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What is This?
Hearing Stories That Violate Expectations Leads to Emotional Broadcasting

Kent D. Harber¹, Peter Podolski¹, and Lisbeth Dyer¹

Abstract
Emotional Broadcaster Theory (EBT) proposes that the need to disclose turns people into news broadcasters whose stories inform others of major events. The present research tested whether the discrepancy theory of emotion explains emotional broadcasting. Study 1 showed that hearers anticipated being more strongly affected by and more likely to retell unusual stories (per discrepancy theory) than stories conveyed by a distressed teller (per emotional contagion theory). Study 2 tested whether the same unusual event (violence) would be disclosed more by people for whom violence is unexpected. As predicted, people with minimal exposure to violence regarded violence as more disturbing and as more likely to be disclosed than did those with extensive exposure to violence. Study 3 replicated Study 2, and showed that violence exposure moderated anticipated emotional arousal and disclosure only for violent events but not for unusual nonviolent events. Neither violence seeking nor social desirability confounded these results.

Keywords
emotions, narratives, norms, self-disclosure, social networks, violence and aggression

We are often surprised and sometimes dismayed to learn that our most personal disclosures have become public knowledge. We confide in others because powerful events compel us to do so (Pennebaker, 1990; Stiles, 1987). And our need to communicate is best met when our confidants register the potency and meaning of our experience—when they sympathetically see what we saw, and feel what we felt (Arizmendi, 2011;
Bucci, 1997). But after handing our friends this psychic hot potato it should not surprise us that they seek the same relief from others that they afforded us. That is, to re-disclose our disturbing story to their confidants in a process known as secondary social sharing (Rimé, 2009). And if our friends’ friends are also sufficiently affected by our story, they may in turn retell it to others. Through these serial retellings our personal experience is relayed across a broadening social network—to our gratification or chagrin.

This pattern of disclosure leading to re-disclosure is the quotidian stuff of water cooler gossip and cross-fence chatter. However, it presents psychology with a problem that connects emotion theory with communications. What are the intrapersonal and interpersonal dynamics that cause story transfer, and what purpose do they achieve? Emotional Broadcaster Theory (EBT; Harber & Cohen, 2005) addresses these issues. Its central thesis is that the personal need to disclose serves the interpersonal function of information transfer. Emotionally aroused people seek relief through communication and as a result become news broadcasters whose disclosures inform others of significant changes, dangers, and opportunities in the world. Their audiences thereby enjoy the benefits of often hard-won knowledge without incurring the costs of obtaining this knowledge firsthand. In short, our need to disclose to our friends, and our friends’ need to retell of our stories to others, operates as the news channel of our social networks.1

Initial Evidence of EBT

Emotional Broadcaster Theory was first tested by Harber and Cohen (2005). They recruited 33 undergraduates who visited a hospital morgue, an experience both novel and disturbing and thus a prime candidate for disclosure. The students reported their levels of emotional arousal immediately after the morgue visit. Three days later they reported the number of people with whom they had shared their experience (primary sharing), the number of people their confidants told (secondary sharing), and the number of people their confidants’ confidants told (tertiary sharing). In accord with EBT, the students’ own degree of emotional disturbance predicted the likelihood that their friends, their friends’ friends, and their friends’ friends’ friends would hear about the morgue visit. The study also revealed how effectively disclosures enable information transfer. Within just a few days the disturbing experience of 33 students was communicated to nearly 900 others through primary, secondary, and tertiary sharing.

What Causes Re-disclosure: Emotional Contagion Versus Schema Violation

The initial test of EBT left an important question unanswered: Why does simply hearing another’s disturbing story compel people to retell this story to others? What happens to hearers that turn them into tellers who, broadcast their confidants’ disturbing stories to other people?
Emotional Contagion. We initially believed that emotional contagion produced the need to retell. Emotional contagion occurs when one person’s emotions triggers sympathetic arousal of emotions in another (Hatfield, Cacciopo, & Rapson, 1994). There are several findings that make emotional contagion appear a likely cause of story transfer. Hearing others’ emotional disclosures arouses emotions in listeners (Archer & Berg, 1978; Christophe & Rimé, 1997), as contagion would predict. Bernard Rimé’s extensive research on social sharing (Rimé, 2009) shows that the more that the initial tellers are upset, the more likely that their confidants will themselves be emotionally aroused and will relay tellers’ stories to third parties. In fact, people rated stories as more “tellable” when they were aroused even if their arousal was unrelated to the story they heard (Berger, 2011). It would thus seem that emotional contagion propels story transfer; the original teller’s upset arouses hearers’ emotions who in turn transmit their agitation to their confidants, and stories thereby ride on these succeeding waves of transferred emotions.

However, emotional contagion presents problems for the EBT. First, emotional arousal alone would be an inefficient means of informational transfer. This is because people are often disturbed by common events, such as a parking ticket or a rude waiter. Such events are meaningful to the person who experienced them but they are not news to many of their hearers. Conversely, some people relay truly novel events with minimal emotionality. For example, the gourmand who offhandedly commends fried locusts (Goodyear, 2011) or the art critic who blandly discusses the aesthetics of elephant dung (Broad, 1998). For hearers, these might be extraordinary events that prompt retelling even though they are unexceptional for the tellers. In sum, emotional contagion as the sole source of story transfer would cause many mundane events to be treated as news, and many novel events to be ignored.

Also, just because the emotionality of the teller precedes retelling by the hearer does not establish emotional contagion as the cause of retelling. A third variable might explain both tellers’ emotionality and hearer’ retelling. One such potential third variable appears as a viable competing explanation.

Schema Violation. An alternative explanation for story transfer is schema violation, also known as the discrepancy theory of emotion (Mandler, 1975; see Rimé, 2009, for an extensive review). Discrepancy theory proposes that emotions are aroused when people encounter information that contradicts their schemas, for example, their expectations, beliefs, or other knowledge structures (Fiske, 1982; Mandler, 1975). These schemas can range from the relatively simple (two socks went into the drier, two should come out) to the more sophisticated (real estate is a secure monetary investment). Disconfirmation of these schemas (e.g., the drier produced just one sock; my house just lost 30% of its value) generates emotions (e.g., bemusement, distress).

