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People generally share their emotions with others and believe that they will recover from their emotions after having talked about them. The aims of the present studies were to examine whether (1) talking about a specific emotional episode really facilitates emotional recovery (‘recovery’ effect) and (2) talking about emotions leads to perceived benefits (‘perceived benefits’). Consistently in the two studies, a decrease of emotional impact was found over time for participants in all conditions. Contrary to expectations, participants assigned to talk about their emotions did not demonstrate beneficial recovery effects at 3 or 7 days or 2 months compared with participants assigned to a factual description of the event (experiment 1), to the expression of another emotional event (experiment 2), to a trivial control condition (experiments 1 and 2) or to a non-talking condition (experiment 2). However, in the two experiments, participants assigned to talk about negative emotional experiences reported more subjective benefits from the session than control participants. The role of personal beliefs about the effects of social sharing of emotion is discussed.

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In everyday life, people generally manifest a marked need to talk after they have experienced emotional events. Using methods as diverse as diary reporting of daily emotions, autobiographic recall of past emotional episodes or the follow-up of critical emotional episodes, field studies showed that when people experience an emotion, they talk about it in 80–100% of cases (for reviews, see Rimé, Philippot, Boca & Mesquita, 1992; Rimé, Finkenauer, Luminet, Zech, & Philippot, 1998). Experimental studies confirmed that exposure to an emotion-eliciting condition provokes an urge to talk about it (Luminet, Bouts, Delie, Manstead, & Rimé, 2000). Thus, it can be assumed that a process of social sharing of emotion develops following emotional episodes. The social sharing of an emotion has typically been found to commence on the day that the event took place and to continue over the subsequent days or weeks as a repetitive phenomenon. People usually share their emotions with intimate others (Rimé et al., 1992, 1998). Taken together, these observations suggest that sharing emotional experiences is a very general manifestation. The question then arises as to why people share their emotions. One would either assume that they do so because it brings them emotional recovery, or because they perceive benefits in sharing.
EMOTIONAL RECOVERY EFFECT

Common sense suggests that sharing one’s emotions contributes to emotional recovery from an event (recovery effect), which means the alleviation of the emotional impact of the memory of the shared emotional episode. Indeed, in an inquiry on a large sample of lay people, some 90% of the respondents endorsed the belief that talking about an emotional experience to someone is relieving (Zech, 1999). This line of reasoning would probably be left unquestioned by most if not all psychologists. Indeed, psychological concepts offer abundant theoretical information that is consistent with such laypersons’ beliefs (see Kennedy-Moore & Watson, 1999). Most schools of psychotherapy consider that expressing emotion is a critical tool to psychotherapeutic change. Numerous potentially beneficial mechanisms involved in sharing emotions have been described in the literature (Kennedy-Moore & Watson, 1999). The mere venting of emotion is thought to lead to relief through a cathartic process (Scheff, 1979). In sum, although most psychotherapy techniques would probably involve more complex interactions than the mere sharing of emotion, mere sharing of emotion is generally assumed to lead to emotional recovery. Surprisingly, this question was left unassessed by empirical research until recently.

In the last two decades, abundant research has examined disclosure of past traumas, using written (e.g. Pennebaker, 1997) or oral form (e.g. Murray & Segal, 1994). The findings from such studies are often understood as supporting the view that ‘putting emotion into words’ is conducive to emotional recovery (see, e.g. Esterling, L’Abate, Murray, & Pennebaker, 1999; Littrell, 1998). However, these studies did not actually address whether putting a specific emotional episode into words leads to recovery from that event. Rather, the procedure consisted of encouraging participants to express themselves about as many past emotional events as they wanted rather than about a specific one (see, e.g. Pennebaker & Beall, 1986). Using general physical or mental health outcomes (e.g. physician visits, reported symptoms, immunological functioning or positive and negative moods) as dependent variables, these studies then assessed how far such general emotional expression leads to health benefits. Thus, in such studies, recovery from an emotional event per se, as assessed by impact measures of that specific event (e.g. intrusive thoughts about the event, search for meaning in the event, arousal when recalling the event) was generally left unconsidered. Even if health effects are found from expressive writing inductions, the studies do not examine whether emotional recovery is the mediator variable. In addition, disclosure studies typically fail to address the specific interpersonal nature of a shared event, namely, that it involves talking about an emotional experience to someone (i.e. sharing).

The interpersonal component involved in social sharing of emotion is usually intentionally excluded in writing studies (e.g. ‘write anonymous essays’) as well as in some talking studies (e.g. talking to a tape recorder, or to a silent ‘confessor’ sitting behind a curtain).

Once the above distinctions are taken into consideration, one is led to recognize that to date only two experimental studies have addressed the recovery effect in an interpersonal context. In both these studies, participants were first exposed to an emotion-inducing film and then assigned to various 2 minute emotion-talking or control conditions (Lepore, Ragan, & Jones, 2000; Mendolia & Kleck, 1993). After a second exposure to the stressor 48 hours later, in both studies benefits were found: participants in the emotion condition had lower perceived stress levels (Lepore et al., 2000) or reported feeling more positive than control participants (Mendolia & Kleck, 1993). However, while Mendolia and Kleck (1993) found that talking about emotions brought physiological recovery effects, no such effects were found in Lepore et al. (2000). These results raise the question of whether talking about past upsetting events—rather than about emotion-inducing films—would bring similar (or even greater) recovery effects. The intensity or severity of the events might be a critical factor in effects. Thus, we need to extend this type of investigation to examine recovery effects from significant emotional episodes experienced in the personal past of individuals.

Recently developed clinical research conducted on the effects of psychological debriefing also provides data that are very relevant for the sharing-recovery relationship. Indeed, psychological debriefing is a group intervention technique develop-
oped for implementation immediately after a potentially traumatizing event in order to prevent the development of a post-traumatic stress disorder (PTSD) among exposed individuals and thus contribute to emotional recovery (see, e.g. Mitchell & Everly, 1995). To this end, participants each describe ‘what happened?’ from their own perspective, express their prominent thoughts concerning the event and communicate ‘what was the worst thing in this situation?’ The technique thus clearly involves the sharing of emotions. Since the use of this technique has been growing rapidly, concern about its effectiveness with respect to reducing post-traumatic impact has emerged. Recent reviews of controlled trials have consistently concluded that psychological debriefing techniques have no efficacy in reducing symptoms of PTSD or other trauma-related symptoms, and have even suggested that the technique may have detrimental recovery effects (Arendt & Elklit, 2001; Rose & Bisson, 1998; Van Emmerik, Kamphuis, Hulsbosch, & Emmelkamp, 2002).

Thus, taken together, results on the recovery effect seem inconclusive. While talking after stress-inducing films tended to induce more recovery, debriefing procedures after traumatic situations provided contrasted conclusions. It thus still remains to be determined whether sharing emotional situations experienced in the personal past of individuals induces recovery.

PERCEIVED BENEFITS OF EMOTIONAL EXPRESSION

In spite of their inconclusive results regarding emotional recovery, psychological debriefing procedures have generally reported clear perceived benefits among participants. Indeed, they consistently concluded that a vast majority of victims or professionals involved in traumatic situations reported that the debriefing was useful and beneficial to them. The question arises as to whether subjective benefits reported after psychological debriefings are specific to these situations or whether they are also found after other situations involving emotional expression. Actually, similar perceived benefits were found in written disclosure studies. For example, Pennebaker and Beall (1986) asked participants who had written about traumatic experiences to answer the following open-ended question ‘Looking back on the experiment, do you feel as if it has had any long-lasting effects?’ The authors reported that the collected answers were ‘uniformly positive’ (p. 279). Similarly, participants who had written or talked about painful emotional or traumatic events were more likely to report that the session had been meaningful or valuable than control participants (see, e.g. Greenberg & Stone, 1992). Although this type of outcome was usually considered as a manipulation check, it could also be considered as perceived benefits that arose from the disclosure session. Murray and colleagues were particularly interested in participants’ perceptions of the disclosure effects (see, e.g. Murray & Segal, 1994). They asked participants to rate the extent to which they felt better or more positive about themselves or about their topic as a result of the experiment. They also asked participants whether the disclosure session had helped them. Disclosure conditions consistently scored better on these aspects than controls.

