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When Social Networking Is Not Working: Individuals With Low Self-Esteem Recognize but Do Not Reap the Benefits of Self-Disclosure on Facebook

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Abstract

The popular media have publicized the idea that social networking Web sites (e.g., Facebook) may enrich the interpersonal lives of people who struggle to make social connections. The opportunity that such sites provide for self-disclosure—a necessary component in the development of intimacy—could be especially beneficial for people with low self-esteem, who are normally hesitant to self-disclose and who have difficulty maintaining satisfying relationships. We suspected that posting on Facebook would reduce the perceived riskiness of self-disclosure, thus encouraging people with low self-esteem to express themselves more openly. In three studies, we examined whether such individuals see Facebook as a safe and appealing medium for self-disclosure, and whether their actual Facebook posts enabled them to reap social rewards. We found that although people with low self-esteem considered Facebook an appealing venue for self-disclosure, the low positivity and high negativity of their disclosures elicited undesirable responses from other people.

Keywords

social networking, Facebook, self-esteem, self-disclosure, interpersonal relationships, social interaction

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Since its inception in February of 2004, the social networking Web site Facebook has revolutionized interpersonal communication and relationship maintenance. With more than 50% of its 500 million users logging in on any given day (Facebook, 2011b), Facebook appears to be fulfilling its mission “to give people the power to share and make the world more open and connected” (Facebook, 2011a).

Popular media outlets have latched on to the idea that Facebook may serve as a “social lubricant” (“Facebook a Big Hit,” 2010, para. 18) that helps people who struggle with relationships—the shy, the lonely, and people with low self-esteem—connect with others in a comfortable environment (e.g., Dailey, 2009; Rosenwald, 2011). Some therapists have even speculated about the utility of Facebook for such groups. For example, Jonathan Dalton noted that “Shy people have difficulty finding topics to talk about. . . Facebook gives you a starting point” (as quoted in Rosenwald, 2011, para. 15). But do people who have difficulty making social connections use these sites in ways that enrich their interpersonal lives?

To examine this question, we focused on a group of people who could benefit from the opportunity to enhance their social connections: individuals with low self-esteem—that is, people whose overall liking for themselves is relatively low. People

with low self-esteem are more socially anxious, introverted, and shy than people with high self-esteem (Leary & MacDonald, 2003). Although both types of individuals seem to desire connection equally (e.g., Anthony, Wood, & Holmes, 2007), people with low self-esteem feel lonelier and have less satisfying and stable relationships than do people with high self-esteem (Leary & MacDonald, 2003; Wood, Hogle, & McClellan, 2009). The lower quality of the former group’s relationships is troubling not only because feeling connected to other people is considered a “fundamental human motivation” (Baumeister & Leary, 1995, p. 497), but also because rich social networks promote better mental health (e.g., Baumeister & Leary, 1995) and even better physical health (e.g., Uchino, Cacioppo, & Kiecolt-Glaser, 1996).

It seems possible that Facebook could help people with low self-esteem lead more fulfilling social lives by providing an opportunity for self-disclosure, which is considered crucial to the development of intimacy (Reis & Shaver, 1988). In

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contexts outside of Facebook, self-disclosure is positively associated with likability (e.g., Collins & Miller, 1994), as well as with relationship quality and stability (e.g., Sprecher & Hendrick, 2004). However, self-disclosure is risky: If an individual shares personal information with others, those others may disapprove or betray that person's confidences.

People with low self-esteem may be especially uneasy about self-disclosing. Baumeister, Tice, and Hutton (1989) observed that such individuals tend to be self-protective: Whereas people with high self-esteem often draw attention to their good qualities, people with low self-esteem focus more on avoiding revealing their flaws. This self-protective orientation seems to guide many behaviors that people with low self-esteem display toward other people (Wood & Forest, 2010), because they are especially fearful of disapproval or of being devalued (Leary, Tambor, Terdal, & Downs, 1995). When faced with "risky" opportunities to deepen their connections with people close to them—opportunities that could leave them vulnerable to being rejected, ignored, or treated badly—people with low self-esteem place a premium on the goal of self-protection (Forest & Wood, 2011b). Indeed, people with low self-esteem self-disclose less than people with high self-esteem do (Gaucher et al., 2012).