According to Mandler (1975), the intensity of an emotion is determined by the severity of a discrepancy relative to the expectation it violated (slight for a lost sock, extreme for imploded home equity). People resolve disturbing discrepancies, says Mandler, by changing their schemas to fit new information or by adjusting new information to conform to existing schemas. Until one or both of these actions are taken,
the discrepancy will remain unresolved and so will the emotion that the discrepancy arouses.

The drive to align new events with existing beliefs connects emotions, disclosure, and re-disclosure. This is because people often address disturbing emotions by telling others about the events that aroused these emotions (Harber & Pennebaker, 1992). Disclosure is believed to alleviate disturbing emotions by assimilating new information to preexisting beliefs—in other words, by resolving discrepancies (Harber & Pennebaker, 1992; Horowitz, 1997).²

Although people can disclose through writing (Pennebaker, 1990), in most cases disclosure involves audiences who hear tellers’ disturbing stories. What tellers typically want from their audiences is neither advice nor instrumental assistance—in fact they often find such responses aversive (Coyne, Wortman, & Lehman, 1988; Harber, Schneider, Everard, & Fisher, 2005). Rather, tellers simply want their confidants to listen and understand—to comprehend their experiences (Rodriguez & Kelly, 2006). However, by fully appreciating tellers’ stories, listeners expose their own beliefs to schema-disrupting information (Shortt & Pennebaker, 1992). And if listeners’ schemas are sufficiently challenged by absorbing the teller’s story, then they may also become emotionally aroused. In its most severe form, second-hand exposure to disturbing events can produce “vicarious traumatization” (McCann & Pearlman, 1990), where hearers suffer unbidden thoughts and images—and the corresponding emotions—related to the teller’s ordeal.

Discrepancy theory therefore suggests that the “vector” in emotional contagion is not the emotion itself, no more than a fever spreads a disease. Rather, it is schema violation that arouses listeners’ emotion, and thus compels listeners to re-disclose. Tellers’ disclosures “infect” listeners with schema-violating information causing them to be emotionally aroused and thereby motivated to re-disclose to others. It is this schema-violation → emotions → disclosure mechanism, and not just brute “emotional contagion,” that we believe explains story transfer.

Schema violation as a source of story transfer presents an intriguing psychosocial dynamic. A person encounters an event that challenges his or her implicit beliefs in the fairness or stability of the world, such as sudden job loss or a major earthquake. This schema violation generates potent emotions that compel disclosure. Those hearing this disclosure may have their own schemas disrupted and therefore experience their own disturbing emotions. If the emotions produced by this “vicarious traumatization” (McCann & Pearlman, 1990) are strong enough, then hearers may seek their own disclosure opportunities, leading to a chain reaction of schema violation leading to emotions leading to disclosure leading to schema violation.

Schema violation would much better serve the information transfer function at the heart of EBT. It allows for Person A’s parking-ticket rant to end with his confidants, and it allows for Person B’s unusual gustatory adventures with North African locusts to be retold and thereby become social news. In effect, schema violation introduces a natural editor into the emotional broadcasting system; events that shake schemas, and which are by definition unusual to the hearer, are more likely retold whereas events
that do not disturb schemas, regardless of the agitation of their tellers, are less likely retold.

**Testing Schema Violation as the Medium of Story Transfer**

Although schema violation best satisfies the tenets of the Emotional Broadcaster Theory, its role has not been demonstrated. The current studies were designed to resolve this issue. Study 1 pitted schema violation against emotional contagion, by manipulating teller’s emotionality and story unusualness. If emotional contagion explains broadcasting, then teller emotionality should affect retelling more than story unusualness. However, if schema violation is primary, then story unusualness, and not teller’s affect, should determine story transfer.

Studies 2 and 3 examined how differing expectancies about the same kind of negative event—violence—would affect disclosure. If broadcasting is due to schema violation, then people unexposed who rarely encounter violence should be more affected by violent events and more likely to disclose these events than those who more frequently encounter violence. However, among those for whom violence is more common, violent events should be “schema congruent” and therefore less disturbing and less likely disclosed.

**Study 1: Discloser Upset Versus Story Unusualness**

Personal disclosures are the stuff of everyday life, and most people have been authors of and audience to a vast array of disclosed stories. Indeed, sharing stories has been observed as early as 18 months (Reese, 1999) and across cultures (Miller, Fung, & Koven, 2007). As a result of this extensive experience most people are probably fairly expert at recognizing which stories are likely to affect them and which stories they are likely to retell. Study 1 capitalized on this native expertise by presenting participants with vignettes wherein a friend discloses a misfortune. If emotional contagion determines story transfer, then the emotionality of the friend should determine anticipated story transfer. However, if schema violation determines story transfer, then story unusualness and not friend emotionality should determine transfer.

**Method**

**Participants.** College undergraduates (n = 392) participated in this study for course credit (67% female; average age = 19.67, SD = 3.20). Participants completed this 30-minute task online in a study described to them as concerning social attitudes.

**Procedure.** Participants read four brief vignettes in which an acquaintance experienced a misfortune. The vignettes varied the acquaintance’s likely distress and the unusualness of the event (see Table 1). Tellers’ expected degree of upset served to capture emotional contagion, and story unusualness served to capture schema violation. After reading each vignette participants reported the following anticipated outcomes: Affective reactions: Of their friend and of themselves; Disclosure: Tendency to disclose this event, to
disclose even if asked not to do so, and whether their confidants would in turn tell others; Disclosure motives: To relieve the desire to tell, to inform others; and Interpretation of events: As unusual, and as violating a just and well-ordered world. Likert-type scales ranging from 1 = Not at all to 5 = A great degree captured participants’ ratings.

