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To Share, or Not to Share? Examining the Emotional Consequences of Social Sharing in the Case of Anger and Sadness

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Previous research has shown the relation between social sharing and emotional processing to be notoriously complex. In the present study, we unraveled this complexity by, for the first time, taking 3 key aspects of this relation into account simultaneously: the nature of the emotion, the timing of possible sharing effects, and the multicomponential character of emotions. Using the day reconstruction method, we first identified an intense anger or sadness target episode for each participant. In a second phase, participants repeatedly reported their sharing behavior and intensity of different emotion components over 5 days. Growth curve analyses revealed that sharing anger leads to several immediate and delayed beneficial effects, whereas sharing sadness leads to limited positive effects that emerge later on. This implies that all 3 aspects under study, as well as their interplay, are of critical importance in the relation between sharing and emotional processing.

Keywords: social sharing, emotional processing, subjective feeling, appraisals, action tendency

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Emotions color our lives, allowing us to experience all of its joys and all of its sorrows. Often, an emotional experience defies the person to regulate it (Aldao & Nolen-Hoeksema, 2013; Kappas, 2011; Thompson, 2011): As stated by Frijda (2007), "Every emotional impulse elicits a secondary impulse that tends to modify it" (p. 17). Over the past years, it has become apparent that emotion regulation comes in many different forms (Koole, 2009), yet one strategy in particular appears to prevail, that is, sharing our emotions with others (Reis et al., 2010; Rimé, 2009).

To share, or not to share? To provide an answer to this question, one needs to know the impact of social sharing on emotional processing. At this point, especially in the case of negative emotions, laypersons have high hopes for emotional expression: Sharing is believed to serve a cathartic function, and thereby to dissolve the impact of the emotional experience (Littrell, 2008; Scheff, 2007). Furthermore, this belief is endorsed by psychologists (McDaniel, Stiles, & McGaughey, 1981). In addition, it is reflected in the fact that almost all major therapeutic modalities contain an expressive component in order to foster emotional processing (Whelton, 2004).

Yet evidence from empirical research on the effects of emotional disclosure is inconclusive at best: Whereas some studies showed disclosure to be beneficial (Frattaroli, 2006), others showed that social sharing is not related to emotional recovery (Rimé, 2009).[1] Moreover, in yet other studies, the benefits of talking appeared to depend on the social context in which that talking occurred (Lepore, Fernandez-Berrocal, Ragan, & Ramos, 2004; Nils & Rimé, 2012).

These and related results illustrate that the relation between disclosure and the processing of negative emotions is notoriously complex (Kennedy-Moore & Watson, 2001; Stanton & Low, 2012). A major challenge for emotion research is therefore to grasp this complexity. The goal of the present study is to help get a better handle on the complex relationship between social sharing and emotional processing by taking into account three distinctions.

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[1] One may note that the beneficial effects found in Frattaroli's (2006) meta-analysis are based on expressive-writing studies, in some of which participants are informed that no one will read their writing, in order to rule out interpersonal effects. In Frattaroli's meta-analysis, it has been tested whether the audience of disclosure (no one will read or hear the disclosure vs. experimenter will do so) moderated the reported effects. Yet this appeared to be the case only for psychological health outcomes (unlike for the other five outcome categories), with studies in which participants' disclosure was private yielding larger effect sizes than studies in which participants' disclosure was turned in to (and read by) the experimenter. Moreover, when location of disclosure sessions was controlled for, the relation between audience and effect size shrank dramatically and became nonsignificant. Hence, there appears to be insufficient evidence to draw conclusions regarding the role of having an experimenter collect (and read) the products of disclosure in expressive-writing studies.

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First, previous studies focused predominantly on the relation between sharing and emotional processing of negative emotions in general, while disregarding more fine-grained distinctions between different negative emotions. However, negative emotional experiences can be broken down into a number of distinct negative emotions, with each emotion containing unique information about one's relationship with the environment. Importantly, it has been suggested that the consequences of social sharing may differ between emotions (Wetzer, Zeelenberg, & Pieters, 2007). There is some preliminary empirical evidence supporting this hypothesis: For instance, in studies on bereavement, it has been found that emotional disclosure does not facilitate the grieving process (M. Stroebe, Stroebe, Schut, Zech, & van den Bout, 2002; W. Stroebe, Schut, & Stroebe, 2005), whereas in other studies it has been shown to reduce anger (Frattaroli, 2006). Therefore, in the present study, we aimed to explore whether the consequences of social sharing are emotion-specific. For that purpose, we selected two frequently experienced and frequently shared negative emotions: anger and sadness.

Second, both emotions and social sharing are processes evolving over time (Curci & Rimé, 2012; Sander, Grandjean, & Scherer, 2005), with several instances of sharing usually occurring over the course of an emotional episode. Even more important, it has been assumed that the effects of social sharing unfold over time. Indeed, it has been argued that social sharing can initially bring emotional relief (defined as a temporary and specific alleviation of emotional distress), whereas emotional recovery (defined as the permanent resolution of the emotional turmoil as a whole) may only be brought about later (Rimé, 2009). Thus, to gain a better understanding of the relation between social sharing and emotional processing, it is important to take time into account, and to draw a distinction between immediate and delayed effects of social sharing. More specifically, we hypothesize that social sharing will have limited immediate effects (in line with the argument that the immediate effects of sharing may be confined to a temporary and specific alleviation of emotional distress), whereas its delayed effects will be more extensive (in line with the assumption that social sharing may bring a permanent resolution of the emotional turmoil as a whole). This hypothesis lines up with some preliminary evidence suggesting that effects of disclosure may not show up instantaneously but rather may take some time to emerge (Pennebaker, 2000; Smyth, 1998).