Because people with low self-esteem self-disclose less in person than do people with high self-esteem, the opportunity to communicate with other people on Facebook may be especially valuable for them. Sharing their thoughts and feelings online may feel less awkward and embarrassing. Unlike people in face-to-face interactions, individuals who disclose their feelings on Facebook cannot see other people's potentially disapproving faces; they see only the responses of the recipients who choose to reply, which are perhaps censored. Disclosing feelings on Facebook, then, may be a way in which people with low self-esteem can relate to other individuals without the risks of face-to-face disclosure.

At the same time, there is a danger that if people with low self-esteem feel free to disclose their feelings openly on Facebook, they may express a lot of negativity. Relative to people with high self-esteem, people with low self-esteem experience higher levels of nearly all negative emotions and are more likely to have anxiety and depressive disorders (Leary & MacDonald, 2003). People with low self-esteem are also less likely to savor positive moods (Wood, Heimpel, & Michela, 2003) and to repair negative moods (Heimpel, Wood, Marshall, & Brown, 2002). Although no researchers have reported associations between self-esteem and negative expressivity, there is good reason to think that if people with low self-esteem do express themselves on Facebook, their disclosures may be more negative than the disclosures of people with high self-esteem.

What impact would expressing negativity on Facebook have on a person's interpersonal relationships? The answer is not clear. Surprisingly little research has addressed the interpersonal consequences of negative self-disclosure, and the

evidence that does exist is mixed. Research in non-Facebook contexts has found that people who are depressed (Coyne, 1976) or high in negative affect (Bell, 1978; Sommers, 1984) are not well liked. However, it is not clear that expressing negativity is what makes other people dislike them—perhaps it is their reassurance-seeking (Segrin & Abramson, 1994) or their failure to show support for others (Gotlib & Robinson, 1982). Other research suggests that expressing negativity may be endearing: People who report a high willingness to express negative emotions have more intimate relationships than people who are less willing to do so (Graham, Huang, Clark, & Helgeson, 2008). Moreover, it seems likely that the impact of expressing negativity depends on who receives the disclosure. People who care about the discloser are likely to be more interested, whereas casual acquaintances and strangers may be put off (cf. Clark & Taraban, 1991). An interesting aspect of Facebook is that it allows people's disclosures to reach a wide audience, including people with whom the discloser has an emotionally close relationship and people whom the discloser barely knows. In Study 3, we examined the effects of positive and negative disclosure on strangers and on participants' real Facebook friends.

Facebook's enormous popularity makes it an important context in which to examine the interpersonal consequences of disclosure. With over 500 million active Facebook users creating, on average, 90 pieces of content per month (Facebook, 2011b), there is no question that Facebook is affecting people's interpersonal lives.

In the research reported here, we sought to explore whether people with low self-esteem do, in fact, see Facebook as a safe medium for self-disclosure (i.e., one that offers low risk for hurt or rejection; Study 1) and whether such individuals capitalize on the opportunity that Facebook provides by expressing themselves there in ways that enhance their social connections (Studies 2 and 3).

Study 1

Because of their self-protective orientation, people with low self-esteem may find Facebook especially appealing. They can think carefully about what to say and can avoid the "in-the-moment" awkwardness of face-to-face interactions. We hypothesized that although both people with low self-esteem and people with high self-esteem see Facebook as a place to connect with other individuals, the former perceive Facebook to be a safer context for expressing their emotions and as offering more advantages—such as the opportunity to receive support—than in-person disclosures do.

Method

Eighty undergraduate Facebook users (17 male, 58 female, 5 undisclosed; mean age = 21.35 years) completed the Rosenberg Self-Esteem Scale (Rosenberg, 1965). Using a scale that ranged from 1, *not at all true*, to 7, *very true*, participants then

answered questions from four measures about their perceptions of Facebook. First, participants reported the degree to which Facebook enabled them to express themselves (3 items, $\alpha = .88$) and connect with other people (3 items, $\alpha = .72$). Next, they completed a 9-item measure ($\alpha = .87$) of the perceived safety of self-disclosure on Facebook compared with in-person interactions (e.g., “posting on Facebook makes me feel less self-conscious,” “posting on Facebook means that I don’t have to see a friend’s reaction”). Finally, participants completed a 10-item measure ($\alpha = .93$) concerning the advantages of disclosing on Facebook rather than in-person (e.g., “posting on Facebook enables me to get more attention from others”). Table S1 in the Supplemental Material available online lists all items for each measure.

