direct interpersonal communication, such as e-mail, texting, instant messaging, and video chat (Jiang & Hancock, 2013; Johnson, Haigh, Becker, Craig, & Wigley, 2008; Rintel, 2013). To the authors’ knowledge, no study has directly investigated the use of SNS in LDRR. In the current study, the role of SNS in relationship maintenance was investigated by comparing SNS use in GCRR and LDRR.
Examining SNS use in romantic relationships is important because it allows public communication between partners. Other forms of CMCs used in romantic relationships are often limited to private, direct interpersonal communication (e.g., video chat, texting, instant messaging, and e-mail) (Jiang & Hancock, 2013). SNS combine these features (e.g., synchronous and asynchronous, public and private, narrow and wide bandwidth) and make it possible to interact in interpersonal and social contexts. The social context of SNS provides indirect communication and access to social information, which have been neglected in previous research on LDRR (Jiang & Hancock, 2013; Johnson et al., 2008; Rintel, 2013; Tong & Walther, 2011). This study contributes to the existing literature by comparing individuals in GCRR and LDRR with respect to amount of SNS use for relationship maintenance, specifically in expressing involvement and gauging a partner’s involvement in the relationship.

**SNS Use and Romantic Relationships**

The possibility to communicate mundane, everyday events makes SNS useful in relationship maintenance (Tong & Walther, 2011). Importantly, the public context of SNS interaction provides opportunities for public displays of affection and mutual belonging (Tong & Walther, 2011; Utz & Beukeboom, 2011). Also, via SNS, people can unobtrusively access their partner’s social interactions with others (Tokunaga, 2011; Utz & Beukeboom, 2011). GCRR couples do make use of these SNS affordances (Clayton, et al., 2013; Craig & Wright, 2012; Dainton, 2013; Darvell et al., 2011; Emery et al., 2014; Fox & Warber, 2013; Hand et al., 2013; Marshall et al., 2012; McEwan, 2013; Muise et al., 2009; Papp et al., 2012; Saslow et al., 2013; Stewart et al., 2014; Tokunaga, 2011; Utz & Beukeboom, 2011), and those who integrate face-to-face and online communication experience greater relational closeness (Caughlin & Sharabi, 2013). Because LDRR lack daily physical togetherness, it was predicted that those in LDRR would have relatively higher levels of SNS use intensity (i.e., SNS use,
emotional connectedness to the medium, and integration of the medium in one’s daily activities) (Ellison, Steinfield, & Lampe, 2007):

**H1: Individuals in LDRR have higher levels of SNS use intensity than those in GCRR.**

**SNS and Relationship Maintenance Processes**

**Expressing relationship involvement via SNS.** Relationship maintenance involves processes that not only sustain the relationship but also ensure relationship satisfaction (Dindia & Canary, 1993; Stafford, 2003). The efforts exerted to sustain a satisfying relationship are referred to as relational maintenance behaviors (Canary & Stafford, 1992). These behaviors consist of strategic efforts (i.e., conscious strategies intended to maintain the relationship) and routine efforts (i.e., every day, mundane behaviors enacted without the explicit goal of maintaining the relationship but which may serve maintenance functions) (Dainton & Aylor, 2002; Stafford & Canary, 1991). Due to distance, traditional (face-to-face) expressions of relational maintenance behaviors may be limited among LDRR couples. To compensate, they may use SNS to enact relational maintenance behaviors. For instance, they may send a private message saying “I love you” to their partner (strategic) or post a status update of their thoughts at a given time (routine) (Stafford, Dainton, & Haas, 2000). Thus, it was hypothesized that:

**H2: Individuals in LDRR will have higher levels of expression of strategic and routine maintenance behaviors via SNS than individuals in GCRR.**