Third, contemporary emotion theories do not conceptualize emotions as monolithic entities but as multicomponential or multilayered phenomena (Sander et al., 2005) comprising of the subjective feeling, appraisals, and action tendency. The subjective feeling component refers to how the emotion is experienced at the most private, intrapersonal level. Appraisals are the result of an individual's meaning analysis of the implications of the circumstances for his or her personal well-being (Roseman & Smith, 2001). Thus, appraisals pertain to the relation between internal (e.g., goals, values) and external (e.g., emotion-eliciting event) factors (Smith & Kirby, 2009). Traditionally, a distinction has been drawn between primary and secondary appraisals: Primary appraisals capture the goal relevance and goal (in)congruence of the emotion-eliciting event, with goal relevance pertaining to how strongly an event touches on the individual's momentary goals, and goal (in)congruence pertaining to the extent to which the event is consistent versus inconsistent with those goals. Secondary appraisals reflect who or what is held responsible for the occurrence of the event and the ability of the person to cope with its consequences (Lazarus, 2001). Finally, the action tendency is a motivational component driving outward-directed (and, hence, often more public) behavior (Frijda, 2007).

Taking into account the distinctions between the different components that make up an emotion, we can now further refine our research hypotheses. As previously explained we hypothesize that the immediate effect of social sharing will be limited, whereas the delayed effect will be more pronounced. Regarding the weaker immediate effect, we expect this to show up at the level of subjective feelings. Moreover, taking into account the supportive aspects of social sharing (including empathic listening, validation, and comforting), we expect a decrease in the intensity of the subjective feeling component. Furthermore, for the delayed effects, we hypothesize that these will show up at the level of all emotion components. In this regard, a delayed effect for appraisals may be explained by the fact that, to change cognitive appraisals, some processing time is required. In the wake of changes in appraisals, we further also predict a change in the associated action tendencies (Bossuyt, Moors, & De Houwer, 2010; Frijda, Kuipers, & Ter Schure, 1989; Moors, Ellsworth, Scherer, & Frijda, 2013).

The major aim of the present study is thus to unravel the complex relation between social sharing and emotional processing by taking into account the nature of the shared emotion, the distinction between immediate and delayed effects of social sharing, and the multilayered character of emotions. In this regard, we hypothesize that sharing will be associated with an immediate decrease in the intensity of the subjective feeling and that it will be associated with delayed effects on all emotion components under study. Furthermore, we will investigate whether this pattern of results is different for anger than for sadness.

To investigate our hypotheses, we measured the experience of emotions in everyday life using the day reconstruction method (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004). As mentioned before, we focused on episodes of anger and sadness—two frequently experienced negative emotions. For both emotions, we assessed the intensity of the subjective feeling and the primary appraisals of goal relevance and incongruence. Furthermore, secondary appraisals were derived from the core relational themes of anger and sadness (Smith & Lazarus, 1993). In particular, from the core relational theme of "other blame" as associated with anger (Smith & Kirby, 2009), we derived the secondary appraisal of "other responsibility," whereas from the core relational theme of "helplessness about loss", as associated with sadness (Smith & Lazarus, 1993), we derived the secondary appraisals of "coping potential" and "positive future expectancy." With regard to action tendencies, we focused on the tendency to oppose, in the case of anger (Kuppens, Van Mechelen, Smits, & De Boeck, 2003), and on the feeling that nothing could be done, in the case of sadness (Wierzbicka, 1992).[2]

[2] It may be noted that, according to Lazarus (1991), sadness is not only characterized by inaction but also by withdrawal from involvement in the world.

Method

Participants

Participants were 248 university students (53 men and 195 women) who participated in partial fulfillment of a course requirement. Their mean age was 18.71 years ($SD = 1.65$).

Procedure

The study lasted for 7 days and consisted of two phases: Our goal in the first phase was to identify, for each participant, an episode of anger or sadness that was sufficiently intense to be monitored over a longer period of time. During the second phase, we repeatedly assessed the different components of the emotion as well as social sharing behavior.

On the first day of the study, participants attended the lab and received general instructions about the study. Specifically, participants were asked to complete a web-based questionnaire, consisting of two parts corresponding to the two phases of the study, each evening right before going to bed.

Phase 1: Identification of an intense anger or sadness episode. The first phase started on the first night of the study and lasted 3 days at most. Each day, participants were presented with a block of questions regarding each of the two target emotions—anger and sadness. The order of these two blocks was randomized across participants. Within each block, participants were first asked how many times during that day they had experienced the emotion (i.e., anger or sadness). Second, if they had experienced the emotion, participants were subsequently asked to think back to the most intense experience and to label it. Third, participants were asked to rate the intensity of the labeled emotional experience on a 7-point Likert scale ranging from 1 (*not at all intense*) to 7 (*very intense*).