Results and discussion

We analyzed participants’ perceptions of Facebook in a series of regression analyses with mean-centered self-esteem as the predictor. Self-esteem did not predict the degree to which participants saw Facebook as offering opportunities to express themselves ($M = 4.20$, $SD = 1.69$), $t < 1.36$. As expected, however, participants with lower self-esteem saw Facebook as a safer place to express themselves than did participants with higher self-esteem, $\beta = -0.31$, $t(78) = -2.89$, $p = .005$, $d = 0.65$. The former were also more likely than the latter to say that Facebook offered opportunities to connect with other people, $\beta = -0.22$, $t(76) = -1.99$, $p = .05$, $d = 0.46$, and to see advantages—such as getting support and attention without burdening other people—to disclosing their thoughts and feelings on Facebook over in person, $\beta = -0.30$, $t(71) = -2.96$, $p = .011$, $d = 0.70$.

Study 2

Given that people with low self-esteem see Facebook as a safe and advantageous place to disclose their thoughts and feelings, do they use Facebook to better their social lives? We hypothesized that Facebook posts made by participants with low self-esteem would be characterized by more negativity and less positivity than Facebook posts made by participants with high self-esteem. We also examined whether posts made by participants with low self-esteem affected other people’s liking for them.

Method

One hundred seventy-seven undergraduate Facebook users (60 male, 117 female; mean age = 19.95 years) completed the Rosenberg Self-Esteem Scale (Rosenberg, 1965). Participants were then asked, “How many hours per month do you spend on Facebook?” and “How many friends do you have on Facebook?” Next, participants were asked to log in to their Facebook accounts and to provide the 10 most recent status updates they had posted along with the date each was posted. When

Facebook users post status updates—usually single sentences to share news, thoughts, or feelings—the posts are visible to all of their Facebook friends—people they have added to their list of Facebook contacts.

Each participant’s set of updates was content coded. Coders were undergraduate Facebook users who were blind to the hypotheses and to participant self-esteem. Four coders rated the degree of positive self-disclosure (“Overall, how much positivity was expressed in the status updates?”; interrater $\alpha = .83$) and negative self-disclosure (“Overall, how much negativity was expressed in the status updates?”; interrater $\alpha = .85$) across each set of updates (1 = *none at all*, 9 = *a great deal*). An example of an update from a set rated as highly positive was, “[The poster] is lucky to have such terrific friends and is looking forward to a great day tomorrow!” An example from a highly negative set was, “[The poster] is upset b/c her phone got stolen :@.” Coders were instructed to treat positivity and negativity independently. Using the same scales, three new coders rated the degree to which each participant expressed specific types of content, namely sadness, anger, frustration, anxiety, fear, tiredness, boredom, illness, embarrassment, irritability, happiness, excitement, and gratitude.

On the basis of each participant’s status updates, 10 new coders rated their liking of the participant using the items “How much do you like this person?” (1 = *not at all*, 9 = *a great deal*), “How interested would you be in spending time with him/her?” (1 = *not at all interested*, 9 = *extremely interested*), and “Would this person be someone you’d want as a friend?” (1 = *definitely not*, 9 = *definitely yes*). The mean of these three items ($\alpha = .97$) was our index of likability (interrater $\alpha = .69$).

Results and discussion

We conducted regression analyses with mean-centered self-esteem as the predictor. Fifty-three participants provided two or fewer status updates, so they were excluded from analyses involving updates. Overall, participants reported spending an average of 26.43 hr per month ($SD = 47.12$) on Facebook and having an average of 321.05 Facebook friends ($SD = 186.78$). Participants with lower self-esteem did not differ from participants with higher self-esteem on these variables, $t_s < 1.20$. Participants averaged 0.26 updates per day ($SD = 0.41$), and this did not depend on their level of self-esteem, $t < 1$. Thus, although people with low self-esteem see more advantages in using Facebook, they do not appear to use Facebook more than do people with high self-esteem.

