

# The Outcomes of Broadcasting Self-Disclosure Using New Communication Technologies: Responses to Disclosure Vary Across One's Social Network

Communication Research  
1–29

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DOI: 10.1177/0093650215598836

crx.sagepub.com



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## Abstract

Several new communication technologies have made it relatively easy for individuals to broadcast a single self-disclosure directly to almost everyone with whom they share a relationship—ranging from close friends to little-known acquaintances. Drawing from research on self-disclosure and the negativity effect, two studies were conducted to test the notion that the interpersonal and relational outcomes of broadcasting positive and negative self-disclosures are not uniform. The results of the cross-sectional survey offer evidence that the outcomes of positive and negative broadcasted disclosures vary depending on the receiver's relationship with the discloser. The results from the experiment largely support the negativity effect explanation for differences in the outcomes of broadcasted disclosures. Relative to positive disclosures, negative broadcasted self-disclosures have a significantly greater impact on acquaintances than on friends' perceptions of the discloser and their relationship.

## Keywords

communication technology, self-disclosure, negativity effect

Self-disclosure, which refers to “what individuals verbally reveal about themselves to others (including thoughts, feelings, and experiences),” is widely recognized to play an integral role in personal relationships (Derlega, Metts, Petronio, & Margulis, 1993,

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p. 1). Although research on this topic has a rich history (Altman & Taylor, 1973; Cozby, 1973; Dindia, 1997; Jourard, 1971), much of the scholarship examining self-disclosure in personal relationships has focused on dyadic interaction with specific others in both mediated (Kim & Dindia, 2011) and non-mediated (Greene, Derlega, & Mathews, 2006; Petronio, 2002) settings. Such works typically consider a single individual making one or more disclosures to a particular receiver. Yet, several new communication technologies have created opportunities for individuals to simultaneously share the same self-disclosure directly with a potentially vast and diverse group of receivers (Bazarova, 2012; Jang & Stefanone, 2011; Walton & Rice, 2013). E-mail is among the first such technologies that afforded this possibility via the “carbon copy” feature. More recently, social network sites (SNSs) and microblogs include technical features that allow users to direct messages to most or all of their connections in their network and make it possible to engage in such disclosure practices.

The potential to broadcast a single self-disclosure to an audience that ranges from close friends and family members to others who are only passing acquaintances raises novel questions for disclosure research. One important question involves the interpersonal and relational consequences of such broadcasts—particularly those involving positive and negative disclosures. Are the outcomes of positive and negative self-disclosures the same among one’s friends as one’s acquaintances? Drawing from theory and research addressing self-disclosure in personal relationships (Altman & Taylor, 1973) and the negativity effect (Kellermann, 1984, 1989), two studies are reported exploring the implications of receiving positive and negative broadcasted self-disclosures for a disclosure recipient’s liking, relationship satisfaction, and willingness to provide social support to the discloser. Study 1 consists of a cross-sectional survey designed to test the notion that the outcomes of receiving broadcasted self-disclosure vary based on receivers’ closeness with the discloser. Study 2 involves an experiment constructed to extend the findings from the first study and directly test the negativity effect explanation for differences in responses to broadcasted self-disclosure stemming from relationship closeness.

Examining the implications of broadcasting positive and negative self-disclosures offers the opportunity to advance our understanding of self-disclosure and communication technology use in personal relationships in several important ways. Focusing on broadcasted self-disclosure makes it possible to explore the outcomes of disclosure beyond dyadic interaction and extend traditional theory and research on this construct to the contemporary media environment. This project also helps advance research on disclosure valence and the negativity effect. In addition to attempting to document the negativity effect in response to self-disclosure—something that has not been done in prior research—an important scope condition for this phenomenon is evaluated. More generally, this project spotlights the receiver’s relationship with a discloser and helps better understand how the discloser-receiver relationship impacts disclosure outcomes. Finally, this project adds to our knowledge about the practical consequences of using new communication technologies to broadcast disclosure in personal relationships. Although SNSs and microblogs have been heralded for their potential to allow users to maintain a diverse set of connections that provide access to resources such as social

capital (Ellison, Steinfield, & Lampe, 2007; Valenzuela, Park, & Kee, 2009), this project explores the possibility that a single positive or negative self-disclosure broadcast using these technologies may have markedly different effects that may serve to benefit or undermine some of a discloser's relationships in the network more than others. Broadcasting negative self-disclosure, in particular, may be less beneficial or more detrimental among the very group of weak ties that these technologies are proposed to cultivate. In the following pages, each study will be presented separately and the manuscript will conclude with a general discussion of the findings.

## **Self-Disclosure, the Negativity Effect, and Communication Technologies**

Self-disclosure is critical to the development and maintenance of personal relationships (Altman & Taylor, 1973; Derlega et al., 1993). Although much of the research on this topic has focused on disclosure in dyadic interaction (for reviews, see Cozby, 1973; Dindia, 1997; Greene et al., 2006; Kim & Dindia, 2011), scholars have recognized the potential for a sender to share the same self-disclosure with multiple receivers. Dindia (2001) briefly discussed "nonpersonalistic disclosure" as a single self-disclosure that has been "revealed to many people" (p. 173). This construct can be contrasted with "personalistic" disclosure made under the pretense that the recipient was specially selected as the disclosure target (Jones & Archer, 1976). This project considers the outcomes of simultaneously communicating the exact same disclosure directly to multiple message receivers—such as might occur in using e-mail, SNSs, microblogs, and other technologies. The disclosures examined in this project are nonpersonalistic in that receivers are aware that they are one of many individuals to whom the disclosure has been communicated.

Researchers studying new communication technologies such as e-mail (Boneva & Kraut, 2002), blogs (Jang & Stefanone, 2011), SNSs (Bazarova, 2012; Vitak, 2012), and microblogs (Walton & Rice, 2013) have considered some implications of broadcasting the same disclosure to multiple receivers. Much of this work has focused on factors influencing the decision to and nature of broadcasted self-disclosure such as privacy and self-presentation concerns (e.g., Bazarova & Choi, 2014; Choi & Bazarova, in press; Vitak, 2012; Walton & Rice, 2013). Less research has considered the outcomes of broadcasted disclosure. One exception is Bazarova's (2012) study in which she showed that the same intimate disclosures were rated as more intimate when made using the status update feature of a SNS than the private message feature. Although such research is critical for documenting the potential outcomes associated with broadcasting disclosure, fully understanding the implications of this phenomenon requires also considering the receivers' relationship with the discloser. There is a reason to believe that the outcomes of broadcasted disclosure—particularly negative self-disclosure—vary across one's social network.

Theorizing about the negativity effect (Kellermann, 1984, 1989) offers a framework to help explain differences in the outcomes of positive and negative self-disclosures across different types of relationships. Positive self-disclosure is defined in this project

as a message about the self in which the content reflects pleasant emotions (e.g., happiness), desirable experiences (e.g., achievement), affirming thoughts, or otherwise communicates contentment; negative disclosure includes content that reflects unpleasant emotions (e.g., sadness), undesirable experiences (e.g., loss), disconfirming thoughts, or otherwise communicates discontentment. The negativity effect refers to the tendency for negative information to be assigned greater weight than information that is similarly positive (for a review, see Kellermann, 1984, 1989). Although various explanations have been offered for this phenomenon (Kellermann, 1984), a central assumption that is pervasive across explanations is that negative information is considered more atypical and, as a result, more informative than positive information (Fiske, 1980; Kellermann, 1989). The negativity effect has been applied specifically to the context of self-disclosure. In discussing initial interactions, Kellermann (1984) claimed that “a negativity effect may operate in the disclosure of bad fortune” (p. 45).