An intense episode of anger or sadness was defined as an emotional experience that exceeded a prescribed threshold. The intensity of the emotional episode had to be higher than 5 on Days 1 and 2 of the study, and higher than 4 on Day 3 of the study.[3] The threshold was set lower on Day 3 of the study to maximize the number of participants entering the second phase. As soon as an intense episode of anger or sadness had been defined for each participant, the second phase of the study started immediately. Participants who did not report an intense emotion by the end of Day 3 were subsequently presented a filler task. The setup of the first phase implies that some participants did not enter the second phase, and for those who did, that only one emotional episode was further monitored.

Phase 2: Repeated assessment of emotion components and social sharing over time. The goal of the second phase of the study, which lasted 5 days, was to monitor the selected emotional episode over time. Therefore, participants were asked about the different emotion components (intensity of the subjective feeling, appraisals, and action tendency) and the associated social sharing behavior 3 times a day over the remaining 5-day period.

During the second phase, the evening questionnaire asked participants to divide each day into three periods (morning, afternoon, and evening), taking into account the time they woke up and went to bed. Subsequently, they were asked to indicate during which part of the day the emotion-inducing event had occurred. Next, they were asked to think back to the exact moment at which the event had taken place and to complete a set of questions that assessed the different emotion components at that moment. The specific items used to assess the different components will be described in detail in the Materials section. Participants were asked to rate the same set of questions for each part of the day after the occurrence of the emotion-eliciting event. In addition, participants were also asked whether or not they had socially shared their emotional experiences relating to the event during the period in question (i.e., during the afternoon).

For the remaining days of the second phase, the same procedure was used, that is to say, participants were first asked to divide the past day in three parts; next, for each period (morning, afternoon, and evening), they were asked to complete the set of questions that assessed the different components and their social sharing behavior.

Materials

The set of questions used to measure the different emotion components in the second phase of the study comprised the following items. To assess intensity of the subjective feeling, participants had to indicate how intensely they experienced the target emotion of anger or sadness (0 = *not intense at all* to 7 = *very intense*).

Regarding primary appraisals, participants were asked to rate the goal relevance and goal incongruence of the emotion-eliciting event. For goal relevance, participants rated how important the emotion-eliciting event was for them (0 = *not at all important* to 7 = *very important*). For goal incongruence, participants indicated how disadvantageous the emotion-eliciting event was to them (0 = *not at all disadvantageous* to 7 = *very disadvantageous*).

Regarding secondary appraisals, participants were asked to rate the dimensions that were derived from the core relational theme of the emotions under study: other responsibility, emotion- and problem-focused coping, and positive future expectancy. For other responsibility, participants indicated the extent to which they held someone else responsible for the occurrence of the emotion-eliciting event (0 = *not at all* to 7 = *someone else is completely responsible*). Regarding problem-focused coping, participants indicated the extent to which they thought they could do something to change the situation that had elicited the emotion (0 = *not at all changeable* to 7 = *very changeable*). Emotion-focused coping was measured by asking participants to indicate the extent to which they thought they could cope with the emotions elicited by the event (0 = *not at all* to 7 = *very much*). Finally, to assess positive future expectancy, participants were asked to indicate the extent to which they thought the event would turn out as they wished (0 = *not at all as I wished* to 7 = *very much as I wished*).

Regarding action tendencies, participants indicated, for anger episodes, the extent to which they felt the tendency to oppose (0 = *not at all* to 7 = *very much*), and, for sadness episodes, the extent to which they felt that it was impossible to do anything (0 = *not at all* to 7 = *very much*). Finally, for social sharing, participants indicated whether or not they had talked with someone about the emotion-eliciting event or their feelings during each part of the day.

[3] This threshold refers to the intensity of the emotion on the first day of an episode (which may be Day 1, 2, or 3 of the study).

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Data Analysis

The key research question we address in the present study pertains to how the unfolding of different emotion components over time is affected by social sharing. To answer this question, we relied on growth curve modeling. This technique is well-suited to investigating patterns of change over time (viz., change in the different emotion components), and most importantly, how these patterns of change are associated with substantive predictors (i.e., in our case, social sharing; McCoach & Kaniskan, 2010; Singer & Willett, 2003).

Temporal evolution of emotion components. We started by investigating how each specific component (e.g., goal relevance) changed over time. To do so, we fitted an unconditional means model (including an intercept only) for each component, which implies no change over time (Singer & Willett, 2003). In a second step, we investigated whether a more complex model with linear or quadratic effects of time better captured the change over time in the different emotion components, making use of the deviance statistic (Singer & Willett, 2003).

Immediate and delayed effects of social sharing. Next and most importantly, we studied whether and how social sharing influenced the time course of the different emotion components. At this point, one of the challenges of the present study was to draw a distinction between possible immediate and delayed effects of social sharing. For this purpose, two dummy predictors were created: Immediate effects of sharing were captured by a first dummy variable, which indicated whether the emotion was shared or not in between two observations. Delayed effects of sharing were captured by a second dummy variable, which was given a value of "1" for all periods following a period in which sharing had taken place, provided that no sharing had taken place in these periods themselves. Both predictors were added simultaneously to the model. We used Wald tests to evaluate the predictive value of the social sharing variables (Singer & Willett, 2003).

Results

Descriptive Statistics

Episode identification. We identified 53 intense anger episodes and 50 intense sadness episodes (according to the selection criteria described earlier), resulting in a total of 103 emotion episodes.