**Gauging a partner’s relationship involvement via SNS.** Individuals in a relationship often seek information about their partners, especially concerning their involvement in the relationship (Afifi, Dillow, & Morse, 2004). In GCRR, SNS are used to gain information about the partner (Utz & Beukeboom, 2011). Utz and Beukeboom (2011) suggested that SNS are not only a passive source of information, users also intentionally gather information about their partner’s activities via SNS. Tokunaga (2011) found that individuals in GCRR monitor their partner’s SNS activities via interpersonal electronic surveillance (e.g., visiting their partner’s
page often, reading comments about their partner on friends’ walls). Individuals in LDRR compared to GCRR have less direct communication and less access to social information regarding their partner. Given that limited physical togetherness reduces access to the partner’s social information, it was hypothesized that:

**H3: Individuals in LDRR will engage more in SNS partner surveillance than individuals in GCRR.**

Information gathered via SNS, whether directly or indirectly, may be interpreted and used as a gauge of a partner’s involvement in the relationship. SNS information may be a basis to infer a partner’s loyalty and commitment. Observations of a partner’s interactions with others displayed on SNS may lead individuals in GCRR to interpretations that elicit jealousy (Muise et al., 2009; Utz & Beukeboom, 2011). Muise et al. (2009) showed that ambiguous scenes on SNS of a partner interacting with past romantic and sexual partners as well as unknown others may trigger jealousy, which is related to doubts about a partner’s fidelity. Moreover, those who engage actively in SNS partner surveillance are likely to experience jealousy related to their partner’s SNS activities (Utz & Beukeboom, 2011). Because LDRR have fewer opportunities to observe their partners in public contexts, it was predicted that they engage in more SNS partner surveillance and experience more SNS-related jealousy. Thus, corollary to the previous hypothesis, it was predicted that:

**H4: Individuals in LDRR are more likely to experience SNS-related jealousy than those in GCRR.**
Method

Participants and Procedure

An online survey was conducted among Facebook users who were involved in a romantic relationship. Facebook was selected because it is currently the most popular SNS. The sample consisted of 272 participants (187 females). They were recruited online by posting a link to an online survey on Facebook. Participants in LDRR were specifically recruited by posting on Facebook group pages of international university students and overseas workers. Participation was voluntary. Participants had to indicate that they were Facebook friends with their partner. Participants’ mean age was 23 years ($SD = 4.37$ years; range 17–52 years old). The sample consisted predominantly of young adults, with 86% of the sample belonging to the 17–25 age range. One hundred and ten participants self-assigned as being involved in GCRR, and 162 in LDRR. LDRR was defined based on whether participants considered themselves to be LDRR or GCRR. According to Stafford (2005), “such a definition likely captures each individual’s relational reality better than researcher-imposed constructions” (p. 27). Table 1 displays the means and standard deviations of age of respondents according to gender and relationship type.

Table 1

Means and standard deviations of age of respondents according to gender and relationship type (GCRR vs. LDRR).

|        | GCRR | | | | LDRR | | | |
|--------|------|---|---|------|------|---|---|---|---|
|        | $n$  | $M$ | $SD$ | $n$ | $M$ | $SD$ | | | |
| Females| 77   | 24.18 | 6.72 | 110  | 22.61 | 2.62 | | | |
| Males  | 33   | 23.79 | 3.44 | 52   | 23.46 | 3.11 | | | |
| Total  | 110  | 24.06 | 5.92 | 162  | 22.89 | 2.80 | | | |

Note. GCRR - geographically-close romantic relationships; LDRR - long-distance romantic relationships
Measures

Facebook use. Items from the Facebook Intensity Scale (Ellison et al., 2007) assessed Facebook usage, emotional connectedness to Facebook, and integration into one’s daily life (1 = strongly disagree to 7 = strongly agree). An example item is “Facebook is a part of my everyday activity.” Items were averaged to establish an SNS use intensity score, with higher values indicating more active participation in Facebook (Cronbach’s $\alpha = 0.80$).