The critical vignettes (in bold) were the jilted friend and the cavalier driving-menace friend, because these two best dissociated emotional contagion from schema violation, respectively. The jilted friend would be emotionally distraught, but failed romances are common. His story therefore represents emotional contagion without schema violation. In contrast, the cavalier driver is emotionally unaffected by her experience. Her blithe admission of nearly killing a small child and then escaping penalty by flirting is unusual and violates expectancies of a just, ordered world. Thus, her story represents schema violation without emotional contagion.

The creepy vandalism vignette (i.e., the friend’s window shattered by a rock attached to a sinister note) provides both an emotional teller and an unusual story. Comparisons to it help determine the relative importance of emotional contagion and schema violation. If story retelling is due mainly to emotional contagion, then the jilted friend story and the vandalism story should be comparably tellable, and both more so than the cavalier driver story. However, if schema violation determines retelling, then the cavalier driver story and the ominous vandalism story should be regard as comparably tellable, and both more so than the jilted friend. The accidentally broken lamp vignette, a common event that likely evoked little emotion in the teller, was expected to produce minimal retelling. It therefore served as a baseline for the other vignettes.

Ancillary measures. Participants completed a brief demographics survey that gathered information on their age and gender.

Results

Data Reduction. Responses to the four vignettes were summed and averaged to create aggregate measures of the following anticipated outcomes (a) being affected by the

<table>
<thead>
<tr>
<th>Table 1. Vignette Summaries, Study 1: Teller Emotionality and Story Unusualness.</th>
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<tbody>
<tr>
<td>Story is common</td>
</tr>
<tr>
<td>Teller is calm</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Teller is upset</td>
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Note. Vignettes 2 and 3 are the criterion cases, distinguishing schema violation (story unusualness) from emotional contagion (teller upset).
event, (b) appraising the event as unusual, (c) wanting to tell others about the event, (d) telling others even after promising not to do so, (e) expecting confidants to retell the event, (f) telling for emotional relief, and (g) telling to inform. The reliabilities of these aggregated variables were fair to moderate, ranging from $\alpha = .49$ to $\alpha = .70$, and averaging $\alpha = .60$. Ratings of the vignette-actors’ reactions could not be summed into a single index, due to very low reliability ($\alpha = .09$).

**Manipulation Checks.** The four vignettes were designed to differentiate between tellers’ distress and whether the event was usual and consistent with just world beliefs. Differences between the four vignettes were tested using dependent paired $t$ tests, and the Holm–Bonferroni method (Holm, 1979) was used to correct for multiple measurements. Results indicated that the four vignettes differed on these dimensions, and in the intended manner (see Figure 1A-C). The two low-distress vignettes (broken lamp and reckless driver) were both rated as equally low in teller distress, and differed from the two high-distress vignettes (romantic break-up and creepy vandalism), which did not differ from each other. Likewise, the two vignettes designed to portray common events (broken lamp and romantic breakup) were rated equally low on unusualness and unjustness, and were rated lower than the two vignettes designed to portray unusual and unjust events (reckless driver and vandalism), which did not differ from each other.

**Gender and Age.** Gender affected two key outcomes. Anticipated distress due to hearing of these misfortunes was higher among women, $M = 3.14$ (0.57) than among men, $M = 2.88$ (0.66), $F(1, 390) = 15.66, p < .001$. Women were also more likely to anticipate talking about these events in order to achieve emotional relief, $M = 2.16$ (0.84), than were men, $M = 1.98$ (0.74), $F(1, 389) = 4.08, p < .05$. Age was unrelated to all outcomes.

**Primary Analyses**

The different effects of emotional contagion and schema violation on story transfer were examined in terms of tendencies to disclose and reasons for disclosure.

![Figure 1. Ratings of teller distress, event unusualness, and event challenge to just world beliefs, Study 1.](image-url)
Tendencies to Disclose. As predicted by schema violation theory, participants anticipated a greater desire to disclose the two unusual events than the two usual events (see Figure 2A). Furthermore, they expected to disclose unusual events more than common events even after promising confidentiality (see Figure 2B). Especially important, these differences distinguished the heedless driver vignette from the romance-breakup vignette, thereby favoring schema violation over emotional contagion. The anticipated likelihood that participants’ confidants’ would re-disclose these events, however, did not significantly differ.

Reasons for Communication. Participants indicated that emotional relief and desire to inform others would more strongly motivate their retelling of unusual events than usual ones (see Figure 3A and B). The selective importance of emotional relief fits neatly with the schema-repair explanation of emotional disclosure (e.g., Harber & Pennebaker, 1992; Smyth & Pennebaker, 1999). According to this explanation, disclosure motives arise from the need to assimilate events that violate expectations. The jilted friend does not represent a gross violation of expectations and therefore should not trigger the desire for relief through disclosure. The reckless but nonchalant driver did represent such a violation and per discrepancy theory lead to heightened disclosure motives.
Correlations Between Anticipated Disclosure Variables. Participants’ anticipated responses to vignettes, their anticipated desires to disclose vignettes, and their evaluations of vignette unusualness were all significantly intercorrelated (see Table 2). However, the magnitude and nature of some of these correlations are especially informative. In accord with past research on secondary social sharing (e.g., Rimé, 2009), the more that participants expected these hypothetical events to affect them, the more they expected to retell these stories to others, even after promising not to do so. Two sets of correlations were particularly important for the schema-violation explanation of sharing. These showed that stories rated as more unusual and as more contrary to just world beliefs were more likely to arouse emotions and to motivate story retelling.

In sum, Study 1 supported schema violation as the basis for secondary social sharing. An event that violated expectations even when conveyed with little emotionality (i.e., the careless driver blásé about nearly killing a child) was more likely to compel disclosure—even prohibited disclosure—than did a mundane event relayed by someone greatly upset (i.e., the jilted lover). Moreover, the retelling of these schema-violation stories was selectively motivated by both hedonic urgency (i.e., “to get it off your chest”) and by a desire to inform others.