Social sharing. In 81% of the anger episodes and 84% of sadness episodes, social sharing occurred at some point during the 5-day study period. Looking at the shared episodes only, it appeared that the average frequency of occurrence of social sharing was 1.5 for anger episodes and 1.6 for sadness episodes. Furthermore, it appeared that for both emotions, given that an episode was shared, for half of the episodes, sharing occurred once, whereas for the other half, sharing occurred several times.

Initial component scores. Table 1 presents the means and standard deviations of the intensity of the different emotion components at the moment at which the emotion-eliciting event occurred. These results show that, at onset, there were some differences between anger and sadness in the different emotion components. In particular, experiences of sadness were elicited by events that were rated as more important than anger experiences, on average. Furthermore, in the case of anger, someone else was held more responsible for the emotion-eliciting event than in the case of sadness.

In Table 2, the correlations between the different emotion components at onset are displayed (above the diagonal for anger, and

Table 1
Means and Standard Deviations (SDs) of Emotion Components Ratings at the Onset of the Emotion Episode

	Anger		Sadness	
Emotion component	Mean	*SD*	Mean	*SD*
Intensity of subjective feeling	5.45_a	1.03	5.38_a	1.10
Primary appraisals				
Goal relevance	3.68_a	2.22	4.58_b	2.08
Goal incongruence	4.15_a	2.01	4.06_a	2.13
Secondary appraisals				
Other responsibility	4.94_a	2.51	2.88_b	2.69
Problem-focused coping	3.23_a	2.47	3.06_a	2.26
Emotion-focused coping	3.74_a	1.73	3.42_a	1.55
Positive future expectancy	2.30_a	2.08	1.86_a	1.60
Action tendency	4.55_a	2.11	4.64_a	1.74

Note. Within rows, means with different subscripts differ significantly from each other. Results are based on independent *t* tests, $df = 101$, $p < .05$.

Table 2
Correlations Between the Different Emotion Components at the Onset of the Emotion Episode

	Intensity of subjective feeling	Goal relevance	Goal incongruence	Other responsibility	Problem-focused coping	Emotion-focused coping	Future expectancy	Action tendency
Intensity of subjective feeling	—	.24	.36**	.08	.14	−.18	−.03	.29*
Goal relevance	.26	—	.22	−.22	.14	−.11	.25	.03
Goal incongruence	.22	.27	—	.16	−.17	−.25	−.12	.16
Other responsibility	.13	−.27	−.20	—	−.18	−.05	−.10	.32*
Problem-focused coping	.04	.37**	.00	−.15	—	.19	.43**	.09
Emotion-focused coping	−.27	−.20	−.27	.04	−.13	—	.23	−.25
Future expectancy	−.40**	−.26	−.15	.00	.05	.14	—	−.10
Action tendency	.08	−.01	.47**	.04	−.29*	−.15	−.22	—

Note. Above the diagonal, the correlations for episodes of anger are displayed; below the diagonal, the correlations for episodes of sadness are displayed.
* $p < .05$. ** $p < .01$.

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below the diagonal for sadness). From this table it can be seen that the correlations were, in general, rather low.

Immediate and Delayed Effects of Social Sharing on the Temporal Evolution of Emotion Components

Temporal evolution of emotion components. In the growth curve analysis, we first looked for a common basic model that captured the change over time in all emotion components under study. For the majority of the components, there was a significant drop in the deviance statistic when adding linear and quadratic effects of time to an unconditional means model. Hence, because a model with both linear and quadratic terms best described change over time for most components, this model was chosen as the common basic model. The growth parameters are presented in Table 3.

Immediate and delayed effects of social sharing. We added the social sharing predictors to the basic model in order to investigate the immediate and delayed effects of social sharing on the temporal evolution of the emotion components under study. Results from these analyses are presented in Table 3. In the table, a positive regression weight reflects that social sharing predicts an increase in the emotion component under investigation, whereas a negative regression weight reflects that sharing predicts a decrease. Note that significant effects reflect contributions of each predictor above and beyond all other predictors. For example, for anger, social sharing had a significant negative delayed effect on the intensity of the subjective feeling, meaning that it predicted a significant decrease in this component, above and beyond the basic fluctuation over time and the immediate effect of social sharing.

The results from these analyses are also shown in Figure 1 for anger, and in Figure 2 for sadness. For each emotion under study, we selected four components. In these figures, four lines are plotted: The first three lines are drawn based on the parameters estimates that are shown in Table 3. The first line (. . . . . .) shows how the emotion component changes over time (without the effects of sharing). The second line (_ . _ . _) shows this normal trajectory plus the immediate effect of social sharing. The third line (_ _ _ _) shows the normal trajectory plus the delayed effect of social sharing. If the immediate and/or delayed effect was not significant, these lines would overlap. Therefore, only the normal trajectory is shown in the case of nonsignificant effects. The fourth line (____) displays a sample trajectory: It shows the change in the emotion component if social sharing occurs between the seventh and eight observations. Because of the time-varying nature of the social sharing predictors (the value of these predictors can, in principle, vary over time), the fourth line switches from one line to the other, depending on whether or not there is a significant effect. As long as there is no sharing, it follows the normal trajectory. When social sharing occurs and it has a significant immediate effect, the fourth line jumps to the line of the immediate effect. When there is a significant delayed effect, the fourth line jumps to the line of the delayed effect.