Kellermann’s (1984) explanation for the negativity effect involves the prevalence of negative information relative to positive information in non-close relationships. She argued that “negative information is not as frequent in initial interactions as positive information and, when present, should be weighed more heavily” (p. 45). This particular assumption is consistent with both theory and research on self-disclosure. Social penetration theory is rooted in the basic notion that, as relationships become more developed, self-disclosure behavior tends to change (Altman & Taylor, 1973). Disclosure valence is one important way in which self-disclosure behavior can vary (Gilbert & Horenstein, 1975; Tardy, Hosman, & Bradac, 1981; Tolstedt & Stokes, 1984). During early stages of relationship development, social penetration theory (Altman & Taylor, 1973) suggests that individuals are typically motivated to discuss positive aspects of themselves and withhold negative aspects in order to signal to receivers that they will be a rewarding partner (Gilbert & Horenstein, 1975; Tolstedt & Stokes, 1984). Interaction is marked by what Altman and Taylor (1973) described as “socially desirable modes of response” in which individuals “present the image of a pleasant, understanding, likeable person” (p. 136). Consistent with this claim, Gilbert and Whiteneck (1976) found that, whereas participants were equally likely to make positive and negative disclosures to their friends or spouse, they were less likely to make negative than positive disclosures to an acquaintance or a stranger. Other research has shown that previously unacquainted individuals were less likely to reciprocate self-disclosure when initial disclosures were negative than positive (Taylor & Belgrave, 1986). In the context of SNSs, researchers have reported differences in message valence based on whether they were communicated using a feature that typically serves to contact specific, known others (i.e., private messaging) or a broad group containing both close and distant others (i.e., status updates). Private messages were more negative (Bazarova, Taft, Choi, & Cosley, 2012) and less positive (Utz, 2015) than messages sent using the status update feature.

In making it relatively easy and convenient to broadcast self-disclosure, new communication technologies such as SNSs and microblogs create a situation in which the same negative self-disclosure may be received by a broad group of individuals who vary in their closeness with the discloser. Kellermann’s (1984) work on the negativity

effect offers a reason to believe that the outcomes of such broadcasts may not be uniform. Whereas negative disclosures may have a greater impact relative to positive disclosures among individuals who do not share a close relationship with the discloser, her argument also implies that the negativity effect may not extend to close relationships (or may be weaker in close relationships) where negative disclosures are more common and, thus, potentially not as informative. Two studies were conducted in an effort to empirically examine this issue. As previously noted, considering the consequences of broadcasting positive and negative disclosures can help advance our understanding of self-disclosure, the negativity effect, and new communication technology use in personal relationships.

## **Study 1: Cross-Sectional Examination of Responses to Broadcasted Disclosure**

The purpose of Study 1 is to test the notion that the outcomes of positive and negative broadcasted disclosures vary based upon receivers' closeness to the discloser. Research on self-disclosure offers consistent evidence that negative self-disclosure generally fosters less beneficial relational outcomes than positive disclosure. Several studies have shown that disclosure recipients typically respond more unfavorably to receiving negative self-disclosures than positive self-disclosures (Caltabiano & Smithson, 1983; Cayanus & Martin, 2008; Hecht, Shepherd, & Hall, 1979; Miller, Cooke, Tsang, & Morgan, 1992), including in computer-mediated contexts (Bazarova, 2012). In order to first demonstrate that the outcomes of positive and negative self-disclosures extend to broadcasted disclosures, a positive association is predicted between the valence of disclosures received and disclosure outcomes. As the broadcasted disclosures become more negative, receivers should report more negative perceptions of the discloser and their relationship.

Three interpersonal and relational outcomes of receiving self-disclosure are examined in this and the following study: liking, relationship satisfaction, and willingness to provide social support to the discloser. These factors have been linked with self-disclosure in prior research (Collins & Miller, 1994; Derlega et al., 1993; Meeks, Hendrick, & Hendrick, 1998) and, as such, are useful indicators of the consequences of broadcasting disclosure for individual (i.e., liking) and relationship (i.e., relationship satisfaction) evaluations as well as one's access to social resources (i.e., social support). In examining the outcomes of broadcasting positive and negative self-disclosures, we consider the degree to which disclosure recipients like, are satisfied by their relationship with, and are willing to provide support to the discloser.

**Hypothesis 1:** The valence of broadcasted disclosures received is associated with (a) liking, (b) relationship satisfaction, and (c) willingness to provide social support to the discloser.

There is, however, a reason to believe that the outcomes of positive and negative broadcasted disclosures may not be uniform. The negativity effect may occur in non-close relationships but not among receivers who are closer to the discloser. Kellermann

(1984) contended that, because negative disclosures are less common in non-close relationships (Gilbert & Whiteneck, 1976; Tolstedt & Stokes, 1984), they should be particularly informative and influential among this group. Yet, the negativity effect in response to receiving self-disclosure may not extend to close relationships where negative disclosures are more common (Gilbert & Horenstein, 1975; Tardy et al., 1981; Tolstedt & Stokes, 1984). Formally stated, relationship closeness is expected to moderate the association between the valence of broadcasted disclosures received and disclosure outcomes. The associations between disclosure valence and the three outcomes should be stronger among individuals who are less close to the discloser than those who share a closer relationship with the discloser. The following hypothesis is proposed to test this interaction. As previously noted, liking, relationship satisfaction, and willingness to provide social support to the discloser are the three outcomes considered in this project.

**Hypothesis 2:** Perceived relationship closeness moderates the association between the valence of broadcasted disclosures received and (a) liking, (b) relationship satisfaction, and (c) willingness to provide social support to the discloser.

In evaluating the outcomes of broadcasting self-disclosure, it is important to account for the total volume of disclosures made by a discloser. Many of the technologies used to broadcast self-disclosure (e.g., e-mail, SNSs, microblogs) make it possible to share a potentially large number of disclosures with relatively little effort. Moreover, the number or amount of disclosures has been identified as an important factor in research examining self-disclosure across a variety of contexts ranging from among friends (Dickson-Markman, 1986) and family members (Martin, Anderson, & Mottet, 1999) to student-instructor interaction (Lannutti & Strauman, 2006). Among SNS users, one study showed a positive association between respondents' disclosure amount and their perceptions of intimacy with their connections on the network (Park, Jin, & Jin, 2011).

In the context of broadcasting disclosure, the effect of the interaction between disclosure valence and relationship closeness may depend on the total number of disclosures received from the discloser during a given time period. The negativity effect (Kellermann, 1984) suggests that negative self-disclosures have a greater impact than positive disclosures among individuals who are less close because they are less common and, thus, more informative. This effect, however, may become attenuated or even decay as the total number of disclosures becomes larger. An increasing number of disclosures may lead receivers who are less close to feel that the negatively valenced information is less informative and, consequently, mitigate the negativity effect among this group. When negative information is less common, in contrast, it should be relatively more informative and have more of an impact among receivers who are less close to the discloser. Formally stated, the interaction between disclosure valence and perceived relationship closeness on the three outcomes should be moderated by the total number of disclosures received during a given time period. Among individuals who are less close to the discloser, the impact of disclosure valence should be stronger

as the volume of disclosures received from the discloser decreases. The following hypothesis is proposed to test the three-way interaction:

**Hypothesis 3:** The total number of self-disclosures received from a discloser moderates the interaction between perceived relationship closeness and disclosure valence on (a) liking, (b) relationship satisfaction, and (c) willingness to provide social support to the discloser.

## Study 1: Method

### *Study Context and Overview*

The outcomes of broadcasting self-disclosure are examined in the context of SNS use in this and the following study.<sup>1</sup> SNSs are a valuable setting in which to examine this phenomenon for several reasons. First, a majority of contemporary SNSs include a feature that allows users to broadcast a single message simultaneously and directly to most or all of their connections in the network. Although some SNSs also include other features for sharing messages widely, this project focuses on instances in which the exact same message is sent to multiple receivers and disseminated directly to each of those individual receivers—such as occurs in using the “status update” feature of contemporary SNSs. Almost half (44%) of all adult users of one popular SNS update their status at least weekly, with more than 25% making at least three updates per week (Hampton, Goulet, Rainie, & Purcell, 2011). Second, individuals’ SNS networks typically consist of a diverse group of people ranging from close friends and family members to others who are acquaintances from the past and present (Ellison, Steinfield, & Lampe, 2011; Hampton et al., 2011). One recent survey by the Pew Internet and American Life Project (PIALP) indicated that users of one popular SNS had a median of 200 connections in their network (Smith, 2014). Maintaining such a varied personal network has been argued to be critical in making SNSs a valuable reserve of social resources such as social capital (Ellison et al., 2007; Valenzuela et al., 2009). Third, SNSs are widely used among American adults. A PIALP survey showed that almost half of all American adults used at least one SNS during 2010 (Hampton et al., 2011). Moreover, the same survey showed that SNSs are used across a broad range of groups; 46% of American adult SNS users were between the ages 36 and 65.