We next investigated whether people with high self-esteem and people with low self-esteem posted different types of content. Individuals with lower self-esteem expressed less positivity, $\beta = 0.26$, $t(119) = 2.92$, $p = .004$, $d = 0.54$, and more negativity, $\beta = -0.31$, $t(119) = -3.57$, $p = .001$, $d = 0.65$, in their status updates than participants with higher self-esteem did. As Table 1 shows, participants with lower self-esteem also expressed more sadness, anger, frustration, anxiety, fear, and

Table 1. Results of Regression Analyses Using Self-Esteem as a Predictor of Emotions Expressed in Participants' Status Updates in Study 2

Emotion	β	$F(1, 119)$
Sadness	-0.35	16.71**
Anger	-0.19	4.20*
Frustration	-0.25	8.00**
Anxiety	-0.26	8.63**
Fear	-0.24	7.13**
Tiredness	-0.16	3.29†
Boredom	-0.08	0.73
Illness	-0.10	1.16
Embarrassment	-0.18	3.77†
Irritability	-0.19	4.46*
Happiness	0.28	10.39**
Excitement	0.29	10.59**
Gratitude	0.28	9.88**

† $p < .08$. * $p < .05$. ** $p < .01$.

irritability, and less happiness, excitement, and gratitude in their posts than did people with higher self-esteem.

What effect did the relatively high negativity and low positivity expressed by participants with low self-esteem have on strangers who examined their Facebook posts? Our coders liked participants with lower self-esteem less than participants with higher self-esteem, $\beta = 0.21$, $t(119) = 2.35$, $p = .020$, $d = 0.43$. To examine whether the overall valence of self-disclosure (positivity expressed minus negativity expressed) mediated the association between self-esteem and liking, we ran a bias-corrected bootstrap analysis (Shrout & Bolger, 2002) with 5,000 resamples. As predicted, valence of disclosure mediated the association between self-esteem and liking, 95% confidence interval (CI) = [.04, .17], $p = .001$. Bootstrap analyses conducted on each of the specific emotions expressed by participants revealed that sadness (95% CI = [.03, .15], $p = .001$), anger (95% CI = [.01, .12], $p = .025$), frustration (95% CI = [.02, .12], $p = .003$), irritability (95% CI = [.01, .09], $p = .019$), happiness (95% CI = [.03, .15], $p = .001$), excitement (95% CI = [.01, .11], $p = .023$), and gratitude (95% CI = [.03, .16], $p = .001$) each mediated the association between self-esteem and liking.

Study 2, then, yielded findings that are unfortunate for participants with low self-esteem: Although these participants saw great promise in using Facebook to safely reap rewarding social experiences (Study 1), they failed to capitalize on this opportunity. Participants with lower self-esteem made posts that were more negative and less positive than those of participants with higher self-esteem and were liked less as a result—"liked less" by strangers, that is. Our coders did not know the people posting Facebook updates. Because nearly half of Facebook friends are strangers or acquaintances rather than close or even casual friends (Forest & Wood, 2011a), the effects of posts on these distant others are important. But

would participants' Facebook friends respond differently than complete strangers, such as our coders, did?

Study 3

One might expect that friends, who care about the discloser's well-being, would respond more positively than strangers would to negative disclosures. However, we suspected that friends' responses would depend on whom the negative disclosure came from. Friends have access to information that strangers do not have: knowledge of the discloser's typical moods and expressive style. Recent research has shown that when people interpret another person's self-disclosure, they take into account that person's typical degree of negativity. When individuals habitually express negativity, others interpret their negative statements as less indicative of real problems and respond less supportively (Forest, Kille, Wood, & Holmes, 2011). Hence, when people with high self-esteem, who express negativity relatively infrequently, post a negative update, their friends may worry that something must really be wrong and offer attention and support. In contrast, negative posts from people who commonly express negativity—as our data suggest that people with low self-esteem do—should be less worrisome. Their friends may even experience the post as tiresome and refrain from expressing interest in hopes of discouraging further negativity. The opposite should be true for highly positive updates: People with low self-esteem should receive more interest from friends than should people with high self-esteem. The friends of people with low self-esteem may lavish attention so as to encourage more pleasant updates in the future.

In Study 3, we again collected participants' 10 most recent Facebook posts and coded them for positivity, negativity, and likability by strangers (coders). We also examined the degree of social reward each post received from participants' Facebook friends.

