

# More Information than You Ever Wanted: Does Facebook Bring Out the Green-Eyed Monster of Jealousy?

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## Abstract

The social network site Facebook is a rapidly expanding phenomenon that is changing the nature of social relationships. Anecdotal evidence, including information described in the popular media, suggests that Facebook may be responsible for creating jealousy and suspicion in romantic relationships. The objectives of the present study were to explore the role of Facebook in the experience of jealousy and to determine if increased Facebook exposure predicts jealousy above and beyond personal and relationship factors. Three hundred eight undergraduate students completed an online survey that assessed demographic and personality factors and explored respondents' Facebook use. A hierarchical multiple regression analysis, controlling for individual, personality, and relationship factors, revealed that increased Facebook use significantly predicts Facebook-related jealousy. We argue that this effect may be the result of a feedback loop whereby using Facebook exposes people to often ambiguous information about their partner that they may not otherwise have access to and that this new information incites further Facebook use. Our study provides evidence of Facebook's unique contributions to the experience of jealousy in romantic relationships.

## Introduction

**I**N YOUNG RELATIONSHIPS, a glance at a rival or a small token of affection is sometimes enough to send those involved into a giddy high or momentary despair. In the past, flirty gestures of interest or signs of subtle disregard remained entirely within a person's own control, and partners in close relationships were most often not subjected to the daily scrutiny of their exchanges with members of their social circle. The development of online social network sites such as Facebook has created a fundamental shift in this practice. Has this new reality resulted in all aspects of our lives becoming open for all to see? If so, what potential negative outcomes can result from this degree of social openness?

Facebook, by its very nature, provides easy access to friends' and partners' information, including changes to their profile, additions of new contacts (termed "friends"), and messages posted on their page (on their virtual "wall"). Lee and Boyer<sup>1</sup> report that Facebook can play a role in maintaining long-distance friendships but that college students do not need Facebook to maintain most of their close friendships. In fact, some of their friends on Facebook may be quite superficial, with students reporting having friends that they have encountered only briefly outside of Facebook.<sup>1,2</sup>

While social network sites provide the opportunity to reunite with long-lost friends, they also allow people to make information public within their circle of friends and to make their list of friends itself open to public scrutiny.<sup>3</sup> Anecdotal evidence from discussions with undergraduates points to a common perception that Facebook causes jealousy and negatively impacts romantic and sexual relationships. Similarly, in a recent popular media article, Persch suggests that Facebook is responsible for creating jealousy and suspicion in romantic relationships.<sup>4</sup> These informal sources suggest that exposing one's social network activities in a public domain appears to have some negative implications for romantic and sexual relationships. For these reasons, we became interested in Facebook as a unique environment for the experience of jealousy.

Past research has indicated several personality and relationship factors that contribute to the experience of jealousy. Feelings of jealousy in a specific situation, such as the imagined situation of a partner's infidelity, are predicted by general levels of emotional jealousy,<sup>5</sup> or trait jealousy, suggesting that some individuals are more prone than others to jealousy. Individual levels of trust and self-esteem have also been associated with the experience of jealousy, where lower levels of trust are related to more intense and frequent experiences of jealousy,<sup>6,7</sup> and self-esteem mediates the intensity

of jealousy experienced following a relationship threat.<sup>8</sup> In addition, White includes self-esteem in his definition of jealousy, describing jealousy as a “complex of thoughts, feelings and actions which follow threats to self-esteem and/or threats to the existence or quality of the relationship.”<sup>9(p24)</sup> Relational uncertainty, and more specifically, doubt about a partner’s involvement in the relationship, also produces jealous responses from individuals in romantic relationships.<sup>10,11</sup> Type of relationship and level of commitment have also been shown to contribute to the experience of jealousy; in general, people in committed relationships experience less jealousy than those in newer, more casual ones.<sup>12</sup>

Exposure to information about a romantic partner’s friends and social interactions may result in an environment that enhances jealousy. Sheets et al.<sup>13</sup> identified four categories of jealousy-evoking situations: when one’s partner shows interest in another person, when another person shows interest in one’s partner, when one’s partner talks about or interacts with prior relational partners, and ambiguous scenes involving the partner. The ease of making connections on Facebook may increase contact with past romantic and sexual partners, creating the potential for jealousy in current relationships. Facebook also assists in maintaining relationships that may otherwise be only ephemeral,<sup>2</sup> and it may in fact connect people who would not otherwise communicate. In the context of a romantic relationship, exposing one’s partner to all of these individuals, many of whom may be unknown to the partner, may increase the potential for jealousy and suspicion.

Social network sites such as Facebook have changed the nature of public and private in the sense that much more information is available to individuals about their partner’s relationships and interactions than they would have with other online or offline methods of communication. This lack of privacy in the traditional sense may expose individuals to more information about their partner than they would access otherwise.

In light of past research, we believed it important to control for personal factors such as trait jealousy, trust, and self-esteem and for relational factors such as relational uncertainty and commitment in our exploration of the links between Facebook use and jealousy. We predicted that time spent on Facebook would uniquely contribute to Facebook-specific jealousy beyond the effects of the personal and relational factors described in the jealousy literature.

