

# Journal of Language and Social Psychology

<http://jls.sagepub.com>

---

## **The Emotional Broadcaster Theory of Social Sharing**

Kent D. Harber and Dov J. Cohen

*Journal of Language and Social Psychology* 2005; 24; 382

DOI: 10.1177/0261927X05281426

The online version of this article can be found at:  
<http://jls.sagepub.com/cgi/content/abstract/24/4/382>

---

Published by:



<http://www.sagepublications.com>

**Additional services and information for *Journal of Language and Social Psychology* can be found at:**

**Email Alerts:** <http://jls.sagepub.com/cgi/alerts>

**Subscriptions:** <http://jls.sagepub.com/subscriptions>

**Reprints:** <http://www.sagepub.com/journalsReprints.nav>

**Permissions:** <http://www.sagepub.com/journalsPermissions.nav>

**Citations** <http://jls.sagepub.com/cgi/content/refs/24/4/382>

# THE EMOTIONAL BROADCASTER THEORY OF SOCIAL SHARING

KENT D. HARBER

*Rutgers University at Newark*

DOV J. COHEN

*University of Illinois, Urbana–Champaign*

*This article introduces the Emotional Broadcaster Theory (EBT) of emotional disclosure. EBT proposes that the intrapsychic need to share experiences with others serves the interpersonal function of transmitting news. According to the model, psychologically arousing stories will travel across social networks. In addition, the extent to which stories travel reflects the degree to which the original teller was affected by the experience shared. These hypotheses were tested in a field study wherein college students visited a hospital morgue. Students' reactions to this experience predicted how many people they told (primary sharing), how many people their friends told (secondary sharing), and how many people their friends' friends told (tertiary sharing). Within 10 days, nearly 900 people heard about this event through these cascading levels of disclosure. The relation of EBT to discrepancy theories of emotion and to basic beliefs is discussed, as are additional predictions arising from EBT.*

**Keywords:** *disclosure; news; emotions; social sharing*

In 1981, posters began appearing in the SoHo district of New York City with the following announcement: "ATTENTION: Amateurs, professionals, criminals, blue collar, white collar, you have wronged people. . . . Get your misdeeds off your chest! Call APOLOGY (212) 255-2748." Those who phoned in their apologies did not get a sympathetic, trained therapist as a confidant but instead a prerecorded voice message directing them to leave their confessions on a telephone answering machine. The likelihood that people would respond to such an unusual invitation and that they would divulge their hearts and souls to a stranger's answering machine would seem slim. Yet the "Mr. Apology" hotline, created by performance artist Allan Bridge, was eventually swamped with so many calls that Bridge incorporated an elaborate routing system that allowed callers to select an appropriate apology category including family, friends, and pets (Wilkinson, 2003).

Why would Mr. Apology's callers relay deeply personal and highly emotional stories to such an anonymous recipient with such minimal prompting? Research on self-disclosure indicates that people realize

JOURNAL OF LANGUAGE AND SOCIAL PSYCHOLOGY,

Vol. 24 No. 4, December 2005 382-400

DOI: 10.1177/0261927X05281426

© 2005 Sage Publications

382

important benefits by divulging emotionally important experiences, even if their audiences are anonymous or just notepads. The very act of putting one's thoughts and feelings into language provides insight and perspective on emotionally troubling events, makes hardships meaningful, and restores feelings of self-worth and other self-resources (Hemenover, 2003; Pennebaker, 1990; Silver, Boon, & Stones, 1983). Most impressively, disclosure through writing or verbal confession has measurable health consequences. Pennebaker and others have shown that disclosing thoughts and feelings surrounding past traumas leads to improved immunocompetence and reduced illness (Pennebaker, Kiecolt-Glaser, & Glaser, 1988).

This array of intrapersonal benefits would seem to sufficiently account for why people disclose major experiences—even in the impoverished outlet supplied by the Mr. Apology hotline. However, focusing exclusively on these intrapsychic benefits of disclosure does not address an important interpersonal aspect of self-disclosure. When other parts of our beings are injured, we have autonomous systems of repair. For example, blood coagulates and skin regenerates after a cut. The body produces antigens when infected. But when the psyche is wounded, it requires an opportunity to convey its experience in a form that other psyches can comprehend.<sup>1</sup> This dependence on the cognizance of others for emotional recovery suggests a symbiosis. The person disclosing receives the manifold intrapsychic benefits that have been summarized in the preceding paragraph. But the person hearing the story may be receiving some important benefits as well. If so, what kind of benefits do disclosers supply to listeners?

#### DISCLOSERS AS NEWS BROADCASTERS

We believe that those who share personal travails act as news sources, broadcasting psychologically important information to members of their social networks. Their disturbing stories serve as bulletins about major events or cautionary tales about hidden hazards and risky choices. It is important to emphasize that disclosers are probably unaware of the informational value of their emotionally driven reportage. People disclose to satisfy the intrapsychic needs previously discussed. An unintended but often real consequence of their efforts to unburden themselves, we believe, is to inform members of their social networks of valuable news.

The notion that those who disclose serve as news outlets is the core of the Emotional Broadcaster Theory (EBT), which was initially proposed by the first author (Harber, 1989; Harber & Pennebaker, 1992) but is developed more fully here. EBT is based on four central propositions: (a) people who have experienced major events are emotionally compelled to communicate their experiences, (b) disclosures are most therapeutic when they succeed as reportage, (c) emotionally motivated

disclosures often contain important information for listeners, and (d) the potency of tellers' own emotional experience will predict how far their stories travel across their social networks. Clinical and empirical research provides support for each of these propositions.

