

## Negative Social Comparison on Facebook and Depressive Symptoms: Rumination as a Mechanism

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Recent research demonstrates that it is the quality rather than the frequency of social networking experiences that places individuals at risk for negative mental health outcomes. However, the mechanisms that account for this association have yet to be examined. Accordingly, this study examined whether the tendency to negatively compare oneself with others while using Facebook leads to increases in depressive symptoms, and whether this association is mediated by increases in rumination. A sample of 268 college-age young adults completed an initial online survey and a 3-week follow-up. Path analysis was used to test the hypothesized model, wherein negative social comparison on Facebook was predicted to be associated with increases in rumination, which, in turn, was predicted to be associated with depressive symptoms. The model controlled for general social comparison to test the specific effect of social comparison on Facebook over and above the tendency to engage in social comparison in general. Results indicated that the hypothesized mediation effect was significant. In sum, in the context of social networking, negatively comparing oneself with others may place individuals at risk for rumination and, in turn, depressive symptoms. Findings increase understanding of the mechanisms that link social networking use to negative mental health outcomes and suggest a continued emphasis on examining the specific processes that take place in the context of social networking that may be pathogenic.

*Keywords:* Facebook, social comparison, social networking, depression, rumination

As social networking sites such as Facebook have become more popular, researchers have become increasingly interested in understanding the potential consequences of their use. Initially, it was suggested that Internet use was associated with negative mental health outcomes such as depressive symptoms. However, as data accumulated, the results became increasingly mixed; some studies supported the associations between Internet use and mental health problems (Kraut et al., 1998;

Selfhout, Branje, Delsing, ter Bogt, & Meeus, 2009; van den Eijnden, Meerkerk, Vermulst, Spijkerman, & Engels, 2008), whereas others demonstrated positive effects of Internet use (Bessière, Kiesler, Kraut, & Boneva, 2008; Morgan & Cotten, 2003; Valkenburg & Peter, 2007). To reconcile discrepant findings, Davila et al. (2012) examined the amount of time spent engaging in social networking activities as well as the quality of interactions people had while using social networking mediums. Consistent with the larger literature on mood and anxiety disorders and interpersonal functioning, the authors hypothesized that poorer quality interactions, rather than use alone, would be associated with negative mental health outcomes. As predicted, in cross-sectional and 3-week prospective analyses, more negative and less positive self-reported social networking interactions were associated with depressive symptoms, whereas time spent engaging in social networking was not (Davila et al., 2012).

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As Facebook use becomes virtually ubiquitous, it is important to continue to identify the specific behaviors and processes that may be “risky.” Previous research on Facebook use has garnered a great deal of media attention, particularly a clinical report claiming that researchers had documented a phenomenon called “Facebook depression,” or depression that results from spending too much time on Facebook (O’Keeffe & Clarke-Pearson, 2011). In fact, no research supports this claim, and, although scholars have attempted to clarify this (Davila, 2011; Magid, 2011), such false claims emphasize the importance of testing hypothesis-driven research questions that shed light on specific mechanisms that may lead to poorer well-being in the context of social networking. As noted, Davila et al. (2012) suggest that it is the quality rather than the frequency of social networking experiences that predicts negative mental health outcomes, but it remains unclear what specifically takes place on social networking sites beyond poor quality interactions that may be pathogenic.

Social networking sites provide venues for people to engage in a variety of behaviors, such as actively interacting with others (e.g., instant messaging), passively interacting with others (e.g., posting a message on someone’s profile), and obtaining information about others (e.g., looking at someone’s profiles). Similar to traditional social activities, these online activities provide individuals with ample opportunity to compare themselves with others on numerous characteristics such as appearance, popularity, and success. When people are presented with information about others, they tend to relate that information to themselves (Mussweiler, Ruter, & Epstude, 2006), and this social comparison provides them with self-evaluative information that can be used to make positive or negative self-judgments (Festinger, 1954). For instance, if a person sees that many of his or her friends are getting jobs and he or she is unemployed and having a difficult time getting a job, then he or she might feel inadequate in that domain. In contrast, if a person sees that many of his or her friends are unemployed and he or she has just gotten a job, then he or she might feel especially adequate in that domain. Importantly, social comparison is a pervasive and automatic feature of relating to others on an individual and group level (Pratto, Sidanius,

Stallworth, & Malle, 1994; Sidanius, Pratto, & Bobo, 1994; Wood, 1989), making it nearly impossible to circumvent.

