

# Do we look happy? Perceptions of romantic relationship quality on Facebook

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## Abstract

Does the information that people share about their romantic relationships on Facebook influence how other people perceive their relationship quality? Across 2 studies, people's accuracy at inferring others' relationship quality based on their Facebook profiles and how Facebook profiles influenced others' judgments of people's relationship quality and likability were investigated. Perceived relationship quality corresponded to self-reported relationship quality (Study 1), and people with more visible relationships were perceived as having greater relationship satisfaction and commitment (Studies 1 and 2) and being more likable (Study 2). High disclosure about the relationship predicted greater perceived relationship quality but lower likability (Study 2). These findings illuminate how sharing information about one's relationship influences other people's impressions of the individual and the relationship.

People automatically and often unconsciously form impressions of others (e.g., Bargh & Pietromonaco, 1982), which can persevere even as people learn contradictory information (Ross, Lepper, & Hubbard, 1975). Although research has investigated how people form impressions of individuals (Ambady & Skowronski, 2008), few studies have examined how people form impressions of others'

romantic relationships. Specifically, does the visibility of a relationship affect observers' perceptions of that relationship?

The current studies extend research on self-disclosure (Derlega & Berg, 1987) and impression formation (Ambady & Skowronski, 2008) to perceptions of romantic relationships. We consider *relationship visibility* (Emery, Muise, Dix, & Le, 2014), the extent to which people's relationships are displayed in the self-images conveyed to others, and *relationship disclosure*, the extent to which people share personal details about their relationships. We test the predictions that (a) people with more visible relationships on Facebook will be perceived as having high relationship quality and being likable, whereas (b) people who share intimate details about their relationships on Facebook will be perceived as having high relationship quality but being unlikable.

## *Self-disclosure and impression formation on Facebook*

Social networking sites promote self-disclosure (Christofides, Muise, & Desmarais, 2012), but sharing information on Facebook

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can have social ramifications. For instance, although those with low self-esteem believe that posting on Facebook elicits support from others, their posts tend to be highly negative, making others like them less (Forest & Wood, 2012). People also disclose information about their romantic relationships on Facebook, and doing so is diagnostic of relationship quality. People who are more satisfied are more likely to post a dyadic relationship status (e.g., “in a relationship”) or a dyadic profile picture (containing both members of the couple) than those who are less satisfied (Saslow, Muise, Impett, & Dubin, 2013). Thus, relationship visibility on Facebook should lead to perceptions of higher relationship quality, and these perceptions should correspond to actual relationship quality. People can discern strangers’ personalities from their Facebook profiles (Back et al., 2010) and have fairly accurate perceptions of close friends’ relationship quality (Agnew, Loving, & Drigotas, 2001). Yet, on Facebook, one’s profile is often accessible to those outside of an immediate social circle, enabling even strangers to form impressions.

Sharing information about one’s relationship is normative on Facebook, perhaps because this information is explicitly asked for when creating a profile (Christofides et al., 2012). However, people may react negatively to those disclosing highly personal information or intimate details about their relationships. Self-disclosure generally increases people’s likability, but those who disclose inappropriately or share overly personal details are perceived as unlikable and psychologically unhealthy (Chaiken & Derglega, 1974; Collins & Miller, 1994). These findings have been extended to the context of Facebook; highly personal self-disclosure, including about relationships, is perceived as inappropriate, making the discloser seem unlikable (Bazarova, 2012).

### *The current research*

We examined how relationship visibility and relationship disclosure on Facebook influence other people’s impressions. Although people display their relationships in offline contexts as well (e.g., showing shared possessions;

Lohmann, Arriaga, & Goodfriend, 2003), relationship visibility may be easier to control on Facebook.

We predicted that perceptions of people’s relationship quality based on their Facebook profiles would correspond to self-reported relationship quality (Study 1), and that people with high relationship visibility (i.e., a dyadic profile picture or status) would be perceived as more satisfied and committed in their relationships and as more likable (Studies 1 and 2). We anticipated that people with high levels of relationship disclosure would also be perceived as satisfied and committed to their relationships, but as less likable (Study 2). In Study 1, observers rated couples’ Facebook profiles, and in Study 2, participants provided their impressions of fictitious Facebook profile owners.