*The compulsion to disclose.* The urgency to disclose traumatic experience has been likened in intensity to a "fever," quelled through sharing personal distress with others (Stiles, 1987). As the Mr. Apology hotline indicates, the need to share causes people to reveal emotionally disturbing events with minimal prompting. Pennebaker (1989) has found that participants share extremely personal experiences, even within the nontherapeutic context of his disclosure and health experiments. In some criminal investigations, suspects even express relief and appreciation to interrogators for coaxing them into disclosing wrongdoing (Pennebaker, 1990).<sup>2</sup> Furthermore, for principals in the justice system, the opportunity to state their cases has an intrinsic value that may supersede instrumental benefits (Tyler, 1994).

People appear to communicate their thoughts and feelings even when they consciously attempt to hide them, as shown by research on emotional leakage (Ekman & Friesen, 1969). The need to share personal experience appears to cross cultures and genders (Rimé, 1995). And as the 30,000-year-old Lascaux cave drawings suggest, the need to convey experiences in a form understandable to others is an ancient part of our human heritage.

Emotional arousal and desires to communicate almost always co-occur following major events such as natural disasters or social upheavals. This close correspondence between emotional arousal and social sharing was a central feature of the 1989 Loma Prieta earthquake and the 1990 to 1991 Persian Gulf War (Pennebaker & Harber, 1993) as well as the September 11 terrorist attacks (Greenberg, Hofschire, & Lachlan, 2002). Research on news diffusion following major events suggests, in accord with EBT, that the emotions aroused by these events are not simply a corresponding feature, but actually a cause of social sharing. The desire to share feelings with others is one of the reasons people most frequently list, and most highly rate, when describing why they discuss such major news events with others (Gantz & Trenholm, 1979). For example, people who were most upset by the Challenger disaster were those most likely to transfer this news on to others (e.g., Riffe & Stovall, 1989), and the more they disclosed, the better they felt (Kubey & Peluso, 1990). Anticipating EBT, Kubey and Peluso (1990) suggest that people pass on major news stories not out of an altruistic desire to inform others but simply to relieve their own feelings.

Cumulatively, these findings indicate that there is a universal, prehistoric, and quite powerful motive for people to socially share major events.

*Disclosures that succeed as reportage are also the most therapeutic.* Pennebaker has reviewed writing samples of participants in his disclosure and health studies and finds that the narrative quality of writing predicts the health outcomes of the writers. These “health-prone” disclosures are emotionally vivid, use imagery and metaphor, and are chronologically well ordered (i.e., clear beginning, middle, and end; Harber & Pennebaker, 1992). Bucci (1997), in her studies of language and psychotherapy, finds that the prognosis for therapy radically improves after clients begin using language that creates clear and vivid images in their therapists’ minds. In short, the most tonic disclosures are those that succeed as “good copy.”

*Emotional disclosures present valuable information to listeners.* People often adopt more adaptive attitudes and behaviors after listening to others’ traumatic stories. They become more alert to dangers and take greater precautions to avoid threats following interactions with victims (McCann & Pearlman, 1990). “Testimony therapists” who have been told stories of governmental oppression become more politically informed and active (Agger & Jensen, 1990). According to Lewin (1948), those who have heard about the suffering of coreligionists adopt more adaptive time perspectives, and clinical research on children of Holocaust survivors indicates that these people develop world-views that favor moderation and complexity over extremism (Carmil & Breznitz, 1991).

A recent study of gossip by Baumeister, Zhang, and Vohs (2004) documents the informational value of informal social sharing. Participants described the most interesting gossip they heard over the past week, month, and year and then answered questions regarding how the gossip affected them emotionally and cognitively. Virtually all participants felt emotionally affected by these stories, and the more they were affected (especially negatively so), the more they claimed to have learned valuable life lessons from these stories (e.g., do not tell lies, do not cheat, do not take friends for granted).

In sum, although hearing about others’ emotionally charged stories may lead to short-term depressed moods and physiologic stress, the long-term benefits may include acquiring more realistic, and hence more adaptive, beliefs and perspectives.

#### **SOCIAL SHARING AND THE TRANSMISSION OF EMOTIONAL STORIES**

If emotional disclosures operate as news stories, then they should be transmitted across tellers’ social networks. In addition, the degree to which stories travel should correspond to the emotional impact that the initial events have upon tellers. This is because tellers who are more disturbed by events may, through disclosure, make hearers more

disturbed, leading hearers to seek their own disclosure opportunities. Indeed, emotional disclosures often have a contagious quality. Being privy to another person's trauma can lead to "secondary traumatization" such that the hearers of traumatic stories themselves become subject to nightmares, fatigue, depression, and other symptoms that follow emotional trauma (McCann & Pearlman, 1990). Hearing other people's disclosures following the September 11 terror attacks was associated with both increased anxiety and heightened physiological responses in the aftermath of this event (Greenberg et al., 2002).

In accord with EBT, those who experience secondary traumatization typically seek their own disclosure opportunities. An impressive body of research on social sharing by Rimé and his associates documents this phenomenon. Rimé reports that "secondary social sharing," in which tellers' confidants relay the tellers' stories to others, occurs between 65% and 78% of the time, despite implicit norms to respect the initial teller's confidence (Christophe & Rimé, 1997). Rimé has also shown that the extent of secondary sharing is related to the distress experienced by the original teller (Christophe & Rimé, 1997). And, significantly for EBT, Rimé speculates that one consequence of sharing is dispersal of important information across social networks (Rimé, 1995; Rimé & Christophe, 1997).