## Methods

Data were collected as part of a larger study on undergraduate student use of Facebook. The study was an anonymous online survey, and data were collected according to the criteria described in Christofides et al.<sup>14</sup> After removing 35 participants ( $n = 31$  female;  $n = 4$  male) due to missing data regarding their Facebook usage, 308 respondents ( $n = 231$  female;  $n = 77$  male), ranging in age from 17 to 24 years ( $M = 18.70$ ,  $SD = 0.97$ ), were retained for analysis. At the time of the survey, the majority of the participants were in a relationship in which they were seriously dating one person (50.5%); other participants were casually dating one or more partners (8.3%), in an open relationship (3.7%), living with a partner but not married (3.0%), married (0.7%), or

divorced/separated (0.3%). The remaining 33.6 percent of participants were not currently dating anyone.

The Facebook Jealousy scale (Cronbach’s  $\alpha = 0.96$ ) was created for the current study in order to assess the experience of jealousy in the specific context of Facebook. We compiled a list of items to reflect aspects of Facebook that have the potential to contribute to sexual and romantic jealousy. A group of Facebook users in the target demographic then reviewed these items for readability and inclusiveness. The scale was administered to the current sample, and exploratory factor analysis (EFA) revealed a one-factor solution with the first factor yielding an eigenvalue of 12.68 and accounting for 47.0% of the variance. All items were retained because the factor loadings ranged from 0.432 to 0.821. The final scale consisted of 27 items, measured on a 7-point Likert scale (1, *very unlikely* to 7, *very unlikely*), that assess Facebook-related jealousy. Sample items include “How likely are you to become jealous after your partner has added an unknown member of the opposite sex?” and “How likely are you to monitor your partner’s activities on Facebook?”

Other factors include general propensity toward jealousy,<sup>15</sup> levels of trust,<sup>6,16</sup> self-esteem (Rosenberg Self-Esteem scale, as used by Ellison et al.<sup>2</sup>), relational uncertainty,<sup>17</sup> and commitment.<sup>18</sup> One item measured the amount of time participants spent on Facebook. Participants were also asked to provide demographic information and descriptive information about their use and their partners’ use of Facebook, and they were asked one open-ended question to allow them to provide qualitative data about their experience of jealousy on Facebook.

## Results

### Descriptive data

Participants in the current sample reported spending an average of 38.93 minutes on Facebook each day ( $SD = 32.13$ ) and had between 25 and 1000 Facebook friends ( $M = 296.19$ ,  $SD = 173.04$ ). The majority of participants (74.6%) were at least somewhat likely to add previous romantic or sexual partners as friends on Facebook, and 78.9% reported that their partner has added previous romantic or sexual partners as friends. Almost all of the participants in the current sample (92.1%) reported that their partner was at least somewhat likely to have Facebook friends who they do not know. Past research has indicated that jealousy may be differentially experienced based on gender,<sup>(eg,19)</sup> and such differences were found in the current sample. Women,  $M = 40.57$ ,  $SD = 26.76$ , in our sample spent significantly more time on Facebook than men,  $M = 29.83$ ,  $SD = 23.73$ ;  $t(305) = -3.32$ ,  $p < 0.01$ , and women,  $M = 3.29$ ,  $SD = 1.24$ , scored significantly higher on Facebook jealousy than men,  $M = 2.81$ ,  $SD = 1.09$ ;  $t(305) = -3.32$ ,  $p < 0.01$ . Therefore, gender was controlled for in the regression analysis.

### Multiple regression

We hypothesized that Facebook use uniquely contributes to the experience of jealousy, and we therefore tested a model of Facebook jealousy that took into account a variety of personal and relationship factors known to be associated with the general experience of jealousy. We tested our model

using a hierarchical multiple regression analysis consistent with the theoretical model that we outlined based on past research into relational jealousy. Gender and trait jealousy were entered into block 1, personality and relational factors were entered in blocks 2 and 3 respectively, and Facebook use was entered in block 4. As expected, we found that trait jealousy was a significant predictor of Facebook jealousy, which, along with gender, accounted for 46% of the variance. When personality and relational factors were added to our model, only trust significantly added to our prediction of Facebook jealousy scores (for trust,  $\beta = -2.03$ ,  $p = 0.04$ ; for all other factors,  $\beta < 0.07$ ,  $p > 0.16$ ). The inclusion of the blocks 2 and 3, the personality and relational factors, accounted for only 2% of additional variance and therefore did not contribute significantly to the model. Time spent on Facebook was a significant predictor of Facebook jealousy ( $\beta = 2.59$ ,  $p = 0.01$ ). While this variable added only 2% of variance to the prediction model, it did uniquely predict scores on the Facebook jealousy scale beyond gender, trait-based jealousy, and other personality and relationship factors. This finding is notable considering the predictive power of trait jealousy. The final model explains 48% of the variance in Facebook jealousy.