From Table 3 and Figures 1 and 2, it can be seen that, for anger, we found a significant immediate effect for intensity of the subjective feeling, problem- and emotion-focused coping, and the positive future expectancy. Furthermore, we found a significant delayed effect for intensity of the subjective feeling, goal relevance and goal incongruence, other responsibility, emotion-focused coping, positive future expectancy, and the action tendency. In the case of sadness, we found a significant immediate effect for goal relevance, and a significant delayed effect for the action tendency.

Taking into account that sharing may happen repeatedly within an emotional episode, one may wonder whether other responsibility and the first and subsequent sharing instances yield the same effect. To examine this, we ran some additional analyses with two new dummy variables—the first one to capture the immediate effect of the first sharing interaction, and the second to capture the immediate effect of subsequent sharing interactions. The results from these additional analyses are displayed in Table 4. These analyses revealed that, for most emotion components, the immediate effect of the first and subsequent sharing interactions was comparable, with the only exceptions being goal incongruence and action tendency, in the case of anger, and goal relevance, in the case of sadness; for all three components in question, a significant immediate effect showed up for the subsequent sharing instances, unlike for the first one.

Discussion

One of the most frequently used strategies for regulating one's emotions is social sharing. Yet the relation between social sharing and emotional processing appears to be fairly complex (Stanton & Low, 2012). In the present study, we hypothesized that to better grasp this complexity, taking into account three aspects may be of major importance: (a) the nature of the shared emotion, (b) the timing of the effects, and (c) the componential structure of emotions.

We found that, for anger, social sharing was associated with an immediate decrease in the intensity of the subjective feeling and with delayed effects on all components under study. Interestingly, the immediate effect of social sharing on the intensity of the subjective feeling was also associated with an increase in coping potential and positive future expectancy, which is consistent with an earlier finding in the communication literature (Bippus, 2001). In the study of Bippus, it was found that people expect to feel more empowered after being comforted by someone else, meaning that they feel more able to handle their problems themselves because of their interaction with their social sharing partner. Furthermore, the positive effects of disclosing anger are also in line with a study of Harber and Wenberg (2005) that showed that disclosing emotions caused by an offense has a positive effect on the appraisal of closeness toward the offender.

For sadness, we found that the effects of social sharing were rather limited: Social sharing was associated with a delayed effect on the associated action tendency. In the periods after which people had talked about their feelings, their feeling that nothing could be done diminished. In this regard, it may be noted that in the case of sadness, the action tendency is actually a tendency to not act (Roseman, Wiest, & Swartz, 1994). Therefore, the effect of sharing should not be interpreted as an inhibition of active behavior, but rather as the lessening of a blockage. This result further suggests that by talking about their problems, people have the feeling that something could be done about their problems, which is also consistent with a process of empowerment. The limited effects of social sharing that we found for sadness are consistent with earlier findings from studies on the effects of psychological debriefing after trauma (McNally, Bryant, & Ehlers, 2003), and on

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Table 3
Regression Weights (and 95% Confidence Intervals) From Growth Curve Analyses of Emotion Component Ratings

	Anger					Sadness				
	Growth parameters			Effect of sharing		Growth parameters			Effect of sharing	
Component	Intercept	Time	Time × Time	Immediate	Delayed	Intercept	Time	Time × Time	Immediate	Delayed
Intensity subjective feeling	4.80*** (4.39, 5.20)	−0.51*** (−0.59, −0.42)	0.03*** (0.02, 0.03)	−0.81*** (−1.18, −0.44)	−1.27*** (−1.65, −0.90)	5.01*** (4.62, 5.39)	−0.61*** (−0.69, −0.52)	0.03*** (0.03, 0.04)	0.36 (−0.02, 0.74)	−0.20 (−0.56, 0.15)
Primary appraisals										
Goal relevance	3.61*** (3.05, 4.17)	−0.29*** (−0.39, −0.18)	0.01*** (0.01, 0.02)	0.10 (−0.37, 0.56)	−0.74** (−1.21, −0.27)	4.49*** (3.90, 5.08)	−0.29*** (−0.39, −0.18)	0.02*** (0.01, 0.02)	0.58* (0.10, 1.05)	−0.20 (−0.65, 0.26)
Goal incongruence	4.00*** (3.43, 4.56)	−0.28*** (−0.39, −0.17)	0.01*** (0.01, 0.02)	−0.26 (−0.74, 0.22)	−1.11*** (−1.60, −0.63)	4.13*** (3.59, 4.67)	−0.23*** (−0.34, −0.13)	0.01*** (0.01, 0.02)	0.31 (−0.17, 0.78)	−0.42 (−0.88, 0.03)
Secondary appraisals[a]										
Other responsibility	4.56*** (3.92, 5.21)	−0.45*** (−0.57, −0.32)	0.02*** (0.01, 0.03)	0.48 (−0.06, 1.01)	−0.63* (−1.18, −0.09)	2.64*** (2.02, 3.25)	−0.04 (−0.13, 0.06)	0.00 (−0.00, 0.01)	0.00 (−0.43, 0.43)	−0.65** (−1.07, −0.23)
Problem-focused coping	3.01*** (2.48, 3.54)	−0.41*** (−0.53, −0.29)	0.02*** (0.02, 0.03)	0.64** (0.13, 1.16)	0.44 (−0.07, 0.96)	3.19*** (2.72, 3.66)	−0.27*** (−0.36, −0.18)	0.01*** (0.01, 0.02)	0.18 (−0.23, 0.59)	−0.06 (−0.45, 0.34)
Emotion-focused coping	3.88*** (3.28, 4.47)	−0.37*** (−0.50, −0.24)	0.02*** (0.01, 0.02)	0.76** (0.19, 1.38)	0.81*** (0.24, 1.39)	3.34*** (2.88, 3.79)	−0.04 (−0.14, 0.06)	−0.00 (−0.01, 0.01)	−0.11 (−0.55, 0.34)	0.38 (−0.04, 0.80)
Positive future expectancy	2.29*** (1.75, 2.82)	−0.27*** (−0.38, −0.16)	0.01*** (0.01, 0.02)	0.83*** (0.34, 1.32)	0.93*** (0.44, 1.42)	1.99*** (1.54, 2.44)	−0.00 (−0.08, 0.07)	0.00 (−0.00, 0.01)	−0.10 (−0.45, 0.26)	−0.06 (−0.40, 0.28)
Action tendency	4.29*** (3.72, 4.86)	−0.37*** (−0.47, −0.26)	0.02*** (0.01, 0.02)	0.04 (−0.42, 0.50)	−1.18*** (−1.65, 0.71)	4.36*** (3.87, 4.84)	−0.22*** (−0.32, −0.12)	0.01** (0.01, 0.02)	0.06 (−0.39, 0.52)	−0.59** (−1.03, −1.58)