Method

Ninety-eight undergraduate Facebook users (21 male, 77 female; mean age = 21.18 years) completed the Rosenberg Self-Esteem Scale (Rosenberg, 1965). As in Study 2, participants also stated how many hours per month they spent and how many friends they had on Facebook, and they provided their 10 most recent status updates. Updates from all participants were randomly ordered and given to three coders, who rated each update for positivity and negativity as in Study 2. The mean of the coders' scores across each participant's set of updates formed indices of positive self-disclosure (interrater $\alpha = .95$) and negative self-disclosure (interrater $\alpha = .94$). Ten separate coders rated their liking for each update's writer using the same three items ($\alpha = .99$) as in Study 2. These ratings were averaged across each participant's set of updates (interrater $\alpha = .82$).

When a person posts a status update, Facebook friends can write a comment, click on a “Like” button to indicate liking the post, or simply not respond. Participants were given instructions on Facebook to report the number of “Likes” each of their most recent updates received and the number of different people who commented on the post.

Results and discussion

We conducted regression analyses with mean-centered self-esteem as the predictor. Twenty-five participants provided two or fewer status updates, so they were excluded from analyses involving updates. Overall, participants reported spending an average of 27.56 hr per month ($SD = 31.62$) on Facebook and having an average of 352.51 Facebook friends ($SD = 240.77$). Participants with lower self-esteem reported spending more time on Facebook each month than did participants with higher self-esteem, $\beta = -0.31$, $t(86) = -3.07$, $p = .003$, $d = 0.66$, but did not differ in number of friends, $t < 1$. As in Study 2, participants with lower self-esteem expressed less positivity, $\beta = 0.23$, $t(71) = 2.01$, $p = .048$, $d = 0.48$, and more negativity in their status updates, $\beta = -0.33$, $t(71) = -2.93$, $p = .005$, $d = 0.70$, than did participants with higher self-esteem, and the former were also deemed less likable by strangers, $\beta = 0.22$, $t(71) = 1.94$, $p = .056$, $d = 0.46$. Once again, valence of disclosure mediated the association between self-esteem and coders’ liking (95% CI = [.03, .19], $p = .005$).

Do the negative posts made by participants with low self-esteem elicit social rewards from their Facebook friends? To answer this question, we used linear-mixed-modeling (LMM) analyses to assess friends’ responses to individual updates posted by people with lower and higher self-esteem as a function of each update’s positivity or negativity (we used LMM analyses because updates were nested within and unbalanced across participants). We expected that expressing negativity would garner more interest from friends of participants with high self-esteem, and expressing positivity would elicit more social rewards from friends of participants with low self-esteem. We did not expect such an interaction on coders’ liking because coders lacked information about the discloser’s self-esteem and typical expressivity. In each analysis, the predictors were mean-centered self-esteem, person-mean-centered update positivity or negativity, and the Self-Esteem \times Positivity or Self-Esteem \times Negativity interaction.

On average, each update received 0.90 ($SD = 1.46$) “Likes” and comments from 1.30 different commenters ($SD = 2.04$). We summed the number of “Likes” each update received and the number of commenters who responded to it. The resulting “social reward” composite reflected the degree to which participants’ Facebook friends rewarded each update with validation and attention.¹

We first conducted LMM analyses using self-esteem, positivity, and their interaction as predictors. A marginal main effect of update positivity indicated that more positive updates received more social rewards from friends, parameter estimate

$= .08$ ($SE = .05$), $t(49.84) = 1.70$, $p = .096$. The predicted Self-Esteem \times Positivity interaction also emerged, parameter estimate $= -.11$ ($SE = .05$), $t(57.13) = -2.37$, $p = .021$ (Fig. 1). This suggests that update positivity was associated with social reward only for participants with low self-esteem: The more positivity participants with low self-esteem expressed, the more comments and “Likes” their friends gave, parameter estimate $= .20$ ($SE = .07$), $t(52.55) = 2.88$, $p = .006$ (for participants with high self-esteem, $t < 1$).

LMM analyses involving self-esteem, negativity, and their interaction as predictors yielded only the predicted Self-Esteem \times Negativity interaction, parameter estimate $= .10$ ($SE = .04$), $t(557.77) = 2.37$, $p = .018$ (Fig. 2): Participants with high self-esteem received more social rewards for their more negative updates than for their less negative ones, parameter estimate $= .18$ ($SE = .07$), $t(558.46) = 2.53$, $p = .012$, whereas participants with low self-esteem did not, $t < 1$.