## **Study 1**

### *Method*

#### *Participants and procedure*

Participants were 108 heterosexual couples ( $N = 216$ ) recruited from a small Canadian university ranging in age from 19 to 31 ( $M = 21.05$ ,  $SD = 0.94$ ) and had been dating for 2–73 months ( $M = 19.78$ ,  $SD = 15.49$ ). Participants were current Facebook users and both partners agreed to provide access to their profiles.<sup>1</sup> Participants were each compensated with \$10.

#### *Measures*

Five items assessed relationship satisfaction ( $\alpha = .91$ ,  $M = 7.78$ ,  $SD = 1.14$ ), and seven items assessed commitment ( $\alpha = .86$ ,  $M = 7.93$ ,  $SD = 1.28$ ; Rusbult, Martz, & Agnew, 1998) on a 9-point scale (1 = *do not agree at all*, 9 = *agree completely*). Participants also completed the Ten-Item Personality Inventory (Gosling, Rentfrow, & Swann, 2003), assessed on a 7-point scale (1 = *disagree strongly*, 7 = *agree strongly*) and indicated how much time they spent on Facebook per day ( $M = 57.56$  min;  $SD = 52.77$ ).

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1. For additional use of this data set, see Saslow et al. (2013) and Emery et al. (2014).

### Facebook profile coding

Two coders who were blind to our hypotheses rated if the couple was present in each Facebook profile picture (0 = *nondyadic photo*, 1 = *dyadic photo*;  $\kappa = .97$ ).<sup>2</sup> Coders made their ratings independently and each coded all of the profiles. About one fourth (27.5%) of participants had a dyadic profile picture (72.5% nondyadic). The same coders also rated participants' relationship status. Those without a status or with an "other" status (e.g., a joke relationship status) were coded as nondyadic and those with an "in a relationship" status were coded as dyadic ( $\kappa = 1.00$ ). In total, 31% of participants had a nondyadic status (69% dyadic status).

### Coding participants' relationship quality

Three coders, who were different from those above and blind to hypotheses, viewed each Facebook profile and rated how satisfied they thought each person was in their relationship (1 = *not at all satisfied*, 7 = *very satisfied*; ICC = .70,  $p < .001$ ) and how committed they thought each person was to their partner (1 = *not at all committed*, 7 = *very committed*; ICC = .71,  $p < .001$ ).

### Results and discussion

As predicted, coders' ratings of satisfaction and commitment were significantly associated with participants' respective self-reports (satisfaction  $r = .31$ , commitment  $r = .32$ ; both  $ps < .001$ ). Coders' ratings of participants' satisfaction and commitment were also highly correlated ( $r = .88$ ,  $p < .001$ ), so we aggregated these ratings to assess relationship quality ( $\alpha = .89$ ). To test our predictions about the associations between relationship visibility and perceived relationship quality, we used multilevel modeling using mixed models in SPSS 20.0, where partners were

nested within couples. As predicted, dyadic profile pictures ( $b = .78$ ,  $t = 7.87$ ,  $p < .001$ ) and dyadic relationship statuses ( $b = .59$ ,  $t = 4.39$ ,  $p < .001$ ) were associated with coders' ratings of relationship quality. There was no significant interaction between relationship status and profile picture.

Next, we considered the additive effects of having both a dyadic relationship status and a dyadic profile picture on coders' ratings of relationship quality. An analysis of variance (ANOVA) compared people with no dyadic profile picture or relationship status ( $n = 56$ ), people with one form of relationship visibility ( $n = 94$ ), and people with both forms of relationship visibility ( $n = 54$ ). The groups significantly differed,  $F(2, 208) = 57.14$ ,  $p < .001$ , partial  $\eta^2 = .36$ . Tukey's least significant difference (LSD) post hoc revealed that people with both forms of visibility were perceived to have higher relationship quality ( $M = 6.13$ ) than those with one ( $M = 5.16$ ,  $SE = .14$ ,  $p < .001$ ) or no forms of relationship visibility ( $M = 4.49$ ,  $SE = .15$ ,  $p < .001$ ). People with one form of visibility were perceived as having higher relationship quality than those with no visibility ( $SE = .14$ ,  $p < .001$ ). When considering the form of visibility (0 = *neither*, 1 = *dyadic status only*, 2 = *dyadic profile picture only*, 3 = *both*), people who had a dyadic profile picture only ( $n = 12$ ,  $M = 5.92$ ) were rated as having significantly higher relationship quality than those with a relationship status only ( $n = 82$ ;  $M = 5.05$ ,  $SE = .25$ ,  $p < .001$ ), and not significantly different from people with both forms of visibility ( $SE = .26$ ,  $p = .40$ ). None of our findings were moderated by time spent on Facebook, personality, gender, or relationship duration.