Relational maintenance behaviors. Stafford, Dainton, and Haas’s (2000) measure of maintenance behaviors was adapted to fit the Facebook context, and a few items were excluded because they were not relevant as Facebook maintenance behaviors (e.g., “I perform my household responsibilities”; 1 = strongly disagree to 7 = strongly agree). To differentiate the use of SNS in LDRR with respect to relevant (strategic) and mundane (routine) maintenance functions (Tong & Walther, 2011), items tapping strategic (e.g., “I say ‘I love you’ on Facebook”) and routine efforts (e.g., “I encourage my partner to share his/her feelings with me via Facebook”) were averaged to establish strategic (10 items, Cronbach’s $\alpha = 0.90$) and routine (10 items, Cronbach’s $\alpha = 0.95$) maintenance scores.

SNS partner surveillance. Items from Tokunaga’s (2011) Interpersonal Electronic Surveillance for SNS (ISS) Scale were used and adapted to be Facebook specific (e.g., “I visit my partner’s Facebook page often”; 1 = strongly disagree to 7 = strongly agree; 9 items, Cronbach’s $\alpha = 0.90$).

SNS jealousy. Six items from the scale developed by Muise et al. (2009) measured SNS jealousy. An example item is “How likely are you to become jealous after your partner has added an unknown member of the opposite sex on Facebook?” (1 = very unlikely to 7 = very likely; Cronbach’s $\alpha = 0.93$).

Relationship quality. Several relationship quality components that have been found to have links with relationship maintenance were measured (Dainton & Aylor, 2002; Stafford et
al., 2000; Weigel, Brown, & O’riordan, 2011): commitment (15 items; Cronbach’s $\alpha = 0.93$) (Sternberg, 1986), relationship satisfaction (10 items, Cronbach’s $\alpha = 0.84$) (Norton, 1983), trust (7 items, Cronbach’s $\alpha = 0.86$) (Larzelere & Huston, 1980), and relational (un)certainty (2 items, Cronbach’s $\alpha = 0.73$) (Dainton & Aylor, 2001).

**Results**

Using independent samples t test, it was found that LDRR and GCRR participants showed comparable levels of commitment, relationship satisfaction, and trust. Individuals in GCRR reported more relational certainty, $M = 4.04$, $SD = 0.80$, $n = 92$, than individuals in LDRR, $M = 3.80$, $SD = 0.81$, $n = 120$; $t(210) = 2.14$, $p < 0.05$, $d = 0.30$. To test H1, which predicted that individuals in LDRR have higher levels of SNS use intensity compared to those in GCRR, an independent samples t test confirmed that participants in LDRR have higher levels of Facebook use intensity, $M = 5.01$, $SD = 1.04$, $n = 139$, compared to participants in GCRR, $M = 4.55$, $SD = 1.15$, $n = 104$; $t(241) = -3.20$, $p < 0.01$, $d = 0.41$. H1 was therefore supported (see Table 2).

**SNS Use in Expressing One’s Relationship Involvement**

H2 predicted that individuals in LDRR, more than those in GCRR, express strategic and routine maintenance behaviors on Facebook. Confirming H2, LDRR participants reported higher levels of expressions of strategic maintenance behaviors, $M = 3.26$, $SD = 1.40$, $n = 135$, than GCRR participants, $M = 2.53$, $SD = 1.14$, $n = 102$; $t(234) = -4.44$, $p < 0.001$, $d = 0.58$. Participants in LDRR had higher levels of expression of routine maintenance behaviors, $M = 3.00$, $SD = 1.63$, $n = 135$, than participants in GCRR, $M = 2.00$, $SD = 1.12$, $n = 102$; $t(233) = -5.63$, $p < 0.001$, $d = 0.74$. 
### Table 2