Social comparison is not in itself problematic, and indeed, even negative<sup>1</sup> social comparisons (i.e., comparisons with others who are perceived as superior) can have positive effects (e.g., self-improvement and self-enhancement; Wood, 1989). Still, negative social comparison can also maintain or exacerbate negative self-appraisals (for reviews, see Ahrens & Alloy, 1997; Suls & Wheeler, 2000; Swallow & Kuiper, 1988; Wood & Lockwood, 1999). Notably, individuals report increases in negative affect subsequent to negative social comparisons (Ahrens & Alloy, 1997; Antony, Rowa, Liss, Swallow, & Swinson, 2005; Giordano, Wood, & Michela, 2000; Wheeler & Miyake, 1992). Despite evidence that negative social comparison may lead to poorer well-being in general, little research exists on this process in the context of social networking. As an exception, a qualitative study found that users of MySpace, another social networking site, reported engaging in social comparison on the site and reported negative self-views subsequent to such comparison (Manago, Graham, Greenfield, & Salimkhan, 2008). Chou and Edge (2012) also found that individuals who spent more time on Facebook were more likely to agree that others were “happier” and “had better lives.” Finally, Haferkamp and Krämer (2011) found that individuals who looked at profile pictures of attractive members of the same-sex reported less positive affect than those who looked at nonattractive members of the same-sex. This emerging body of research provides preliminary support for a social networking site such as Facebook to provide a context for engaging in negative social comparison, which may be associated with negative consequences.

In addition to examining the relationship between specific processes taking place in the

<sup>1</sup> Several different terms have been used throughout the literature to describe the process wherein an individual compares himself or herself with others who are perceived as superior. Although most studies refer to this process as *upward* social comparison, others have referred to it as *downward* social comparison or *negative* social comparison. We chose to use the term *negative* social comparison throughout this article, as it seems to be the least ambiguous.

context of social networking and mental health outcomes, it is important to understand the mechanisms that may account for these associations. One possible factor that may account for the association between negative social comparison on Facebook and depressive symptoms is the tendency to engage in maladaptive emotion regulation strategies, such as rumination. Rumination refers to repetitively focusing on one's distress, including its potential causes and consequences (Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008), and has been consistently linked to negative mental health outcomes, including depression (for a meta-analytic review, see Aldao, Nolen-Hoeksema, & Schweizer, 2010). Although there has been little research on social comparison and emotion regulation, one study found that social comparison was positively associated with rumination (Cheung, Gilbert, & Irons, 2004). Building on these cross-sectional findings, the present study tests the hypothesis that negative social comparison on Facebook will lead to increases in the use of rumination as an emotion regulation strategy. Given that negative social comparison may be associated with rumination, and that rumination has consistently been linked to depressive symptoms, it is likely that rumination may act as a mechanism through which negative social comparison increases depressive symptoms. Notably, Locatelli, Kluge, and Bryant (2012) found that rumination mediated the association between negative status updates on Facebook and depressive symptoms. Although their study provides preliminary support for our meditation hypothesis, the current study extends this to social comparison and uses a prospective design to test changes over time.

