HEALTH EFFECTS OF DISCLOSING PERSONAL SECRETS TO
ACCEPTING VERSUS NON-ACCEPTING CONFIDANTS

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by

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HEALTH EFFECTS OF DISCLOSING PERSONAL SECRETS TO
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Abstract

by

Robert Rene Rodriguez

In Experiment 1, undergraduates (N = 87) wrote either about trivial events or about a secret while imagining (a) an accepting confidant, (b) a non-accepting confidant, or (c) no confidant. Unlike the no-confidant group, the accepting group reported fewer illnesses at 8-week follow-up than did the non-accepting and trivial groups, especially to the extent that this group found their confidants to be accepting and discreet. Experiment 2 (N = 74) used the same design, except that the confidant manipulation came after the writing. Eight weeks later, the accepting group—having imagined reactions that were more accepting and less judgmental than the non-accepting group—again reported fewer illnesses than did the non-accepting and trivial groups. The author suggests that when people keep personal secrets, they often do so because they fear being ostracized. Revealing to an accepting confidant can reduce distress associated with not belonging and, therefore, can lead to health benefits.
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INTRODUCTION

There is a longstanding conventional wisdom that confession—the uninhibited disclosure of one’s secret thoughts, feelings, and misdeeds—is good for the soul. Psychology has much invested in the idea that self-disclosure of secrets promotes healing. After all, early psychological theories proposed a connection between the disclosure of hidden, emotionally charged events and well-being (see, e.g., Breuer & Freud, 1895/1966; Freud, 1913/1958).

Although scholars have only recently made secrets and secret-keeping the subject of empirical study, research examining the disclosure of previously undisclosed traumas seems to support these early theories. Specifically, disclosing (i.e., talking or writing about) private traumatic experiences in an anonymous, confidential setting results in health improvements, such as fewer physician visits (e.g., Pennebaker & Beall, 1986; Pennebaker, Colder, & Sharp, 1990; Richards, Beal, Seagal, & Pennebaker, 2000), enhanced immunological functioning (e.g., Booth, Petrie, & Pennebaker, 1997; Petrie, Booth, Pennebaker, Davison, & Thomas, 1995), increased positive affect (Murray, Lamnin, & Carver, 1989; Smyth, 1998), and reduced stress (e.g., Lepore, Ragan, & Jones, 2000).

But despite the established health benefits of disclosing stressful private events, researchers have not yet adequately addressed the role of the confidant as a potential moderating factor in this ameliorative process (e.g., see Kelly, 2002; Kelly & McKillop,
That is, the interpersonal mechanisms that underlie the health benefits of revealing either previously undisclosed stressful events or secrets remain largely undefined. My purpose in this paper is to propose an interpersonal mechanism that may explain the health benefits of revealing secrets (i.e., to an appropriate confidant) and to present two tests of this idea.

Accepting Confidants

When it comes to personal secrets (i.e., those directly involving the secret-keeper), Kelly (2002) has argued that the qualities and idiosyncratic response of the confidant may determine the degree to which self-disclosure is beneficial. Of the attributes possessed by helpful confidants, acceptance and support of the revealer are thought to be among the most critical (see Kelly, Klusas, von Weiss, & Kenny, 2001; Kennedy, Kiecolt-Glaser, & Glaser, 1990; Pennebaker, 1990). In one study, participants were asked to rank (in order of preference) the features of a person with whom they would be most willing to share their personal secrets (Kelly et al., 2001, Study 1). In addition to preferring a confidant who is discreet, participants said they valued confidants who were both understanding and non-judgmental (Kelly et al., 2001). And, indeed, other research suggests that accepting responses to intimate self-disclosures are associated with positive outcomes (e.g., Major et al., 1990).

Based on this and other evidence, Kelly (2002) concluded that secret-keepers are well advised to select confidants who, in addition to being discreet and insightful, are especially accepting—or, as Kennedy et al. (1990) put it, “a confidant who will listen without withdrawing love and support” (p. 262).
Why People Keep Secrets

Scholars have long speculated that a major reason individuals keep secrets is to avoid the disapproval of others (Bok, 1982; Kelly & McKillop, 1996; Larson & Chastain, 1990; Stiles, 1987; Wegner & Erber, 1992). This point was demonstrated in a recent diary study conducted by Macdonald and Morely (2001). The more participants anticipated negative (i.e., labeling or judging) responses to their disclosure of emotional events, the less likely they were to disclose them (Macdonald & Morely, 2002). Even in psychotherapy, clients, who are typically paying for services, often report that they are keeping secrets from their therapists—largely because they feel too ashamed or embarrassed to reveal them (Hill, et al., 1993; Kelly, 1998).