#### TERTIARY SOCIAL SHARING

If story transfer is motivated by emotional arousal, then the greater impact an experience has upon the original teller, the farther this person's story should travel. For this reason, demonstrating repeated transfer of stories across social networks is central to EBT. Of course, a story may be told and retold across a network for reasons other than emotional release. In some cases, tellers' confidants share the tellers' stories with others who themselves are friends with, or at least know of, the teller. If so, then the sharing may occur to consolidate support for (or perhaps censure of) the teller. In this instance, the sharing would be mainly social—it would serve to strengthen interpersonal bonds or to realign social connections rather than to disseminate news more generally defined. However, the more times a story is transferred from one person to another, the more likely it will be to reach people outside of the teller's immediate social network. In this case, the interest value of the story is likely to be "guess what happened" rather than "guess what happened to so and so."

This is significant because EBT argues that social sharing is not merely about social support but also about the transfer of emotionally arousing information across a relatively wide network of people. For this reason, we examined not only secondary sharing but also tertiary sharing. Tertiary sharing occurs when tellers inform their friends (primary sharing) who then inform their friends (secondary sharing), who

in turn inform their friends (tertiary sharing). Although sharing at the tertiary level may still involve members of the original teller's social network, the odds increase that tertiary sharing also involves those without ties to the teller.

The present study was designed to test whether tertiary social sharing occurs and whether it is related to the original teller's psychological reaction to the disturbing event. In addition, this study sought to demonstrate these effects in a real-world context, using ecologically valid data supplied from actual social networks. Demonstrating that secondary and tertiary sharing occur in the real world, following a commonly shared event of high emotional impact, would advance both the EBT and the social-sharing literature in general. The opportunity to meet these goals arose when the second author organized a field trip to a hospital morgue for an introductory psychology class. This novel, emotionally charged event, surrounding the fundamentally disruptive topic of mortality (Solomon, Greenberg, & Pyszczynski, 1991), seemed tailor-made for testing the predictions of EBT.

## METHOD

### OVERVIEW

Students toured a hospital morgue during a class field trip. Three days after the morgue tour, they reported on (a) how many friends and family they spoke to about the tour (primary disclosures), (b) how many people their friends and family spoke to about the tour (secondary disclosures), and (c) how many people these contacts, in turn, spoke to about the tour (tertiary disclosures). The students also reported on their own emotional reactions to the morgue tour and wrote brief summaries (1-2 paragraphs) of their experiences.

### THE MORGUE VISIT

Two sections of a large Introduction to Psychology class (combined  $n = 50$ ) had the option to take a field trip to the morgue at a local hospital for extra course credit.<sup>3</sup> Thirty-three students (66%) chose to participate, of which 18 (55%) were female. The second author arranged the field trip and accompanied the students on the tour, which was led by a hospital administrator and lasted approximately 1 hour. During the tour, students were informed of the purposes and procedures involved in the handling of bodies donated to science, they met with a pathologist who discussed neuroanatomy and showed the students a human brain and other organs as well as equipment used in dissection, and they met the hospital chaplain, who discussed issues related to griev-

ing as well as to ministering to the sick. A cadaver was available for viewing for the second group but not for the first group. The curriculum preceding the morgue visit did not include research or theory relating to social sharing, to the dynamics of emotional disclosure, or to other topics that would have alerted students to the research goals of the morgue visit.

#### DISCLOSURE TRACKING EXERCISE

Three days after the field trip (at the next meeting of their class discussion section), students who had attended the field trip were asked to participate in a follow-up survey in which they would serve both as respondents and as researchers. The students were not alerted to this option before this time, and therefore, anticipating the research opportunity did not influence the information they supplied. All students agreed to participate and received course credit for their participation. The exercise involved three subparts. Part I was a brief survey of participants' own psychological reactions to the morgue visit. Items concerned the degree to which students experienced the field trip as upsetting, interesting, and valuable; their thoughts about the trip and their efforts to suppress these thoughts; and other related aspects of their reactions to this event. Students rated these items using a 1 (*not at all*) to 5 (*extremely*) Likert scale. A separate item concerned the total number of people students spoke to about visiting the morgue. Responses to this item constituted our measure of primary sharing, which we discuss in the results section. The survey, which was otherwise anonymous, also asked about students' gender and age. Part II of the exercise involved a brief writing exercise, consisting of a single sheet of lined paper upon which students related any thoughts and feelings they wished to share regarding the morgue visit. This narrative exercise immediately followed the reactions survey.

Part III of the exercise was designed to track how far students' morgue-related stories traveled. That is, how many people students told, how many people students' contacts told, and how many people the contacts' contacts told. The students collected these data with the aid of a Story Tracking Log Sheet (see Appendix 1). As Appendix 1 shows, the log sheet was organized such that students listed the first six people whom they themselves contacted, in the order in which these contacts were made. For convenience, these initial contacts are henceforth referred to as students' "friends," although they often included family as well as friends. Students were not allowed to include other field-trip attendees among their friends because doing so would obscure tracing story transfer beyond those who experienced the event firsthand.

Students were instructed to contact each of their friends and to ask them to list the people to whom they had disclosed the morgue visit



story. This second tier of contacts, referred to as “friends’ friends,” represented the secondary sharing of the morgue story. To trace the tertiary sharing of stories, students obtained from either their first or their last listed friend the names and phone numbers of all the people whom the friend had contacted, telephoned each of these friend’s friends, and asked each of them to report the number of people to whom they had shared the morgue story (i.e., friends’ friends’ friends). This final level of story transfer constitutes tertiary social sharing.