A cross-sectional survey was conducted to test the hypotheses proposed in Study 1. Respondents first rated their relationship with a designated target. They then reported and evaluated the status updates (that qualified as self-disclosures) they had received from that individual during the previous 7 days on the SNS that they use most frequently (e.g., Facebook, Google+).

### *Respondents*

Because SNS users represent a wide range of age groups (Hampton et al., 2011), we attempted to recruit adults of varying ages to serve as respondents. Undergraduate

students enrolled in communication courses received extra credit for referring one adult who was not a student or an employee of the university at which the study was conducted to complete an online questionnaire. Potential respondents were invited to participate by the first author. A total of 254 respondents sufficiently completed the questionnaire. However, 34 respondents reported not receiving a self-disclosure from their target individual via SNS during the previous week. Given that this study focuses on the outcomes of receiving broadcasted disclosures from a specific target, data from the 220 respondents who reported receiving one or more broadcasted self-disclosures were included in the analyses.

Respondents' ages ranged from 18 to 72 ( $M = 33.05$ ,  $SD = 14.75$ ), and 55% were female. Approximately half of the respondents (54%) reported having earned a college degree or greater education. A majority of the respondents reported that Facebook (86%) was the SNS they used most frequently, followed by Google+ (2%) and MySpace (1%); 12% of respondents selected "other," indicating that they used some other, unspecified SNS. Almost three quarters of respondents (71%) indicated that they visited their primary SNS once per day or more frequently. Finally, approximately half of the respondents (49%) filled out the survey regarding status updates they received from a male target and the other half reported on status updates received from a female target (51%).

## Procedure

Respondents were asked to complete the questionnaire with one specific individual in mind. In order to assure sufficient variability in relationship closeness, this target individual was randomly assigned based on their sex and relationship with the respondent. Respondents were randomly assigned to report on one specific male or female who they consider a close friend (but not a best friend), friend, distant friend, or acquaintance. Respondents were instructed to choose someone with whom they do not live and are not involved romantically. Respondents first reported demographic information about the target and assessed their relationship with the target. Respondents then reported and evaluated the messages broadcast (via the status update feature) by the target during the prior 7 days.

## Measures

**Relationship closeness.** Two items were developed for this study to evaluate respondents' perceptions of their closeness with the target. The two items included "I feel very close to my friend [acquaintance]" and "My friend [acquaintance] and I are very close to each other." Both items were rated on a 7-point scale with the anchors (1) *strongly disagree* and (7) *strongly agree* ( $M = 4.26$ ,  $SD = 2.00$ ,  $\alpha = .96$ ).

**Relationship satisfaction.** Five items were used from the relationship assessment scale (RAS; Hendrick, 1988) to evaluate relationship satisfaction. Sample items included "How good is your relationship compared to most?" and "How often do you wish you hadn't gotten into this relationship?" All five items were rated on 7-point

semantic differential scales where larger values signify higher levels of satisfaction ( $M = 5.16$ ,  $SD = 1.25$ ,  $\alpha = .84$ ).

**Willingness to provide social support.** Eight items were adapted from the medical outcomes survey (MOS) social support survey (Sherbourne & Stewart, 1991) to evaluate the willingness of respondents to provide social support to the target. Four items were selected from the informational support subscale and four items were chosen from the emotional support subscale. Sample items included “I would be someone my friend [acquaintance] could confide in or talk to about him/herself and his/her problems” and “I would give my friend [acquaintance] good advice about a crisis.” The items were rated on a 7-point scale with the anchors (1) *none of the time* and (7) *all of the time*. The two subscales ( $r = .92$ ) were combined into a single index representing respondents’ willingness to provide social support to the target ( $M = 5.44$ ,  $SD = 1.52$ ,  $\alpha = .96$ ).

**Liking.** Four items from Rubin’s (1970) liking measure were included to determine how much the respondent liked the target. Sample items included “My friend [acquaintance] is the sort of person whom I myself would like to be” and “My friend [acquaintance] is one of the most likeable people I know.” These items were rated on a 7-point scale with the anchors (1) *strongly disagree* and (7) *strongly agree* ( $M = 4.87$ ,  $SD = 1.51$ ,  $\alpha = .90$ ).

**Broadcasted self-disclosures received.** Respondents were asked to access the SNS they use most frequently and focus specifically on the status updates they had received during the previous week. The status update feature is common to contemporary SNSs and involves messages that are broadcast to multiple people but disseminated directly to each individual; as such, self-disclosures sent via the status update feature meet the conceptual definition of a broadcasted disclosure. The process used to identify and then evaluate self-disclosures involved the following steps: For each status update they received from the target, respondents were first asked to record the target’s message. Respondents then determined whether or not the message was a self-disclosure. Following Derlega et al.’s (1993) definition of disclosure, respondents indicated whether or not the update was “about [the target] (i.e., information or facts about him/her; events in his/her day or life; his/her personal feelings, opinions, judgments).” Respondents next evaluated the valence of the status update by rating it on a 7-point scale with the anchors (1) *negative* and (7) *positive*. Respondents were allowed to report on up to 20 status updates they received from the target during the prior 7 days. The number of self-disclosures received was evaluated by summing the number of status updates that were identified by respondents as self-disclosures (range = 1-20;  $M = 6.67$ ,  $SD = 5.57$ ). To determine disclosure valence, the mean of the valence measure was computed for all status updates deemed self-disclosures ( $M = 5.28$ ,  $SD = 1.29$ ).

**Control variables.** Prior research on self-disclosure highlights the importance of accounting for three control variables in testing the study hypotheses. Given Dindia and Allen’s (1992) meta-analysis demonstrating sex differences in self-disclosure

that extend to the sex of the dyad (mixed/same), these two factors were used as control variables in this study. Respondents self-reported their sex (55% female). The sex of target reported on by each respondent was used to determine the dyad sex (mixed = 53%). Self-disclosure depth has also been recognized as an important dimension of disclosure (Altman & Taylor, 1973; Derlega et al., 1993) and was included as a control variable in this study. In reporting on the status updates they received from the target, respondents evaluated the relative depth of each update using a 7-point scale with the anchors (1) *trivial or superficial* and (7) *intimate or personal*. The mean for all updates deemed self-disclosures was computed to determine disclosure depth ( $M = 4.03$ ,  $SD = 1.38$ ).

## Study 1: Results

### Preliminary Analyses

The data were first screened following the recommendations established by Tabachnick and Fidell (2001). The screening process revealed that the measure of total disclosures received was positively skewed. To address this issue, the measure of total disclosures received was square-root transformed ( $M = 2.37$ ,  $SD = 1.03$ ). A three-factor confirmatory factor analysis (CFA) was conducted for the three outcome measures. The results indicate that the model sufficiently fits the sample data,  $\chi^2(df = 116) = 265.21$ ,  $p < .001$ , comparative fit index (CFI) = .98, standardized root mean square residual (SRMR) = .04, root mean square error of approximation (RMSEA) = .08.

### The Implications of Disclosure Valence and Relationship Closeness

Hypothesis 1 predicted that disclosure valence would be associated with liking, relationship satisfaction, and willingness to provide social support. Hypothesis 2 predicted that relationship closeness would moderate the preceding associations, and Hypothesis 3 predicted a three-way interaction between the number of self-disclosures received, disclosure valence, and relationship closeness for the three outcome variables. Three identical regression models, with the exception of the outcome variable, were created to test the hypotheses. The three control variables (i.e., dyad sex, participant sex, disclosure depth) were entered in the first block of the models. The second block included the total number of disclosures received, perceived closeness, and mean disclosure valence. The third block included the two-way interactions between the three preceding variables, and the final block included the three-way interaction. All variables in the second block were mean-centered before constructing the interaction terms (Aiken & West, 1991).

