

Social Networking Sites in Romantic Relationships: Attachment, Uncertainty, and Partner Surveillance on Facebook

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Abstract

Social networking sites serve as both a source of information and a source of tension between romantic partners. Previous studies have investigated the use of Facebook for monitoring former and current romantic partners, but why certain individuals engage in this behavior has not been fully explained. College students ($N=328$) participated in an online survey that examined two potential explanatory variables for interpersonal electronic surveillance (IES) of romantic partners: attachment style and relational uncertainty. Attachment style predicted both uncertainty and IES, with preoccupieds and fearfuls reporting the highest levels. Uncertainty did not predict IES, however. Future directions for research on romantic relationships and online surveillance are explored.

Introduction

THE USE OF MEDIA FOR COMMUNICATING in close relationships has escalated in recent years due to the advent of social media, texting, and other technologies that enable convenient and pervasive access to others. The social networking site (SNS) Facebook has become perhaps the most successful single platform with more than one billion users worldwide.¹ College students are particularly heavy users, averaging 1 to 2 hours on the site each day.^{2,3}

Despite Facebook's growing dominance in interpersonal and social interaction, limited research has addressed its implications for our romantic relationships, both on- and offline. By connecting on Facebook, partners are able to post messages on each other's profiles, search a partner's extended network of friends, view each other's photographs, examine a partner's history of posts and pictures, message each other privately, or identify the other as one's romantic partner in the relationship status (i.e., going "Facebook official").^{2,4-8} Given these affordances, it is imperative that researchers investigate how romantic partners use SNSs to monitor their partners. However, little is known about how relational variables such as attachment style influence this process. This study contributes to the existing research on SNSs and romantic relationships by examining the role of attachment style,⁹ sex,⁷ and relational uncertainty¹⁰ in monitoring one's current or former romantic partner.^{11,12}

Social networking sites

SNSs enable a user to (a) create a public or semi-public profile, (b) identify and connect with other users, and (c) trace these first-degree connections to identify members farther out in the collective network.¹³ In contrast to previous forms of online interaction, SNSs like Facebook are nonymous and predominantly used to connect with one's existing offline networks.¹⁴ Because social networks often play a significant role in romantic relationships,^{15,16} it is unsurprising that Facebook is affecting how partners interact, both online and offline.^{8-12,17,18}

Romantic relationships and monitoring behavior

Within romantic relationships, it is common for individuals to stay apprised of the happenings in their partners' lives. Communication within the couple, an interactive strategy, is the most straightforward way to garner this information, but it is common for partners to employ other information-seeking strategies to learn about their target (the other partner).¹⁹ For example, a partner may use a passive strategy and observe the target's behavior from a distance, such as watching them interact with others at a party, or a partner may engage in an active strategy and consult third parties, such as mutual friends, for information about the target.¹⁹

SNSs provide a novel way for partners to gather information about each other.^{2,10-12,17} Indeed, monitoring another

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person is one of the most common uses for SNSs.²⁰ Tokunaga identifies four characteristics of SNSs that promote *interpersonal electronic surveillance* (IES) of one's romantic partner.¹² First, information is readily accessible through these sites. It is easy to join an SNS and only requires a simple click to access the profiles of your connections. Second, information on SNSs is comprised of various media.¹² Users can post textual messages, photographs, links, and audio or video clips. Given that pictures are considered more credible than words on SNS profiles,²¹ this capability may be particularly relevant to partners with suspicions. Third, SNSs allow the archiving of profile information. Partners may conduct IES of the target's past posts, photos, or interactions with others to gather more data. Fourth, given that neither geographical proximity nor social interaction is necessary to obtain this information, data may be gathered more surreptitiously.¹² The target may never know that s/he is under surveillance by the partner. Thus, Facebook's affordances enable partners to gather information via IES, which may answer questions about the relationship or, conversely, lead to more.^{19,22}

Relational uncertainty

One predictor that has been shown to increase levels of monitoring within relationships is relational uncertainty. This uncertainty stems from perceptions of ambiguity within the relationship, such as not knowing if the partner is serious about the relationship or if the relationship has a future.^{23,24} If a partner is unsure about the target's feelings or intentions, the partner may be more likely to engage in uncertainty reduction behaviors such as IES. Thus, the partner experiencing uncertainty may explore the content of the target's profile to determine what the target is doing and who they are interacting with so that the partner can alleviate uncertainty about the relationship.