In sum, to refine our understanding of the processes that render individuals at risk when using social networking sites, the current study used a 3-week prospective design to examine a mediation model, wherein it was hypothesized that negative social comparison on Facebook would be associated with increases in depressive symptoms 3 weeks later *through* its association with increases in rumination. We controlled for general social comparison tendencies (i.e., social comparison not specific to Facebook) to examine the *specific* effects of Facebook social comparison. Additionally, given that there are some data to suggest bidirectional associations between rumination and depressive

symptoms (Nolen-Hoeksema, Larson, & Grayson, 1999; Nolen-Hoeksema, Stice, Wade, & Bohon, 2007; for an exception, see McLaughlin, Hatzenbuehler, Mennin, & Nolen-Hoeksema, 2011), we examined an alternate mediation model with depressive symptoms as the mediator and rumination as the outcome. By examining both models, we hoped to gain a better sense of the direction of the proposed mediation effect. The current study extended previous research in several ways, including examining a specific process that may put individuals at risk for depressive symptoms in the context of social networking, using path analysis to test mediation models to better understand mechanisms of action, and controlling for general social comparison tendencies to provide a more stringent test.

## Method

### Participants

Eligible participants were at least 18 years old and enrolled in a psychology course for which they earned research credits for study participation. The present study was posted on the online system used by the psychology department to advertise research projects and track student credit. Participants included 105 male and 181 female students from Stony Brook University. Nine participants did not complete the follow-up assessment (retention rate = 96%), and nine additional participants did not complete one or more of the measures. These 18 participants were excluded from analyses; they did not significantly differ from the rest of the sample on gender, race/ethnicity, age, Facebook social comparison, general social comparison, rumination, or depressive symptoms (*ps* range from .07 to .68). The final sample included 268 individuals (62% female), with an average age of 19.66 years (*SD* = 2.29) and a racial/ethnic distribution including Caucasian (40%), Asian (42%), Latino/a (5%), African American (4%), Middle-Eastern (3%), and other (6%).

### Procedure

Participants completed an online survey (Time 1; T1) consisting of questionnaires assessing social comparison (in general and spe-

cific to Facebook), rumination, and depressive symptoms. To assess change over time, a follow-up online survey was conducted 3 weeks later (Time 2; T2). Given that the surveys were administered online, respondents were able to participate from any location that had Internet access. Participants received course credit for their participation. This research was approved by the Stony Brook University Committee on Research Involving Human Subjects.

## Measures

**Social comparison on Facebook.** The tendency to engage in social comparison when using Facebook was assessed with the Social Comparison Rating Scale (SCR; Allan & Gilbert, 1995), an 11-item self-report measure that presents respondents with an incomplete sentence followed by a series of bipolar constructs. We modified the instructions so that participants endorsed items based on social comparison while using Facebook. Specifically, whereas the original scale began using the stem, "In relationship to others I generally feel. . ." we used the stem, "When I compare myself to others on Facebook, I feel. . ." Participants selected a number from 1 to 10 that best described their perceived position between two poles (e.g., inferior/superior, incompetent/more competent, unlikeable/more likable, undesirable/more desirable). We reverse coded and summed all responses to compute a total score in which higher values indicated more negative self-perceptions compared with others. Possible total scores could range from 11 to 110, and in our sample, ranged from 13 to 110 at T1. Allan and Gilbert (1995) reported internal consistency (alpha) of .88 and significant correlations with measures of psychopathology, including depression. In the current sample, the alpha was .94 at T1.

**General social comparison.** The general tendency to engage in social comparison was assessed with the Iowa-Netherlands Comparison Orientation Measure (INCOM; Gibbons & Buunk, 1999), which is an 11-item self-report measure. Participants were instructed to rate their degree of agreement with each statement, ranging from 1 (I disagree strongly) to 5 (I agree strongly). Sample items include, "I often compare how my loved ones are doing with how others are doing," "If I want to learn more about

something, I try to find out what others think about it," and "If I want to find out how well I have done something, I compare what I have done with how others have done." Responses to all items were summed to create a total score, where higher scores reflected a greater tendency to compare oneself with others. Possible total scores could range from 11 to 55, and our sample had a large distribution (15–54 at T1). Gibbons and Buunk (1999) demonstrated internal consistencies (alphas) ranging from .78 to .84, 3 to 4 week test–retest reliability of .71, and significant convergent and divergent validity across numerous samples. The alpha was .85 at T1 in the current sample.