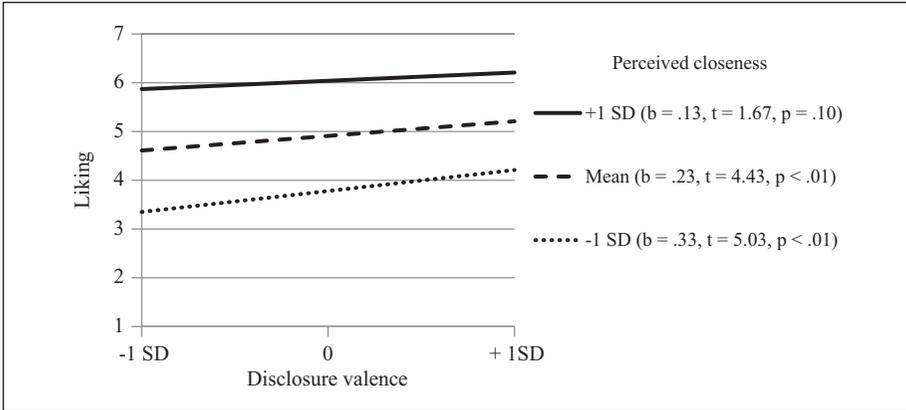
The results of the three regression models are reported in Table 1. The results offer support for Hypotheses 1a, 1b, and 1c. After accounting for the control variables, disclosure valence was positively associated with liking, relationship satisfaction, and willingness to provide social support. As the positivity of disclosures received from the target during the prior week decreased, so did respondents' liking, relationship satisfaction, and willingness to provide support to the target. The results for liking and social support, however, are qualified by significant interactions.

**Table 1.** Results of the Regression Models Tested in Study 1.

|   | Liking  |       |              | Relationship satisfaction |       |              | Willingness to provide social support |       |              |
|---|---------|-------|--------------|---------------------------|-------|--------------|---------------------------------------|-------|--------------|
|   | $\beta$ | $t$   | $\Delta R^2$ | $\beta$                   | $t$   | $\Delta R^2$ | $\beta$                               | $t$   | $\Delta R^2$ |
| <b>Block 1: Control variables</b>                                     |         |       | .01          |                           |       | .01          |                                       |       | .03          |
| Dyad sex (0 = same)   | .09     | 1.31  |              | .08                       | 1.18  |              | .16*                                  | 2.34  |              |
| Participant sex (0 = female)  | .06     | 0.85  |              | .03                       | 0.44  |              | -.01                                  | -0.10 |              |
| Disclosure depth  | .03     | 0.39  |              | .06                       | 0.80  |              | .06                                   | 0.85  |              |
| <b>Block 2: Disclosure and closeness</b>                              |         |       | .66*         |                           |       | .62*         |                                       |       | .55*         |
| Total disclosures   | .03     | 0.78  |              | -.03                      | -0.57 |              | .07                                   | 1.38  |              |
| Perceived closeness   | .75*    | 17.90 |              | .76*                      | 17.24 |              | .71*                                  | 14.88 |              |
| Disclosure valence  | .22*    | 5.17  |              | .12*                      | 2.74  |              | .18*                                  | 3.59  |              |
| <b>Block 3: Two-way interactions</b>                                  |         |       | .01          |                           |       | .01          |                                       |       | .03*         |
| Perceived closeness x Disclosure valence                              | -.08*   | -1.97 |              | .07                       | 1.52  |              | -.10*                                 | -2.20 |              |
| Perceived closeness x Total disclosure received                       | .01     | 0.15  |              | .01                       | 0.29  |              | -.11*                                 | -2.33 |              |
| Disclosure valence x Total disclosures received                       | -.06    | -1.31 |              | .06                       | 1.24  |              | -.11*                                 | -2.37 |              |
| <b>Block 4: Three-way interaction</b>                                 |         |       | .001         |                           |       | <.01         |                                       |       | .01*         |
| Perceived closeness x Total disclosures received x Disclosure valence | .04     | 0.89  |              | .02                       | 0.40  |              | .12*                                  | 2.37  |              |

Note. The results for each block are reported when that block was added to the model.

\* $p < .05$ .

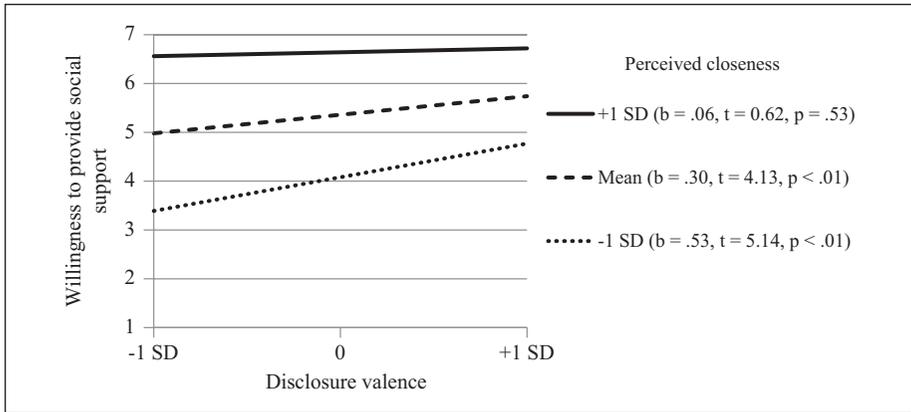


**Figure 1.** Relationship closeness moderates the association between disclosure valence and liking.

Relationship closeness moderated the associations between disclosure valence and both liking and willingness to provide social support. Moreover, there was a three-way interaction between the number of disclosures received, relationship closeness, and disclosure valence for willingness to provide social support. The PROCESS macro, developed by Hayes (2013), was used to decompose the significant interactions. For the two-way interaction involving liking, the association between disclosure valence and liking was computed at the mean level of closeness as well as 1 standard deviation above and below the mean level of closeness. The results, which are illustrated in Figure 1, show that the association between disclosure valence and liking was significant when relationship closeness was relatively moderate or low but not when it was relatively high. The results of the three-way interaction for willingness to provide social support followed the same trend. The interaction between disclosure valence and relationship closeness was only significant when the total number of disclosures received was relatively low. As illustrated in Figure 2, when the total number of disclosures was low, the association between disclosure valence and willingness to provide social support was significant when relationship closeness was relatively low or moderate, but not when it was relatively high. In sum, disclosure valence was only important among those receivers who were less close to the discloser (and, in the case of willingness to provide social support, the total number of disclosures received was low). These results support Hypotheses 2a, 2c, and 3c. No support was found for Hypotheses 2b, 3a, or 3b.

## Study 2: Experimental Examination of Responses to Broadcasted Disclosure

Study 1 was conducted to examine the implications of broadcasting self-disclosure and test the notion that the outcomes of positive and negative disclosures vary based



**Figure 2.** Relationship closeness moderates the association between disclosure valence and willingness to provide social support when the total volume of disclosures received is low.

on a receiver's relationship with the discloser. The results offer some evidence to show that respondents who were less close to the discloser were more sensitive to receiving positive and negative disclosures. Perceived closeness moderated the association between disclosure valence and liking of the discloser, and there was a three-way interaction among the total volume of disclosures received, disclosure valence, and perceived closeness for willingness to provide social support to the discloser. The simple slopes consistently showed positive associations between disclosure valence and both liking and social support (among those who received relatively fewer total disclosures) for individuals who were less close to the discloser. Among those who were relatively closer to the discloser, the associations between disclosure valence and these outcome variables were not significant.