RECOVERY EFFECT AND/OR PERCEIVED BENEFITS?

In sum, previous results have consistently indicated that the expression of emotion elicits perceived benefits. Results regarding emotional recovery contrasted with this unanimity. It is thus essential to disentangle real recovery benefits from reported perceived benefits after the sharing of an emotional experience. The question then arises as to why people report that they benefited from expressing their emotions. One possibility is that perceived benefits result from real recovery effects. Another one is that participants simply appreciated the fact that they had an opportunity to express themselves and that their expression was taken into consideration by someone. Finally, participants could also report such benefits according to their beliefs about the beneficial effects of emotional expression. Indeed, those who believe in the benefits of expression could report more benefits after sharing emotional experiences.

The aims of the present studies were thus (1) to examine the assumption that talking about a specific emotional episode leads to emotional recovery and (2) to examine whether talking about emotions leads to perceived benefits. The two studies also explored potential contributors of both recovery effect and perceived benefits. In the first study, we tested whether confrontation with emotional aspects of the experience was needed to achieve benefits. In the second, we tried to disentangle the two types of effect—recovery and perceived benefits—by varying the emotional experience.
talked about. The role of personal beliefs about the beneficial effects of social sharing of emotion were examined in both studies.

EXPERIMENT 1

The first study tested the impact of emotional versus factual sharing in comparison with a trivial sharing. There are reasons to believe that how one shares an event may differentially influence outcome variables. Although relying on different theoretical postulates, research conducted by Pennebaker and Beall (1986) and by Mendolia and Kleck (1993) suggested that one may need to express emotion-related feelings rather than emotion-related facts to achieve benefits. Indeed, both catharsis (i.e. the venting of emotions) and habituation (i.e. the decrease in intensity of arousal following prolonged exposure to a threatening stimulus) require attention to emotional cues (Foia & Kozak, 1986; Scheff, 1979). It was thus expected that recovery would be faster and that more perceived benefits would be reported in the emotional as compared with the factual group, who would report faster recovery and more benefits than the trivial sharing group.

Method

Participants

Fifty-one undergraduate psychology students (16 males and 35 females) volunteered to participate and received course credits in return. Their mean age was 20.4 years (SD = 1.15). They were randomly assigned to one of the three conditions with the restriction that an equal number of participants ($N = 17$) were in each group. One student did not return for the one-week follow-up. Additionally, nine students did not complete the two-month follow-up. Dropouts did not differ from completers with regard to the type of condition they were assigned to, $\chi^2(2, N = 51) = 1.74$, ns, or with respect to gender, $\chi^2(1, N = 51) = 2.01$, ns.

Procedure

During individual sessions, participants had to recall ‘the most negative upsetting emotional event of their life, one they still thought about and still needed to talk about’. When one was found (it was usually a quick retrieval process, lasting a few seconds to a maximum of one or two minutes), they completed a questionnaire. They first dated the event (month and year), described the episode in a few words, and rated how negative it was at its occurrence. The questionnaire then involved questions on the current emotional impact of the episode.

At completion, participants in the Emotion condition were then invited to talk in detail about the various feelings and emotions they felt during this episode, to examine and express them, to explain why they felt them and describe the implications the episode had for them. Participants in the Fact condition were asked to explain in detail what happened before, during and at the end of the episode but in a purely descriptive manner, thus excluding the emotional aspects of this episode. Participants in the Trivial condition were told to talk in detail about the things and actions they performed on a typical day at the university. The participants talked to the experimenter for 20 minutes following the instructions. The experimenter maintained a warm, non-directive, empathetic attitude. When necessary, she also made statements intended to keep participants talking in the frame of their assigned condition.

Participants were continuously video- and tape-recorded with their consent. Content analyses of the recordings were used to check that the manipulation was correctly executed. For the same purpose, after the interview, participants also completed a questionnaire assessing the content of what they had talked about. After one week and again after two months, participants returned to the laboratory to complete follow-up questionnaires.

Measures

Manipulation Checks. In order to check compliance with the instructions, participants rated the content of what they talked about. Objective measures were also taken from video- and tape recordings.

Participant’s ratings of interview. Just after the interview, participants rated, on seven-point scales (not at all (1)/a great deal (7)) the extent to which they talked about (1) all emotions they felt, (2) emotional aspects in a very detailed manner, (3) profound or intimate topics, (4) distressing topics and (5) important topics.

Objective measures. Length of interview and respective talking duration of the participants and the interviewer were measured from the video-recordings. Audiotaped materials were also transcribed. Due to technical problems, this was not possible for one participant in the Emotion and one in the Fact condition. Content of interview was
analysed for the number of emotion words spoken by the participants. To this end, a French adaptation of the Linguistic Inquiry and Word Count (Francis & Pennebaker, 1993) computer program was used.

**Emotional Recovery.** This questionnaire was completed before and 7 days and 2 months after the interview. It was composed of five scales assessing the intensity of the emotional impact of the event.

**Emotional intensity scale.** Participants rated on a 10-point scale (not at all (0)/a great deal (6)), how intensely the episode evoked the following primary emotions when thinking about it now: joy, sadness, anger, fear, anxiety, disgust, contempt, shame, guilt, and elation. Negative emotions and negatively keyed positive emotions were averaged to obtain a negative emotion score (Cronbach’s α = 0.75).

**Remaining emotional impact.** Participants rated on seven-point scales (not at all (0)/a great deal (6)) how far the episode was (1) recovered from (reversed); (2) still painful; (3) still inducing emotional involvement; (4) still affecting them; (5) still involving hurting/painful thoughts. Ratings were averaged to obtain a remaining emotional impact score (Cronbach’s α = 0.75).

**Search for meaning.** Participants rated on seven-point scales (as above) the frequency of their ruminations about the episode during the last seven days along a seven-point scale (never (0)/6 times or more (6)). Furthermore, they estimated on seven-point scales (not at all (0)/very much (6)) how far during the last seven days the event-related thoughts had been (1) ‘popping up’ in their minds; (2) attention catching; (3) long lasting; (4) involving vivid images; (5) disrupting their current activities; (6) self-provoked; (7) difficult to eliminate and (8) uncontrollable. Ratings were averaged to obtain an intrusive thought score (Cronbach’s α = 0.74).

**Perceived Benefits.** At the two-month follow-up, participants were asked to rate, on seven-point scales (not at all (0)/a great deal (6)), the extent to which the talking session (1) was meaningful to them, (2) helped them to cope with the episode, (3) was of interest to them and (4) changed their perception of the episode. Ratings were averaged to obtain a perceived benefit score (Cronbach’s α = 0.84).

**Beliefs About the Effects of Sharing.** At the two-month follow-up, participants rated on seven-point scales as above the extent to which they believed that (1) talking about an emotional event is relieving or helps to cope with it and (2) talking about emotional experiences to someone they trust is relieving. A score of beliefs was computed by averaging the items (Cronbach’s α = 0.63).