### Study 2

Study 1 established that a person's relationship quality can be inferred based on his or her Facebook profile, such that those with more visible relationships are perceived as being more satisfied and committed. Study 2 expanded on Study 1 in three primary ways. First, in Study 2, we systematically varied the content of Facebook profiles to determine the unique

2. Because both members of the couple participated in the study, after the ratings were complete, coders were able to verify that the other person in the photo was the person's romantic partner. Coders were blind to participants' scores on the survey measures (i.e., relationship quality).

and causal effects of different forms of relationship visibility. Second, in addition to examining relationship visibility, we considered the level of relationship disclosure as a predictor of perceived relationship quality. Third, we investigated how relationship visibility and disclosure influence perceived likability.

## Method

### Participants and design

Participants were 114 undergraduate Facebook users (32.5% male, 67.5% female; 35.1% in a relationship) at a college in the Northeastern United States ranging from 17 to 22 years old ( $M = 18.5$ ,  $SD = 0.9$ ). They received course credit for participating.

Each participant rated 24 fictitious Facebook profiles,<sup>3</sup> with four components manipulated: gender of the Facebook user, profile picture content, relationship status, and status update content. The profile contained a single or dyadic profile picture, and either no relationship status or a dyadic relationship status. Each profile included one of three types of status updates: high relationship disclosure (e.g., "Pining away for Jordan ... I just love you so much I can't stand it!"), low relationship disclosure (e.g., "I love my girlfriend <3"), or not about the relationship (e.g., "Phoneless for a bit, email me!"). The study employed a 2 (gender)  $\times$  2 (profile picture)  $\times$  2 (relationship status)  $\times$  3 (status update) within-subjects design.

### Procedure

Participants completed an online survey and answered questions about 24 randomly ordered, fictitious Facebook profiles. They

were told that they would be viewing profiles of individuals in relationships. They also reported their average time spent on Facebook each day and number of past romantic relationships.

### Materials and measures

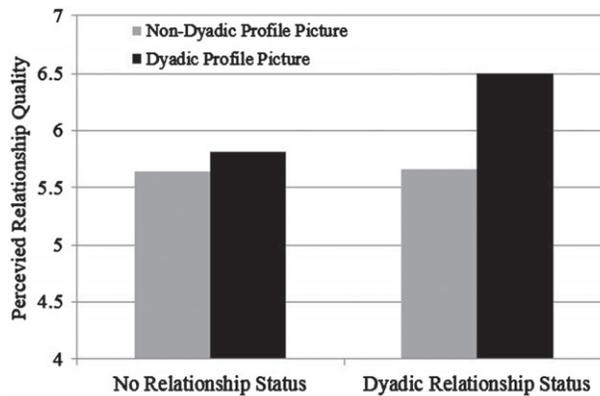
The 24 profiles were designed to look like real Facebook profiles. The profile pictures were obtained from Hotornot.com, Google searches, and acquaintances of the authors, and the researchers generated the status updates. Participants evaluated each fictitious Facebook profile user's relationship satisfaction (one item) and commitment (two items; 1 = *do not agree at all*, 9 = *agree completely*; adapted from Rusbult et al., 1998). As in Study 1, these ratings were significantly correlated (mean  $r = .59$ ,  $p < .001$ ) and combined into a composite measure of relationship quality (mean  $\alpha = .81$ ). Participants also rated the likability of the Facebook user in each profile (one item; 1 = *not at all*, 9 = *a lot*).