Finally, we conducted parallel LMM analyses of coders’ liking for each update’s writer. As predicted, participant self-esteem did not interact with update positivity or negativity to predict liking by strangers, $t_s < 1.61$.²

In sum, the responses of strangers and of participants’ Facebook friends suggest that people with low self-esteem are not rewarded for their tendency to express negativity. The more negativity an update contained, the less participants were liked by coders. Although participants with high self-esteem garnered more attention and validation from friends the more they expressed negativity, participants with low self-esteem did not. Indeed, friends of participants with low self-esteem rewarded the latter’s posts with more validation and attention the more positive they were, perhaps trying to encourage this atypical behavior.

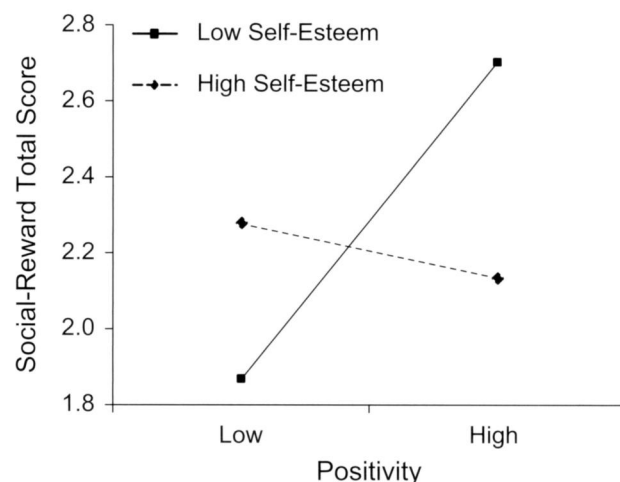


Fig. 1. Results from Study 3: social-reward total score as a function of self-esteem and coder-rated positivity of Facebook status updates. Social-reward scores were calculated by summing the number of “Likes” each update received on Facebook and the number of commenters who responded to each update. For both self-esteem and positivity, *low* refers to the value 1 standard deviation below the mean, and *high* refers to the value 1 standard deviation above the mean.

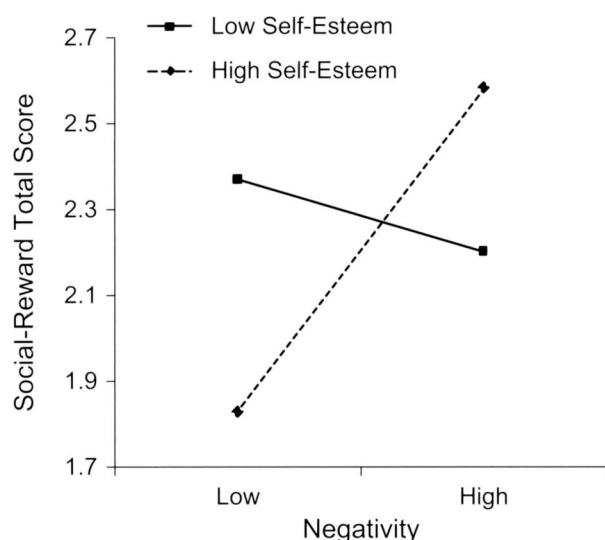


Fig. 2. Results from Study 3: social-reward total score as a function of self-esteem and coder-rated negativity of Facebook status updates. Social-reward scores were calculated by summing the number of “Likes” each update received on Facebook and the number of commenters who responded to each update. For both self-esteem and negativity, *low* refers to the value 1 standard deviation below the mean, and *high* refers to the value 1 standard deviation above the mean.

General Discussion

The rapid growth of social networking Web sites in recent years has created a fantastic opportunity for relationship development by enabling people to connect with others by sharing their thoughts and experiences. As popular media outlets have speculated, this opportunity could be especially valuable for people such as those with low self-esteem, whose self-protectiveness normally makes them hesitant to self-disclose, and whose relationships could use a boost.