### Study 2: History of Violence and the Retelling Violent Versus Nonviolent Events

Study 1 tested expectancy violation as the source of emotional broadcasting by varying the kinds of situations people might encounter. It showed that events that violate expectations, regardless of teller emotionality, were those rated as most likely to arouse listeners’ emotions and to be disclosed by them to others. Study 2 also tested the role of expectancy violation in emotional broadcasting. However, it did so by
examining how people with varying expectancies would likely respond to the same negative event, in this case violence. For most people violence is unusual and violates expectations of a safe and stable world, and encounters with violence are therefore disturbing. However, for some people violence is more commonplace and encounters with it are likely to confirm beliefs that the world can be unpredictable and dangerous. Expectancy-violation theory would suggest that for these people, new encounters with violence will be less schema-disrupting and thus less disturbing and therefore less likely disclosed. Emotional contagion, wherein arousal begets arousal, does not make this prediction.

*Event unusualness or event severity?* An alternative explanation for Study 1 results is that the unusual-events vignettes were not only atypical but were also highly consequential. For example, the “careless driver/near death of a child” vignette may have been more arousing and more tell-able than the failed romance vignette because it was worse rather than weirder. Often, these two qualities coexist; events that are more potently good or more potently bad are also, generally, more rare. Study 2 addressed this issue by holding constant the kind of event considered—in this case, types of violence. What varied were individual differences in exposure to this class of events.

Although extremely bad events are also typically rare events, for some groups of people and some kinds of events, this is not the case. Emergency first-responders, intensive care staff, and others who work in crises routinely encounter some of the worst events imaginable. Yet these people are neither perpetually distressed nor morally complacent about the tragedies they encounter. Instead, they accommodate to a world where bad things can happen to good people. This accommodation can be understood within Ronnie Janoff-Bulman’s approach to traumatic events (Janoff-Bulman, 1989), which accords with discrepancy theories of emotion. According to Janoff-Bulman, people hold implicit “basic beliefs” that the world is just and well-ordered, and that the self is good. Importantly, these basic beliefs are shaped can be modified by experience. Thus, veteran emergency room nurse will likely be less disturbed by catastrophic injuries because for them such events, though severe, do not violate basic expectations. And because they are less disturbed, we predict that they are less likely to disclose medical emergencies to others.

In sum, Study 2 tests whether individual differences in expectations determine emotional disclosure for the same kind of event. It does so by examining whether people with a more extensive “history of violence” (HOV; Richters & Martinez, 1993) are less disturbed by violent events, and therefore less likely to disclose these events, than those with little exposure to violence.

**Method**

**Participants.** Undergraduates (*n* = 73) participated in this study, 52.7% female, mean age = 20.71 (*SD* = 3.46). The sample was ethnically diverse, including students who identified themselves as Asian (19%), Black (26%), Latino (31%), Middle Eastern (5%), White (14%), and other (3%). The study was administered to groups of 1 to 9 participants.
Procedure. Participants completed a 30-minute online survey, for which they received partial course credit. The primary measure was the Survey of Exposure to Community Violence (SEVC; Richters & Saltzman, 1990), wherein respondents indicate their exposure to various types of violence (e.g., guns fired, others getting beaten up, yourself being mugged). The SEVC was developed for older youth and is thus age appropriate for a college sample. It was reduced in the present study to the 14 types of violence witnessed and excluded items in which the respondent was a victim. Response ranged from 1 (“Yes, [witnessed this event type] many times”) to 4 (“No [never witnessed this kind of event]”).

Also included was “The Reaction to Violent Events (RVE),” which we designed. The RVE includes items from the SEVC plus three questions designed to broaden the range of violent/criminal events encountered (drug deals, graffiti on others’ property, and own property). Each item of the RVE was posed as a hypothetical event (e.g., “You hear guns fired”), and then followed by three ratings: “how much would the event emotionally affect you,” “how likely you would be to tell friends or family about this event,” and “how likely is it that those you told would themselves tell other people.” Response options ranged from 1 (minimal affect/desire to tell) to 6 (maximum affect/desire to tell). A current-mood measure was included to capture mood-congruency effects (Bower, 1981) that might disrupt primary analyses. The online survey also inquired into participants’ age, gender, and ethnicity. To reduce experimental demand, the RTE hypotheticals were administered before the SEVC.

We predicted that participants with a more extensive HOV would anticipate being less affected by encounters with violence, less likely to talk about these encounters, and expect that those hearing about violence to be less likely to retell these events.

Results and Discussion

Data Reduction

Survey of Exposure to Community Violence. The 14 items comprising the modified SECV were reverse-coded, so that higher scores represented greater violence exposure. These were summed and averaged into a single scale (α = .90).

Reaction to violent events. Three subscales were derived from this measure: emotional reaction to these events (α = .92), desire to tell others about these events (α = .94), and likelihood those told would retell these events to others (α = .94).

Mood. The five mood items were consolidated into an overall “negative mood” score (with “happy” reverse coded), α = .68.

Preliminary Analyses

Covariates. Analyses were conducted to identify individual differences, other than a HOV, which might influence responses to violent events.
**Gender.** Men were more likely to have encountered violence ($M = 2.30$, $SD = 0.56$) than were women ($M = 1.79$, $SD = 0.63$), $F(1, 70) = 12.87, p < .001$, and women anticipated being more emotionally affected by violent events ($M = 4.48$, $SD = 1.16$) than did men ($M = 3.64$, $SD = 1.01$), $F(1, 65) = 9.94, p = .002$. There was a nonsignificant trend wherein women were more likely to tell others about encountered violence ($M = 5.01$, $SD = 1.30$) than were men ($M = 4.51$, $SD = 1.44$), $F(1, 66) = 2.36, p = .13$. Men and women did not differ in expected retelling by their confidants, $F(1. 68) = 0.29, p = .59$.

**Age.** Older participants were less likely to have encountered violence than younger ones, $r(70) = -.24, p = .047$. Age was unrelated to being affected by violent events, desiring to tell others about these events, or expectation that confidants would retell these events (all $p$s > .16).

**Ethnicity.** There were no differences among ethnic groups in encountering violence, or in the anticipated responses to these events (all $p$s > .37).