After a breakup, uncertainty about the relationship's future may remain. In the wake of termination, it is not uncommon for ex-partners to remain friends on Facebook.^{11,12,17,25} Although the current state of the relationship may be in good or bad shape, certain or uncertain, the exes still remain "friends" in name on Facebook. This lingering connection—as well as access to the ex-partner's post-breakup experiences via Facebook posts and pictures—may foster feelings of uncertainty about the relationship after dissolution. If an ex-partner chooses not to terminate the Facebook friendship, it may be perceived as a sign that the ex may consider rekindling the romance. Thus, it is possible that ex-partners experiencing uncertainty about the current relationship will perform IES and monitor their ex's behaviors on Facebook for clues about the ex's relational goals and intentions.

H1: Higher levels of relationship uncertainty will be associated with greater IES of the current or ex-partner.

Attachment theory

One theory that may clarify the occurrence of IES is attachment.^{26–29} Attachment theorists argue that the relationships one experiences with primary caregivers during infancy form working models that will shape how relationships unfold across the life-span. The attachment mechanism operates when infants come to form favorable or unfavorable im-

pressions of the self and others through interaction.²⁷ The key dimensions of attachment are *anxiety*, wherein relationships can cause increased or decreased uncertainty, and *avoidance*, wherein individual opt to either engage in or avoid personal relationships based on early relational experiences.^{26–28} Although limited research has addressed romantic attachment in relation to social media, one study⁹ found that avoidant individuals were more likely to use technologies such as social media to terminate relationships.

Bartholomew and Horowitz argued there are four distinct attachment styles: *secure*, *preoccupied*, *dismissing*, and *fearful*.²⁶ Each of these styles is marked by different perceptions and behaviors regarding romantic relationships. *Secure* individuals are comfortable with themselves and their partners in their relationships. They have high regard for the self and other in relationships, and view themselves as worthy of close, intimate relationships. As such, they exhibit low levels of anxiety about their partners and report fewer relationship problems than other styles.²⁶ *Preoccupied* individuals tend to elevate the partner because they feel that they are inferior or not worthy of the partner. Due to this insecurity, preoccupieds then attempt to control the relationship because they are anxious that the partner may reject them. Preoccupieds tend to be high in anxiety but low in avoidance. Thus, they may cling to their partners.²⁶ *Dismissing* individuals, on the other hand, have a positive perception of the self but more negative perceptions of others. As such, they have low anxiety, are more independent, and do not prioritize close relationships. Dismissing individuals tend to be more avoidant than those with a secure or preoccupied attachment style.²⁶ *Fearful* individuals are uncomfortable in close relationships because they are worried about being hurt by others. They experience high anxiety and, because they lack assertiveness, tend to avoid or nullify relationship issues.²⁶

Considerable research has established how attachment styles influence reactions to breakups.^{30,31} These studies indicate that those with anxious attachment styles often have a longer recovery period and may continue to seek information about their partner after the breakup. Given these patterns, we expect that:

H2: Preoccupied individuals will report greater relationship uncertainty than secure, dismissing, or fearful individuals.

H3: Preoccupied individuals will report greater IES than secure, dismissing, or fearful individuals.

Method

Participants were recruited from a large Midwestern university and offered course credit for completing the survey. Some respondents ($n = 34$) were excluded from analysis due to extensive missing data or not meeting study criteria. The final sample ($N = 328$) included 145 male and 183 female Facebook users, ranging in age from 18 to 48 years ($M = 20.68$, $SD = 2.77$) who identified as white ($n = 268$; 81.7%), black/African/African-American ($n = 21$; 6.4%), Asian/Asian-American ($n = 19$; 5.8%), Latino/a/Hispanic ($n = 4$; 1.2%), multiracial ($n = 14$; 4.3%), or other ($n = 3$; 0.9%). Participants identified themselves as heterosexual ($n = 316$; 96.3%), bisexual ($n = 7$; 2.1%), or gay/lesbian ($n = 5$; 1.5%). In the sample, 201 were currently in a relationship, and 127 reported about a relationship that had broken up within the past year.

Measures

Interpersonal electronic surveillance. Tokunaga's IES scale¹² was used to measure partner monitoring via Facebook. Participants responded to 13 items such as "I visit my (ex-) partner's social networking site page often" on a fully labeled 5-point Likert scale (1="strongly disagree," 5="strongly agree"; $M=3.27$, $SD=0.80$; Cronbach's $\alpha=0.96$). Both participants currently in a relationship ($M=3.16$, $SD=0.83$) and those formerly in a relationship ($M=3.46$, $SD=0.72$) reported on IES occurring during the relationship. Those formerly in a relationship also reported current IES of their ex-partner ($M=2.75$, $SD=0.93$).