**GCRR and LDRR comparison of means**

<table>
<thead>
<tr>
<th>Relationship type</th>
<th>GCRR</th>
<th>LDRR</th>
<th>t-test</th>
<th>df</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNS use intensity</td>
<td>4.55 (1.15)</td>
<td>5.01 (1.04)</td>
<td>-3.20</td>
<td>**</td>
<td>241</td>
</tr>
<tr>
<td>SNS strategic maintenance</td>
<td>2.53 (1.14)</td>
<td>3.26 (1.40)</td>
<td>-4.44</td>
<td>***</td>
<td>234</td>
</tr>
<tr>
<td>SNS routine maintenance</td>
<td>2.00 (1.12)</td>
<td>3.00 (1.63)</td>
<td>-5.63</td>
<td>***</td>
<td>233</td>
</tr>
<tr>
<td>SNS partner surveillance</td>
<td>3.66 (1.25)</td>
<td>4.48 (1.17)</td>
<td>-4.86</td>
<td>***</td>
<td>207</td>
</tr>
<tr>
<td>SNS jealousy</td>
<td>2.84 (1.54)</td>
<td>3.70 (1.54)</td>
<td>-3.95</td>
<td>***</td>
<td>205</td>
</tr>
</tbody>
</table>

Note: Standard deviations appear in parentheses; * p < .05, ** p < .01, *** p < .001

### SNS Use in Gauging a Partner’s Relationship Involvement

H3 predicted that individuals in LDRR, more than those in GCRR, engage in SNS partner surveillance. As predicted, participants in LDRR reported higher levels of SNS partner surveillance, \( M = 4.48, SD = 1.17, n = 119 \), than participants in GCRR, \( M = 3.66, SD = 1.25, n = 90 \); \( t(207) = -4.86, p < 0.001, d = 0.68 \), thereby supporting H3.

Lastly, H4 predicted that individuals in LDRR, more than those in GCRR, experience SNS-related jealousy. LDRR participants reported higher levels of Facebook jealousy, \( M = 3.70, SD = 1.54, n = 118 \), than GCRR participants, \( M = 2.84, SD = 1.54, n = 89 \); \( t(205) = -3.95, p < 0.001, d = 0.55 \). These results are consistent with H4.
Discussion

The current study examined the use of SNS in romantic relationship maintenance. Individuals who were involved in LDRR and GCRR were compared in terms of their intensity of use of SNS and their specific uses of SNS for relationship maintenance. In general, individuals in LDRR had higher SNS use intensity than individuals in GCRR. Also, those in LDRR used SNS more for relationship maintenance than those in GCRR.

SNS and Relationship Involvement Expressions

Individuals in LDRR, more than those in GCRR, use SNS to perform relational maintenance behaviors, similarly for strategic and routine efforts. Access to SNS is easy, convenient, and relatively cheap, allowing constant connectivity. The range of SNS features enable people to choose from private and public interactions, direct and indirect sharing, and narrow and wide bandwidth communications. The accessibility of SNS and the choices of communication modalities allow people to communicate not just strategic messages but also routine and mundane information. The regular sharing of information, both relevant and mundane, provides maintenance functions (Dainton & Aylor, 2002). Previous research on the use of CMC in relationship maintenance failed to capture the value of mundane sharing of day-to-day experiences (Tong & Walther, 2011). This study contributes to existing knowledge by providing initial evidence for routine and mundane relational maintenance via SNS.