**Current mood.** The more negative were participants’ moods, the more they anticipated being affected by violent events, $r(67) = .34, p = .004$, the more they expected to tell others about such events, $r(68) = .29, p = .018$, and (marginally) the more they expected their confidants to retell these events, $r(70) = .22, p = .069$. Mood was unrelated to a past HOV, $r(72) = .012, p = .873$.

Gender, age, and mood were therefore entered as covariates in the principal analyses.

**Intercorrelation of emotions and communication outcomes.** A central supposition of the EBT is that emotionally arousing events are more likely to be disclosed, and that the more distressed are the initial sharers, the more likely it is that their confidants will re-disclose these events to others. Bivariate correlations confirmed these predictions. Participants who anticipated being more disturbed by violent events also anticipated greater disclosure of these events, $r(65) = .76, p < .001$, and more frequent retelling of these events by others, $r(65) = .69, p < .001$. Participants who expected to share these events more also expected their confidants to do so as well, $r(68) = .90, p < .001$.

**Primary Analyses**

This study tested whether people with a greater HOV would expect (a) to be less affected by violence, (b) to have less desire to disclose violent events, and (c) that their confidants would be less likely to retell these events to others. These predictions were tested in three hierarchical linear regression models, wherein the covariates (gender, age, and negative mood) were entered as the first step, and HOV was entered at the second step. This two-step model provides a more conservative test of violence-expectations as a moderator of emotional broadcasting. Table 3 shows that the principal predictions were confirmed. The more violence that participants had experienced, the less they anticipated: being affected by new violent encounters, wanting to tell others.
about these encounters, and that those with whom they did disclose would re-disclose these events to others.

In sum, Study 2 indicated that it is not the normative severity of events that determine social sharing, but instead the degree to which such events violate personal expectations. For those with extensive exposure to violence, violent events do not challenge beliefs. As a result, these events are less emotionally arousing and are therefore less likely to be disclosed. These results support the role of expectancy violation in emotional broadcasting.

Study 3: Does History of Violence Uniquely Explain Broadcasting?

Study 2 confirmed that those with a greater HOV expected to be less affected by, and less likely to disclose, violent events. However, there are important alternative explanations that Study 2 did not address. Study 3 tested these alternatives.

Violent Stories Versus Unusual Stories

Are people with a greater HOV less affected by violent stories because violence is less discordant for them, or because they are simply inured to all unusual events? Study 3 tested the prediction that HOV only affects responses to violent events, but does not affect responses to unusual nonviolent events.

Table 3. Moderating Effects of History of Violence on Emotional Broadcasting, Study 2 (N = 64).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Emotionally affected by misfortune</th>
<th>Desire to tell others about misfortune</th>
<th>Confidants will retell to others</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>β</td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.79</td>
<td>0.27</td>
<td>.34**</td>
</tr>
<tr>
<td>Mood (negative)</td>
<td>0.47</td>
<td>0.18</td>
<td>.30*</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.26</td>
<td>0.26</td>
<td>.11</td>
</tr>
<tr>
<td>Mood (negative)</td>
<td>0.52</td>
<td>0.16</td>
<td>.33**</td>
</tr>
<tr>
<td>History of violence</td>
<td>-0.87</td>
<td>0.20</td>
<td>-.48***</td>
</tr>
</tbody>
</table>

Note. M = model.
+ p < .10. *p < .05. **p < .01. ***p < .001.
Violent People Versus Violent Histories

It may be that those who have encountered more violence are themselves more violent people, or are people who are attracted to violence. If so, they may be less disturbed by violent events, and therefore less motivated to disclose to others their violent encounters, than people repelled by violence. Study 3 tested whether the muting effects of HOV are due a HOV rather than an affinity for violence.

Social Desirability

Blasé responses to violence may indicate acceptance of something generally regarded as immoral. Thus, reports of anticipated distress to violence may serve to advertise norm-adherence rather than represent genuine emotional reactions. Study 3 tested this possibility by including individual differences in social desirability as a covariate.

Priming

In Study 2, the HOV measure was completed at the same time as the other measures, and may have been influenced by them. A stronger test of the effects of HOV would be to measure it prior to the rest of the study, and in a manner that obscured its connection to the study. Study 3 addressed this priming problem by administering the HOV measures, and also measures of aggressive tendencies and social desirability, in an omnibus prescreening several weeks in advance of the remainder of the study.

Method

Participants. Undergraduates (n = 143) participated in this 30-minute study in exchange for partial course credit. The sample was 70.6% female, mean age 20.25 years (SD = 4.45), and was ethnically diverse (African Americans = 17.5%, Asians = 25.9%, Hispanics = 14.7%, Middle Easterners = 5.6%, and Whites = 27.3%). The study was administered to groups of 1 to 9.

Procedure. Study 3 followed the procedures employed in Study 2. However, the “Reactions to Violent Events” was paired with a new measure, the “Reactions to Nonviolent Events (RNVE).” The RNVE included 17 unusual, nonviolent events such as witnessing a professor drive into a tree, seeing a fellow student having convulsions, and learning that campus tuition will double in the next 3 years. The RNVE was formatted identically to the RVE, and participants rated each RVE item for how much the event would likely affect them, how much they would need to tell others about the event, and the likelihood that their confidants would retell this event to others. The RVE and the RNVE were presented in a counterbalanced order.

Study 3 addressed the problem of predictor measures biasing outcome measures by administering the HOV measure as well as measures of aggressive tendencies and social desirability, in an omnibus prescreening survey distributed online to all
participants in the departmental participant pool. Thus, participants completed these measure weeks before they completed the disclosure measures, and in a format unrelated to these outcome measures.

**Aggression Questionnaire.** The Aggression Questionnaire (Buss & Perry, 1992) is a 29-item self-report inventory that measures propensity toward aggression. It consists of four subscales: physical aggression, verbal aggression, anger, and hostility. The subscales are positively intercorrelated, and it is therefore permissible to use the entire scale as a comprehensive measure of aggressive tendencies. The Aggression Questionnaire has strong test–retest reliability and has been validated by peer ratings of aggression (Buss & Perry, 1992).