The threat of interpersonal alienation or not belonging may be particularly pronounced for individuals with stigmatizing personal secrets. For example, victims of incest often fear that disclosing their secret will result in their being abandoned (Kaufman, Peck, & Tagiuri, 1954), not believed (Butler, 1978), punished (Herman, 1981), or blamed for the incestuous contact (Geiser, 1979; Goodwin, 1982; Justice & Justice, 1979, Meiselman, 1978).

Consequences of Intimate Self-Disclosure

The fear on the part of secret-keepers that intimate disclosure of their secret will result in a loss of acceptance or belonging may be well justified. After all, just as supportive social networks can help alleviate the stress of difficult life situations, having unsupportive or critical social networks is associated with increases in stress (e.g., Abbey, Abramis, & Caplan, 1985; Holahan, Moos, Holahan, & Brennan, 1997; Kennedy et al.,
1990; Lepore, 1992; Major et al., 1990; Major, Zubek, Cooper, Cozzarelli, & Richards, 1997; Manne, Taylor, Dougherty, & Kemeny, 1997; Rook, 1984; Vinokur & Van Ryn, 1993). For instance, Coates, Wortman, and Abbey (1979) found that individuals who openly share their struggles elicit more rejection from peers than do individuals who behave as if they are coping well (see also Spiegel, 1992). Moreover, confidants tend to withdraw from those who have revealed secrets to them (Coates et al., 1979; Lazarus, 1985), leaving distressed individuals more socially isolated at a time when they might most benefit from a confidant’s supportive presence.

Longitudinal evidence of the interaction between self-disclosure and accepting social contexts was reported by Cole, Kemeny, and Taylor (1997). Cole and his colleagues had previously published impressive findings linking intimate disclosure to long-term health. Specifically, the researchers found that compared to gay men who were “out of the closet,” gay men who concealed their homosexuality were more likely to suffer from major illnesses (e.g., cancer) if they were HIV-negative (Cole, Kemeny, Taylor, & Visscher, 1996) and more likely to experience rapid progression of AIDS if they were HIV-positive (Cole, Kemeny, Taylor, Visscher, & Fahey, 1996). However, in a follow-up to these studies, Cole et al. (1997) found that a subset of HIV-positive gay men seemed to benefit from continuing to hide their gay identity. Analysis of personality variables revealed that these particular men scored high on rejection-sensitivity. And when compared to other rejection-sensitive participants who came out of the closet, those rejection-sensitive participants who concealed their sexual orientation experienced a slower progression of the disease (Cole et al., 1997). These results suggest that self-disclosure may set the stage for enhanced well-being to the extent that the disclosure
fosters or facilitates social acceptance. And in the case of the less-disclosing rejection-sensitive men in the Cole et al. (1997) study, one could argue that social acceptance was best achieved (whether in actuality or in the minds of the participants) by limiting self-disclosure.

The idea that intimate self-disclosures are associated with subsequent breakdowns in social acceptance, and, in turn, with eventual declines in health is represented across a number of additional studies. It is not uncommon, for instance, for women who disclose that they were raped to receive inconsistent support, avoidance, or even hostility from their confidants (Sudderth, 1998). And negative social reactions to rape disclosures have been shown to significantly predict poor adjustment among adult victims (Ullman, 1996). Major et al. (1990) described similar results among a group of women who chose to tell close acquaintances about their abortion. Those women who felt that their confidants were less than completely supportive experienced poorer psychological adjustment after the procedure than did those women who either shared with a supportive confidant or elected to keep the abortion secret (Major et al., 1990).