The restriction to survey only one set of friend’s friends was done to reduce the burden placed on students and to thereby obtain greater compliance and hence more reliable data. Alternating between the first and the last listed friend as a source of information on tertiary sharing was done to control for artifacts that might arise from focusing exclusively on a most favored social network member, with whom affiliative ties to the student might unduly contribute to story transmission and thereby obscure the “newsworthiness” of the story itself.

## RESULTS

### PRELIMINARY ANALYSES

*Data reduction.* The 13 emotional reaction items on the postvisit survey were summed and averaged to form a composite reactivity index. One item, concerning regret about attending the field trip, was excluded because it reduced index reliability. The reliability of the overall reactivity index was satisfactory,  $\alpha = .81$ . The average reaction score to the morgue visit was 3.99 ( $SD = 0.82$ ), where scores could range from 1 to 5. This indicates that the field trip was a fairly potent psychological experience, as it was expected to be.

*Group differences on blocking variables.* Students in the first tour group did not view a cadaver, but those in the second tour group did. The reactions of these two groups did not significantly differ from one another,  $F(1, 31) = 0.11, p = .74$ . Further analyses therefore collapse across the field-trip groups. Women tended to have slightly stronger reactions to the field trip ( $M = 4.18, SD = 0.89$ ) than did men ( $M = 3.77, SD = 0.71$ ), but this difference was not reliable,  $F(1, 31) = 1.94, p = .17$ . Further analyses also collapsed across gender.

A final set of preliminary analyses concerned differences in tertiary sharing among participants who surveyed their first-listed friend’s friend or their last-listed friend’s friend. These two groups did not differ in the average number of tertiary contacts made by any individual friend’s friend— $F(1, 21) = 1.54, p = .23$ —and subsequent analyses collapse across this factor.

Table 1  
*Rates of Primary Sharing, Secondary Sharing, and Tertiary Sharing Among Students Who Attended the Morgue Field Trip and Members of the Students' Social Networks*

	Primary Sharing (Sharing by Students) ( <i>n</i> = 33)	Secondary Sharing (Sharing by Students' Friends) ( <i>n</i> = 32)	Tertiary Sharing (Sharing by Students' Friends' Friends) ( <i>n</i> = 26)
No. and % of students for whom sharing occurred	32.00 97%	27.00 82%	16.00 48%
Mean contacts per sharer	6.21 (4.06)	1.46 (1.21)	1.26 (1.20)
Total no. of contacts at this level of sharing	205	299	377

*Note.* The *ns* refer to the number of students reporting data at this level. Percentages are based on the total number of students in the study (i.e., 33). Numbers in parentheses represent standard deviations. "Total number of contacts" for secondary sharing is imputed based on "mean contacts per secondary sharer" (1.46)  $\times$  total number of primary contacts (205), and "total number of contacts" for tertiary sharing is imputed based on "mean contacts per tertiary sharer" (1.26)  $\times$  total number of secondary contacts (299).

## MAIN ANALYSES

*Story travel.* This study was designed to trace the travel of students' stories from the students themselves to their friends (primary sharing), to their friends' friends (secondary sharing), and to their friends' friends' friends (tertiary sharing). Table 1 summarizes data on the travel of students' morgue visit stories. It shows that primary disclosure occurred among nearly all students (97%), who reported their morgue visit to at least one friend. Secondary sharing, in which students' friends relayed the morgue visit story to their own friends, occurred among 82% of the students, who relayed the story to at least one member of their social networks.

Tertiary sharing, which is the focus of the present study, occurred for 48% of the students. For these students, the story they told was transferred from friends, to friends' friends, to friends' friends' friends. Table 1 also indicates that the rate of sharing appears to decline nonlinearly between levels of sharing: 6.21 contacts were made by each student,<sup>4</sup> 1.46 contacts were made by each friend, and 1.26 contacts were made by each friend of a friend. This pattern is consistent with the prediction that sharing reflects the intensity of each person's reaction to the shared event. We would assume greatest disturbance by students who visited the morgue and then steeply declining levels of disturbance at each succeeding level of sharing, as the event became increasingly remote and more frequently filtered by preceding sharers.

A surprising feature of story travel is the sheer number of people who ultimately heard about the students' morgue experience (see

Table 2  
*Correlations Between Students' Emotional Reactions to the Morgue Field Trip to Primary, Secondary, and Tertiary Social Sharing of Their Field-Trip Stories*

	Primary Sharing ( <i>n</i> = 33)	Secondary Sharing ( <i>n</i> = 32)	Tertiary Sharing ( <i>n</i> = 26)
Students' reactions	.73**	.24	.46*
Students' disclosures (i.e., primary sharing)		.56**	.61**

*Note.* Secondary and tertiary sharing refer to the average number of contacts per each secondary and tertiary respondent.

\* $p < .05$ . \*\* $p < .01$ .

Table 1). The nucleus of 33 students who attended the field trip shared their experience with a total of 205 listeners (or 6.21 listeners each), those 205 people then told another 299 listeners (1.46 people each) about the field trip, and those 299 people in turn told another 377 listeners (1.26 people each). Within just 3 days, 33 people had an experience and another 881 people had learned about it from a friend, a friend of a friend, or a friend of a friend of a friend. Even assuming the story went no further, this process of relaying stories seems to effectively transfer information across social networks.