The results from Study 1 offer some evidence to substantiate the claim that responses to broadcast disclosures vary based on a receiver's relationship with the discloser. Moreover, the pattern of findings is consistent with what would be expected if a negativity effect occurred in response to negative disclosures among receivers who were less close to the discloser. The results in Figures 1 and 2 showing stronger associations between disclosure valence and relational outcomes among individuals who were less close to the discloser could have been the result of negative disclosures having a particularly strong impact among this group. In order to replicate and extend the findings from Study 1, an experiment was conducted in Study 2. Through experimentally manipulating relationship closeness and disclosure valence, it is possible to further explore the nuances of broadcasting self-disclosure and more directly test the negativity effect explanation for the outcomes of negative and positive disclosures among receivers who vary in closeness with the discloser.

If the negativity effect explains the inconsistent impact of negative self-disclosure across different types of relationships, then two conditions should be met—both of which are extensions of the premise that a negativity effect occurs when negative

information is given greater weight than similarly discrepant positive information (Kellermann, 1984, 1989). First, it is critical to demonstrate the occurrence of a negativity effect among individuals who do not share a close relationship with a discloser. Compared to receiving a neutral self-disclosure, individuals who do not have a close relationship with a discloser should be more impacted by negative disclosures than positive disclosures. Using neutral disclosures as a baseline, the relative impact of negative disclosures should be greater than that of positive disclosures. Second, the negativity effect should be greater among receivers who have a less close relationship with the discloser than among those who share a closer relationship with the discloser. The relative impact of negative disclosures (compared to positive disclosures) should be significantly larger among acquaintances than among close friends. The following two hypotheses are proposed to directly test the notion that the negativity effect explains the differing responses to negative disclosures by receivers who are more and less close to a discloser.

**Hypothesis 4:** Compared to neutral disclosures, receiving negative disclosures has a relatively larger impact than positive disclosures on acquaintances' (a) liking, (b) relationship satisfaction, and (c) willingness to provide social support to the discloser.

**Hypothesis 5:** The relative impact of negative disclosures (compared to positive disclosures) on (a) liking, (b) relationship satisfaction, and (c) willingness to provide social support to the discloser is greater among acquaintances than among close friends.

## Study 2: Method

An experiment was conducted to test the two preceding hypotheses. As in Study 1, the implications of broadcasting self-disclosure were examined in the context of SNSs. Participants were exposed to a series of self-disclosures (communicated via SNS status update) from a purported friend or acquaintance in which disclosure valence was manipulated and then completed a questionnaire containing measures of the dependent variables.

### Participants

As in Study 1, an attempt was made to recruit a sample of SNS users representing a broad range of age groups. Participants were recruited using Amazon.com's Mechanical Turk (MTurk) program, which is a virtual workspace in which over 100,000 individuals are registered to earn small sum of money for completing basic tasks (for an introduction, see Buhrmester, Kwang, & Gosling, 2011). MTurk has been validated as a resource for recruiting participants in social scientific research (see Berinsky, Huber, & Lenz, 2012). An announcement regarding this study was posted on the MTurk website. Participants were limited to those individuals who were 18 years of age or older, residents of the United States, and current users of a SNS.

A total of 349 participants sufficiently completed the experiment. The mean age of participants was 32.74 ( $SD = 11.71$ ), and participants were more likely to be female (63%). Approximately half of the participants (49%) reported having earned a college degree or greater education. A majority of participants reported that Facebook (93%) was the SNS they used most frequently, followed by Google+ (3%) and MySpace (<1%); 3% of respondents reported using some other, unspecified SNS. Over three quarters of participants (82%) reported that they visited the SNS they use most frequently at least once per day.

## Design

A 3 (self-disclosure valence)  $\times$  2 (relationship type)  $\times$  2 (topic) between-participants design was used in this study. The design was fully crossed. Self-disclosure valence consisted of positive disclosures, negative disclosures, and neutral disclosures. Relationship type consisted of close friend and acquaintance. The two self-disclosure topics involved issues related to home-life or work-life.

## Procedure

Participants were randomly assigned to 1 of the 12 conditions. In each condition, participants were informed that they would be shown a series of status updates posted over the course of the previous week by their friend/acquaintance named "Alex." After reading some background information about their relationship with Alex, participants were then presented with a series of seven separate webpages each containing a mock-up of the status update feature common to SNSs. Each webpage displayed the updates made by Alex on a single day of the week (Monday through Sunday). A total of 12 updates were presented across the 7 days; the number of updates made each day was held constant across all conditions. After reading the updates, participants then completed the study questionnaire.

## Materials

Relationship type was manipulated in the description of "Alex." In the close friend condition, Alex was presented as "not your best friend, but someone whom you feel close to and consider a close friend." In the acquaintance condition, Alex was described as "not someone who is close enough to you to be considered a friend, but is someone you know and consider an acquaintance." Participants in all conditions were informed that Alex was of the same age, sex, and a current resident of the same town as the participant.

Self-disclosure valence was manipulated in the content of the status updates. All 12 of the status updates made by Alex were self-disclosures, operationalized as statements about Alex's thoughts, feelings, and experiences (Derlega et al., 1993). Disclosure positivity was operationalized as disclosures that reflected contentment, optimistic thoughts, or the experience of good fortune; negativity was operationalized

in terms of disclosures that reflected discontentment, pessimistic thoughts, or the experience of bad fortune. Neutral disclosures were operationalized as disclosure that reflected mixed contentment, mixed fortune, or reflected the status quo. Disclosure valence was manipulated by first creating kernel disclosures and then adding information to make them positive, negative, or neutral. For example, the kernel, "Day 4 of new job . . .," was then made positive ("feel like I know what I'm doing"), negative ("feel like I don't know what I'm doing"), and neutral ("feel like I do and don't know what I'm doing"). Care was taken to ensure that a wide range of self-disclosures were represented. The 12 status updates in each condition included disclosures that were descriptive and evaluative and addressed both intimate and trivial issues (see Table 2). The total number of words included in the 12 self-disclosures used in the six conditions (manipulating valence and disclosure topic) ranged from 115 to 134 words ( $M = 122.67$ ,  $SD = 7.09$ ).

Self-disclosure topic was also manipulated to ensure that the results were not an artifact of any specific topic. Two different sets of positive, negative, and neutral disclosures were created. The first set focused largely on issues associated with Alex's work-life (i.e., first week at a new job) and the second set focused on Alex's home-life (i.e., first week in a new home). Table 2 includes the positive and negative self-disclosures about Alex's home-life.

## Measures

The measures of liking ( $M = 3.29$ ,  $SD = 1.59$ ,  $\alpha = .92$ ), relationship satisfaction ( $M = 3.58$ ,  $SD = 1.39$ ,  $\alpha = .90$ ), and willingness to provide social support ( $M = 4.35$ ,  $SD = 1.54$ ,  $\alpha = .96$ ) used in Study 1 were again employed in Study 2. A full description of each measure was supplied in Study 1.

Two manipulation check measures were created to evaluate the disclosure valence and relationship closeness manipulations. Ratings for both measures were made on a 7-point scale with the anchors (1) *strongly disagree* and (7) *strongly agree*. To evaluate disclosure valence, participants rated the degree to which the messages they received from Alex were generally positive and generally negative (this item was reverse scored). The mean of these two items was computed to create the disclosure valence manipulation check ( $M = 3.78$ ,  $SD = 2.12$ ,  $\alpha = .90$ ). To evaluate the relationship type manipulation, participants rated the degree to which they believed that Alex was a friend and an acquaintance (this item was reverse scored). The mean of these two items was computed to construct the relationship type manipulation check ( $M = 3.79$ ,  $SD = 2.44$ ,  $\alpha = .95$ ).

Finally, as in Study 1, participants' sex was included as a control variable to account for sex differences in self-disclosure reported in prior research (Dindia & Allen, 1992). The mean scores used to conduct the tests evaluating the hypotheses were adjusted for participants' sex. Because all participants received disclosures from a same-sex partner and both the number and relative intimacy of disclosures were held constant in the study materials, it was not necessary to use these variables as covariates in the analyses.