**Results**

**The Emotional Episodes**

Of the 51 reported emotional episodes, 25% dealt with death of a family member, close friend or pet, 20% involved relationship problems among or with close persons (e.g. quarrel, divorce) and 16% centred on love relationship problems (breaking of relationship). Other topics included one’s illness or a close person’s health problem (14%), sexual harassment or abuse (8%), academic problem (6%) and witnessing a car accident (4%). The remaining episodes (7%) were a public humiliation, a drug problem, a suicide attempt and hearing bad news. Eighty-six percent of the topics had at least been talked about once within the first week after the event’s occurrence. The extent to which participants had talked about these events was unrelated to current emotional impact, r(51) = 0.21, ns, thus suggesting that natural social sharing does not account for current impact level.

Confirming the instructions to recall a negative emotional event, episodes were rated as being highly negative at their occurrence (M = 5.38; SD = 0.90 on a scale from 0 = not at all negative to 6 = the most negative event ever possible). The episodes had happened on average 3 years and 8 months before the beginning of the study (SD = 45.25 months). Although the events had happened long ago, they were still upsetting at the beginning of the study (M = 6.29, SD = 2.36, on a scale from 1 = not intense at all to 10 = strongest upset ever experienced in my
life). Conditions did not differ significantly with regard to the period of time elapsed since the episodes’ occurrence, \( F < 1 \), nor to emotional impact before interview, \( F(2, 48) = 1.14 \), ns. Though similar to those reported by Pennebaker and Beall (1986), the vast majority of these episodes could not be characterized as ‘traumatic’ (see diagnostic criterion A of PTSD, DSM-IV, APA, 1994). Rather, most were intense emotional life events such as death of a grandparent, a quarrel with parents or a romantic relationship break-up.

Manipulation Checks

On average, the interviews lasted 20 min and 2 s (SD = 4 min 0 s). They were comparable for duration of participant talking, \( F(2, 45) = 1.51 \), ns, and experimenter talking, \( F(2, 45) = 2.11 \), ns. As expected, participants in the Emotion condition used a larger number of emotion words, talked more about emotional aspects and communicated more the emotions they felt than participants in the Fact condition. The latter differed significantly on these dimensions from participants in the Trivial condition (see Table 1). As expected, participants in the Emotion and Fact conditions were also found to have talked about more profound and intimate, more distressing, and more important topics when compared with participants in the Trivial condition. Thus, these objective and subjective checks clearly indicated that the three groups talked for the same amount of time but about different topics (emotional versus trivial) and that the way they talked was different in the Emotion and Fact conditions.

Emotional Recovery

The facets of the Emotional Impact Questionnaire were subjected to a 3 (condition) \( \times \) 3 (time) between–within repeated measures MANOVA. Throughout the manuscript, Wilks’s lambda is reported for the multivariate tests. The MANOVA yielded a highly significant time effect, \( F(10, 26) = 9.06, p = 0.0001, \eta^2 = 0.78 \). Contrary to expectations, it did not yield a significant time \( \times \) condition effect, \( F(20, 52) = 1.23, \) ns, \( \eta^2 = 0.32 \). The main condition effect did not approach significance either, \( F < 1, \eta^2 = 0.08 \). When examining the univariate ANOVAs on each of the facets, highly significant main effects for time were found for each but one of the variables (0.0001 < \( p < 0.03, 0.11 < \eta^2 < 0.55 \)). Examination of the means indicated that the emotional impact had decreased from pre-interview to seven days after the interview (see results in Table 2, multivariate time effect \( F(5, 43) = 12.84, p = 0.0001, \eta^2 = 0.60 \) and from the seven-day to the two-month follow-up, \( F(5, 31) = 7.97, p = 0.0001, \eta^2 = 0.56 \). However, none of the univariate condition by time interactions approached significance (\( p < 0.15 \)).

The univariate main condition effects did not approach significance (\( p > 0.34 \)). Thus, on the whole, while decreases in emotional impact, negative emotions and intrusive thoughts were observed, interviewing conditions did not differ in their capacity to change the cognitive and emotional aftermath of negative episodes.

Perceived Benefits

Two months after the interview, participants rated how far they estimated that the talking session had been beneficial to them. The ANOVA yielded a significant condition effect, \( F(2, 38) = 4.31, p = 0.02, \eta^2 = 0.19 \). As expected, the planned contrast yielded a highly significant result, \( t(38) = 2.79, p = 0.008 \). As can be seen in Figure 1(a), participants in the Emotion condition (\( M = 3.94, SD = 1.18 \)) rated the talking session as more beneficial as compared with participants in the Fact condition (\( M = 3.57, SD = 1.31 \)), who perceived more benefits as compared with participants in the Trivial condition (\( M = 2.60, SD = 1.22 \)). This clearly confirmed the perceived benefit effect.

The Role of Beliefs

Thus, whereas participants who had shared their emotional experience reported more beneficial effects, they did not show more emotional recovery as compared with those in the other conditions. This suggested that perceived benefits were unrelated to emotional recovery. This result was

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1 An analysis of difference scores (T2-T1; T3-T1) was also used to save degrees of freedom. Results indicated that there were no significant condition effects for means computed by subtracting the pre-test from the one-week post-test, multivariate \( F(10, 86) = 1.41, p > 0.19, \eta^2 = 0.14 \). Results for each variable were, for emotional intensity, \( F(2, 47) = 1.31, p = 0.28, \eta^2 = 0.05 \); for negative emotions, \( F(2, 47) < 1, \eta^2 = 0.04 \); for search for meaning, \( F(2, 47) = 1.91, p = 0.16, \eta^2 = 0.08 \); remaining impact, \( F(2, 47) = 1.84, p = 0.17, \eta^2 = 0.07 \); and intrusive thoughts, \( F(2, 47) < 1, \eta^2 = 0.01 \). Results also indicated that there were no significant condition effects for means computed by subtracting the pre-test from the two-month follow-up, multivariate \( F(10, 64) = 1.59, p < 0.13, \eta^2 = 0.20 \). Results for each variable were, for emotional intensity, \( F(2, 35) < 1, \eta^2 = 0.03 \); for negative emotions, \( F(2, 35) < 1, \eta^2 = 0.05 \); for search for meaning, \( F(2, 35) = 1.93, p > 0.16, \eta^2 = 0.10 \); remaining impact, \( F(2, 35) = 1.57, p > 0.22, \eta^2 = 0.08 \); and intrusive thoughts, \( F(2, 35) = 2.03, p > 0.15, \eta^2 = 0.10 \).
partially confirmed by correlating the two-month recovery indexes (i.e. impact before minus impact 2 months after intervention) with perceived benefits. Out of the five correlations, three were not significant, \( p > 0.15 \), one yielded a trend with the recovery in remaining impact, \( r(41) = 0.22, p = 0.06 \), and one was significant for recovery in negative emotions, \( r(40) = 0.34, p = 0.04 \).

It is possible that these participants reported benefits because they relied on their general belief that talking about emotions is helpful and beneficial. This hypothesis suggests that the general belief

Table 1. Means (SDs in parentheses) of manipulation check questions by condition (experiment 1)

<table>
<thead>
<tr>
<th></th>
<th>Emotion</th>
<th>Fact</th>
<th>Trivial</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Participants’ number of emotion words</td>
<td>59.06a</td>
<td>30.19b</td>
<td>13.18c</td>
<td>29.67****</td>
</tr>
<tr>
<td></td>
<td>(26.42)</td>
<td>(11.87)</td>
<td>(8.28)</td>
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<tr>
<td>Participants’ ratings of the interview</td>
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<tr>
<td>I talked in detail about emotional aspects</td>
<td>5.41a</td>
<td>3.71b</td>
<td>1.65c</td>
<td>40.54****</td>
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<tr>
<td></td>
<td>(0.94)</td>
<td>(1.49)</td>
<td>(1.17)</td>
<td></td>
</tr>
<tr>
<td>I communicated all emotions I felt</td>
<td>5.65a</td>
<td>3.41b</td>
<td>1.94c</td>
<td>28.72****</td>
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<tr>
<td></td>
<td>(1.00)</td>
<td>(1.73)</td>
<td>(1.48)</td>
<td></td>
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<tr>
<td>I talked about a profound and intimate topic</td>
<td>6.35a</td>
<td>5.12b</td>
<td>2.24c</td>
<td>34.14****</td>
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<td></td>
<td>(0.79)</td>
<td>(2.00)</td>
<td>(1.44)</td>
<td></td>
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<tr>
<td>I talked about a distressing topic</td>
<td>4.53a</td>
<td>3.76b</td>
<td>1.65c</td>
<td>10.88****</td>
</tr>
<tr>
<td></td>
<td>(1.81)</td>
<td>(2.33)</td>
<td>(1.32)</td>
<td></td>
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<tr>
<td>I talked about an important topic</td>
<td>6.00a</td>
<td>6.12b</td>
<td>2.06c</td>
<td>56.20****</td>
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<tr>
<td></td>
<td>(1.22)</td>
<td>(1.22)</td>
<td>(1.29)</td>
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Higher scores reflect greater expression. Means with different subscripts are significantly different at \( p < 0.05 \), using Bonferroni post hoc test.