Note. Because there is no straightforward way of computing effect sizes in a multilevel model (Nezlek, 2012), we present our results with confidence intervals instead.
* $p < .05$. ** $p < .01$. *** $p < .001$.

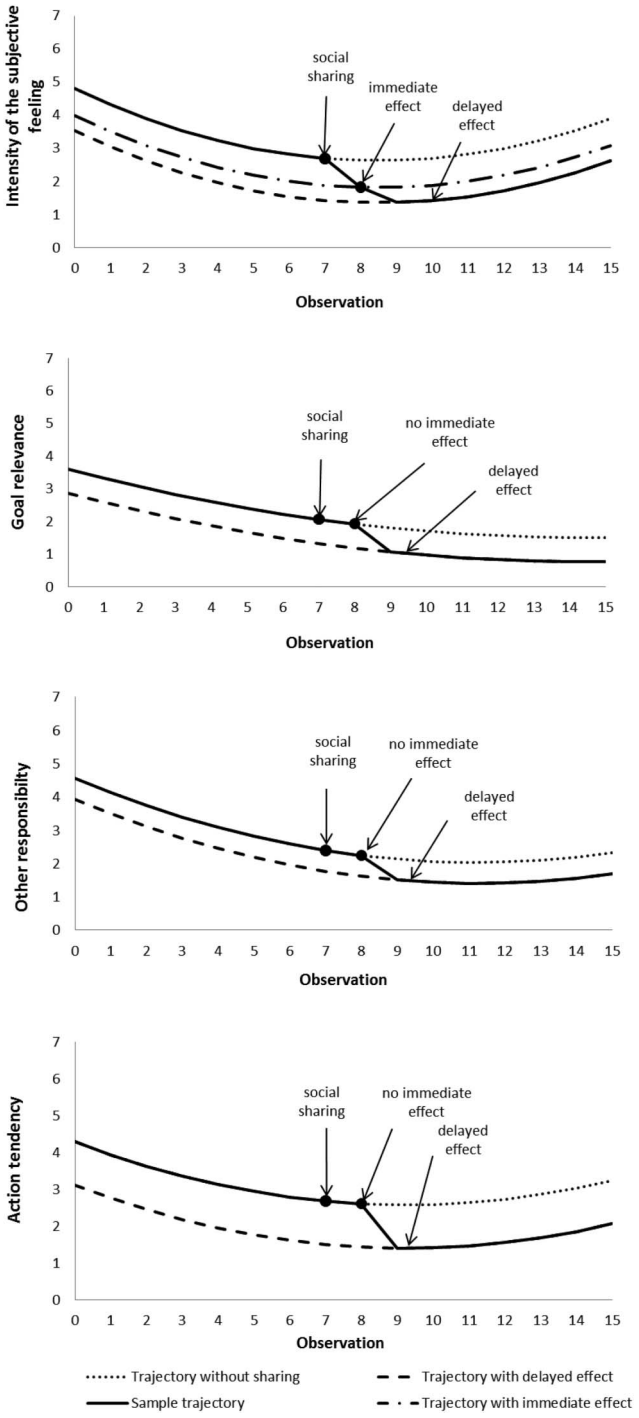


Figure 1. Growth curve plots showing the immediate and delayed effect of social sharing for four anger components.

the effects of emotion expression in the context of bereavement (M. Stroebe et al., 2002; W. Stroebe et al., 2005). Furthermore, they are also consistent with a recent study on expressive writing within the context of marital separation (Sbarra, Boals, Mason, Larson, & Mehl, 2013), in which the authors found that expressive writing may even impede emotional recovery; Sbarra et al. (2013) suggest that this may be explained by the fact that by writing about one's emotions, one may focus attention back on oneself, and thereby exacerbate rather than relieve the distress.