Gauging a Partner’s Involvement via SNS

Previous studies have demonstrated that people involved in romantic relationships use SNS to access information and to monitor their partner, and that they rely on this information to gauge their partner’s involvement and loyalty (Muise et al., 2009; Tokunaga, 2011; Utz & Beukeboom, 2011). The present research contributes to these findings by showing that these SNS-related behaviors and experiences are more pronounced among people in LDRR. Partner surveillance and jealousy are oftentimes interpreted as negative consequences of SNS
use in romantic relationships, suggesting that SNS use is detrimental to LDRR. However, such an interpretation might be erroneous. Considering the situation of LDRR couples, SNS may provide LDRR couples with opportunities to experience relationship processes that might otherwise be absent or limited. These processes, although related to negative emotions and thoughts, may have important maintenance functions depending on the couple’s motivations and responses. For instance, SNS partner surveillance may be the only way for LDRR couples to access social information about their partner. SNS surveillance can be either intentional or unintentional (Utz & Beukeboom, 2011). Unintentional SNS surveillance is inherent in the medium. Thus, whether couples want information about their partner or not, information sharing is inevitable if they are SNS contacts. Information about the partner and public displays of affection via SNS may contribute to relationship maintenance (Papp et al., 2012). Intentional SNS partner surveillance may be perceived as a negative behavior because of its intrusive characteristic (Utz & Beukeboom, 2011). However, without any other sources of public information in LDRR, purposeful seeking of information about the partner may signal continued interest and concern for the partner who is far away. When couples lack daily togetherness for an extended period of time, SNS partner surveillance may thus serve a maintenance function for the relationship. Like SNS surveillance, SNS-related jealousy may not necessarily be bad for the relationship. Attridge (2013) described offline (reactive) jealousy in GCRR as a positive sentiment because it promotes relationship quality. It arouses a sense of protectiveness over the relationship, motivating one to act in a manner that affirms love for the other. SNS-related jealousy may function in a similar manner and thereby contribute positively to relationship quality. SNS provide LDRR couples with public relational experiences and processes that otherwise would be very limited. Although SNS partner surveillance and SNS jealousy are interpreted as negative consequences of SNS use, they may serve maintenance functions in situations where partners are separated by distance. Because the two types of
relationships did not differ substantially in relationship quality, it is likely that the distance-related lack of physical means to perform and experience relationship maintenance processes contributed to individuals in LDRR relying more on SNS than individuals in GCRR.

**Limitations and Future Directions**

The findings of the current study must be considered in the light of several limitations. First, results based on this convenience sample may not be generalized beyond college-aged, young adults. Moreover, the current study did not consider length, stages, types of romantic relationship (e.g., dating vs. married), distance, or types of LDRR (e.g., domestic vs. international). Further, selected items were used from existing scales and the maintenance relational behaviors scale was scored based on strategic and routine categories to meet the purpose of the study. Although each scale in the current study showed satisfactory reliability, the comparability to other studies that use the same measure is limited.

For future studies, a systematic investigation of the impact of relationship quality components (e.g., relationship satisfaction, trust) on SNS use in LDRR is recommended. Moreover, further investigation using experimental and longitudinal designs to examine the underlying processes of the links found in the current study is recommended. Using a dyadic level of analysis, looking at the interplay between partners, is suggested. Additionally, a more nuanced investigation on the use of SNS such as the use of specific communication features, ease of access, and forms of access (e.g., computer, phone or tablets) is recommended. Lastly, future studies should differentiate domestic and international LDRR, and take cultural factors into account.
Conclusions

To the authors’ knowledge, this is the first study on the effects of SNS use in romantic relationships that has examined private and public contexts of relationship maintenance processes, and that has compared the use of SNS in LDRR and GCRR. Individuals in LDRR were more likely than individuals in GCRR to use SNS for relationship maintenance by using SNS to express their involvement and to gauge their partner’s involvement. The results of this study suggest that SNS is a viable medium for relationship maintenance. Aside from regular interpersonal communications between couples, it provides social and public contexts for relationship processes that are typically limited in LDRR. For GCRR couples, SNS is ancillary to offline relationship maintenance processes. For LDRR couples, because of a lack of physical and social means to perform and experience relationship maintenance processes, the findings suggest that SNS is an important alternative. It is hoped that the current study stimulates further investigation on the role of SNS in LDRR, especially on how it may mitigate the impact of geographic separation among couples. Lastly, the current study contributes to existing knowledge by accounting for both private and social contexts of SNS use that may be important in future theorizing about the role of CMC in relationship maintenance.


Tokunaga, R. S. (2011). Social networking site or social surveillance site? Understanding the use of interpersonal electronic surveillance in romantic relationships. *Computers in Human Behavior, 27*(2), 705-713. doi: 10.1016/j.chb.2010.08.014