**Balanced Inventory of Desirable Responding–Impression Management subscale (BIDR; Paulhus, 1984).** The 20-item BIDR impression management subscale focuses on concern with other peoples’ judgments, as distinct from self-judgments. The measure has strong internal consistency and convergent and divergent validity. We used the BIDR impression management subscale because it was more germane to the purposes of the present research.

The RVE, RNVE, and general background survey were administered during the experimental session.

**Results**

**Data Reduction.** Three parallel sets of subscales were derived from the RVE and from the RNVE: (a) how much would the events affect participants, (b) how much would participants want to share these events, and (c) how likely would participants’ confidants re-disclose these events. These six subscales (two sets of three, per each scale) showed adequate reliability, with alphas ranging from $\alpha = .84$ to $\alpha = .93$.

**Order Effects.** The order in which the violent events and nonviolent events were presented did not affect ratings of emotional reactivity, desire to tell, or likelihood that confidants would retell, $p = .17$ to $p = .80$.

**Demographic Characteristics.** Responses to violent and nonviolent events were examined in terms of participants’ gender, ethnicity, and age (see Table 4). As in Study 2, men were generally less likely than women to anticipate being affected by, and wanting to disclose, both violent and nonviolent events. In addition, men were less likely to expect their confidants to retell their disclosures to others, but only for violent events. Gender was therefore covaried in subsequent analyses. Age was unrelated to all outcomes. Ethnicity affected anticipated RVE, $F(5, 133) = 2.23, p = .05$. Tukey post hoc tests indicated that Middle Easterners were more likely to be affected by such events than were Latinos or “Others.”
Table 4. Responses to Violent and Nonviolent Events as a Function of Demographics, Study 3.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Ethnicity</th>
<th>Age, r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male (n = 41)</td>
<td>Black (n = 25)</td>
<td></td>
</tr>
<tr>
<td>Female (n = 99)</td>
<td>Asian (n = 36)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Latino (n = 21)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Middle East (n = 8)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>White (n = 38)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other (n = 11)</td>
<td></td>
</tr>
</tbody>
</table>

Violent events

<table>
<thead>
<tr>
<th>Affected</th>
<th>Tell others</th>
<th>Others retell</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.34 (0.95)</td>
<td>3.67 (1.13)</td>
<td>3.33 (1.06)</td>
</tr>
<tr>
<td>3.95 (0.85)</td>
<td>4.11 (1.00)</td>
<td>3.70 (1.02)</td>
</tr>
<tr>
<td>3.69 (0.96)</td>
<td>3.93 (1.01)</td>
<td>3.70 (0.76)</td>
</tr>
<tr>
<td>3.75 (0.98)</td>
<td>3.86 (1.03)</td>
<td>3.33 (0.76)</td>
</tr>
<tr>
<td>3.53 (0.76)</td>
<td>4.00 (1.03)</td>
<td>3.50 (0.98)</td>
</tr>
<tr>
<td>4.11 (0.67)</td>
<td>4.07 (1.29)</td>
<td>3.38 (1.14)</td>
</tr>
<tr>
<td>3.61 (0.87)</td>
<td>4.29 (0.95)</td>
<td>3.96 (1.00)</td>
</tr>
<tr>
<td>3.41 (0.98)</td>
<td>3.41 (0.98)</td>
<td>3.41 (1.29)</td>
</tr>
</tbody>
</table>

Nonviolent events

<table>
<thead>
<tr>
<th>Affected</th>
<th>Tell others</th>
<th>Others retell</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.46 (0.67)</td>
<td>3.32 (0.77)</td>
<td>3.13 (0.86)</td>
</tr>
<tr>
<td>3.73 (0.58)</td>
<td>3.63 (0.80)</td>
<td>3.21 (0.95)</td>
</tr>
<tr>
<td>3.84 (0.61)</td>
<td>3.75 (0.70)</td>
<td>3.50 (0.84)</td>
</tr>
<tr>
<td>3.58 (0.65)</td>
<td>3.41 (0.89)</td>
<td>3.48 (1.01)</td>
</tr>
<tr>
<td>3.47 (0.49)</td>
<td>3.48 (1.01)</td>
<td>3.03 (1.09)</td>
</tr>
<tr>
<td>3.74 (0.49)</td>
<td>3.34 (1.01)</td>
<td>2.80 (0.73)</td>
</tr>
<tr>
<td>3.71 (0.50)</td>
<td>3.77 (0.71)</td>
<td>3.36 (0.85)</td>
</tr>
<tr>
<td>3.47 (0.63)</td>
<td>3.17 (0.88)</td>
<td>3.10 (1.00)</td>
</tr>
</tbody>
</table>

Note. Annotated differences are within variables. Cells with differing subscripts differ at p < .05.
*p < .05. **p < .01.

Ratings of Violent and Nonviolent Events. Participants rated violent events (V), compared to nonviolent events (NV), as marginally more potentially affecting (V = 3.76 [0.92]; NV = 3.65 [0.1]), t(141) = 1.83, p = .07; more tell-able (V = 3.98 [1.04], NV = 3.53 [0.80]), t(141) = 6.25, p < .001, and more likely retold by confidants (V = 3.59 [1.04], NV = 3.19 [0.92]), t(141) = 6.11, p < .001. Although these differences between violent and nonviolent events were not predicted, they are not substantial (less than one-half point on a 5-point scale).

Response to Events and Communication About Events. Participants who expected to be disturbed by violent and nonviolent events were more likely to anticipate disclosing these events to confidants (violent events r = .70, p < .001; nonviolent events r = .63, p < .001), and that their confidants would re-disclose these events to others (violent events r = .58, p < .001; nonviolent events r = .50, p < .001). This pattern replicated Study 2 findings, and supports a basic premise of the Emotional Broadcasting Theory.