*The effect of students' reactions upon story travel.* This study predicted that students' emotional reactions to the morgue field trip would influence the extent to which their morgue-visit stories traveled across social networks. The composite "emotional reactions" scale constituted our independent variable, and our dependent variables included the total numbers of people who directly heard about the visit from the students (primary sharing), the average number who heard about it from each of the students' friends (secondary sharing), and the average number who heard about it from each of the students' friends' friends (tertiary sharing).<sup>5</sup> Table 2 shows that in the main, these predictions were confirmed. Students' reactions strongly predicted their own rates of primary sharing ( $r = .73, p < .01$ ), as well as tertiary sharing ( $r = .46, p < .03$ ).

*Primary sharing predicts secondary and tertiary sharing.* Primary sharing is so closely tied to people's emotional reactions to events ( $r = .73$ ) that the rate at which people disclose their experiences to others may, in itself, serve as an index of reactivity (a point also made by Kennedy-Moore & Watson [1999] and by Luminet, Bouts, Delie, Manstead, & Rimé [2000]). We therefore correlated primary sharing (the rate at which students related the morgue study to friends) to the average rates of secondary sharing and tertiary sharing. Results, presented in Table 2, show that students' own propensity to discuss the morgue field

trip with others was a potent predictor of the average rate of secondary sharing and the average rate of tertiary sharing.

*Students' experiences, in their own words.* Of the 33 students, 28 (85%) chose to write brief statements (about half a page) regarding their reactions to the morgue visit. Several themes emerged in these writings. Many students wrote about how interesting they found the visit, in terms of gaining a deeper appreciation for human physiology. A number of students were offended by the apparently cavalier manner in which some staff discussed death and mourning, and others were similarly distressed by the casual way in which the cadaver was displayed. Interestingly, 12 students (43% of those who wrote) commented on being affected by their own psychological reactions. Typical of these was the student who anticipated feeling horrified and repulsed by the field trip but instead found that she was fascinated and then wondered what her unexpected interest said about her as a person. Collectively, students' writings confirmed that the morgue visit had a profound impact on the students, evoking strong, complex, and—for some—conflicting emotions.

## DISCUSSION

According to EBT, the intrapsychic need to disclose serves the interpersonal function of conveying news. The present study supports the model by demonstrating transfer of an emotionally arousing event across social networks. Nearly all the students who participated in the morgue field trip shared their experiences with at least one other person. Most of students' confidants also shared this story. This secondary social sharing is consistent with previous research by Rimé and his associates, which demonstrates transmission of upsetting stories beyond the persons directly affected by the disturbing event.

A stronger indication that disclosures serve to transport news across social networks, however, would involve evidence of tertiary social sharing. In the present study, tertiary sharing—where audiences may be twice removed from those who initially described the experience—occurred for half of the students who disclosed their morgue experiences. Some of this tertiary sharing may have occurred because both the sharers and their listeners were acquainted with the students who visited the morgue. However, by virtue of being transmitted three times, the likelihood decreased that listeners were affiliated with the field-trip attendees. For tertiary listeners, the story was more likely about the morgue visit itself and less about the students who participated in the visit.

Thirty-three students visited the hospital morgue, yet in less than 1 week, as many as 881 others were informed through primary, second-

ary, or tertiary social sharing.<sup>6</sup> This degree of coverage in such a short time, for an event that although unusual, was not catastrophic, indicates that social sharing is a very potent means of information transfer across social networks. Social sharing would seem fully adequate to the spread of information within a small collective, including populations that lack written language or other media for mass communication, which until relatively recently was true for most humanity.

EBT predicts that stories that carry greater emotional impact are more likely to be shared across social networks. The present study confirmed this prediction. The degree to which primary and even tertiary sharing occurred was correlated to the psychological reactions of the primary sharers—the students who attended the morgue tour. Furthermore, the correlation between students' own degree of disclosure, and the propensity of their friends, and their friends' friends, to transmit the morgue visit story, was quite strong (*r*s were .56 and .61, respectively). Disclosure about disturbing events is, itself, a strong behavioral index of psychological reactions to such events (Kennedy-Moore & Watson, 1999). It is therefore likely that disclosure rates are as good (or perhaps even better) indicators of tellers' reactivity than are self-reports. Together, these two sets of correlations provide strong confirmation that the emotional reactions of those who immediately experience major events predicts the sharing of these events by others.

In sum, the psychological reactions of people who directly experienced a disturbing event appear to have determined the degree to which others, three times removed from them, heard about this event. This distal interpersonal consequence of their own intrapersonal need to disclose was most likely unintended by, and perhaps even unknown to, the original tellers.

#### CAVEATS

We contend that tertiary sharing represents the information-transfer function of disclosure because relaying a story three-times removed from the original teller is less likely to reflect interest in this person but instead interest in this person's experience. However, we have no direct data regarding social ties between the students who went on the morgue visit and the secondary or tertiary audiences to their stories. Also, we do not know the content of secondary and tertiary disclosures and therefore cannot determine the degree to which these focused on the morgue visit or the students who participated in it. Finally, we cannot account in this study for the emotional profiles of tellers' confidantes. It may have been that aroused tellers sought out especially excitable, gregarious, or talkative confidantes, who were by nature more likely to transfer the story on to others.

The informational function of social sharing does not preclude other important interpersonal benefits that accompany emotional disclo-

sure, such as reinforcing social bonds, establishing trust and intimacy, providing a means to demonstrate social standing (e.g., “guess what hot news I’m privy to”), or being a source of entertainment and titillation. However, the fact that these and other benefits may accrue from social sharing does not necessarily void the informational aspect. Like mating, competing, or playing, social sharing may serve both proximal and distal ends.