In one of the only experiments to examine confidant effects directly, Lepore et al. (2000) investigated cognitive-emotional adjustment to stress as a function of self-disclosure (i.e., talking) and social support (i.e., validating versus invalidating responses). Participants watched a stress-inducing video on the Nazi Holocaust and were then assigned to a no-talk control condition or to one of three talk conditions, each of which called on participants to voice their thoughts and feelings about the film: talk alone, talk to a validating confederate, or talk to an invalidating confederate. During their interaction with participants, validating confederates maintained eye contact, nodded and smiled
approvingly, agreed with participants’ observations, and reciprocated disclosure. Invalidating confederates avoided eye contact and disagreed with many of the participants’ expressed views. Compared to participants in the no-talk condition, participants in the validating and talk-alone conditions reported fewer intrusive thoughts about the film in the two days following the initial exposure. And upon being re-exposed to the film after the two day interim, validating- and talk-alone participants reported less stress than did those in the no-talk condition. The authors suggested that talking and validation may have indirectly reduced stress by decreasing the occurrence of intrusive thoughts. However, the invalidating group did not differ from the other three groups on distress and intrusion measures. Lepore et al. (2000) acknowledged that a limitation of their design was that participants might not have perceived the invalidating confederate to be invalidating, and thus the question of how people respond to differentially supportive confidants in an experimental design remains unanswered.

The Need to Belong as a Mechanism Underlying the Benefits of Disclosure

Thus far, I have noted that there is some correlational evidence to suggest (a) that the real or imagined responses of confidants can influence the degree to which disclosure of personal secrets is beneficial and (b) that the extent to which those responses communicate acceptance of the revealer is key. This evidence serves as a backdrop for my contention that the reason why acceptance leads to health benefits may stem from a universal human need to belong. Roughly a decade ago, Baumeister and Leary (1995) proposed that a need to belong is a fundamental human motivation—one that underlies other motives such the need for affiliation and the need for achievement. They defined
this fundamental motivation as the pervasive drive to develop and maintain significant, positive relationships. In their review, they provided a great deal of evidence that not feeling a sense of belonging is linked with serious physical and psychological consequences. They argued that this need to belong is consistent with principles of human evolution (Baumeister & Leary, 1995). Specifically, fitting in with one’s group on the human ancestral plain would have meant better access to food and protection from predators, and thus would have meant increased survival and reproductive rates. Therefore, people today may have inherited from their ancient ancestors a predisposition to try to fit in with their groups and to become distressed in the absence of belonging.

Given the fundamental nature of this need to belong, I propose that the reason acceptance might play a central role in the outcomes of revealing personal secrets is that it helps people feel assured of their place in the group. As described earlier, people often keep personal secrets because they fear that discovery of their secrets might cause them to be rejected or even ostracized (see also Kelly, 2002, for a review). I suggest that because acceptance from a confidant enhances a feeling of belonging, it reduces the distress associated possible alienation as a result of one’s secrets; and this reduction in distress may in turn lead to health benefits. But this possibility has never been examined experimentally.

Therefore, Experiments 1 and 2 examined whether disclosing personal secrets while imagining accepting versus non-accepting confidants would influence health. Based on the notion that belonging is a fundamental human motivation (Baumeister & Leary, 1995), I predicted that accepting confidant responses—even imagined ones—would facilitate secret-keepers’ sense of belonging to the group and thus improve the
secret-keepers’ health. Specifically, I predicted that participants who disclosed a personal secret to an imagined accepting confidant would demonstrate fewer illnesses in the weeks following disclosure than would participants who disclosed to an imagined non-accepting confidant and those who disclosed trivial events. Moreover, based on the notion that acceptance enhances the extent to which disclosure promotes physical health, it was predicted that a disclosure control group (i.e., a group that disclosed a personal secret but was not given instructions to imagine a particular confidant) would not differ from the non-accepting and trivial-events groups on self-reported illness.
EXPERIMENT 1: METHOD