**Table 2.** Sample Positive and Negative Disclosures Focused on Home-Life.

| Condition | Monday   | Tuesday   | Wednesday | Thursday  | Friday   | Saturday  | Sunday   |
|-----------|--|---|-----------|---|--|---|--|
| Positive  | All moved into my new place. I think I'm going to love it. | Watching the weather. I love when the season changes. Exciting day at work. |           | Just flew back in town. Got upgraded to first class. Have way more motivation than usual lately. Day 5 in new place . . . feel very safe around new neighbors. Just finished watching the game. 3 hours of complete excitement.   | Some days I just know I've found my perfect career. I love my job. Got my oil changed today . . . finished in record time! | It looks like I need to do some painting in my kitchen. This will be fun!!      | Thinking a lot about my finances lately. Been saving more than spending. It's official. My sister is pregnant. What a great thing! |
| Negative  | All moved into my new place. I think I'm going to hate it. | Watching the weather. I hate when the season changes. Boring day at work.   |           | Just flew back in town. Sat next to a guy who was sick. Have way less motivation than usual lately. Day 5 in new place . . . don't feel safe around new neighbors. Just finished watching the game. 3 hours of complete let down. | Some days I question if I'll ever find my perfect career. I hate my job. Got my oil changed today . . . took forever!      | It looks like I need to do some painting in my kitchen. This will be terrible!! | Thinking a lot about my finances lately. Been spending more than saving. It's official. My sister is pregnant. Not a good thing!   |

## Results

### *Manipulation Checks and Preliminary Analyses*

Prior to testing the study hypotheses, checks were first conducted to evaluate the disclosure valence and relationship type manipulations. A two-way ANOVA showed an omnibus difference in perceptions of disclosure positivity among the three conditions used to manipulate disclosure valence,  $F(2, 340) = 368.64, p < .001, \eta^2 = .68$ . Post hoc, pair-wise tests indicated that all three conditions were significantly different from one another ( $p < .001$ ) and consistent with expectations.<sup>2</sup> Participants in the positive disclosure condition ( $M = 5.99, SD = 1.17$ ) rated the disclosures as most positive, followed by participants in the neutral disclosure condition ( $M = 3.66, SD = 1.21$ ) and the negative disclosure condition ( $M = 1.69, SD = 1.20$ ). Moreover, there was no main effect for relationship type nor an interaction between disclosure valence and relationship type. A second two-way ANOVA revealed that participants in the close friend condition ( $M = 5.68, SD = 1.59$ ) were more likely to report that Alex was a close friend than participants in the acquaintance condition ( $M = 1.90, SD = 1.47$ ),  $F(1, 339) = 519.23, p < .001, \eta^2 = .60$ . There was no main effect for self-disclosure valence nor a two-way interaction. In sum, these results offer evidence that the self-disclosure valence and relationship type manipulations were successful.

Two additional sets of analyses were also conducted. First, three one-way ANOVAs were conducted to further verify that the relationship type manipulation was effective and that participants thought about "Alex" as intended. Participants asked to consider Alex as a friend reported greater liking,  $F(1, 347) = 14.97, p < .001, \eta^2 = .04$ ; relationship satisfaction,  $F(1, 347) = 17.28, p < .001, \eta^2 = .05$ ; and being more likely to provide support to Alex,  $F(1, 346) = 32.03, p < .001, \eta^2 = .08$ , than participants in the acquaintance condition. These results offer evidence that the relationship type variable was meaningful to participants. Second, three one-way ANOVAs were conducted to determine if the topic variable, in which the general topic of the self-disclosures was manipulated (i.e., focused on home- or work-life), impacted the three dependent variables. There were no differences between the two topics in participants' liking,  $F(1, 347) = 1.31, p = .25, \eta^2 < .01$ ; relationship satisfaction,  $F(1, 347) = 0.44, p = .51, \eta^2 < .01$ ; or willingness to provide social support to the discloser,  $F(1, 346) = 0.13, p = .72, \eta^2 < .01$ .

Mean scores for the three outcome variables across the six conditions representing the disclosure valence and relationship type manipulations are reported in Table 3. It should be noted that the means were computed while controlling for participants' sex and the disclosure topic variable to ensure that these two factors did not influence the results. The mean scores reported in Table 3 were used in conducting the tests described in the following section.

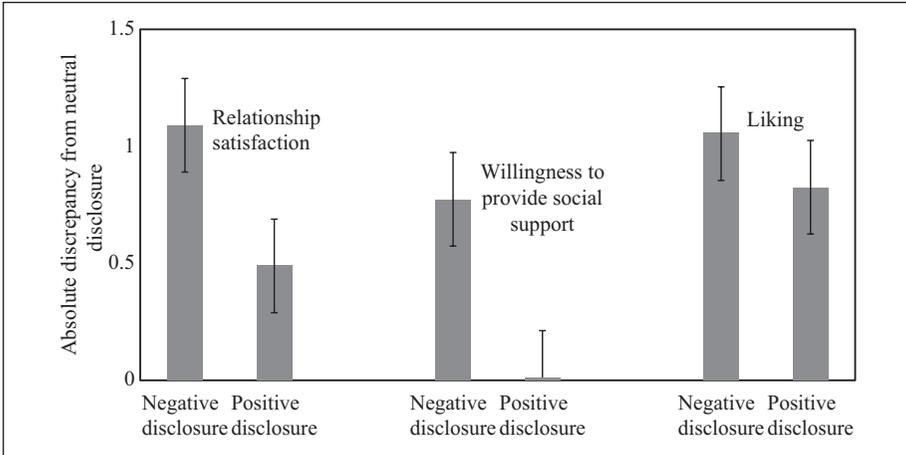
### *Testing the Negativity Effect Explanation*

Hypotheses 4 and 5 were proposed to evaluate the negativity effect explanation for the inconsistent effects of broadcast disclosures across an interpersonal network. Hypothesis 4 predicted that, relative to neutral disclosures, negative disclosures should

**Table 3.** Means and Standard Errors Across the Six Message Valence/Relationship Type Conditions in Study 2.

|  | Acquaintance/<br>positive<br>disclosure |        | Acquaintance/<br>neutral<br>disclosure |        | Acquaintance/<br>negative<br>disclosure |        | Close friend/<br>positive<br>disclosure |        | Close friend/<br>neutral<br>disclosure |        | Close friend/<br>negative<br>disclosure |        |
|--|---|--------|--|--------|---|--------|---|--------|--|--------|---|--------|
|  | M                                       | (SE)   | M                                      | (SE)   | M                                       | (SE)   | M                                       | (SE)   | M                                      | (SE)   | M                                       | (SE)   |
| Liking                                   | 3.83                                    | (0.17) | 3.01                                   | (0.17) | 1.94                                    | (0.18) | 4.82                                    | (0.17) | 3.40                                   | (0.17) | 2.58                                    | (0.17) |
| Relationship<br>satisfaction             | 3.93                                    | (0.16) | 3.44                                   | (0.16) | 2.35                                    | (0.16) | 4.60                                    | (0.16) | 3.94                                   | (0.16) | 3.03                                    | (0.16) |
| Willingness to provide<br>social support | 4.93                                    | (0.19) | 4.16                                   | (0.19) | 3.38                                    | (0.20) | 4.16                                    | (0.20) | 4.84                                   | (0.19) | 4.57                                    | (0.20) |
| <i>n</i>                                 | 58                                      |        | 59                                     |        | 55                                      |        | 56                                      |        | 57                                     |        | 57                                      |        |

Note. The mean scores were adjusted for participants' sex and the self-disclosure topic (i.e., work- or home-life).