### EBT AND EMOTION THEORY

EBT draws heavily from “discrepancy theories” of emotional arousal (Mandler, 1964; Simon, 1967). According to these theories, emotions arise when information violates expectations. These expectations reflect beliefs or schemas about how the world works and are vital for navigating daily living. By drawing attention to event or belief discrepancies, emotions may prompt people to more closely examine schema-disrupting events (e.g., to determine whether these were correctly perceived) or to correct their schemas so as to make them better reflect reality. In this way, emotional assimilation prompts learning and helps organize knowledge.

Importantly, one of the central ways in which people assimilate emotions (i.e., resolve the event or belief discrepancies from which emotions arise) is by talking about them and about the situations from which emotions arise (Harber & Pennebaker, 1992). Thus, to complete the intrapsychic work of assimilation, people often expose others to the events that they themselves experienced as disturbing. If their listeners also find this shared information to be discordant with their own beliefs and schemas, then they too will be emotionally aroused and hence motivated to share this experience with others as a way to resolve their own inner conflict.

EBT proposes that this sequence from belief-disrupting event to emotion to disclosure is an engine that prompts social sharing. From this framework, a number of testable predictions can be derived, which determine when sharing will occur and when it will not occur.

Janoff-Bulman’s (1989) work on posttraumatic coping provides a way to distinguish between disturbing events that will become highly “transmittable” as news and equally disturbing events that will not become highly transmittable news. According to Janoff-Bulman, traumas occur when schemas of great importance, so-called fundamental assumptions, are violated. These assumptions include believing that the world is just, that the world is well ordered and nonchaotic, and that the self is good.

What is especially useful in these fundamental assumptions, in terms of EBT, is that they help predict when an event will be emotionally meaningful for those who experience it firsthand, for their listen-

ers (or potential listeners), for both, or for neither. For example, being treated rudely by a waiter may violate a diner's belief in her own worthiness, evoke in her strong feelings of offense, and therefore, compel her to share this event with her friends. However, because the existence of rude waiters probably does not violate most people's fundamental beliefs about the world, the diner's story is probably not likely to disturb her listeners and therefore will not be retold by them.

In contrast, a visit to a hospital morgue—where bodies are handled with shocking casualness, where taboos about death are broached, and where mortality is confronted—is very likely to disrupt implicit beliefs about the benevolence and orderliness of the world, as well as illusions of invulnerability (as per Solomon et al., 1991). The morgue visit would therefore constitute news not only for those who experienced this event firsthand but also for their listeners. As a result, the event should be transferred beyond the first echelon of listeners. The present study indicates that it did.

As mentioned in the introduction, hearing others' traumatic stories can levy a psychological toll. One reason people are willing to accept the cost of listening may be the information value that disclosures offer. However, when the "news value" of a disturbing story has been exhausted, listeners may be less inclined to welcome, let alone encourage, others to share their troubling experiences. Pennebaker and Harber (1993) report that immediately following the 1989 Loma Prieta earthquake, when people were eager for information, strangers were speaking freely to each other about their experiences. Three weeks later, when people were saturated with quake-related news, emotional disclosures may have been less welcomed, as evidenced by T-shirts that read, "Thank you for not sharing your quake experience with me."

According to EBT, the compulsion to disclose is motivated by the demands of emotional assimilation. Because these demands are satisfied through disclosure (as previously discussed), initial disclosures should reduce the desire for additional disclosures. The first author has conducted a study that supports this prediction (Harber, 2004). In this study, participants watched a gruesome scene from the John Sayles movie *Matawan*, in which a young coal miner is brutally murdered by antiunion goons. Immediately afterward, half the participants were given an opportunity to disclose their thoughts and feelings about this scene using Pennebaker's (1989) disclosure paradigm. The other participants were instructed to describe the film factually and, thus, were prevented from disclosing (and thereby resolving) the emotions that the film aroused. Participants were then asked to not discuss the movie with anyone until returning to the experiment 6 weeks later. Participants who had disclosed their emotions during the initial study phase reported being less tempted to discuss the film during the 6-week interval and, in fact, followed the no-disclosure instruction more

faithfully than did participants who could write only factually but not emotionally about the film clip. In sum, the compulsion to share was further reduced following an initial disclosure opportunity.

#### **EMOTIONAL DISCLOSURE AND EVOLUTIONARY PSYCHOLOGY**

Evolutionary psychology has rightly focused on the kinds of behaviors central to human functioning, including mate selection, aggression, and morality. However, with some exceptions, there has been relatively scant consideration of how emotionally motivated disclosure is adaptively valuable.<sup>7</sup> One of these exceptions is the emerging interest in the psychology of gossip. According to Dunbar (2004), gossip—which he estimates occupies 65% of most informal conversations—serves to police free riders and may also function to solidify social bonds, much the way grooming does among other primates. Baumeister et al. (2004) supply an analysis of gossip that is remarkably close to the propositions and predictions of EBT. According to Baumeister et al., gossip is fundamentally a means of information transfer. Hearing stories of others' experience, they say, saves listeners the costs of having to endure these experiences themselves while supplying the life lessons that these experiences contain. Baumeister et al. make a point about gossip that we make regarding disclosure generally, which is that although social sharing serves the distal end of spreading information, the proximal impulse to share social information is not necessarily to educate but may arise instead from more immediate egocentric desires (i.e., to raise social status, to entertain, etc.).