Overview and Design

An anonymous written-disclosure paradigm modeled after Pennebaker’s (e.g., Pennebaker & Beall, 1986) protocol was used in this study. Participants ($N = 87$) were randomly assigned to 1 of 4 experimental writing groups. The procedure was based, in part, on the results of a meta-analysis of expressive writing studies. In that meta-analysis, Smyth (1998) found that the number and length of individual writing sessions were unrelated to the protocol’s overall effect; however, the temporal spacing between sessions did influence the effect, such that effect size increased as time intervals between sessions increased. Based on those findings, all 4 groups in this study engaged in a 15-min session of anonymous writing during a first visit to the laboratory, engaged in another 15-min session of anonymous writing during a second visit to the laboratory (1 week later), and completed a questionnaire during a third visit to the laboratory (8 weeks after the second visit). At the first session, all participants provided a brief description of one personal secret. During the first and second laboratory visits, those in the first 3 groups were asked to write about their secret “much like [they] would in a private diary.” The first group was asked to imagine that an accepting confidant would read their writing (i.e., Condition 1, “accepting” condition; $n = 26$), whereas the second group was asked to imagine that a non-accepting confidant would read their writing (i.e., Condition 2, “non-accepting” condition; $n = 23$). The third group wrote about a secret but received no confidant
instruction (i.e., Condition 3, “no-confidant” condition; \( n = 18 \)). And those in the fourth group (i.e., Condition 4, “trivial” condition; \( n = 20 \)) wrote about trivial events (i.e., their previous day). Self-report measures administered at Sessions 1 and 2 included participants’ assessments of their secret, evaluations of the writing experience, and—for those in the accepting and non-accepting conditions—descriptions of their imagined confidants. During the third laboratory visit, all participants completed an illness/symptom inventory, which served as the primary dependent variable. Later, a group of independent judges provided ratings of participants’ writing samples.

Participants

Ninety undergraduates from a private Midwestern university earned psychology course credit for participating. Three of these participants were subsequently dropped from the study. Two of the three did not return for the final laboratory visit, and the third disclosed and wrote about someone else’s (as opposed to her own) secret. Of the remaining 87 participants (52 women and 35 men, mean age = 18.6 years), 76 self-identified as White/Euro-American, 6 as Asian-American/Pacific Islander, 1 as African-American, 1 as Hispanic/Latino, and 3 as “other.” Participants were treated in accordance with the “Ethical Principles of Psychologists and Code of Conduct” (American Psychological Association, 1992).

Measures

The Seriousness of Illness Rating Scale (SIRS; Wyler, Masuda, & Holmes, 1968) is a commonly used measure in psychosomatic research. The scale consists of a list of
common and more serious illnesses (e.g., cold, sore throat, heart problems) and functioned as the primary dependent variable for this study. Instructions were altered, such that respondents indicated whether or not (i.e., 0 = no and 1 = yes) they had experienced each of these illnesses “since your first visit to the lab [approximately 9 weeks ago].” The version of the scale used here included items added by Sanchez (1994) to make the instrument more sensitive to the complaints of college students. Nurses at a university infirmary generated these added items by drawing them from the symptoms that students reported upon admission to the infirmary. The items were summed, with possible scores ranging from 0 to 71. Higher scores indicated greater self-reported illness.

Physicians provided the original ratings for the SIRS, and test-retest reliability was demonstrated with a Spearman’s Rho of .98. Two independent samples of physicians ranked the illnesses, and a Mann-Whitney U test indicated no significant differences between the samples (Wyler, Masuda, & Holmes, 1970). The SIRS yielded an alpha of .78 for this sample.

Five items (see Kelly et al., 2001)—referred to here as the Secrets Questionnaire—were used to assess participants’ cognitive and emotional preoccupation with the secret they disclosed. Using a 9-point scale ranging from 1 (not at all) to 9 (extremely), participants indicated the degree to which their secret was disturbing (item 1) and private (item 2). Using a 9-point scale ranging from 1 (never) to 9 (extremely often), participants indicated how often they had thought about the secret in the past week (item 3). Finally, using a 9-point scale ranging from 1 (not at all) to 9 (fully), participants indicated the degree to which they had “come to terms with this secret” (item 4).
Participants were also asked to indicate how many people they had told about the secret prior to the study (item 5).

A single item was created to assess the extent to which participants believed that discovery of their secret would threaten their sense of belonging. At the first laboratory session, participants were asked, “How uncomfortable would you feel if others who did not know you very well found out about this secret?” The 9-point response scale ranged from 1 (not at all) to 9 (extremely).

The Working Alliance Inventory (WAI; Horvath & Greenberg, 1986) is a 36-item questionnaire used to assess the quality of the relationship between psychotherapist and client. The 12-item Bond subscale of the WAI-Client Form was used to measure the quality of the alliance between those participants in the accepting and non-accepting conditions and their imagined confidants (as judged by the participants). This instrument served as a manipulation check. Responses are provided using a 7-point scale ranging from 1 (never) to 7 (always). Bond subscale items include “(target person) and I understand each other,” “I believe (target person) likes me,” and “I have a feeling that if I say or do the wrong things, (target person) will not accept me.” For the purpose of this study, participants were asked to fill the blanks in the items with the name of the person they imagined would read their writing. Possible scores on the subscale range from 12 to 84, with higher scores indicating a stronger alliance. Reliability estimates for the Bond subscale based on Hoyt’s (1941) algorithm range from .85 to .92 (Horvath & Greenberg, 1989). For this sample, the alpha was .91.