**Rumination.** Rumination was assessed with the Ruminative Responses Scale (RRS; Nolen-Hoeksema & Morrow, 1991). The RRS is a 22-item self-report measure that assesses how frequently individuals experience or engage in various thoughts, feelings, and actions during a depressed mood. Sample items include "Think about how sad I feel" and "Analyze recent events to try to understand why I am depressed." Each item is rated on a 1 (almost never) to 4 (almost always) scale, and responses are summed to compute a total score, which could range from 22 to 88, with higher scores representing higher levels of rumination. At both time points in our sample, we had a full range of scores. Excellent internal consistency and a significant correlation with depressive symptom severity have been reported (Nolen-Hoeksema & Morrow, 1991). In this sample, the alpha was .94 at T1 and .96 at T2.

**Depressive symptoms.** Depressive symptoms were assessed with the Center for Epidemiological Studies-Depression Scale (CES-D; Radloff, 1977). The CES-D was specifically designed for use with community samples and included 20 items assessing past week experience of depressive symptoms. Responses ranged from 0 (*rarely or none of the time*) to 3 (*most or all of the time*), with greater scores indicating greater depressive symptoms. Sample items included, "I was happy" (reverse scored), "I felt that I could not shake off the blues even with help from my family and friends," and "I felt hopeful about the future" (reverse scored). Construct validity, internal reliability, and other psychometric strengths of the CES-D have been widely supported (Radloff, 1977). Possible total scores could range

from 0–60. In this sample, scores ranged from 1 to 44 at T1 and 0 to 51 at T2. The alpha was .88 at T1 and .89 at T2.

## Results

Table 1 presents the means, standard deviations, and zero-order correlations for all of the variables. As hypothesized, Facebook social comparison was significantly and positively associated with general social comparison, and both were significantly and positively associated with rumination and depressive symptoms at both time points. Rumination was also significantly and positively associated with depressive symptoms at both time points. Notably, the correlation between Facebook social comparison and general social comparison was modest ( $r = .18$ ), suggesting that they are distinct constructs.

Path analysis with measured variables was conducted using IBM SPSS Amos Version 20 to examine the primary hypothesized mediation model (see Figure 1). Path analysis has the advantage of being able to simultaneously test the associations among multiple predictor and outcome variables. The hypothesized model proposed that Facebook social comparison at T1 would lead to increases in depressive symptoms at T2 through increases in rumination at T2. Given the prospective design, we controlled for rumination and depressive symptoms at T1. Additionally, general social comparison was controlled for to test the specific effect of Facebook social comparison. To test the significance of the hypothesized indirect effect of Facebook social comparison on depressive symptoms mediated through rumination, we conducted bootstrapping analyses to estimate bias-corrected confidence intervals (cf. Mackinnon, Lockwood, & Williams, 2004). Less than 1% of the data from the final sample was missing, and it was handled by imputing a participant's mean score on a measure in place of a missing value on one of the measure's items. All paths included in the model were estimated freely, and two paths were not included, thus they were set to 0 (the path from T1 rumination to T2 depressive symptoms and the path from T1 depressive symptoms to T2 rumination). Model fit was assessed by the comparative fit index (CFI), the Tucker–Lewis index (TLI), and the root-mean-square error of approximation

(RMSEA), with acceptable model fit indicated by a CFI and TLI  $> .90$  and an RMSEA  $< .06$  (Hu & Bentler, 1999; Kline, 2005).