### Results and discussion

Using within-subjects ANOVA analyses, we tested the effects of relationship visibility and disclosure on perceived relationship quality and likability.<sup>4</sup> First, as predicted, individuals with a dyadic profile picture ( $M = 6.16$ ,  $SE = .07$ ) were perceived to have higher quality relationships than were those without one ( $M = 5.65$ ,  $SE = .07$ ),  $F(1, 104) = 75.41$ ,  $p < .001$ , partial  $\eta^2 = .42$ . People with a dyadic relationship status ( $M = 6.08$ ,  $SE = .07$ ) were perceived to have higher relationship quality than were those with a nondyadic status ( $M = 5.73$ ,  $SE = .07$ ),  $F(1, 104) = 31.76$ ,  $p < .001$ , partial  $\eta^2 = .23$ . These effects were qualified by a two-way interaction between profile picture and relationship status,  $F(1, 104) = 38.47$ ,  $p < .001$ , partial  $\eta^2 = .27$  (Figure 1). Those with both a dyadic profile picture and a dyadic relationship status were perceived to have the highest relationship

3. We pilot-tested the profile pictures before selecting the final images for use in the study. In the first pilot, participants ( $N = 52$ ) rated the attractiveness of the single pictures, and in the second pilot, participants ( $N = 76$ ) evaluated the attractiveness and perceived satisfaction of people in the dyadic pictures. The photos included in the primary study featured targets with similar levels of attractiveness (single photos:  $M = 4.80$ ,  $SD = .19$ ; dyadic photos:  $M = 4.74$ ,  $SD = .34$ ; range = 4.61–5.08) and, for dyadic photos, similar levels of perceived satisfaction ( $M = 5.05$ ,  $SD = .33$ ; range = 4.91–5.42). The single and dyadic photos did not significantly differ in attractiveness ratings,  $t(22) = .494$ ,  $p = .63$ .

4. The pattern of results remained the same when satisfaction and commitment were tested separately in these and subsequent analyses.



**Figure 1.** Interaction between profile picture content and relationship status in the Facebook profiles in Study 2 predicting perceived relationship quality.

quality. Among profiles with a single profile picture, there was no difference between those with a relationship status and those without.

Next, we examined the influence of relationship visibility on likability. As predicted, individuals with a dyadic profile picture ( $M = 5.01$ ,  $SE = .07$ ) were perceived to be more likable than were those without a dyadic profile picture ( $M = 4.68$ ,  $SE = .07$ ),  $F(1, 95) = 31.29$ ,  $p < .001$ , partial  $\eta^2 = .25$ . Furthermore, those with a dyadic relationship status ( $M = 4.92$ ,  $SE = .07$ ) were seen as more likable than were those without a dyadic relationship status ( $M = 4.77$ ,  $SE = .08$ ),  $F(1, 95) = 5.83$ ,  $p = .018$ , partial  $\eta^2 = .06$ . These effects were qualified by a two-way interaction between profile picture and relationship status,  $F(1, 95) = 23.84$ ,  $p < .001$ , partial  $\eta^2 = .20$  (Figure 2). When no relationship status was posted, the profile picture did not affect likability. Individuals with a dyadic relationship status and a single profile picture were perceived to be least likable; those with a dyadic relationship status and a dyadic profile were perceived to be most likable.

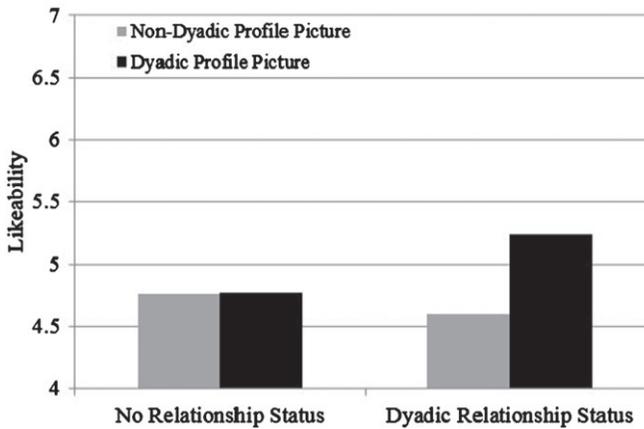
Next, we tested effects of relationship disclosure on perceived relationship quality. As expected, levels of relationship disclosure impacted perceived relationship quality,  $F(2, 103) = 93.13$ ,  $p < .001$ , partial  $\eta^2 = .64$ . A Tukey's LSD post hoc test revealed that low relationship disclosure ( $M = 6.10$ ,  $SE = .08$ ) predicted higher perceived relationship quality compared to statuses not about the

relationship ( $M = 5.01$ ,  $SE = .08$ ,  $p < .001$ ). High levels of disclosure ( $M = 6.60$ ,  $SE = .09$ ) predicted higher perceived relationship quality than low relationship disclosure ( $p < .001$ ).