#### **CONCLUSION**

Disclosing emotionally arousing events serves important intrapersonal needs, including the need to align schemas and beliefs with new information. According to EBT, the need to disclose may also serve an equally important interpersonal function, which is to transmit news through social networks. It does so by imparting, from teller to hearer, disturbing information that often compels hearers to seek out disclosure opportunities of their own. In this way, a social telegraph is instantiated, through which events experienced by a few people are quickly transmitted to many times their number. EBT provides a way of understanding how and why this telegraph operates. It may also represent a junction where theories of emotion, cognition, communication, and perhaps even evolution intersect.



### APPENDIX 1 HOW FAR DOES YOUR STORY TRAVEL?

1. Write down the names of the first 6 people **outside of class** whom you spoke to about this experience, **in the order in which they were contacted**.
2. Then, contact each of these people and ask them how many people they told your story to, as well as the sex of each of these people.
3. For the first (last) person on your list, record the names and numbers of all the people this person contacted.
4. Contact each of the people identified by your first (last) listener and find out the number and sex of their listeners.

#### Your Listeners' Listeners.

1. Name: <u>Roger</u>	Phone: 634 - 8324	Sex = <u>X</u> <u>M</u>	told = <u>1</u>
2. Name: <u>Maja</u>	Phone: 634 - 5378	Sex = <u>  </u> <u>M</u> <u>X</u> <u>F</u>	told = <u>0</u>
3. Name: <u>Marlow</u>	Phone: 798 - 2125	Sex = <u>X</u> <u>M</u> <u>  </u> <u>F</u>	told = <u>2</u>
4. Name: <u>  </u>	Phone: <u>  </u>	Sex = <u>  </u> <u>M</u> <u>F</u>	told = <u>  </u>
5. Name: <u>  </u>	Phone: <u>  </u>	Sex = <u>  </u> <u>M</u> <u>F</u>	told = <u>  </u>
6. Name: <u>  </u>	Phone: <u>  </u>	Sex = <u>  </u> <u>M</u> <u>F</u>	told = <u>  </u>
7. Name: <u>  </u>	Phone: <u>  </u>	Sex = <u>  </u> <u>M</u> <u>F</u>	told = <u>  </u>
8. Name: <u>  </u>	Phone: <u>  </u>	Sex = <u>  </u> <u>M</u> <u>F</u>	told = <u>  </u>
9. Name: <u>  </u>	Phone: <u>  </u>	Sex = <u>  </u> <u>M</u> <u>F</u>	told = <u>  </u>
10. Name: <u>  </u>	Phone: <u>  </u>	Sex = <u>  </u> <u>M</u> <u>F</u>	told = <u>  </u>

  

1 Sex =    M X F, # told = 3  
Hannah  

PRIMARY SHARING  
(Student's friend)

2 Sex =    M X F, # told = 2  
Deb

3 Sex = X M    F, # told = 2  
Roddy

4 Sex = X M    F, # told = 0  
Ross

5 Sex =    M X F, # told = 4  
Kelly

6 Sex = X M    F, # told = 1  
Ted

SECONDARY SHARING  
(Friend of friend)

TERTIARY SHARING  
(Friend of friend of friend)

Notes:

1. This is a simulation of a completed Story Tracking Log Sheet. The information presented here was invented for purposes of illustration.
2. On the alternate version of this form, information on Tertiary Sharing would be gathered for the last identified source of Primary Sharing.

## NOTES

1. Even when writing in diaries or journals, one's own self may serve as audience, the receptive "me" to whom the expressive "I" discloses.
2. Novelists have created poignant examples of people psychologically compelled to confess wrongdoing, such as Roskolnikov in Dostoevsky's *Crime and Punishment* (Dostoevsky, 1984) and the narrator in Poe's *Tell-Tale Heart* (Poe, 1983), as well as those tormented by their failure to confess, such as the Reverend Dimmesdale in Hawthorne's *The Scarlet Letter* (Hawthorne, 1850).
3. The purpose of the field trip was to introduce students to a domain in which social mores, cultural taboos, science, and medicine all intersect.
4. As mentioned in the method section, the total number of people that students informed was based on an item in the follow-up survey rather than the tracking sheet in which no more than six listeners could be listed.
5. We used the average number, rather than total number, of people contacted because the totals would be conflated by the rate of sharing at the prior level.
6. This sum is based on the extrapolation described in the results section.
7. Owren and Bacharowski (2001) discuss the adaptive value of emotional expression in humans, but their treatment is largely limited to understanding smiling, laughing, and related visceral responses rather than the more elaborated narratives that social sharing entails.

## REFERENCES

- Agger, I., & Jenson, S. B. (1990). Testimony as ritual and evidence in psychotherapy for political refugees. *Journal of Traumatic Stress, 3*, 115-130.
- Baumeister, R. F., Zhang, L., & Vohs, K. D. (2004). Gossip as cultural learning. *Review of General Psychology, 8*, 111-121.
- Bucci, W. (1997). *Psychoanalysis and cognitive science*. New York: Guilford.
- Carmil, D., & Breznitz, S. (1991). Personal trauma and world view. *Journal of Traumatic Stress, 4*, 393-405.
- Christophe, V., & Rimé, B. (1997). Exposure to the social sharing of emotion: Emotional impact, listener responses and secondary social sharing. *European Journal of Social Psychology, 27*, 37-54.
- Dostoevsky, F. (1984). *Crime and punishment*. New York: Bantam.
- Dunbar, R. I. M. (2004). Gossip in evolutionary perspective. *Review of General Psychology, 8*, 100-110.
- Ekman, P., & Friesen, W. (1969). Nonverbal leakage and clues to deception. *Psychiatry, 32*, 88-105.
- Gantz, W., & Trenholm, S. (1979). Why people pass on news: Motivations for diffusion. *Journalism Quarterly, 56*, 365-370.
- Greenberg, B. S., Hofschire, L., & Lachlan, K. (2002). Diffusion, media use, and interpersonal communication behaviors. In B. S. Greenberg (Ed.), *Communication and terrorism* (pp. 3-26). Cresskill, NJ: Hampton Press.
- Harber, K. D. (1989). *Responses to traumatic disclosures: Collaboration vs. contest*. Report presented to the Stanford Center on Conflict and Negotiation.
- Harber, K. D. (2004). [Impeding disclosure fosters disclosure]. Unpublished raw data.
- Harber, K. D., & Pennebaker, J. W. (1992). Overcoming traumatic memories. In S. A. Christianson (Ed.), *The handbook of emotion and memory: Research and theory* (pp. 359-386). Hillsdale, NJ: Lawrence Erlbaum.
- Hawthorne, N. (1850). *The scarlet letter*. Boston: Tichnor, Reed, & Fields.