Results indicated that the hypothesized model fit the data very well,  $\chi^2(2, N = 268) = 1.78, p = .41, CFI = 1.00, TLI = 1.00,$  and  $RMSEA = .00$  (90% CI = [.00–.12]). The model demonstrated that Facebook social comparison was significantly associated with increases in rumination, which, in turn, were significantly associated with depressive symptoms<sup>2</sup> (see Table 2). Bootstrapping analyses supported the significance of the indirect effect of Facebook social comparison on increases in depressive symptoms through increases in rumination,  $\beta = .05,$  bias-corrected 90% CI = [.02–.09],  $SE = .02$ . The direct effect of Facebook social comparison on increases in depressive symptoms was not significant in the model, but it was significant when the mediator (rumination) was not included in the model (standardized path coefficient = .11,  $p = .03$ ). Together, these findings provide support for the hypothesized mediation effect. Further, the significance of the indirect effect of *general* social comparison on depressive symptoms through rumination was *not* significant,  $\beta = .004,$  bias-corrected 90% CI = [–.02 to .03],  $SE = .01,$  suggesting that this effect may be specific to negative social comparison on Facebook.

Given that the mediator (rumination) and the outcome (depressive symptoms) were both measured at the T2 assessment, we also examined an alternate model with depressive symptoms as the mediator and rumination as the outcome. Results indicated that the alternate model did *not* fit the data well,  $\chi^2(2, N = 268) = 9.36, p = .01, CFI = .99, TLI = .90,$  and  $RMSEA = .12$  (90% CI = [.05–.20]). Although bootstrapping analyses indicated that the indirect effect of Facebook social comparison on

<sup>2</sup> Given that rumination and depressive symptoms were both measured at the T2 assessment, it is worth noting that, in a separate regression analysis, rumination at T1 was associated with depressive symptoms at T2, controlling for depressive symptoms at T1 ( $\beta = .14, p = .01$ ). Thus, even though the model included a path from rumination at T2 to depressive symptoms at T2, it is likely that rumination does, in fact, predict increases in depressive symptoms over time (as demonstrated by our data and previous research).

Table 1  
Means, Standard Deviations, and Zero-Order Correlations

Variable	1	2	3	4	5	6	Mean (SD)
1. T1 Facebook social comparison	—	—	—	—	—	—	57.38 (16.95)
2. T1 General social comparison	.18*	—	—	—	—	—	35.68 (7.21)
3. T1 Rumination	.42**	.37**	—	—	—	—	49.63 (14.82)
4. T1 Depressive symptoms	.38**	.19*	.57**	—	—	—	12.89 (8.50)
5. T2 Rumination	.42**	.26**	.66**	.43**	—	—	48.07 (15.23)
6. T2 Depressive symptoms	.35**	.16*	.49**	.69**	.54**	—	13.07 (8.60)

\*  $p < .01$ . \*\*  $p < .001$ .

increases in rumination through increases in depressive symptoms was significant,  $\beta = .03$ , bias-corrected 90% CI = [.01–.06],  $SE = .02$ , this should be interpreted with caution because of the poor model fit. In sum, results provide stronger support for our primary model than our alternate model, suggesting that rumination mediates the association between negative social comparison on Facebook and depressive symptoms.

### Discussion

As the use of Facebook becomes increasingly commonplace, it is important to identify the behaviors and processes that may place users at risk for negative consequences. Given the inherently social nature of Facebook, we tested the hypothesis that negatively comparing one-

self with others on Facebook leads to increases in depressive symptoms. Further, to better understand the mechanism underlying this association, we tested the hypothesis that negative social comparison would lead to increases in rumination, and this passive and repetitive focus on distress would in turn be associated with depressive symptoms. We review key findings below.