Relational uncertainty. Relational uncertainty was measured using Knobloch and Solomon's scale.²³ Participants responded to 16 items, including "How certain are you about the current status of this relationship?" on a fully labeled 6-point scale (1="completely or almost completely certain"; 6="completely or almost completely uncertain"; $M=4.78$, $SD=1.06$). Participants in a relationship responded about their current relationship ($M=5.26$, $SD=0.78$). Participants formerly in a relationship were asked to report their current level of certainty about the relationship with their ex-partner ($M=4.03$, $SD=1.00$). Cronbach's alpha for the scale was 0.96.

Attachment. Bartholomew and Horowitz's categorical attachment style measure was employed.²⁶ Participants selected one of four descriptions that most closely matched how they feel about close relationships (e.g., "It is easy for me to become emotionally close to others..."). They scored as secure ($n=143$; 43.6%), dismissive ($n=73$; 22.3%), preoccupied ($n=56$; 17.1%), and fearful ($n=50$; 15.2%), which reflects the distribution common in U.S. samples.²⁶

Results

Prior to conducting analyses, Pearson correlations were run to ascertain the relationships between variables. See Table 1.

H1 considered whether relational uncertainty would predict interpersonal electronic surveillance of current or former partners. Relationship status and sex were also incorporated in the regression model. Regression analysis indicated that the model did not significantly predict IES, $R=0.15$, adjusted $R^2=0.01$, $F(3, 324)=2.45$, $p=0.063$.

Because relational uncertainty and IES were not correlated, independent two-way ANCOVA tests were employed to test H2 and H3. To examine relational uncertainty (H2), attachment style and relationship status were incorporated as predictor variables and sex was entered as a covariate. Sex was a

significant covariate, $F(1, 313)=13.45$, $p<0.0005$, partial $\eta^2=0.04$. Analyses revealed both a main effect for attachment style, $F(3, 313)=5.47$, $p=0.001$, partial $\eta^2=0.05$, as well as a main effect for relationship status, $F(1, 313)=13.45$, $p<0.0005$, partial $\eta^2=0.28$. Those in a relationship reported significantly less uncertainty than those in a terminated relationship. The interaction effect was also significant, $F(3, 313)=3.48$, $p=0.016$, partial $\eta^2=0.03$. Because differences were hypothesized for preoccupied individuals compared to other groups, planned pairwise comparisons were conducted. Preoccupied individuals not in relationships ($M=3.43$, $SD=0.95$) demonstrated significantly higher levels of uncertainty than all other groups ($p<0.001$) except fearful individuals not in a relationship ($M=3.15$, $SD=1.13$). Preoccupied individuals in relationships ($M=1.76$, $SD=0.84$) demonstrated significantly lower levels of uncertainty than all groups in relationships ($p<0.001$); preoccupied individuals in relationships did not differ from other attachment styles in uncertainty.

To examine IES (H3), an ANCOVA was run with attachment style and relationship status incorporated as predictor variables and sex as a covariate. Sex was not a significant covariate, $F(1, 313)=0.68$, $p=0.41$, partial $\eta^2=0.00$. Analyses revealed a main effect for attachment style, $F(3, 314)=4.71$, $p=0.003$, partial $\eta^2=0.04$, but no main effect for relationship status, $F(1, 314)=2.68$, $p=0.10$, partial $\eta^2=0.01$, nor interaction effect, $F(3, 314)=0.59$, $p=0.62$, partial $\eta^2=0.01$. Because differences were hypothesized for preoccupied individuals compared to other groups, planned pairwise comparisons were conducted. Preoccupied individuals ($M=2.93$, $SD=1.13$) reported significantly greater IES than secure ($M=2.45$, $SD=1.01$) or dismissing individuals ($M=2.41$, $SD=1.01$) but not fearful individuals ($M=2.82$, $SD=0.92$).

Discussion

This study contributed to recent research on attachment and new media technologies,^{9,32,33} and revealed that attachment theory is an effective framework for understanding interpersonal electronic surveillance between romantic partners and ex-partners on Facebook. Likely due to their high levels of relationship anxiety, preoccupied and fearful individuals experienced the highest levels of relational uncertainty and engaged in the highest levels of IES. Previous studies have noted the prevalence of using Facebook to monitor partners,^{2,4,5,11,25} and this study shed light on those findings by recognizing the role of attachment style in this process.