#### Qualitative data

While only a portion of the participants responded to our open-ended question (68 participants), their answers provided some additional information about potential cues regarding the process associated with Facebook jealousy. The statements of these individuals were analyzed for themes relating to the experience of jealousy on Facebook by the first and second authors, and four themes emerged. An independent rater who was blind to the purpose of the study coded the data using these four themes and demonstrated high interrater reliability (Cohen's  $\kappa = 0.93$ ). The first theme, which we called *accessibility of information* (described by 19.1% of participants) included statements about the increased amount of information available through Facebook about the relationship one's partner has with other individuals. The second theme, *relationship jealousy* (16.2%), explicitly linked Facebook use to participants' own or their partner's experiences of jealousy. The third theme, *Facebook as an addiction* (10.3%), indicated participants' difficulty in limiting the time they spent on their partner's Facebook page or on Facebook in general. The final theme, *lack of context* (7.4%) consisted of references to the ambiguous nature of Facebook and the role of this ambiguity in potential negative consequences such as jealousy.

#### Discussion

For all of the positive aspects of the increased social connection that Facebook enables, there may also be some costs for those individuals involved in romantic and sexual relationships. Our data showed a significant association between time spent on Facebook and jealousy-related feelings and behaviors experienced on Facebook. Is time spent on Facebook increasing jealousy, or is the heightened level of jealousy that may emerge as a result of the information found on partners' Facebook postings resulting in increased time on Facebook? We argue that both options are inevitably intertwined and that the findings are most likely due to dual

causation. The qualitative feedback we collected provides some preliminary support for this argument.

The open nature of Facebook gives people access to information about their partner that would not otherwise be accessible. As one participant reported, "It turns people into nosey parkers ... all of that personal information is totally unnecessary, but no one can help themselves." Moreover, the information listed on one's Facebook page may be interpreted in a variety of ways given its frequent lack of context. As some participants explained, "I have enough confidence in her [his partner] to know my partner is faithful, yet I can't help but second-guess myself when someone posts on her wall. ... It can contribute to feelings of you not really 'knowing' your partner." Ambiguous scenes involving a partner and contact with past romantic and sexual partners are among the common triggers of jealousy in romantic relationships,<sup>13</sup> and these ambiguous scenes are a regular occurrence on Facebook. Real or imagined negative situations invoke feelings of jealousy, and participants felt the Facebook environment created these feelings and enhanced concerns about the quality of their relationship. As one participant noted, "It definitely invokes a false sense of jealousy." Another participant explained that "I was already a bit jealous and insecure, but I think that Facebook has definitely made me much much much worse."

Our results suggest that Facebook may expose an individual to potentially jealousy-provoking information about their partner, which creates a feedback loop whereby heightened jealousy leads to increased surveillance of a partner's Facebook page. Persistent surveillance results in further exposure to jealousy-provoking information. For many, the need for knowledge about their partner's intent becomes indispensable, and several participants specifically mentioned the word "addiction" in relation to their own Facebook usage. One participant who had recently broken up with her boyfriend stated, "It's addictive. ... I always find myself going on there checking new pictures and screening them. I can't help it!" Our finding of a link between jealousy triggers on Facebook and increased surveillance of a partner's profile has also been discussed in some popular media,<sup>4</sup> suggesting that this phenomenon is not limited to the current sample. However, our study is the first to test this hypothesis and to control for personality and social factors that may have confounded the results.

With the vast majority of our sample reporting that their partners have unknown individuals and past romantic and sexual partners as friends on Facebook, the potential for jealousy in this environment is evident. The qualitative data we collected indicates that participants recognize that increased exposure to information on Facebook without proper context can increase their experience of jealousy. What is perhaps more puzzling is that despite this knowledge, many of these same participants also engage in a high degree of personal disclosure on Facebook.<sup>14</sup> These findings are consistent with past research that college-aged students practice high self-disclosure on Facebook,<sup>1</sup> suggesting that individuals may not adequately recognize that their own information disclosure may be a cause for concern for their partner. As a result, personal disclosures may foster a vicious cycle whereby a person's acontextual disclosure on Facebook may only increase the likelihood that one's partner may also do the

same, thus increasing the likelihood of causing one's own experience of jealousy.

This study provides evidence of a relationship between Facebook use and the experience of jealousy in that context, though further research is needed to better understand this feedback loop because the nature of our data could not fully explain this process. Future research must directly examine the effects of various triggers on the experience of jealousy and on the time individuals spend on Facebook. Ideally, this research would directly assess the process by which time spent on Facebook and the experience of jealousy on Facebook are related. In addition, it would be interesting to learn whether these same relationships hold true in samples of adults who are outside of the university context. Unlike most young undergraduate student relationships, adult relationships are more likely to have developed before Facebook became popular, and one could argue that partners in that age group may be less well equipped to deal with the challenges that Facebook poses to relationships. In addition, adults may have a longer past to uncover, with more old friends and partners with whom to connect, thus potentially exposing members of couples to a greater potential for jealousy. One thing is sure: Facebook provides a superb forum for the study of relational jealousy, and our study only serves as a starting point.

#### Disclosure Statement

The authors have no conflict of interest.

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