Finally, we examined whether relationship disclosure is associated with likability. As expected, status update content affected likability,  $F(2, 94) = 38.24$ ,  $p < .001$ , partial  $\eta^2 = .45$ . A Tukey's LSD post hoc test revealed that low relationship disclosure ( $M = 5.11$ ,  $SE = .08$ ) or statuses not about the relationship ( $M = 5.26$ ,  $SE = .12$ ) caused greater perceived likability than statuses with high relationship disclosure ( $M = 4.16$ ,  $SE = .08$ ,  $p < .001$ ). People who posted a status not about the relationship were marginally more likable than those with a low relationship disclosure status ( $p = .09$ ). Overall, these effects were not moderated by participant gender, time spent on Facebook, relationship status, or number of past relationships, and the pattern of effects remained the same when controlling for these variables.

## General Discussion

Although previous research has investigated how people form impressions of others (Ambady & Skowronski, 2008), few studies have evaluated how people perceive others' romantic relationships. This research examined the effects of relationship visibility (how central the relationship is in the self-image that a person presents to others; Emery et al., 2014)



**Figure 2.** Interaction between profile picture content and relationship status in the Facebook profiles in Study 2 predicting perceived likability.

and relationship disclosure (revealing intimate details about the relationship) on outsiders' perceptions. Two studies supported our predictions that observers' perceptions of people's relationship quality based on their Facebook profiles would be consistent with their actual relationship quality (Study 1), and that those with higher relationship visibility would be perceived as being more satisfied and committed (Studies 1 and 2) and more likable (Study 2). Moreover, the presence of both a dyadic profile picture and a dyadic relationship status led to more positive perceptions of relationship quality (Studies 1 and 2) and likability (Study 2) than either alone. Although high relationship disclosure predicted higher perceived relationship quality, it also caused lower perceived likability (Study 2).

This research is the first to examine the impressions that observers form of other people's romantic relationships from information shared on Facebook. Our findings are consistent with research suggesting that people who display "couple objects" (including photos of the couple) report higher relationship quality (Lohmann et al., 2003), and that excessive self-disclosure affects likability (Chaiken & Derlega, 1974), as well as with theory and research on impression formation (e.g., Ambady & Skowronski, 2008). Consonant with previous research, these studies suggest that the impressions people form of others

have significant interpersonal ramifications (e.g., Forest & Wood, 2012).

Yet, certain limitations exist. An ideal test of our hypotheses would involve a large sample of Facebook users rating a large sample of Facebook users' profiles. However, as this was not practical, we selected a multimethod approach, having coders rate profiles from a sample of real individuals in relationships and a sample of Facebook users rate fictional profiles. The use of single-item measures for dependent variables is another limitation of this research. We chose these measures in Study 1 to ensure they were as straightforward as possible and facilitate agreement between coders. In Study 2, we selected single-item measures to reduce burden on participants, given the large number of profiles that participants were rating. Future studies should attempt to replicate our findings with validated scales.

The mechanisms underlying the effects of relationship disclosure on likability were not examined in the current studies. It could be that intimate disclosures are not seen as appropriate for a public context (Chaiken & Derlega, 1974). However, it is also possible that people engaging in high relationship disclosure are seen as gloating about their relationship or perceived to be overly dependent on their partners. Future studies should test these possible explanations empirically.

This research examined impressions formed by outside observers who did not know the

profile owners. However, the findings in this research might differ depending on the observer: a stranger, a long-time friend, and a prospective employer might all have different reactions to relationship visibility on Facebook. As such, Facebook is a fascinating environment in which to explore the “multiple audience problem” (Fleming & Darley, 1991). Given that people may want to convey different images simultaneously to their various Facebook “friends” (e.g., a committed partner, a fun party animal, and a hard-working employee), disclosures related to one of these images may create challenges for the other domains.

### Conclusions

Taken together, these findings indicate that how people display their relationships on Facebook affects others’ perceptions of them, and these impressions have social ramifications. Although people who have more visible relationships on Facebook are seen as having higher relationship quality, those who display too little relationship visibility or engage in too much relationship disclosure are seen as less likable. In order to convey an image of a loving relationship and to seem likable at the same time, this research suggests that people in relationships should make their relationships visible to others but not share too much private information about the relationship in a public context.

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