First, Facebook social comparison, rumination, and depressive symptoms were all positively and significantly associated with one another. As noted, the correlation between general social comparison and Facebook social comparison was modest at T1 and nonsignificant at T2, suggesting that these are distinct constructs. When we included all of the variables in the proposed path model, we found a strong fit to the data. Specifically, controlling for the general

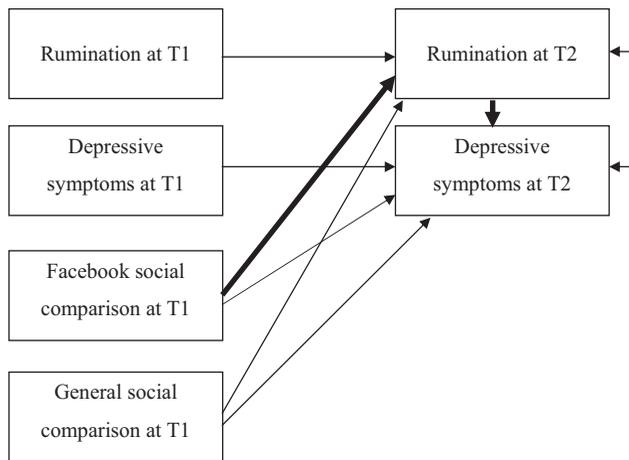


Figure 1. Path model depicting the significant indirect effect of Facebook social comparison on increases in depressive symptoms through increases in rumination. Note. Correlations among all T1 variables are included in the model, but not depicted for parsimony; paths representing the mediation component of the model are emphasized in bold.

Table 2  
*Standardized Path Coefficients, Unstandardized Path Coefficients, and Standard Errors*

Path	Standardized path coefficient	Unstandardized path coefficient	Standard error
T1 Facebook social comparison → T2 Rumination	.17*	.15*	.05
T1 Facebook social comparison → T2 Depressive symptoms	.03	.01	.02
T2 Rumination → T2 Depressive symptoms	.29*	.16*	.03
T1 General social comparison → T2 Rumination	.01	.03	.10
T1 General social comparison → T2 Depressive symptoms	-.02	-.03	.05
T1 Rumination → T2 Rumination	.58*	.60*	.05
T1 Depressive symptoms → T2 Depressive symptoms	.56*	.57*	.05
T2 Depressive symptoms error term	—	33.40*	2.89
T2 Rumination error term	—	125.97*	10.90

Note. → = predicting.

\*  $p < .001$ .

tendency to engage in social comparison, negatively comparing oneself with others while using Facebook predicted increases in rumination, which in turn was associated with increases in depressive symptoms. The significant indirect effect of Facebook social comparison on depressive symptoms through rumination coupled with the nonsignificant direct effect with the mediator in the model provides preliminary support for the possibility that rumination does indeed mediate the association in question. Further, the nonsignificant indirect effect of general social comparison on depressive symptoms through rumination suggests that this effect may be specific to engaging in negative social comparison on Facebook rather than the general tendency to compare oneself with others. Notably, when we tested an alternate model with depressive symptoms as the mediator and rumination as the outcome, the model fit was poor. This provides additional support for the proposed direction of the mediation effect in our primary model, and it is consistent with previous research that failed to find a significant association between depressive symptoms and increases in emotion dysregulation over time (McLaughlin et al., 2011). However, other studies have demonstrated that depressive symptoms are associated with increases in rumination over time (Nolen-Hoeksema et al., 1999, 2007). Thus, although findings suggest that rumination may be a mechanism underlying the association between negative social comparison on Facebook and depressive symptoms, it will be important for future research to collect at least three time points and include the *prospective* association between the mediator and outcome.

Findings are consistent with and expand previous research in several meaningful ways. Consistent with findings that link negative social comparison with increases in negative affect (Ahrens & Alloy, 1997; Antony et al., 2005; Giordano et al., 2000; Wheeler & Miyake, 1992), we found support for a significant association between Facebook social comparison and depressive symptoms in the zero-order correlations. This suggests that social networking sites can provide novel opportunities for individuals to compare themselves with others, and these comparisons can have negative influences on well-being. Further, this provides insight into what specifically may be happening on social networking sites that has the potential to be pathogenic—namely, comparing oneself with others who are perceived as superior. We also found that negative social comparison on Facebook predicted increases in rumination at a 3-week follow-up, which extends previous cross-sectional findings (Cheung et al., 2004). Why might this be the case? Some evidence suggests that individuals tend to self-disclose more positive information about themselves on Facebook compared with “real life” (Qiu, Lin, Leung, & Tov, 2012), and individuals who spend more time on Facebook are more likely to agree that others are “happier” and have “better lives” (Chou & Edge, 2012). As such, given that rumination involves passive and repetitive focus on one’s distress, social comparison may provide ample opportunity to mull over causes and consequences of perceived inferiority.