**Figure 3.** Absolute impact of positive and negative disclosures relative to neutral disclosures among acquaintances.

have a greater impact than positive disclosures on acquaintances' (a) liking, (b) relationship satisfaction, and (c) willingness to provide social support to the discloser. In order to test this hypothesis, discrepancy scores were first computed within the friend and acquaintance conditions for each dependent measure. The means for participants in the positive and negative disclosure conditions were subtracted from the mean for participants in the neutral condition (within both the friend and acquaintance conditions separately); the absolute values of these discrepancies were used in conducting the analyses. Using the neutral condition as a baseline makes it possible to compare the relative impact of positive and negative disclosures. Independent-samples *t* tests were then conducted for each of the three dependent measures to determine whether the absolute effect of negative disclosures was greater than positive disclosures among participants in the acquaintance condition.

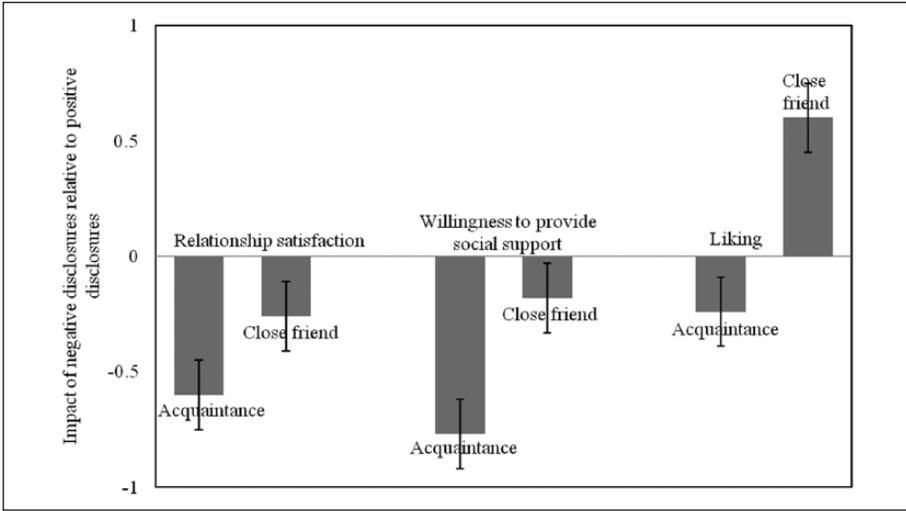
The results were consistent with Hypotheses 4b and 4c. Among participants in the acquaintance condition, negative disclosures ( $M = 1.09$ ,  $SD = 1.12$ ) had a significantly larger absolute impact relative to neutral disclosures than did positive disclosures ( $M = .49$ ,  $SD = 1.12$ ) on participants' ratings of relationship satisfaction with the discloser,  $t(170) = 4.05$ ,  $p < .001$ ,  $d = .62$ . Negative disclosures ( $M = 0.77$ ,  $SD = 1.56$ ) from an acquaintance also had a significantly larger impact than positive disclosures ( $M = 0.00$ ,  $SD = 1.49$ ) on participants' willingness to provide social support to the discloser,  $t(170) = 3.85$ ,  $p < .001$ ,  $d = .59$ . Hypothesis 4a was not supported. Although the difference scores were in the expected direction, the difference in the relative effects of negative ( $M = 1.06$ ,  $SD = 1.25$ ) and positive ( $M = 0.82$ ,  $SD = 1.41$ ) disclosures on acquaintances' liking of the discloser was not significant,  $t(170) = 1.39$ ,  $p = .17$ ,  $d = .21$ . The results related to Hypothesis 4 are illustrated in Figure 3.

Although no predictions were made about the relative effects of negative and positive disclosures received from close friends, supplementary analyses were conducted

to examine whether the negativity effect occurred in the close friend condition. Despite one significant difference, the negativity effect was not observed in the close friend condition. No difference was found in the relative effects of positive ( $M = 0.66$ ,  $SD = 1.27$ ) and negative ( $M = 0.92$ ,  $SD = 1.21$ ) disclosures on relationship satisfaction among close friends,  $t(168) = 1.56$ ,  $p = .12$ ,  $d = .24$ . Similarly, there was no difference in the effects of positive ( $M = 0.09$ ,  $SD = 1.35$ ) and negative ( $M = 0.27$ ,  $SD = 1.37$ ) disclosures in the close friend condition on participants' willingness to provide support to the discloser,  $t(168) = 1.01$ ,  $p = .31$ ,  $d = .16$ . There was a significant difference in the relative effects of positive and negative disclosures on liking among close friends, but it was in the opposite direction of what would be expected with a negativity effect. In the close friend condition, negative disclosures ( $M = 0.82$ ,  $SD = 1.29$ ) had a significantly smaller absolute impact relative to neutral disclosures than did positive disclosures ( $M = 1.42$ ,  $SD = 1.24$ ) on participants' liking of the discloser,  $t(168) = -3.59$ ,  $p < .001$ ,  $d = .55$ .

Beyond attempting to demonstrate that negative disclosures had a relatively greater impact than positive disclosures among acquaintances, Hypothesis 5 was proposed to examine the notion that the effects of negative disclosures (relative to positive disclosures) would be larger among acquaintances than among friends. In order to test this hypothesis, the discrepancy scores computed for the preceding analyses were used to determine the overall discrepancy between positive and negative disclosures among both friends and acquaintances. The discrepancy between the positive and neutral disclosure conditions for each respective outcome was subtracted from the discrepancy between the negative and neutral disclosure conditions (within the friend and acquaintance conditions separately); absolute values were not used in computing the overall discrepancy score. The resulting scores reflect the degree to which (relative to the neutral disclosure condition) negative disclosures had a greater effect on the dependent measure than positive disclosures. Negative scores indicated that the negative disclosure condition had a relatively greater impact than the positive disclosure condition. Independent-samples  $t$  tests were used to test for differences in the effect of negative disclosures relative to positive disclosures between the close friend and acquaintance conditions.

The results, which are illustrated in Figure 4, support Hypotheses 5a, 5b, and 5c. The effects of negative disclosures relative to positive disclosures were significantly greater in the acquaintance condition ( $M = -0.24$ ,  $SD = 1.33$ ) than in the close friend condition ( $M = 0.60$ ,  $SD = 1.27$ ) for liking,  $t(340) = -6.04$ ,  $p < .001$ ,  $d = .65$ . The deleterious impact of negative disclosures relative to positive disclosures on liking of the discloser was significantly greater among acquaintances than among close friends. The effects of negative disclosures relative to positive disclosures in the acquaintance condition ( $M = -0.60$ ,  $SD = 1.12$ ) were also significantly greater than in the close friend condition ( $M = -0.26$ ,  $SD = 1.24$ ) for relationship satisfaction,  $t(340) = -2.67$ ,  $p = .008$ ,  $d = .29$ . Finally, the relative effects of negative disclosure in the acquaintance condition ( $M = -0.77$ ,  $SD = 1.53$ ) were greater than in the close friend condition ( $M = -0.18$ ,  $SD = 1.36$ ) for willingness to provide social support,  $t(340) = -3.78$ ,  $p < .001$ ,  $d = .41$ . In sum, these results demonstrated that the impact of negative self-disclosure,



**Figure 4.** Differences in the impact of negative disclosures relative to positive disclosures between close friends and acquaintances.

relative to positive disclosure, was significantly greater among acquaintances than among close friends.

## General Discussion

The purpose of this project was to better understand the implications of broadcasting the same self-disclosure across a personal network. The results from Study 1 offer evidence that the outcomes of positive and negative broadcasted disclosures vary depending on recipients' closeness with the discloser. Whereas there were positive associations between disclosure valence and both liking and social support (among those who received relatively fewer total disclosures) for respondents who were less close to the discloser, these associations were not significant among respondents who had a closer relationship with the discloser. Put differently, respondents in Study 1 who had a relatively less close relationship with the discloser were more sensitive to the positive and negative disclosures they received. Study 2 explored this issue in more detail and showed evidence of a negativity effect (Kellermann, 1984, 1989) in response to negative broadcasted self-disclosures among receivers who were less close to the discloser. Negative disclosures had a significantly larger absolute impact than positive disclosures among acquaintances on two of the three outcomes. The impact of negative disclosures, relative to positive disclosures, was also significantly greater among acquaintances than among close friends for all three outcomes. Taken together, the results offer evidence that broadcasting positive and negative self-disclosures produces inconsistent outcomes among receivers who vary in closeness with the discloser. The effects of negative self-disclosure, in particular, appear to be more pronounced

among acquaintances than among close friends. The results from this project have implications for research on self-disclosure, the negativity effect, and new communication technology use in personal relationships.

