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Emotional Expression and Health

Richard B. Slatcher and James W. Pennebaker
The University of Texas at Austin

Correspondence should be addressed to the authors (e-mail: slatcher@mail.utexas.edu or pennebaker@mail.utexas.edu), Department of Psychology, University of Texas, Austin, 78712. Preparation of this manuscript was aided by a grant from the National Institutes of Mental Health (MH52391).

Emotional Expression and Health

A longstanding puzzle within psychology and psychosomatic medicine concerns the relationship between the expression of emotions and physical health. Descartes and Shakespeare suggested that not expressing powerful emotions could be unhealthy. Similarly, William James (1890) and Franz Alexander (1950) forcefully argued that inhibiting the expression of strong emotions over time could result in physical health problems through basic biological stress-related channels. Despite these early hypotheses, there is still not overwhelming evidence to support the idea that the suppression of emotional expression is unhealthy and, conversely, that their open expression is beneficial.

Emotional expression has been viewed by our culture somewhat ambivalently. On the one hand, emotional expression is often viewed as rather uncivilized, as “giving in” to passion (King & Emmons, 1990, p. 864). On the other hand, it is assumed that emotions usually should be let out, that the healthy end to an emotional response is emotional expression. This view is especially common in the psychological literature. From Breuer and Freud (1895/1966) to the present (e.g., Cole, Kemeny, Taylor & Visscher, 1996; Pelletier, 1985) the inherent value of naturally expressing one’s thoughts and feelings has been emphasized. Emotional expression is thus viewed as a somewhat unseemly but normal part of everyday life.

While emotional expression is a normative behavior that is neither good nor bad per se, actively holding back emotion through inhibition may have negative health consequences. Much of the literature examining the links between emotional expression and health has focused on the consequences of inhibition (Cole et al., 1996; Gross & Levenson, 1997; Traue & Deighton, 1999). The findings from these studies suggest that actively holding back thoughts, emotions, or behaviors can be a form of stress that exacerbates a number of adverse biological processes, such

as increased cortisol production and immune suppression (Traue & Deighton, 1999). By expressing emotions, one may be able to organize and assimilate previously inhibited thoughts and feelings, thus bypassing the need for further inhibition. Several correlational studies have hinted that such processes may be at work (Cole et al., 1996; Gross & Levenson, 1997; Major & Gramzow, 1999).

Certain life events may be more likely than others to have deleterious health consequences because of their links to emotional expression. Those events that produce the most conflict are ones that are most difficult to share with others—sexual abuse, being fired from one's job, having a stigmatizing disease, marital infidelity, and other potentially traumatic experiences. Under such circumstances, individuals often try to inhibit thoughts and feelings about their experiences. Often, attempts at thought suppression may actually lead to greater increased thoughts about the very experience that they are trying to erase from memory (Wegner, 1984). Such inhibition, especially if it continues for extended periods of time, can exacerbate stress, and, in turn, lead to declines in immune system functioning and other markers of physical health.

In recent years there has been a rapid growth in research examining emotional expression and health, but a large number of questions remain unanswered. For example, to what extent does the expression of emotions bring about changes in peoples' psychological and social worlds? Are some people more likely than others to benefit from emotional expression? What are the cognitive, linguistic and social mechanisms that link emotional expression to health outcomes? One method that has been used to test the effects of emotional expression—expressive writing—is particularly relevant to our understanding of the links among upheavals, emotion, language, and health. Included in this overview will be a discussion of some of the

underlying processes that may help to explain some of the powerful effects associated with emotional expression.

Testing the Relationship Between Emotional Expression and Health: Expressive Writing

There are a number of ways that people are able to express their thoughts and emotions about important events in their lives. Beyond simple venting, perhaps most common is that people talk to others. This translation of an emotional experience into language is also the basis of expressive writing. In 1986, Pennebaker and Beall published the first expressive writing study. In that and subsequent studies, when people were asked to write emotional upheavals for 3-4 days for 15-30 minutes per day, they exhibited improvements in physical health relative to controls who had been randomly assigned to write about superficial topics. The initial studies focused on physician visits to the student health center as an outcome measure. Later studies expanded these findings to various health indicators, such as blastogenesis measures, CD4 counts, liver enzymes, and other biological markers (Pennebaker, 1997). About ten years ago, multiple labs around the world began testing the expressive writing intervention with generally positive results. The first meta-analysis of the writing paradigm suggested that this method produced positive effects for various markers of physical health (Smyth, 1998).

In recent years, the number of expressive writing studies has grown exponentially. Multiple studies have examined the effectiveness of expressive writing in the treatment of AIDS, diabetes, cancer, and other physical health problems. A wide variation of writing instructions have been tried across an enormous range of participant populations. As more studies have been conducted, we are now beginning to get a sense of some of the boundary conditions of writing.