Preoccupied and fearful individuals no longer in a relationship reported the highest levels of uncertainty. Before the advent of social media, it may have been difficult to gather information about a former partner. Now, preoccupied and fearful exes retain access to their former partners' lives. Maintaining this virtual connection with one's ex may enhance feelings of uncertainty about the future of a relationship that, without social media, may have had a clearer and more certain ending.

It is important to recognize who engages in IES because it may affect levels of satisfaction, stability, and security within the relationship. Preoccupied and fearful individuals often identify or create problems in their relationship due to their levels of anxiety. Given the additional information available about one's partner and their social interactions, Facebook may exacerbate preoccupieds' and fearfuls' anxiety about the

TABLE 1. MEANS AND CORRELATIONS AMONG VARIABLES

	M	SD	Rel. status	Sex	Rel. uncert.	IES
Relationship status	—	—	—	-0.15*	0.57*	-0.07
Sex	—	—	—	—	-0.25*	0.07
Relationship uncertainty	2.22	1.06	—	—	—	0.04
IES	3.27	0.80	—	—	—	—

* $p<0.01$.

relationship. For example, they might be more likely to interpret ambiguous content on Facebook in a negative way, which may create conflict or strain the relationship.

The lack of a relationship between uncertainty and IES was surprising. However, Muise et al.¹⁰ also found no relationship between relational uncertainty and Facebook-related jealousy. This finding may be an artifact of the sample, however; many college students may perceive their relationships as transient. Thus, although they are uncertain about the relationship, it may not concern them or influence their Facebook behaviors. Future studies should investigate different variables such as the desire to be in a relationship with the partner.

It was interesting that preoccupieds did not differ from fearful individuals in their levels of uncertainty or IES, but it may be because it is attachment-related anxiety rather than avoidance that predicts these outcomes. Our findings mirror previous studies on attachment^{30,31} which have shown that anxious attachment leads to more distress and partner monitoring after breakups. Facebook may appeal to these two types for different reasons. Preoccupieds might feel more control and closeness by using Facebook. Because fearfuls are both anxious and avoidant, Facebook may provide them with the perfect opportunity to monitor the partner and perceived relational threats passively without having to interact with or confront him or her directly. Future research should investigate different attachment styles' motivations to engage in IES.

Limitations and Future Directions

This sample was heavily skewed toward heterosexual participants; gay, lesbian, bisexual, and other sexually identified individuals may be recruited specifically in future studies. Additionally, although we accounted for sex in this study, cell sizes limited the analyses we were able to perform. Future research should consider sex as a potential moderator. Future research may also investigate the role of gender, as it has been shown to be a better predictor than sex regarding some relational behaviors.^{34,35}

One limitation is that this study focused exclusively on Facebook; technological practices and preferences will likely shift.³⁶ Several studies have indicated that attachment plays a role in texting behaviors,^{9,32,33} and future research may examine how different attachment styles use different technologies (e.g., Twitter, Google searching, GPS-enabled applications, or online dating sites) for partner monitoring. Additionally, experimental studies would provide more insight into what triggers partner surveillance and establish causality. For example, researchers could prime relevant relationship beliefs and then track romantic partners' Facebook use.

Another rich area for future research is the management strategies that partners or former partners use to regulate the information that is shared via social media. These strategies may be dictated by the affordances a particular SNS has to offer. For example, although Facebook previously broadcasted all posts to the entire social network, now privacy settings can be configured to narrow the audience of a specific post. Similarly, Google Plus features an affordance known as "circles" so that information can be shared with select groups rather than the entire network. Some individuals now maintain private Twitter accounts with only a few close

friends as followers because they want to share information but their Facebook network is too far-reaching.³⁶ In the most extreme cases, some users simply agree not to friend or connect to their partners via social media.¹⁷ Any of these tactics may help partners conceal information from each other while still connecting to other network members via SNSs.

Given the widespread use of IES, future studies should be conducted to determine its immediate and lasting psychological, interpersonal, and social consequences. Continued research in the area of SNSs and romantic relationships will uncover the tactics and strategies that maximize the likelihood of positive relational outcomes. In the meantime, users should be mindful about the significance and potential effects of monitoring their current and former romantic partners on Facebook.

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