**** \( p < 0.0001 \).

![Figure 1](image)
Table 2. Means (SDs in parentheses) of recovery effects before and after the interview and at the follow-up (experiments 1 and 2)

<table>
<thead>
<tr>
<th>Measures</th>
<th>Experiment 1</th>
<th></th>
<th></th>
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<th>Experiment 2</th>
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<td>Conditions (C)</td>
<td>Effects</td>
<td>Conditions</td>
<td>Effects</td>
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<td>Fact</td>
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<td>Other-emotion</td>
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<td>Emotional intensity</td>
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<tr>
<td>Pre-test</td>
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<td>1.31</td>
<td>4.75</td>
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<tr>
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<td>(2.75)</td>
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<td>(2.33)</td>
<td>(2.16)</td>
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<td>Post-test&lt;sup&gt;a&lt;/sup&gt;</td>
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<td>4.50</td>
<td>5.00</td>
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<td>(2.61)</td>
<td>(2.60)</td>
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<td>(2.40)</td>
<td>(2.58)</td>
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<tr>
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<td>(1.92)</td>
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<tr>
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<td>3.02</td>
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<td>53.59****</td>
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<td></td>
<td>(0.95)</td>
<td>(1.11)</td>
<td>(1.15)</td>
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</tr>
<tr>
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<td>2.17</td>
<td>2.45</td>
<td></td>
<td></td>
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<td></td>
<td>(0.88)</td>
<td>(0.84)</td>
<td>(1.12)</td>
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<td></td>
<td>(1.01)</td>
<td>(0.90)</td>
<td>(1.07)</td>
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<tr>
<td>Pre-test</td>
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<td>3.02</td>
<td>3.08</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>1.91</td>
<td>2.58</td>
<td>2.47</td>
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<td>(1.19)</td>
<td>(1.70)</td>
<td>(1.22)</td>
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<td></td>
<td></td>
<td>(1.32)</td>
<td>(1.18)</td>
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<td>2.92</td>
<td>2.64</td>
<td></td>
<td></td>
<td></td>
<td>2.36</td>
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<td></td>
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<td>(1.42)</td>
<td>(1.24)</td>
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<tr>
<td></td>
<td>(1.83)</td>
<td>(1.66)</td>
<td>(1.40)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>1.78</td>
<td>9.31****</td>
</tr>
<tr>
<td>Pre-test</td>
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<td>3.66</td>
<td>3.61</td>
<td></td>
<td></td>
<td></td>
<td>3.17</td>
<td>3.52</td>
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<tr>
<td></td>
<td>(1.05)</td>
<td>(0.93)</td>
<td>(1.21)</td>
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<td></td>
<td></td>
<td>(1.32)</td>
<td>(1.50)</td>
</tr>
<tr>
<td>Post-test</td>
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<td>3.14</td>
<td>3.57</td>
<td></td>
<td></td>
<td></td>
<td>2.70</td>
<td>3.21</td>
</tr>
<tr>
<td></td>
<td>(1.37)</td>
<td>(1.15)</td>
<td>(1.16)</td>
<td></td>
<td></td>
<td></td>
<td>(1.32)</td>
<td>(1.46)</td>
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<tr>
<td>Follow-up</td>
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<td>2.83</td>
<td>3.03</td>
<td></td>
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<tr>
<td></td>
<td>(1.45)</td>
<td>(1.15)</td>
<td>(1.17)</td>
<td></td>
<td></td>
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<td>Intrusive thoughts</td>
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<td></td>
<td></td>
<td></td>
<td>&lt;1</td>
<td>7.18**</td>
</tr>
<tr>
<td>Pre-test</td>
<td>2.39</td>
<td>2.82</td>
<td>2.68</td>
<td></td>
<td></td>
<td></td>
<td>2.25</td>
<td>2.40</td>
</tr>
<tr>
<td></td>
<td>(1.00)</td>
<td>(1.35)</td>
<td>(0.83)</td>
<td></td>
<td></td>
<td></td>
<td>(1.51)</td>
<td>(1.47)</td>
</tr>
<tr>
<td>Post-test</td>
<td>2.18</td>
<td>2.40</td>
<td>2.40</td>
<td></td>
<td></td>
<td></td>
<td>2.08</td>
<td>2.18</td>
</tr>
<tr>
<td></td>
<td>(0.98)</td>
<td>(0.98)</td>
<td>(1.19)</td>
<td></td>
<td></td>
<td></td>
<td>(1.41)</td>
<td>(1.39)</td>
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<tr>
<td>Follow-up</td>
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<td>1.80</td>
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<tr>
<td></td>
<td>(1.38)</td>
<td>(0.93)</td>
<td>(1.04)</td>
<td></td>
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</tr>
</tbody>
</table>

Higher scores represent greater intensity of emotion, stronger need to search for the meaning etc. In experiment 1, emotional intensity ranges between 1 and 10; in experiment 2, it ranges between 0 and 10. Univariate repeated measure tests for the pre- to post-interview MANOVA are reported. The other tests are reported in the text.

<sup>a</sup>For experiment 1, the post-test was 7 days after the interview (N = 50); for experiment 2, it was 3 days after the interview (N = 256).

<sup>b</sup>For experiment 1, the follow-up was 2 months after the interview (N = 41).

<sup>*</sup>*p < 0.05. **p < 0.01. ***p < 0.005. ****p < 0.0001.
could independently influence reported benefits. To test this hypothesis, an ANCOVA on the perceived benefits score was used with the beliefs about the effects of social sharing as covariate. Results revealed that the model was highly significant, $F(3, 37) = 6.59, p < 0.001, \eta^2 = 0.35$. The effect of the covariate was highly significant, $F(1, 37) = 9.28, p = 0.004, \eta^2 = 0.20$, suggesting that perceived benefits were indeed influenced by participant’s beliefs about the beneficial effects of social sharing. It is noteworthy that the main Condition effect remained significant, $F(2, 37) = 5.06, p = 0.01, \eta^2 = 0.22$. Thus, perceived beneficial effects of social sharing were associated both with personal beliefs and emotional expression.

By contrast, the two-month emotional recovery indexes were unrelated to beliefs about the beneficial effects (for the five recovery scores, $p > 0.17$). This suggested that people who believed in the beneficial effects of social sharing did not recover more than others. However, beliefs could actually have been more influential for participants who shared their event (i.e. Emotion and Fact conditions). To test this moderation hypothesis, a median split on participant’s beliefs was conducted. This variable was entered in a 3 (condition) $\times 3$ (time) $\times 2$ (low versus high belief) MANOVA on the five facets of emotional impact. Results revealed that, with the exception of the significant effect of time, none of the multivariate or univariate effects approached significance, indicating that beliefs did not affect recovery outcomes, even as a function of sharing condition.