Expressive writing is not a panacea. Although an early meta-analysis by Smyth (1998) found that the effect size of writing on objective health outcomes was .67, these effects were

based on relatively healthy samples. More recent meta-analyses with medical samples suggest that effect sizes for clinical trials are smaller ($d = .21$) but still significant (Frisina, Borod, & Lepore, 2004). Because virtually no writing studies could be classified as true RCTs, a recent Cochrane Report concluded that the use of writing as a medical intervention was still in the “not proven” category (Meads, 2003). But since the Meads report was completed, several promising medical studies have been completed (e.g., Taylor et al., 2003; Petrie et al., 2004; Solano et al., 2003).

Although the overall effect size of the intervention is modest several weeks or months afterwards, given its low cost and minimal adverse effects, the findings continue to be promising. The health benefits for writing are evident in measures of physical and mental health and hold up across samples of widely varying social class, ethnicity, language, and cultures. It may be more effective for people dealing with more traumatic than expected upheavals and with events that happened several weeks or months after the event as opposed to immediately afterwards.

Why does expressive writing work? The search for mechanisms

While there is now solid evidence that disclosing emotional experiences can be healthy, one of the more intriguing aspects of this phenomenon has been trying to develop theories that best explain it. Over the years, theoretical views in this area have evolved tremendously. These theories are outlined briefly below.

Inhibitory processes. One of the first theories to explain the effectiveness of expressive writing dealt with inhibition. But direct tests of changes in inhibition following emotional disclosure have yielded disappointing results. For example, participants who claim that they have not previously disclosed their traumas have not differed in health outcomes versus those who have disclosed their traumas (Greenberg, Stone, & Wortman, 1996). In addition, individuals

have great difficulty answering (or even understanding) questions that ask them the degree to which they are actively inhibiting their thoughts, emotions, or behaviors (Pennebaker, Kiecolt-Glaser, & Glaser, 1988). Thus, at this point, the inhibition model is still unproven.

Cognitive processes. Another explanation for the effects of expressive writing is that the act of converting emotions and images into words changes the way a person cognitively organizes and thinks about an emotional experience. By integrating thoughts and feelings about an emotional experience, one can then construct a coherent narrative of that experience. Once this integration takes place, the event can be summarized, stored and forgotten more efficiently. Various cognitive models have focused on different facets of cognitive construction and narrative construction. Smyth and his colleagues (1999), for example, have assumed that emotional expression fundamentally organizes an upsetting experience. As an indirect test of this, the authors had people write about a trauma in either an organized or unstructured way. Only the organized writing resulted in health and mood improvements.

Using a different analysis strategy of looking directly at the ways individuals express emotions, several researchers are now finding support for the idea that constructing a narrative over the course of writing about emotional topics helps individuals to better integrate the experience. Specifically, by looking at word usage (e.g., an increasing use of cognitive words over the days of writing), health improvements are efficiently predicted. These word patterns have now been reported in multiple studies (e.g., Campbell & Pennebaker, 2003; Klein & Boals, 2001).

Social Integration. Emotional expression, by nature, is an inherently social activity. The ultimate purpose of language is to communicate ideas and thoughts with other people. When someone talks to other people about his or her experiences, it alerts them to the person's

psychological state and, ultimately, allows him or her to remain socially tied to them.

Conversely, people who have traumatic experiences and do not tell their friends are more likely to live in a detached, isolated state. Consistent with this approach, Rimé (1995) argues that disclosure in the first days or weeks after a trauma has the power to change the quality of a person's social network by bringing people closer together. Disclosure, then, serves as a force of social integration. Rimé suggests that even private disclosure (as well as with writing) helps free a person from the stress of a nondisclosed event, which ultimately allows for greater social integration. This is consistent with many of the social integration ideas first suggested by Durkheim (1951) wherein mental health was viewed as the result of the relationship between individuals and their social worlds.

Researchers are now examining the social effects of expressive writing. In one pilot study, Matthias Mehl and the second author asked 52 participants to wear a re-engineered tape recorder called the Electronically Activated Recorder (EAR) as a part of an expressive writing experiment (discussed in Pennebaker & Graybeal, 2001). After the writing manipulation, those in the expressive writing condition changed how they interacted with others, exhibiting significant increases in interactions with others, use of self-references, and the use of emotion words. Similarly, another recent study examined social interaction patterns before and after expressive writing among 95 bilingual participants whose first language was either Spanish or Korean (Kim, 2004). Compared to controls, those in the experimental condition increased in their amount of talking to others in the days following expressive writing. While social integration theory still has not been fully tested, these preliminary findings have been encouraging.

Conclusion

Expressive writing studies have yielded important new ways to think about how emotional expression can exert mental and physical health improvements. The mechanisms underlying this effect are still unclear but, in all likelihood, there is no single mediating influence between expressive writing and health. Perceptual, cognitive, emotional, linguistic, and social processes all undoubtedly contribute and influence each other. Rather than continuing the task of trying to learn which of these features contributes the most or is the most pivotal, future research should draw on all of these processes in trying to maximize the salutary effects of emotional expression.

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