The Writing Evaluation Measure, which was created for the purpose of this study, also served as a manipulation check (i.e., the first item was used to compare the secret-
writing groups to the trivial-writing group, and the rest were used to compare the accepting group to the non-accepting group). The measure utilized a 9-point scale ranging from 1 (not at all) to 9 (to a great extent). Participants in all 4 groups completed the initial item, which asked that they indicate the degree to which their writing involved the expression of feelings. The remainder of the items, which were completed by those in the accepting and non-accepting groups only, asked participants to indicate the extent to which their imagined confidant was (a) judgmental and (b) capable of admitting her/his own faults, and to what extent they believed their imagined confidant—upon learning of the participants’ secret—would (a) be accepting, (b) be rejecting, (c) permanently alter her/his impression of the participant, and (d) share the secret with others.

To assess whether and in what ways disclosure of secrets varied across the accepting, non-accepting, and no-confidant groups, a pair of judges who were blind to experimental conditions read participants’ writing and rated the disclosure on four separate dimensions. Using 9-point scales ranging from 1 (not at all) to 9 (to a great extent), raters indicated the extent to which participants were open in their writing (item 1) and the extent to which the information disclosed in the writing was private (item 2). Raters also indicated the extent to which they perceived that the participants had made meaning or come to some understanding as a result of their writing (item 3) and to what extent the participants vented their feelings in their writing (item 4). Separate sets of ratings were provided for Session-1 and Session-2 writing samples. A two-way, random-effects model was used to assess the level of consistency between judges’ ratings. Intraclass correlations between the judges’ ratings for Session 1 ranged from .64 to .73 across the four items, with a mean Session-1 intraclass correlation of .69. Intraclass
correlations for Session 2 ranged from .58 to .80, with a mean Session-2 intraclass correlation of .69.

Basic demographic information was collected. Participants reported their sex, their age, and their race.

Procedure

Session 1. In groups of 1 to 4, participants arrived at the laboratory and were seated at separate cubicles. The experimenter informed participants that the purpose of the study was to examine individuals’ thought processes during the written disclosure of private material. The experimenter secured participants’ consent and emphasized the data collection procedures designed to assure participants’ anonymity and confidentiality. For instance, the locked collection box into which participants would later deposit their anonymous survey materials was pointed out, as was the fact that the experimenter did not have access to the box. Credit was given prior to the start of the study, and the participants’ right to withdraw was stressed on more than one occasion.

After receiving opening instructions, the participants generated their own confidential identification codes, which were later used—instead of laboratory-generated I.D. numbers—to track and match survey materials across sessions. (Use of participant-generated I.D. numbers, combined with laboratory processing procedures, made it impossible to link participants’ names to their diary and survey materials.) To acclimate participants to writing about their personal thoughts and feelings, they were next led through a 3-minute, stream-of-consciousness writing task (see Kelly et al., 2001):

For the next 3 minutes I am asking you to write down your thoughts and convey whatever information is present in your awareness from moment to moment. Your
writing might include, but is not limited to, descriptions of images, ideas, memories, feelings, fantasies, plans, sensations, observations, daydreams, objects that catch your attention, or efforts to solve a problem. In other words, there are no restrictions, qualifications, conventions, or expectations. Simply write down whatever is going through your mind without worrying about grammar and spelling.

Using the following instructions (see Kelly et al., 2001), participants were then asked to describe a personal secret:

Virtually everyone keeps secrets or hides personal information from others at some point in time. In other words, we keep private information that we would want very few other people, or no one, to know about. What I would like you to do now is to think about a very private secret that involves you directly and personally. Select a personal secret of yours that no one or very few people know about. Please write down your secret without explaining it or going into any detail. Basically, indicate what the secret is without elaborating. Please include one secret only.