**Discussion**

Results failed to confirm a ‘recovery’ effect, i.e. that socially sharing an emotional experience leads to emotional recovery. They suggested that talking in detail about a past emotional experience was not sufficient to bring about emotional recovery. In addition, recovery effects were not mediated by the focus of social sharing on feelings and emotions. Contrary to a simple venting hypothesis, this indicated that attending to and expressing emotional cues was not sufficient to bring about recovery.

Nevertheless, participants who had talked about their emotional event evidenced a marked ‘perceived benefit’ effect. They indeed perceived more benefits than participants who did not share their event. Whereas one would expect this effect to be strongly associated with the ‘recovery’ one, this was not the case. Rather, perceived benefits were related to participant’s beliefs about the beneficial effect of social sharing. Although paradoxical, these results are consistent with findings from studies on psychological debriefing procedures, which also showed no emotional recovery effects but, rather, strong perceived benefit effects. The question remains of why participants in the emotion condition reported more perceived benefits while they did not recover more from their event than other participants.

**EXPERIMENT 2**

The first aim of this study was to understand the origin of the perceived benefits. If ‘perceived benefit’ effects are specifically related to emotional sharing, benefits should then be reported after sharing any emotional topic, as was observed with the disclosure studies reviewed above. On the contrary, recovery effects should be expected only when people talk about that specific event. In other words, recovery should not be observed after socially sharing a different emotional situation. Therefore, in this study, we compared a condition in which participants had to assess and talk about the same event with a condition in which participants had to assess an emotional event but talk about a different one. Perceived benefits were expected in both emotional conditions while recovery effects were expected only among participants sharing the event assessed in the questionnaire.

The second aim of this study was to understand the origin of the observed decrease of emotional impact through time for all participants, even in the Trivial condition. This result could be due to several factors. For example, it is possible that unspecific beneficial factors associated with the personal contact with the experimenter, or with the talking period, led participants to recover. Although less likely, given the average time since event, the decrease of impact could also reflect the course of usual adjustment and emotional recovery over time. To control these effects, experiment 2 included both a trivial-talking and an assessment-only condition.

Finally, in this study, the likelihood of finding a recovery effect was enhanced by increasing the statistical power (increased $N$). Also, the procedure was closer to ecological sharing conditions that were not present in experiment 1 and that could possibly have prevented recovery benefits from being found (e.g. the same interviewer who was unknown to the sharer; artificial laboratory conditions). It also examined the incremental explained variance in emotional recovery due to natural con-
frontation strategies (i.e. intrusive thoughts and social sharing) after the intervention. Indeed, consistent with the idea that for habituation to occur people should confront their emotions in a repetitive manner (see, e.g. Foa & Kozak, 1986), Mendolia and Kleck (1993) found that those who recovered from the emotion-inducing film were those who talked and thought more about the episode between sessions. Participants high in social sharing and intrusive thoughts between sessions should thus be expected to recover more from their emotions than those low in confrontation strategies.  

**Method**

**Interviewers**
Third and fifth-year psychology students enrolled in an advanced class on ‘Emotion and expression’ were asked to act as interviewers. Although they were free to refuse, 81% of the students in the class voted to assist with the interviewing. It should be stressed that these students had some interviewing experience: they all had previously been involved in a course program on interviewing. During a briefing session, the 329 psychology students (277 females and 52 males) received an envelope with the sets of questionnaires and detailed written instructions on how to conduct two interviews (without being told the hypotheses). Thus, in total, 658 interviews were conducted. For didactic reasons (i.e. training in the practice of interviewing), the 329 student-interviewers were asked to conduct an interview on an emotional episode (i.e. Target-emotion condition). For a second interview, the same interviewers were then randomly assigned to one of three control conditions (i.e. Other-emotion condition, n = 116; Trivial condition, n = 108; and No sharing condition, n = 105, see Procedure).

**Participants**

In total, 658 participants recruited from the interviewers’ acquaintances were interviewed (431 women and 227 men). A severe screening of the collected materials was performed. One hundred seventy-two participants (26.1%) were discarded from the data for various reasons (i.e. not a recent episode (older than 3 years) or missing date of occurrence, missing data for interview content, talking about the target episode although not instructed to and/or not finding a second emotional episode in the Other-emotion condition).  

The valid sample consisted of 486 participants (319 women and 167 men), with respectively 287, 79, 65 and 55 of them in the Target-emotion, the Other-emotion, the Trivial and the No sharing conditions. To allow statistical analyses on conditions involving an equivalent number of participants, the data of the Target-emotion condition was randomly divided into five equivalent-sized sub-samples. Each of the participants in this condition was thus randomly selected and randomly assigned to one of five Target-emotion sub-samples (N = 57, 51, 58, 62 and 59). Each of the sub-samples data files was then merged with the Other-emotion, Trivial and No sharing data files. Analyses were performed for each of these five equivalent sized sub-sample data. They yielded five times equivalent results. Results are presented here only for the first randomized data file which was composed of 256 participants (172 women and 84 men), with respectively 57, 79, 65 and 55 participants in the Target-emotion, Other-emotion, Trivial and No sharing condition.  

Participants’ age ranged from 17 to 74 years (M = 27.05, SD = 10.73). They were comprised of students (58%), employees (32%), house keepers (6%), unemployed (3%) and retired people (1%). The vast majority of participants (90.5%) had education beyond the high school level. Participants did not differ between conditions with regard to their age, F < 1, or gender, χ²(3, N = 256) = 1.53, ns.

**Procedure**

At the beginning of the first session, all participants had to recall a recent unrecovered emotional episode (i.e. ‘an episode that when you think about

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2 Two main factors led to the exclusion of data from the pool. For homogeneity purposes, emotional episodes that had happened more than 3 years before the beginning of the study were eliminated (n = 76). Exclusion for this reason did not differ between conditions, χ² < 1. However, participants were excluded only in the three control conditions because they had talked about the target episode (n = 88). After cueing the recall of an unrecovered emotional episode, it seemed difficult to restrain participants from talking about it.

3 Although interviewers should be considered as involving a within-subject variable, we did not investigate the interviewer effect in our analyses because the design involved only two interviews per interviewer. This means that only one degree of freedom could have been considered by interviewer.

4 These hypotheses were also tested in experiment 1. They yielded non-significant results for interaction terms. However, the number of participants in this study did not provide sufficient statistical power to trust these results.
it, you still feel painful emotions’). When one was found, participants immediately answered the Emotional Impact Questionnaire. In the Target-emotion condition, participants were then asked to talk in great detail about their unrecovered episode and to give a detailed description of the circumstances, the feelings and emotions experienced and the meanings and consequences that the episode might have had. In the Other-emotion condition, participants had to recall another recent emotional episode that had been intense and were then asked to talk about this second episode with the same interviewing instructions as in the Target-emotion condition. In the Trivial condition, participants were interviewed on trivial topics (e.g. last film, typical work day). These three interview conditions were conducted according to a non-directive style. The participant was given the initiative, whereas the interviewer manifested warmth and interest. In a fourth ‘No sharing’ condition, no interview was conducted. After completion of the questionnaire, participants were immediately thanked and the appointment was made for the follow-up session conducted 3 days later. Interviewers were asked to randomly start interviewing according to either the Target-emotion condition, or the other condition they received.

To check for manipulation compliance, interviewers had to note the time when the narrative had started and ended. They also briefly described what the participant had talked about. At the beginning of the second session conducted 3 days later, participants rated other manipulation checks, their emotional impact, and perceived benefits of the first session. Participants who had not had the possibility to share their emotions about the target episode were then given the opportunity to do so if they wanted to. They were then thanked for participation and debriefed.