The results of the three studies reported here, however, suggest that the way in which people with low self-esteem use Facebook may prevent them from reaping its potential social benefits. We found that people with low self-esteem perceive Facebook as a safe, appealing place for self-disclosure and that they spend as much (or more) time using Facebook as do people with high self-esteem. The comfort that people with low self-esteem feel in this low-risk environment could make it a great place for them to enrich their relationships by sharing things they otherwise would not. However, people with low self-esteem tend to make updates that are higher in negativity and lower in positivity than those of people with high self-esteem, and they are liked less than people with high self-esteem as a result.

The finding that people with low self-esteem express themselves in ways that are not especially likable is unfortunate because people spend time with only 24% of their Facebook friends in face-to-face interactions (Forest & Wood, 2011a). Facebook contact may be the only way that many friends communicate, then, yet people with low self-esteem use the site in

a manner that may push other people away. It is ironic that feeling safe enough to disclose their feelings on Facebook may encourage people with low self-esteem to reveal things that could lead to the very rejection they fear. The usual guarded, self-protective orientation of people with low self-esteem is generally thought to hamper their ability to cultivate satisfying relationships, but in the studies reported here, more self-protectiveness might have led them to minimize their negativity and brought about better interpersonal outcomes.

Do the negative disclosures of people with low self-esteem always make them dislikable, or are such disclosures particularly objectionable on Facebook? We know of no research that has found a direct association between the degree to which typical (i.e., nondepressed) individuals express negativity and those individuals’ likability. Moreover, negative disclosure may, at times, benefit relationships. Disclosing negative personal information can signal that the discloser trusts the person he or she is communicating with and desires connection (Graham et al., 2008). However, expressing negativity on Facebook may lack a key relationship-promoting quality: fostering intimacy (Altman & Taylor, 1973). If a person makes a negative disclosure to hundreds of other people over Facebook, any one of the discloser’s friends is unlikely to see the disclosure as a sign of trust or intimacy seeking with him or her in particular. Moreover, expressing negativity may lose its relationship-boosting benefits when it is “constant or indiscriminate” (Graham et al., 2008, p. 395). Although further research is needed on the effects of expressing negativity outside of Facebook, we suspect that frequently expressing negativity is detrimental to people’s relationships in many contexts.

What, then, should people with low self-esteem do to use social networking more constructively? Discouraging people with low self-esteem from ever expressing negativity on Facebook seems unwise. Their negative Facebook disclosures may provide them with nonsocial benefits (e.g., improved physical and mental health; Pennebaker & Chung, 2007). And we do not advocate being inauthentic. However, given that more positive and less negative updates are better liked by strangers than are less positive, more negative updates (Studies 2 and 3) and that people with low self-esteem receive better responses from Facebook friends for more positive updates than for less positive updates (Study 3), people with low self-esteem might benefit from making more positive and less negative updates. Rather than posting phony positive updates, however, people with low self-esteem might try to share more of the positive things that do happen to them and to be selective about what negative things they post. Perhaps, then, Facebook really could be a tool that not only makes the world “open and connected” (Facebook, 2011a), but also one that helps people with low self-esteem create rewarding social relationships.

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Declaration of Conflicting Interests

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Supplemental Material

Additional supporting information may be found at <http://pss.sagepub.com/content/by/supplemental-data>

Notes

1. We consider comments as rewards for two reasons. First, because responding to Facebook updates is voluntary, commenting suggests that the commenter cares enough to post a response. Second, participants' ratings of how much they liked the first comment they received for each update (1 = *not at all*, 9 = *very much*) fell above the midpoint in 91.2% of cases, and only 3.4% of first comments were liked "not at all" ($M = 6.97$, $SD = 2.04$); this finding suggests that these comments were generally well received.
2. Although we were interested primarily in self-esteem's role in moderating the effects of positivity and negativity on social reward, we also tested mediation (the possibility that self-esteem yielded positivity or negativity, which in turn yielded social reward) using LMM analyses with grand-mean-centered positivity or negativity and the joint significance approach (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). There was no direct effect of self-esteem on social reward, but there was an indirect effect of self-esteem on social reward via positivity (but not via negativity): Lower self-esteem predicted expressing less positivity, parameter estimate = .29 ($SE = .14$), $t(69.65) = 2.11$, $p = .039$; in turn, less positivity was associated with receiving less social reward, parameter estimate = .11 ($SE = .05$), $t(49.29) = 2.06$, $p = .045$.

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