Primary Analyses

Moderating Effects of HOV on Responses to Violent Versus Nonviolent Events. The main prediction of this study was that HOV would moderate anticipated reactions to and disclosure of violent events (as per Study 2), but would not similarly affect nonviolent events. Also, the moderating effects of HOV on expected reactions to, and disclosure
of, violent events was predicted to be unaffected by violence attitudes and social desirability. To test these predictions a tertiary split on HOV was done to create low, moderate, and high HOV subgroups. This HOV grouping variable was entered into a repeated-measures analysis of variance as the between-subjects factor, and type of event (violent or nonviolent) was entered as the within-subject factor. Violent tendencies and social desirability were entered as covariates, as were gender and the order in which the violent and nonviolent event scales were presented.

HOV produced all predicted outcomes (see Figure 4A-C). HOV moderated anticipated emotional responses to violent versus nonviolent events, \( F(2, 133) = 6.20, p < .01 \); tendencies to disclose violent versus nonviolent events, \( F(2, 133) = 9.05, p < .001 \); and expectations that confidants would re-disclose violent versus nonviolent events (as a nonsignificant trend), \( F(2, 133) = 1.96, p = .15 \). These interactions were probed in two parallel sets of univariate ANOVAs, one for violent events and one for nonviolent events. HOV groups differed in how much they expected to be affected by violent events, \( F(2, 136) = 12.46, p < .001 \). Tukey post hoc tests showed that low HOV participants expected to be more disturbed than were moderate HOV or high HOV participants. HOV also affected anticipated disclosures regarding violence, \( F(2, 136) = 5.57, p = .001 \). Low HOV participants anticipated such events would prompt more disclosing than did moderate HOV or high HOV participants. And HOV marginally affected expectations that confidants would re-disclose violent episodes to third parties, \( F(2, 136) = 2.73, p = .07 \), with low HOV participants marginally more likely to expect re-disclosure than moderate HOV participants. There were no significant differences between HOV groups regarding anticipated emotional reactions to nonviolent events, desires to disclose nonviolent events, or expectations that confidants would retell nonviolent events to others.

Study 3 reconfirmed that expectancies regarding violence moderate the transmission of violent stories. Participants who had encountered more violence in their lives anticipated being less distressed by new violent events, less likely to disclose these events, and less likely to expect that their disclosures would be retold. However, this pattern does not likely reflect a generalized numbing to all unusual events created by violence exposure. This is because HOV did not affect anticipated reaction to, or disclosure of, events that were unusual but nonviolent. Study 3 also showed that the influence of HOV on emotional reactions to and disclosure of violence were not confounded by violent tendencies or by social desirability, or by confounds arising from the order or timing of experimental materials.

**Discussion**

The Emotional Broadcasting Theory proposes that the personal need to disclose serves the interpersonal need for information. In effect, emotionally upset people become news broadcasters for their social networks. If disclosure promotes information transfer, then the mechanism mediating disclosure and re-disclosure should favor news over noise. The schema-violation theory of emotion (Mandler, 1975) provides such a mechanism; its basic principle is that emotions are aroused by events that challenge
expectations. Such events are by definition news; they inform and modify beliefs, perspectives, and behavior. The present studies tested whether schema-violation theory best explains social sharing and the informational transfer function that, according to EBT, social sharing serves.

**Schema Violation Versus Emotional Contagion**

Study 1 contrasted schema violation with emotional contagion theory, which represents a prominent alternative mechanism for emotional broadcasting. Participants read
four vignettes describing misfortunes supposedly told to them by a friend. The vignettes varied in the degree to which they depicted unusual misfortunes and distressed friends. If broadcasting arises from schema violation, then the unusualness of misfortunes—indeed of the friends’ distress—should have determined whether stories were likely to be disclosed. This is what occurred. Misfortune unusualness, but not friends’ distress, best predicted whether participants anticipated retelling these events to others, whether they would do so even after pledging to keep these events secret, and whether participants expected their confidants to in turn retell these stories to others. Importantly, participants anticipated greater relief disclosing a bizarre story conveyed by a calm friend than a mundane story delivered by an emotionally distraught friend.

**Same Event, Different Expectations**

If schema violation drives emotional broadcasting, then whether an event gets told (and retold) should be determined by the particular expectations of the hearer, and not the general typicality of the event. This suggests that the same event, such as violent criminality, will be more disturbing and will compel more disclosure for those who regard such events as extraordinary, but will have less affect, and compel less disclosure, among those who regard such events as common. Study 2 tested this prediction by measuring participants’ exposure to violence and presenting them with descriptions of violent events. As schema-violation theory would predict, participants with a greater HOV anticipated being less disturbed by violence, less likely to disclose violent events to others, and less likely to believe that their disclosures would be retold. Study 2 also showed that Study 1 results were not an artifact of event severity, because severity (violent acts) was held constant in this study.

Study 3 addressed alternative explanations to Study 2. It showed that people with a greater HOV are not emotionally inured to all unusual events, but only to violent ones; that the moderating effects of HOV on anticipated communication was not an artifact of greater propensity to act violently or to enjoy violence; and that the results of Studies 2 were not moderated by individual differences in social desirability motives or transitory mood. By presenting the HOV survey prior to, and independently of, the rest of the experiment, Study 2 addressed priming confounds.

In sum, these three studies provide converging evidence that expectancy violation is the dynamic underling emotional broadcasting. These results also reinforce the information-transfer function of social sharing. Stories that disrupt beliefs about the world, and that are therefore news, are most likely to be retold. Schema violation thereby introduces a natural editor in the emotional broadcasting, selecting information that challenges rather than confirms expectations.

**Emotions, but not Emotional Contagion, Mediate Story Transfer**

If story transfer is due to schema violation rather than emotional contagion, then one might wonder where is the “emotion” in the EBT. Emotion does play a vital role, but
this role is different than brute emotional-contagion would suggest. The emotions of the story teller, which are critical for contagion, appear to be relatively unimportant for transfer. Thus, the dismay of a driver who receives a parking ticket will probably not induce story transfer. People often get tickets, and the driver’s confidants are therefore not receiving news that challenges their schemas. However, if the ticket was issued out of malice or incompetence—circumstances that violate beliefs in a just, well-ordered world—then the driver’s confidants might experience schema violation, leading to troubling emotions and motives to disclose, leading to story transfer. Thus, emotions do play a key role in emotional broadcasting, but these emotions arise from the schema-disruptive content of disclosures, rather than the mere emotionality of the teller.