Measures

Before the Interview. Participant’s beliefs about the effects of social sharing of emotions. The same questions as in experiment 1 were used.

Emotional recovery. Participants noted the date of occurrence of the unrecovered emotional event and described it in few words (in a 3cm × 15cm rectangle). Participants rated four dimensions of emotional impact. First, they rated the current emotional intensity of the episode on a scale anchoring from no upset (0) to strongest upset ever experienced in my life (10). Second, they rated the remaining emotional impact of the episode (three first questions of the Remaining impact facet of experiment 1). Ratings were averaged to obtain a remaining impact score (Cronbach’s α = 0.75). Third, they assessed their current search for meaning in the experience. Items were the same as those used in experiment 1 but items 5 and 6 were replaced by asking them how far they still needed to (1) put order into what happened, (2) remember the details of what happened and (3) modify what had happened. These items were averaged to obtain a search for meaning score (Cronbach’s α = 0.74). Fourth, they rated the intrusive thoughts they had had about the episode during the previous three days. A three-item version of the questionnaire used in experiment 1 was used: it included the question on the frequency of mental ruminations, question 5 (on disruptiveness) and question 7 (on uncontrollability). These items were averaged to obtain an intrusive thought score (Cronbach’s α = 0.67). Finally, they rated on a seven-point scale (not at all (0)/more than 6 times (6)) their social sharing frequency during the last three days. In the Other-emotion condition, participants also answered a few questions about their second event (e.g. a one-sentence description of the episode). The latter served as manipulation checks.

Follow-Up Session. Manipulation checks. Participants rated, on seven-point scales (not at all (0)/a great deal (6)) the extent to which they (1) had talked in a very detailed manner about emotional aspects, (2) had overtly expressed strong emotions and (3) were detached or not involved in what they were talking about.

Emotional recovery. Participants assessed the same questions about the Target emotional event as before the interview.

Perceived benefits of the session. Participants evaluated whether they felt that the session had helped them. They rated on seven-point scales (not at all (0)/a great deal (6)) the extent to which the session was (1) meaningful, (2) useful and (3) satisfying. Ratings were averaged to obtain a perceived general benefits score (Cronbach’s α = 0.76). On the same scales, they also rated the extent to which (1) the session made them feel good, (2) the session relieved their emotions, (3) the session allowed them to feel better and (4) they felt at ease. Ratings were averaged to obtain a perceived relief score (Cronbach’s α = 0.75). On the same scales, they rated the extent to which the session had helped them (1) in understanding themselves better, (2) in seeing more clearly inside themselves and (3) in putting order in themselves. Ratings were aver-
aged to obtain a perceived cognitive benefit score (Cronbach’s $\alpha = 0.94$). They finally rated whether (1) they felt understood, (2) they experienced comforting words or behaviors and (3) the session helped them in getting the opinion of the other. Ratings were averaged to obtain a perceived interpersonal benefit score (Cronbach’s $\alpha = 0.70$).

Results

Description of the Collected Emotional Materials

Of the 256 recent negative emotional episodes, 33% involved relational problems with close persons or groups (e.g. quarrels, rejection), 27% dealt with death or permanent separation from a close person and 9% centered on the failure to achieve what was hoped for (e.g. failure to pass an examination). Other topics included receiving bad news (e.g. not selected for a job) (7%), physical pain or sickness (6%), physical aggression by others or to others (3%), anger about inappropriate rewards for self (feeling unjustly treated) (3%) or temporary separation (2%). The remaining episodes (10%) were scattered across other categories of antecedent situations.

The episodes had happened on average 8 months before the beginning of the study (SD = 10.10 months; range = 0–36 months). The emotional intensity still felt before the interview was on average 4.71 (SD = 2.25) on a scale from 0 (no upset) to 10 (strongest upset ever experienced in my life). These events could thus be considered as moderately intense at the beginning of the study. Only 3.5% of participants had not shared their experience at all before the study. As was already the case in experiment 1 the extent to which participants had initially shared their emotions was unrelated to current emotional impact, $r(256) = 0.08, ns$, suggesting that sharing did not contribute to current impact level. Conditions did not significantly differ with regard to the time elapsed since the episode’s occurrence, $F(3, 252) = 1.66, ns$, or to emotional impact before interview, $F = 1$.

Manipulation Checks

The length of interview varied on average between 30 and 33 minutes in the three interview conditions and less than one minute in the No sharing condition (see Table 3). As expected, Bonferroni post hoc tests on the manipulation check ratings indicated that participants in the Target-emotion and Other-emotion conditions had talked more about emotional matters and showed more their emotions than those in the Trivial and No sharing conditions. Participants in the No sharing condition reported talking less about emotional topics than participants in the Trivial condition. Participants who had talked about an emotional episode also reported feeling less involved than participants in the Trivial condition. Noteworthily, talking about an unrecovered emotional event (Target-emotion) was not differentiated on any of the emotional expression indices in comparison to the sharing of a second emotional event (Other-emotion).

Emotional Recovery

The four facets of emotional impact were simultaneously subjected to a 3 (condition) $\times$ 2 (time) MANOVA. Across the four facets, a highly significant multivariate effect for time was obtained, $F(4, 248) = 12.81, p < 0.0001, \eta^2 = 0.17$. Contrary to expectations, it did not yield a significant time $\times$ condition effect, $F < 1, \eta^2 = 0.01$. The main

Table 3. Comparison of group means (SDs in parentheses) for the manipulation checks (experiment 2)

<table>
<thead>
<tr>
<th>Measures</th>
<th>Target-emotion ($n = 57$)</th>
<th>Other-emotion ($n = 79$)</th>
<th>Trivial ($n = 65$)</th>
<th>No Sharing ($n = 55$)</th>
<th>$F(3, 254)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview length (in min.)</td>
<td>30.59$a$</td>
<td>30.00$a$</td>
<td>33.40$a$</td>
<td>0.82$b$</td>
<td>191.54****</td>
</tr>
<tr>
<td>(10.54)</td>
<td>(7.84)</td>
<td>(9.94)</td>
<td>(2.68)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participants’ rating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I talked about emotion</td>
<td>4.12$a$</td>
<td>3.84$a$</td>
<td>2.05$b$</td>
<td>0.96$c$</td>
<td>42.44****</td>
</tr>
<tr>
<td>(1.73)</td>
<td>(1.94)</td>
<td>(1.73)</td>
<td>(1.55)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I overtly expressed emotion</td>
<td>2.63$a$</td>
<td>2.52$a$</td>
<td>1.46$b$</td>
<td>0.83$b$</td>
<td>13.59****</td>
</tr>
<tr>
<td>(1.94)</td>
<td>(1.99)</td>
<td>(1.69)</td>
<td>(1.49)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was distant</td>
<td>1.14$a$</td>
<td>1.48$a$</td>
<td>2.33$b$</td>
<td>2.12$ab$</td>
<td>4.07**</td>
</tr>
<tr>
<td>(1.71)</td>
<td>(1.57)</td>
<td>(1.83)</td>
<td>(2.09)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Higher scores represent greater sharing of emotion, greater expression of emotion, greater distance. Means with different subscripts are significantly different at $p < 0.05$, using a Bonferroni post hoc test.