Furthermore, we found that for most emotion components under study, the immediate effect of the first and subsequent sharing interactions was comparable, with the only exceptions being goal incongruence and action tendency, in the case of anger, and goal relevance, in the case of sadness.

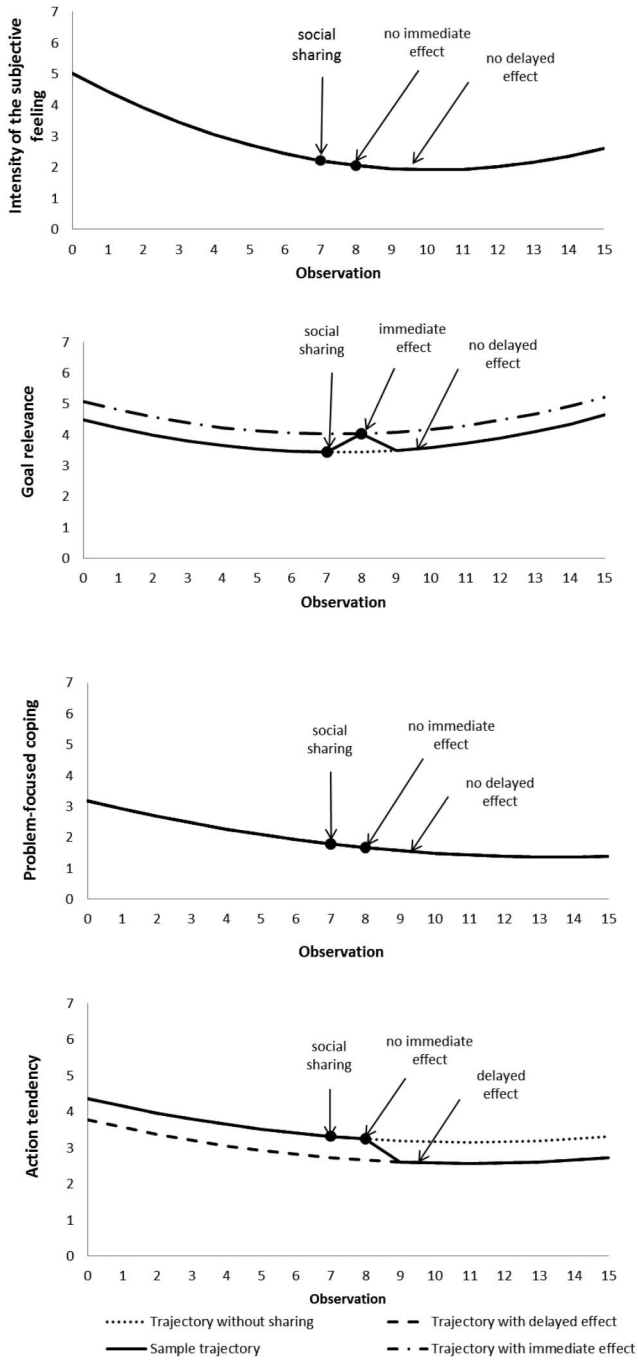


Figure 2. Growth curve plots showing the immediate and delayed effect of social sharing for four sadness components.

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Table 4
Regression Weights (and 95% Confidence Intervals) From Growth Curve Analyses of Emotion Component Ratings When Comparing the Immediate Effect of the First and Subsequent Sharing Instances