Finally, consistent with the larger literature on risk factors for depression, we found that rumination was associated with depressive

symptoms. If an individual ruminates on his or her perceived inferiority subsequent to negatively comparing oneself with others on Facebook, he or she is engaging in an emotion regulation strategy known to maintain and exacerbate distress. Nolen-Hoeksema et al. (2008) speculated that rumination may prolong and increase depression, in part, because it is associated with reduced interpersonal problem solving, less willingness to engage in pleasant activities to lift mood when given the chance, and more pessimistic views about positive events in the future. Thus, rather than problem solving (i.e., changing the situation that led to the negative social comparison) or switching the focus of attention to more positive or rewarding aspects of their environment, these individuals may continue to passively focus on distress (perhaps via increased time spent on the site) and/or seek out others in potentially problematic ways (e.g., corumination, excessive reassurance seeking). The significant indirect effect of Facebook social comparison on depressive symptoms through rumination is also consistent with a recent study that found that rumination mediated the association between negative status updates on Facebook and depressive symptoms (Locatelli et al., 2012). Together, these findings lend confidence to the notion that rumination may play a mechanistic role in the associations between negative social networking experiences and depressive symptoms, as two studies have now demonstrated similar meditational effects despite different predictor variables and methodological features.

It is useful to note that research on Facebook use and mental health has important public health implications. First, given the bidirectional and transactional nature of depression and problematic interpersonal functioning (see Joiner & Timmons, 2009), in order to continue to understand the bounds of their association it is incumbent upon researchers to examine interpersonal processes in the contexts in which they currently occur, which includes social networking sites. Next, the media has taken a particular interest in research on social networking, and has oft made large-scale claims about the “dangers” of Facebook use (e.g., “Facebook depression”). As scientists developing a programmatic line of research to test a priori hypotheses regarding Facebook use and mental

health, we hope to shed light on the processes that may render individuals more vulnerable to negative effects of Facebook use.

The current study has several strengths, including a large and racially/ethnically diverse sample, a prospective design, and the use of path analysis to test the proposed mediation model. Nevertheless, it is important to keep in mind the following limitations that underscore the importance of replicating and extending these findings. We relied on a one-time self-report assessment of social comparison tendencies, and findings would be strengthened by a laboratory manipulation of this process. Additionally, our sample was composed of nonclinical emerging adults and may not generalize to older or younger adults or a more clinically depressed sample. That said, that this effect was so robust in a nonclinical sample that commonly uses social networking sites is quite notable and suggests that this process may be especially relevant for those with elevated symptomatology. Consistent with current interventions designed to enhance adaptive emotion regulation (see Kring & Sloan, 2010), findings suggest that targeting rumination in a clinical context may minimize the negative consequences of engaging in negative social comparison. It will be useful for future research to test more complex models that account for the various types of maladaptive emotion regulation strategies that individuals may engage in to regulate their mood subsequent to negative social comparison on Facebook, as well as additional types of mental health outcomes that may be affected by these processes. Future research could also benefit from assessing specific behaviors related to rumination that may take place in the context of social networking (e.g., rereading posts on Facebook that contribute to one’s dysphoria). Finally, our study focused on only one set of variables that may contribute to associations between Facebook use and depressive symptoms. Ongoing development of theory about the function of social networking, the contexts in which it occurs, and the ways in which it is related to self-concept and identity may provide new avenues of research that will allow for further understanding of its effect on people of all ages.

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