**$p < 0.01$. ****$p < 0.0001$.**
condition effect also did not approach significance, $F(12, 656) = 1.33$, $ns$, $\eta^2 = 0.02$. Thus, the intervention did not result in recovery effects. Univariate repeated measure ANOVAs on each of the emotional impact facets confirmed highly significant main effects for time for each facet (see Table 2). Similarly to experiment 1, examination of the means indicated that emotional intensity, search for meaning, remaining emotional impact and intrusive thoughts had decreased from before to three days after the intervention, irrespective of the assigned condition. Thus, this confirmed the failure to show a recovery effect.²

Natural Confrontation as a Moderator of Recovery

We checked whether confrontation processes (i.e. social sharing and intrusive thoughts) occurring between sessions could explain some part of the variance in the recovery effect over time. Respondents were divided into two groups, those who had shared their event between sessions (59%) and those who had not (41%). We then conducted a 2 (sharing) $\times$ 4 (condition) $\times$ 2 (time) repeated measure MANOVA on the impact measures. There was a time main effect, $F(4, 244) = 11.47$, $p < 0.0001$, $\eta^2 = 0.16$, which confirmed that the impact decreased over time (univariate effects, $0.0001 < p < 0.01$, $0.03 < \eta^2 < 0.12$). There was also a sharing main effect, $F(4, 244) = 3.38$, $p = 0.01$, $\eta^2 = 0.05$. This effect was found on each of the variables (univariate tests, $0.0001 < p = 0.06$, $0.01 < \eta^2 < 0.06$). It revealed that those who did not share between sessions had lower levels of impact than sharers (e.g. for emotional intensity, estimated means are respectively 4.22 versus 4.76). This suggested that natural sharing was an indicator of lower recovery from the emotional event. None of the multivariate or univariate interactions involving time effects were revealed to be significant, $p > 0.14$, $\eta^2 \leq 0.02$, indicating that neither induced nor natural social sharing occurring between sessions accounted for the observed recovery over time.

The same procedure was used for intrusive thoughts that occurred between the first and second session, but using a median split (median = 2). The MANOVA was conducted on the three remaining emotional impact facets. Similar results were found: a main time effect, $F(3, 245) = 15.32$, $p < 0.0001$, $\eta^2 = 0.16$, and a main rumination effect, $F(3, 245) = 46.12$, $p < 0.0001$, $\eta^2 = 0.36$. These indicated that the impact had decreased from the first to the second session and that higher upset, remaining emotional impact and search for meaning in the event were found among those who had high levels of intrusive thoughts between sessions. Here, in addition, a multivariate time by rumination interaction was obtained, $F(3, 245) = 4.79$, $p = 0.003$, $\eta^2 = 0.06$, as well as univariate time by rumination interactions for each of the facets (e.g. for emotional impact, $F(1, 247) = 5.19$, $p = 0.025$, $\eta^2 = 0.02$). Post hoc analyses indicated that the emotional impact had significantly decreased among low rumination participants, $F(1, 137) = 14.47$, $p = 0.0001$, $\eta^2 = 0.10$ ($M$(impact pre-session) $= 3.80$ versus $M$(post-session) $= 3.20$), while this was not the case for high ruminators, $F < 1$, $\eta^2 = 0.00$ ($M$(impact pre-session) $= 5.76$ versus $M$(post-session) $= 5.72$). Similar results were obtained for the three emotional impact facets. This indicated that, contrary to expectations, those who recovered were those who naturally thought the least about their experience. This result is contrary to the view that the natural confrontation strategy was beneficial. None of the multivariate or univariate condition by time or triple interactions approached significance, $p \geq 0.60$, indicating that this effect was independent from condition assignment.

Perceived Benefits

Each of the four ANOVAs yielded highly significant results (for perceived general benefits, $F(3, 252) = 6.04$, $p < 0.001$, $\eta^2 = 0.07$, for perceived relief, $F(3, 252) = 6.47$, $p < 0.0005$, $\eta^2 = 0.07$, for perceived cognitive benefits, $F(3, 252) = 4.40$, $p < 0.005$, $\eta^2 = 0.05$, and for perceived interpersonal benefits, $F(3, 252) = 24.24$, $p < 0.0001$, $\eta^2 = 0.22$). Bonferroni post hoc tests revealed that perceived benefits never significantly discriminated the Target-emotion from the Other-emotion conditions (see Figure 1(b)). However, talking about emotional episodes induced more general benefits than talking about personal but non-emotional topics or no talking at all (these two latter conditions not differentiating one from the other). Talking about emotional episodes induced more perceived relief than talking about trivial topics or no talking at all. Both emotional conditions also significantly differed from the Trivial condition with regard to perceived cognitive benefits, but not from the No sharing condition. It is possible that talking about

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²The recovery effect was also tested on the subsample of very recent events (in the past 3 months; $M$(time of occurrence) $= 1.06$ months, $SD = 1.07$; remaining $N = 124$). Similar results were found, with highly significant time main effects ($p < 0.001$) but no condition by time interactions ($p > 0.20$). This suggested that the date of occurrence did not account for the non-significance of the recovery hypothesis.
personal but quite trivial matters (e.g. one typical work day) may induce a reduction of meaning as compared to no sharing at all. Finally, post hoc tests on the interpersonal benefits indicated that participants in both emotion conditions had perceived the first session as being more interpersonally beneficial as compared to participants in the Trivial condition, who themselves had perceived more interpersonal benefits as compared to participants in the No sharing condition.

**The Role of Beliefs**

As in experiment 1, we needed to examine whether people reported beneficial effects because they believed it should be beneficial and/or because of the condition assignment. Correlations between the four indices of emotional recovery and the four perceived benefits scores yielded only one significant result out of 16 correlations, suggesting that emotional recovery was not associated with perceived benefits. A multivariate ANCOVA on the perceived benefit scores was used with the beliefs about the effects of social sharing as covariate. Consistent with experiment 1, the models for each of the perceived benefits were highly significant ($p < 0.0001$, $0.08 < \eta^2 < 0.24$). The effect of the covariate was highly significant for each benefit type (respectively perceived general benefits, $p < 0.005$, \(\eta^2 = 0.03\), perceived relief, $p < 0.0001$, \(\eta^2 = 0.06\), perceived cognitive benefits, $p < 0.01$, \(\eta^2 = 0.03\), and perceived interpersonal benefits, $p < 0.05$, \(\eta^2 = 0.02\)). This suggested that perceived benefits were indeed influenced by participants’ beliefs about the beneficial effects of social sharing. The main condition effects also remained significant (respectively, $p < 0.001$, \(\eta^2 = 0.07\), $p < 0.0001$, \(\eta^2 = 0.07\), $p < 0.005$, \(\eta^2 = 0.05\), and $p < 0.0001$, \(\eta^2 = 0.22\)). Thus, confirming the results of experiment 1, perceived beneficial effects of social sharing were associated with both personal beliefs and the induced emotional expression.

As in experiment 1, none of the correlations between recovery indexes and belief scores approached significance, $-0.06 < r(256) < 0.09$, $p > 0.16$. Again, people who believed in the beneficial effects of social sharing did not recover more than others. These correlations were also not significant for participants who had shared their emotional event (Target-emotion group), $-0.20 < r(57) < -0.01$, $p > 0.14$, suggesting that participants who believed strongly in beneficial effects of social sharing did not recover more, even when they talked about their emotions. The moderation test, using a median split on participants’ beliefs, was conducted. This variable was entered in a 3 (condition) $\times$ 2 (time) $\times$ 2 (low versus high belief) MANOVA on the four facets of emotional impact. As in experiment 1, none of the multivariate or univariate interactions involving the belief variable approached significance, indicating that beliefs did not affect recovery outcomes as a function of sharing condition.

**GENERAL DISCUSSION**

The logic on which the studies relied was that both common sense and theoretical hypotheses propose that sharing emotions should lead to both recovery and perceived benefits. According to this assumption, expressing emotions through words represents the functional process *per se* (whatever the efficient underlying process). Confirming this, in both experiments, a perceived benefit effect was strongly confirmed, regardless of the nature of the shared episode. These results are consistent with the literature on immediate psychological debriefing and on emotional disclosure. In our experiments, expressing emotions produced a variety of perceived benefits. Specifically, participants who had expressed their emotions reported emotional relief and cognitive benefits, as if the interaction had given them more insight and had helped them to put things into more order. Participants in the emotion conditions also felt that the session had brought them some interpersonal benefits, such as feeling understood or being more comforted by the listener. These subjective benefits were more present in conditions in which participants had shared emotional matters. These results were consistent with theoretical hypotheses underlying the recovery effect. However, perceived benefits were unrelated to observed recovery outcomes. Moreover, sharing emotions was not found predictive of emotional recovery.