The findings have important implications for theorizing about self-disclosure. Despite the significant volume of research on this topic produced during the past four decades (for reviews, see Cozby, 1973; Derlega et al., 1993; Greene et al., 2006; Kim & Dindia, 2011), relatively little scholarship has examined the impact of sharing the same self-disclosure with multiple receivers who have different types of relationships with the discloser. Yet, the widespread diffusion of several new communication technologies such as microblogs and SNSs that afford the opportunity to easily share messages broadly has made it critical to explore the implications of such nonpersonalistic disclosures. Recent research suggests that these technologies are being used to broadcast self-disclosures (e.g., Walton & Rice, 2013) and has raised a number of important questions. Scholars have considered self-presentation and privacy issues associated with broadcasting disclosures using SNSs and microblogs (Bazarova & Choi, 2014; Choi & Bazarova, *in press*; Vitak, 2012; Walton & Rice, 2013). This research has been valuable to help better understand the sender-related implications of broadcasting self-disclosure. The outcomes of such disclosures, however, have received less attention. Research that has been conducted has focused on the implications of making such disclosures relative to personalistic disclosures targeted at a single individual (Bazarova, 2012). The present project advances this body of scholarship by considering the role of the discloser-receiver relationship in determining the outcomes of broadcasted self-disclosures. The results show that the consequences of broadcasting self-disclosure are dependent upon the receiver's relationship with the discloser. Across the two studies, the impact of negative disclosure on recipients' liking and willingness to provide social support to the discloser was greater in non-close than close relationships.

This project also helps advance our understanding of positive and negative disclosure as well as the negativity effect. The results offer evidence that the negativity effect extends to the context of self-disclosure. Despite Kellermann's (1984) suggestion that the negativity effect should occur in this setting, relatively little research has been conducted to formally test this idea. Although several studies have shown that negative disclosures result in more deleterious outcomes than positive disclosures (Caltabiano & Smithson, 1983; Cayanus & Martin, 2008; Hecht et al., 1979; Lazowski & Andersen, 1990; Miller et al., 1992), they do not offer any evidence that the negativity effect is responsible for such differences. In Study 2, a neutral message condition was included in the design and used as a baseline from which to demonstrate the relative impact of positive and negative disclosures. The results from Study 2 offer direct evidence of a negativity effect by showing that, among acquaintances, negative disclosures had a greater relative effect on receivers' evaluations of the discloser and their relationship than did positive disclosures. Beyond documenting the negativity effect, the results suggest a scope condition for this phenomenon in the context of self-disclosure. The negativity effect appears to only operate in non-close relationships. Study 2 offers evidence that the effects of negative self-disclosure are not stronger than positive self-disclosure in close relationships.

The findings related to the outcomes of negative self-disclosure among acquaintances suggest some practical consequences for communication technology use in personal relationships. A key potential benefit of using microblogs and SNSs—a technology used by half of all adult Americans (Hampton et al., 2011)—is the ability to maintain a diverse set of connections with others and accrue access to resources such as social capital (Ellison et al., 2007, 2011; Valenzuela et al., 2009). Although broadcasting disclosure is one way to maintain and manage one's connections, the results of this project suggest that doing so could produce inconsistent and even unintended consequences. Broadcasting a negative disclosure had a disproportionately more deleterious impact among more distant connections. This finding is especially important because negative disclosures are a valuable means for marshalling social resources among those who are less close and could be considered weak ties (Derlega et al., 1993). The results of this project indicate that making a status update to report a recent job loss or breakup would generally be met with a more negative or less positive response among one's weak ties than among one's close relationships. Using a SNS or microblog to engage in help-seeking behavior and broadcasting a negative disclosure about one's challenges might serve to undermine the very weak-tie resources that these technologies are proposed to foster.

Those hypotheses that were not supported across the two studies warrant consideration. In Study 1, relationship closeness did not moderate the association between disclosure valence and relationship satisfaction. This may be an artifact of the smaller amount of variance in this outcome measure relative to the other two outcomes; the findings regarding relationship satisfaction from the experiment conducted in Study 2 were consistent with the hypotheses and showed a negativity effect among acquaintances but not close friends. Additionally, in Study 2, negative disclosures did not have a relatively large impact on liking in the acquaintance condition. Yet, consistent with the negativity effect, the impact of negative disclosures on liking relative to positive disclosures was significantly greater among acquaintances than among friends.

As with many studies, this project is not without limitations. Although the common limitations of survey (e.g., inability to make causal claims) and experimental (e.g., lack of external validity) research might be applied individually to the two studies, the use of a multi-method approach in this project mitigates some of these concerns. Whereas the survey approach used in Study 1 is relatively high in ecological validity, the experiment conducted for Study 2 made it possible to isolate and directly test the negativity effect explanation proposed in this project. Beyond this more general issue, the uses of a single-item measure to evaluate disclosure valence in Study 1 should be noted. A multi-item measure would be more ideal. Yet, this particular single-item measure has been used in previous research (e.g., Bazarova, 2012) and made it possible for respondents to effectively evaluate up to 20 different status updates they received.

Another potential limitation of Study 1 involves the order in which respondents evaluated their relationship with the target and the status updates they received from him or her. It is possible that evaluations of the relationship may have influenced respondents' evaluations of the status updates they received. Yet, this order was

deemed the more desirable option relative to asking respondents to first evaluate the updates they received and then complete the outcome measures. We felt that respondents' evaluations of their relationship would be less likely to influence their evaluations of the status updates they received because they had access to the actual content of those status update messages. Nonetheless, randomizing the order in which respondents evaluated their partner and the messages they received would be valuable in future research to examine this issue empirically. A final limitation involves the manipulation of relationship type in Study 2. Participants did not interact with an actual friend or an acquaintance. However, the approach used in Study 2 made it possible to rule out an alternative explanation for the findings. Because participants had no prior interaction with "Alex" and the same baseline level of information about him or her, the results cannot be an artifact of participants' prior evaluations of or experiences with him or her. The results can be directly attributed to the nature of the relationship (i.e., friend or acquaintance) and the valence of the disclosures participants received. Additionally, there is evidence that participants perceived the relationship type manipulation as intended. Participants reported significantly greater liking, relationship satisfaction, and willingness to provide social support to Alex in the close friend than in the acquaintance condition.

## Conclusion

Several new communication technologies offer novel opportunities for individuals to share their experiences, thoughts, and feelings with others. This study examined the outcomes of using a communication technology to broadcast self-disclosure directly and simultaneously to multiple message receivers who are more and less close to the discloser. The results showed that the outcomes of positive and negative broadcasted self-disclosures vary based on the discloser's relationship with receivers. Future research exploring the implications of new communication technologies for self-disclosure is a valuable avenue to help continue refining our understanding of this important communication construct and, more generally, personal relationships in the contemporary media environment.

## Acknowledgments

The authors thank the editor Dr. Mike Roloff and two anonymous reviewers for their helpful feedback on this manuscript.

## Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

## Notes

1. Although we believe that the arguments made in this project are particularly relevant to social network sites (SNSs), we do not intend to limit them to this single communication technology. We contend that the basic arguments could apply to almost any instance where one is broadcasting the same self-disclosure simultaneously to most or all of one's social network—including in face-to-face interaction.
2. The results of the pair-wise comparisons were as follows: positive/negative ( $M_{\text{difference}} = 4.30$ ,  $SE = 0.16$ ); positive/neutral ( $M_{\text{difference}} = 2.34$ ,  $SE = 0.16$ ); neutral/negative ( $M_{\text{difference}} = 1.96$ ,  $SE = 0.16$ ). All differences were statistically significant at  $p < .001$ .

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