	Anger					Sadness				
	Growth parameters			Immediate effects of sharing		Growth parameters			Immediate effects of sharing	
Component	Intercept	Time	Time × Time	First	Subsequent	Intercept	Time	Time × Time	First	Subsequent
Intensity subjective feeling	4.78*** (4.37; 5.19)	−0.49*** (−0.58; −0.41)	0.03*** (0.02; 0.03)	−0.66** (−1.08; −0.24)	−1.05*** (−1.53; −0.56)	5.01*** (4.62; 5.39)	−0.61*** (−0.69; −0.52)	0.03*** (0.03; 0.04)	0.37† (−0.07; 0.81)	0.34 (−0.57; 0.16)
Primary appraisals										
Goal relevance	3.60*** (3.04; 4.17)	−0.28*** (−0.39; −0.18)	0.01*** (0.01; 0.02)	0.17 (−0.36; 0.70)	−0.01 (−0.62; 0.59)	4.51*** (3.93; 5.10)	−0.30*** (−0.41; −0.20)	0.02*** (0.01; 0.02)	0.42 (−0.13; 0.96)	0.83** (0.20; 1.45)
Goal incongruence	3.97*** (3.10; 4.54)	−0.26*** (−0.37; −0.15)	0.01*** (0.01; 0.02)	0.00 (−0.54; 0.54)	−0.67* (−1.28; −0.05)	4.14*** (3.59; 4.68)	−0.24*** (−0.35; −0.13)	0.01*** (0.01; 0.02)	0.24 (−0.30; 0.79)	0.40 (−0.23; 1.03)
Secondary appraisals[a]										
Other responsibility	4.57*** (3.92; 5.21)	−0.45*** (−0.57; −0.32)	0.02*** (0.01; 0.03)	0.47 (−0.13; 1.08)	0.49 (−0.20; 1.19)	2.67*** (2.06; 3.28)	−0.07 (−0.16; 0.03)	0.01 (−0.00; 0.01)	−0.27 (−0.76; 0.99)	0.42 (−1.18; −0.08)
Problem-focused coping	3.02*** (2.49; 3.55)	−0.42***	0.02*** (−0.54; −0.30)	0.58† (0.02; 0.03)	0.74* (−0.01; 1.41)	3.19*** (0.07; 1.41)	−0.27*** (2.72; 3.65)	0.01*** (−0.36; −0.17)	0.21 (0.01; 0.02)	0.12 (−0.26; 0.69)
Emotion-focused coping	3.87*** (3.27; 4.47)	−0.36*** (−0.50; −0.23)	0.02*** (0.01; 0.02)	0.83* (0.17; 1.49)	0.66† (−0.09; 1.41)	3.38*** (2.93; 3.83)	−0.08 (−0.18; 0.02)	0.00 (−0.00; 0.01)	−0.44† (−0.95; 0.07)	0.39 (−0.19; 0.97)
Positive future expectancy	2.29*** (1.75; 2.82)	−0.26*** (−0.38; −0.15)	0.01*** (0.01; 0.02)	0.87** (0.31; 1.43)	0.78* (0.14; 1.42)	2.01*** (1.56; 2.46)	−0.02 (−0.10; 0.06)	0.00 (−0.00; 0.01)	−0.22 (−0.62; 0.19)	0.08 (−0.38; 0.55)
Action tendency	4.33*** (3.76; 4.89)	−0.40*** (−0.51; −0.29)	0.02*** (0.01; 0.03)	−0.33 (−0.85; 1.96)	0.61* (0.01; 1.20)	4.34*** (3.85; 4.83)	−0.21*** (−0.31; −0.10)	0.01** (0.00; 0.16)	0.22 (−0.31; 0.74)	−0.16 (−0.77; 0.44)

Note. Because there is no straightforward way of computing effect sizes in a multilevel model (Nezlek, 2012), we present our results with confidence intervals instead.
† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Regarding the different patterns of results for anger and sadness, one may wonder what mechanism underlies these differential effects of sharing. Although there are several differences between experiences of anger and of sadness (e.g., they are characterized by different secondary appraisals and are associated with different action tendencies), in the present study it appeared that the events that elicited sadness were rated as more important than the events that elicited anger. This difference has also been found in other studies (e.g., Verduyn, Van Mechelen, & Tuerlinckx, 2011). Furthermore, in the present study, sharing sadness was associated with an immediate increase in the goal relevance of the event. Taken together, these findings suggest that, in the case of sadness, the emotion-eliciting events are considered as more important, and that highlighting this importance may be part of the sharing; this, in turn, may explain the increase in goal relevance immediately after the sharing.

A high ecological validity must be recognized as one of the major strengths of this research: We investigated emotionally important events, reported by participants as these events occurred in their lives. We then traced the time course, expression, and outcomes of these emotions as experienced by participants day to day. Furthermore, the growth curve analyses allow for a fine-grained analysis of time-lagged effects.

Apart from these strenghts, the present study also had some limitations. First, we did not take into account the social context in which the sharing took place. For example, we did not control for the type of sharing partner (e.g., partner, family, or friend) or the way in which (s)he reacted (e.g., supportive vs. challenging reaction). In future studies, it may interesting to investigate whether such variables moderate the effects of social sharing.

Second, because of the correlational nature of the study, it is not possible to draw causal claims in relation to our findings. For example, it is difficult to tell whether sharing affected appraisals and appraisals influenced the other emotion components, or rather whether changes in the other components brought about changes in the appraisals.

Third, the data relied on end-of-day reports, which require some retrospection and may consequently be subject to memory biases. As an element for the defense, however, one may note that memory biases only appear to substantively influence people's judgments with delays exceeding 1 day (Dockray et al., 2010).

Fourth, participants reported on their emotions as part of the data collection process. This in itself might represent a form of disclosure, albeit a relatively impoverished one. However, some researchers have shown that simply labeling emotions can diminish their intensity (Lieberman, Inagaki, Tabibnia, & Crockett, 2011).

Finally, the sample mainly consisted of female participants. This may be somewhat troublesome, as it has been shown that women use coping strategies that involve verbal expression (such as seeking social support for emotional reasons and positive self-talk) more often than men (Tamres, Janicki, & Helgeson, 2002). However, previous research has also found no evidence for sex differences in the extent of social sharing (Rimé, 2009).

To share, or not to share? That was the question with which we started this article—a question that is of major importance, as social sharing is an often-used strategy, both in everyday life and in psychological practice; a question that can only be answered properly, provided that we correctly understand the effect of social sharing on emotional processing. The present study was the first to investigate this effect while simultaneously taking into account distinctions between different emotions, between different emotion components, and between immediate and delayed effects of social sharing. This more fine-grained approach paid off, as the impact of social sharing appeared to depend on all three distinctions as well as on their interplay. In particular, it was found that sharing anger leads to several immediate and delayed beneficial effects, whereas sharing sadness leads to limited positive effects that emerge later on. To share, or not to share: Apparently an easy question, yet one that requires a fairly nuanced answer.

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