This paradox may be explained in at least two ways. First, it is possible that reported beneficial effects are based on an illusion. In support of this hypothesis, perceived benefits were significantly explained by the *belief* that social sharing of emotion is beneficial. This suggested that the reported benefits were influenced by people’s beliefs. People may thus have reported beneficial effects in the upholding of a cognitive coherence with their beliefs. Furthermore, illusions of control and optimism may be critical to mental health and
psychological adjustment (Taylor, 1983) and they may even have evolutionary significance. They may contribute to maintaining the self as a highly organized information processing system and produce behavioral persistence (Greenwald, 1980).

Thus, people may keep reporting that sharing helped them even if it did not really lead to recovery from the event. Also, retaining the illusion that sharing will be beneficial for the future may be more important in and of itself than the actual beneficial recovery effects.

There is also a second explanation to the above paradox. Indeed, even after partialling out the variance explained by the beliefs, the condition effect on perceived benefits remained significant, indicating that talking about emotions per se induced perceptions of benefits. It is thus also possible that people really benefited from social sharing of emotions but that it had other functions. In other words, perceived benefits could be explained by objective changes in specific dependent variables that were not tapped in the studies. Our research focused on intrapersonal effects of talking about emotions. However, in natural settings, social sharing of emotion often implies interpersonal processes, as one talks about something to someone. Recipients of social sharing often exchange ideas and experiences, give advice, offer recognition, validation and support and may also minimize the experience of the sharing person. Partners are involved in complex interpersonal interactions that may (or may not) prove to be beneficial. In our studies, the interviewers’ role was to listen empathetically, in a non-directive and neutral manner, a clinical technique commonly used in client-centered therapies (Rogers, 1957). In such circumstances, sharing emotions may have involved social functions rather than intrapersonal ones (e.g. enhancement of interpersonal relationships and social integration; see Laurenceau, Feldman-Barrett, & Pietromonaco, 1998; Rimé et al., 1998). There is a need to further investigate such effects.

Contrary to our hypotheses, the findings of the two studies provided no evidence for a beneficial recovery effect. Following our results, it seems unlikely that simple social sharing of emotion leads to recovery. This conclusion is congruent with conclusions from recent meta-analytic reviews of studies which assessed the effects of immediate psychological debriefing following potentially traumatic experiences (Arendt & Elklit, 2001; Rose & Bisson, 1998; Van Emmerik et al., 2002). It is also in line with results from studies that examined whether naturally occurring social sharing of emotion was predictive of emotional recovery. Indeed, contrary to expectations, neither the frequency of social sharing, nor the latency of initiation of social sharing after an emotional episode, were related to emotional recovery (for a review, see Rimé et al., 1998). Similar negative findings resulted from comparisons of emotional events that were socially shared and emotional events that were kept secret. In two independent studies, events that were never shared were no more nor less recovered from than events that had been shared (Finkenauer & Rimé, 1998). Further correlative studies have confirmed that naturally developed social sharing about a specific event is unrelated to emotional recovery (Southwick, Morgan, & Rosenberg, 2001; Stroebe, Stroebe, Schut, Zech, & Van den Bout, 2002). For example, in two studies reported by Stroebe et al. (2002), the extent to which bereaved persons naturally shared their loss-related emotions was not associated with later adjustment to the loss. Thus, results have consistently failed to find that social sharing leads to recovery, with the exception of two studies on minor stressors (Lepore et al., 2000; Mendolia & Kleck, 1993). However, in a recent article reporting two independent studies, Lepore, Fernandez-Berrocal, Ragan, and Ramos (2004) were led to conclude ‘(…) unlike our previous work (Lepore et al., 2000), we found that simply talking was not associated with greater benefits than not talking (….)’ (p. 356). In sum, we believe that such compelling results from so many different lines of investigation should be taken as evidence that the widespread belief that talking about emotions per se leads to recovery needs reconsideration.

In addition to the simple main recovery effect, two processes were examined that could mediate or moderate the recovery effects. First, simple ventilation of feelings would reduce the impact (e.g. Scheff, 1979). This view was contradicted by the results of the first study showing that the specific instruction to express emotions and feelings did not lead to recovery effects one or eight weeks post-intervention. This result confirms previous research on the ventilation of feelings in aggressive acts (e.g. punching a cushion in case of anger), an expressive behavior that was shown to be ineffective to decrease one’s emotions (see the review by Kennedy-Moore & Watson, 1999). Second, emotional recovery could be predicted by repetitive confrontation strategies to the emotional material that would lead to habituation (see, e.g. Foa &
Kozak, 1986). This moderation hypothesis was explicitly tested using both natural social sharing and intrusive thoughts as confrontation strategies. Confirming previous natural social sharing studies, results showed that social sharing between sessions did not account for recovery effects. Rather, the more participants had shared their emotions between sessions, the more they reported high levels of impact, suggesting that sharing behavior was indicating high impact. With regard to intrusive thoughts, results were similar to those on social sharing. Importantly, they also indicated that those who recovered were actually the ones who had the fewest intrusive thoughts between sessions. This suggested that, in contrast to the above hypothesis, intrusive thoughts were not beneficial for recovery. Rather, when participants were more able to control their thoughts (i.e. the reverse of intrusive thoughts), it was indicative of more recovery. These results were thus in apparent contrast with the results of Mendolia and Klecks’ (1993), which indicated that more talking and thinking were associated with greater recovery. Thus, there might be two types of confrontation strategy: repetitive uncontrolled processes, through sharing or thinking, that hamper recovery, or more constructive, insightful and controlled processes that lead to positive outcomes. The first would be similar to ruminative thinking while the second would be similar to problem-solving strategies. This distinction seems important to investigate in the future.

Caution needs to be exercised with respect to over-interpretation of the results. Our results so far have failed to show that social sharing of emotion leads to self-reported cognitive and experiential recovery. Contemporary conceptions of emotion consider that in addition to the cognitive/experiential component the emotion response system also includes physiological and behavioral/expressive components (see, e.g. Cacioppo et al., 1995). Our studies thus focused on only one—albeit a major one from a subjective well-being viewpoint—component of the emotion response system. One major reason to consider each of the three components is that they evidence low intercorrelations (see, e.g. Cacioppo et al., 1995), suggesting that they represent distinct components of emotional responding. Measures assessing the other two components should be considered in future.

The question then arises as to why talking about emotions does not lead to emotional recovery too (i.e. over and above the retrieval and control processes suggested above). It is possible that, because interviewers have been empathizing and agreeing with participants’ feelings and emotions, this did not allow for a change in perspective or appraisal. According to emotion theories, because emotions arise from the appraisal of an event, changing this appraisal or reappraising the event in a more positive light should change the nature and intensity of felt emotions (see, e.g. Gross, 2002). Thus, from an emotion regulation perspective, expressing emotions should be beneficial only if expression allows one to re-evaluate the event. As indicated by our results, sharing with an empathetic partner was perceived as beneficial, but it might not necessarily lead to reappraisal. In such supportive circumstances, the reappraisal of the event’s consequences might take more time than our manipulation allowed. In natural settings, gaining new insights into significant emotional situations could also typically demand more time than in these experiments because the sharer may also need to feel understood before a new perspective could be either provided, or found. Future studies should thus investigate the role of the listener’s responses over time.
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