Disclosure of Mundane Events

If schema violation triggers the emotions that compel disclosure, why would people be affected by their own mundane misfortunes, and disclose these uninteresting events to others? One would expect that a parking ticket recipient would recognize that such citations are common, and would therefore be neither aroused by it nor compelled to disclose it. Yet such events are both upsetting and disclosed. Janoff-Bulman’s (1989) “fundamental beliefs” help explain why such mundane disclosures occur. Among the triad of fundamental beliefs is that the self is good and worthy, a precept supported by research on egocentric biases (Greenwald, 1980). The psyche may therefore elevate the emotional status of routine inconveniences and mundane indignities when they happen to the self. For hearers, of course, their selves are not implicated in others’ mundane misfortunes, and as a result hearers are less disturbed when listening to these events, and are less likely to report them to others.

Of course, some people are aware that their own normal mishaps are tedious news for others, and consequently withhold disclosing such events. This “suppression of the typical” may be consequential. Research on daily hassles (DeLongis, Coyne, Dakof, Folkman, & Lazarus, 1982) indicates that the everyday frustrations can be an especially potent health hazard. Suppression of these mundane but trying events may aggravate the health risk that such common mishaps present.

Do Norms Rather Than Expectations Moderate Violence-Related Disclosures?

Violent communities might have norms against disclosing violence, which would explain why participants with a greater HOV anticipated disclosing less in Studies 2 and 3. However, there are reasons why norms probably do not account the moderating effect of HOV on violence-related disclosure. First, youths exposed to chronic violence appear emotionally desensitized to it (Fitzpatrick, 1993). This is consistent with the altered expectations of discrepancy theory. Second, anticipated disclosure of violent events was correlated to anticipated arousal, for high HOV as well as low HOV participants. If norms cause those with high HOV to suppress an active desire to disclose, then this correlation should not occur.
Caveats

Reliance on Self-Reports. These studies asked participants to anticipate how they and their social contacts would respond to various negative situations. Participants did not directly encounter negative events, and their actual disclosures were not observed. In part, this methodology bows to pragmatics; it is very difficult and ethically challenging to present participants with events as rare and as serious as those depicted in the present studies, and to do so in a way that tests underlying processes. This reliance on self-reports has notable limitations. People are often unable to accurately introspect on their own mental processes (Nisbett & Wilson, 1977) and their efforts to predict their own future emotional states, known as “affective forecasting,” is similarly imperfect (Gilbert, Gill, & Wilson, 2002). But there are important qualifications to these qualifications. First, people are good at predicting whether an event will upset, excite, or amuse them, although less good at estimating the degree to which this is so (Robinson & Clore, 2002). People should therefore be fairly accurate at anticipating the types of events more likely to upset them (per Robinson & Clore, 2002), and their errors in predicting the degree of upset should be constant across these kinds of events. Furthermore, our participants were asked to predict how and when they communicate to others, a behavior with which they are intimately knowledgeable. This differs from the infrequent events explored in affective forecasting research, such as how one would cope with a serious illness or with winning a lottery (Gilbert et al., 2002). Finally, the efficacy of self-reports for social sharing has been amply demonstrated by Rimé (2009) in their studies on secondary social sharing.

Communication Is Multiply Determined. Emotional relief is not the only social motive for communication. People share information with others for pleasure, affection, affiliation, escape, relaxation, and control (Rubin, Perse, & Barbato, 1988). The influence of emotional relief relative to these other motives, how relief may interact with them, and how individual differences in disclosure may themselves affect these interacting motives (e.g., “communication apprehension”; Kondo, 1994), remain important and yet unanswered questions.

Conclusion

People depend on implicit beliefs to navigate their worlds. Events that counter beliefs generate emotions, which focus attention on these discrepancies (Mandler, 1975). Emotional disclosure helps people resolve these disparities, and to thereby update their beliefs while alleviating their distress (Harber & Pennebaker, 1992). However, disclosure typically involves sympathetic listeners who, by listening, make their own schemas vulnerable to the events that so disturbed the tellers. If listeners are disturbed by tellers’ stories, they may seek disclosure opportunities of their own. Thus, stories are transmitted along a chain reaction wherein a schema violation → emotion → disclosure mechanism reproduces itself as hearers become tellers.
This social telegraph of disclosures begetting disclosures suggests an important social-psychodynamic process. The social network, and not just the individuals comprising it, becomes the entity of interest. How social networks absorb or repel new information, and how they attend to or suppress those who supply this information, represent an important new area in social psychology. EBT may help explore the psyche of social networks.

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Notes
1. The major premises for Emotional Broadcaster Theory are supplied in Harber and Cohen (2005).
2. Evidence that emotional disclosures effects cognitive assimilation include fewer intrusive thoughts (Lepore, Ragan, & Scott, 2000), increased working memory (Klein & Boals, 2001), and more moderate social judgments (Harber, Cohen, & Lang, 2008; Harber & Wenberg, 2005).

References


**Author Biographies**

**Kent D. Harber** is an associate professor in the Department of Psychology at Rutgers University at Newark. His research focuses on the Emotional Broadcaster Theory of social sharing, the effects of emotional disclosure on social cognition, the effects of psychosocial resources on social perception and physical perception, and interracial feedback from Whites to minorities.

**Peter Podolski** is a graduate student in computer sciences at the New Jersey Institute of Technology. His undergraduate honors thesis at Rutgers/Newark examined the effects of emotional disclosure on victim blaming.

**Lisbeth Dyer** studied linguistics and social psychology at NYU and at Rutgers University at Newark, and is interested in the intersection of these fields.