- Hemenover, S. H. (2003). The good, the bad, and the healthy: Impacts of emotional disclosure of trauma on resilient self-concept and psychological distress. *Personality and Social Psychology Bulletin, 29*, 1236-1244.
- Janoff-Bulman, R. (1989). Assumptive worlds and the stress of traumatic events: Applications of the schema construct. *Social Cognition, 7*, 113-136.
- Kennedy-Moore, E., & Watson, J. C. (1999). *Expressing emotion*. New York: Guilford.
- Kubey, R. W., & Peluso, T. (1990). Emotional response as a cause of interpersonal news diffusion: The case of the space shuttle tragedy. *Journal of Broadcasting and Electronic Media, 34*, 69-76.
- Lewin, K. (1948). *Resolving social conflicts*. New York: Harper.
- Luminet, O., Bouts, P., Delie, F., Manstead, A. S. R., & Rimé, B. (2000). Social sharing of emotion following exposure to a negatively valenced situation. *Cognition and Emotion, 14*, 661-668.
- Mandler, G. (1964). The interruption of behavior. In *Nebraska symposium on motivation* (pp. 163-220). Lincoln: University of Nebraska Press.
- McCann, I. L., & Pearlman, L. A. (1990). Vicarious traumatization. *Journal of Traumatic Stress, 3*, 131-149.
- Owren, M. J., & Bachorowski, J. A. (2001). The evolution of emotional expression: A "selfish-gene" account of smiling and laughter in early hominids and humans. In T. J. Mayne & G. A. Bonanno (Eds.), *Emotions: Current issues and future directions* (pp. 11-36). New York: Guilford.
- Pennebaker, J. W. (1989). Confession, inhibition, and disease. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 22, pp. 211-244). New York: Academic Press.
- Pennebaker, J. W. (1990). *Opening up: The healing power of confiding in others*. New York: William Morrow.
- Pennebaker, J. W., & Harber, K. D. (1993). A social stage model of collective coping: The Loma Prieta earthquake and the Persian Gulf War. *Journal of Social Issues, 49*, 125-145.
- Pennebaker, J. W., Kiecolt-Glaser, J., & Glaser, R. (1988). Disclosure of traumas and immune function: Health implications for psychotherapy. *Journal of Consulting and Clinical Psychology, 56*, 239-245.
- Poe, E. A. (1983). *The tell-tale heart and other writings*. New York: Bantam.
- Riffe, D., & Stovall, J. G. (1989). Diffusion of news of shuttle disaster: What role for emotional response? *Journalism Quarterly, 66*, 551-576.
- Rimé, B. (1995). The social sharing of emotion as a source for the social knowledge of emotion. In J. A. Russell, J.-M. Fernandez-Dols, A. S. R. Manstead, & J. C. Wellencamp (Eds.), *Everyday conceptions of emotions* (pp. 475-489). Boston: Kluwer Academic.
- Rimé, B., & Christophe, V. (1997). How individual emotional episodes feed collective memory. In J. W. Pennebaker, D. Paez, & B. Rimé (Eds.), *Collective memories of political events: Social and psychological perspectives* (pp. 131-146). Hillsdale, NJ: Lawrence Erlbaum.
- Silver, R. C., Boon, C., & Stones, M. (1983). Searching for meaning in misfortune: Making sense of incest. *Journal of Social Issues, 39*, 81-102.
- Simon, H. (1967). Motivational and emotional controls of cognition. *Psychological Review, 74*, 29-39.
- Solomon, S., Greenberg, J., & Pyszczynski, T. (1991). A terror management theory of social behavior: The psychological functions of self-esteem and cultural worldviews. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 24, pp. 93-159). San Diego, CA: Academic Press.
- Stiles, W. B. (1987). "I have to talk to somebody." In V. J. Derlega & J. H. Berg (Eds.), *Self-disclosure* (pp. 257-382). New York: Plenum.
- Tyler, T. (1994). Psychological models of the justice motive: Antecedents of distributive and procedural justice. *Journal of Personality and Social Psychology, 67*, 850-863.
- Wilkinson, A. (2003). *Mr. Apology and other essays*. Boston: Houghton Mifflin.

*Kent D. Harber is an assistant professor of psychology at Rutgers University in Newark his research focuses on psychosocial resources and coping, and interracial feedback. He received his Ph.D. at Stanford University in 1995.*

*Dov J. Cohen is an associate professor of psychology at the University of Illinois, Urbana-Champaign. He received his degree from the University of Michigan in 1994. He studies issues related to culture, honor, and perspectives on the self.*