Participants completed the Secrets Questionnaire and were then introduced to the 15-min experimental phase of the study. Those assigned to the trivial group were asked to write about the events of the previous day exactly as they occurred, using facts only and avoiding any mention of emotions or opinions. Those in the other three conditions were given the following instructions (adapted from Kelly et al., 2001; and Pennebaker, Zech, & Rimé, 2001):

For the next 15 minutes, I would like for you to write about your very deepest thoughts and feelings regarding your secret. In your writing, I’d like you to really let go and explore your very deepest emotions and thoughts about this secret—much like you would in a private diary. You might tie your writing to your relationships with others, to your past, your present, or your future—or to who you have been, who you would like to be, or who you are now. All of your writing will be completely anonymous and confidential. Don’t worry about spelling, sentence structure, or grammar. The only rule is that once you begin writing, continue to do so until your time is up.

Those in the accepting and non-accepting conditions received this additional instruction:

Even though you are writing as you would in a diary, I want you to imagine—just to imagine—that this diary entry will be read by someone—a friend, family
member, co-worker, or other acquaintance—who [would] OR [would not] understand and accept you—someone who [would] OR [would not] support you if she or he knew your secret. It’s important that you keep this person in mind as you write—imagining that s/he will be reading the facts and feelings you generate in your writing.

All participants then responded to the belonging item, the Writing Evaluation Measure, and the demographic questions. Participants in the accepting and non-accepting groups also completed the WAI.

Session 2. One week later, participants returned to the laboratory, where they were issued the same writing instructions as the previous week. Those in the accepting, non-accepting, and no-confidant conditions were asked to continue writing about the same secret, and those in the accepting and non-accepting groups were asked to imagine that the same confidant would read their writing. Afterward, all groups completed the first item of the Writing Evaluation Measure (i.e., the item assessing the extent to which the writing involved the expression of feelings).

Session 3. Approximately 8 weeks after the second writing session, participants were scheduled for a brief return visit to the laboratory. After completing the SIRS, participants were fully debriefed and dismissed.
EXPERIMENT 1: RESULTS

Types and Subjective Ratings of Secrets

The secrets disclosed by participants were classified using a modified version of an existing taxonomy (see Kelly et al., 2001). Three categories—secrets relating to violations of social norms and/or parents’ expectations (e.g., getting a tattoo or body piercing), secrets pertaining to violations of others’ privacy (e.g., reading a roommate’s diary), and an “other” category—were added to the nine previously identified types. Two advanced undergraduates majoring in psychology (both of whom were blind to experimental conditions) independently assigned participants’ secrets to one of the 12 categories. There was considerable agreement between the two judges’ independent ratings, resulting in a kappa of .84. The few discrepancies that did exist were resolved by the author. Of the 87 participants, 29 listed sexual secrets (e.g., being raped/ molested; experimenting with sexual acts or pornography; having a sexually transmitted disease), 10 reported interpersonal alienation (e.g., loneliness; feelings of not belonging), 9 indicated that they secretly desired or were secretly having a romantic relationship, 7 disclosed family secrets (e.g., having been neglected as a child; having an unemployed or alcoholic parent), 7 reported delinquencies (e.g., cheating on a test; stealing), 7 described problems with addictions and/or eating disorders, 3 listed secrets relating to death or suicide (e.g., their own suicide attempts), 2 listed violations of others’ privacy, 1 described health problems, 1 reported violations of social norms/parents’ expectations,
and 11 disclosed secrets that were classified as “other.” There were no secrets assigned to
the abortion/pregnancy category. Because participants were asked to disclose their secret
prior to the manipulation, there was no reason to expect that group assignment would
affect the type of secret selected.

Across the 4 conditions, participants provided similar assessments of the secret
they disclosed (as measured by the Secrets Questionnaire; see Table 1). A series of
ANOVAs revealed no significant group differences in the degree to which participants
were disturbed by their secret or in the degree to which participants regarded their secret
as private. Similarly, there were no significant differences in how often participants had
thought about their secret in the previous week or in the extent to which participants said
they had come to terms with their secret. Finally, the number of individuals to whom
participants had revealed their secret prior to the study did not vary by condition. Overall,
indications are that participants in all conditions disclosed secrets that they believed were
considerably private, fairly upsetting, and not fully resolved. In addition, the four groups
did not differ on the belonging item, meaning that all the groups reported discomfort
about the prospect of others (i.e., who did not know them very well) discovering their
secret ($M = 5.62; SD = 2.71$), $F(3, 83) = .07, p > .97$.

Manipulation Checks

The purpose of the experimental manipulation employed in the study was two-
fold: (a) to induce participants in the accepting, non-accepting, and no-confidant
conditions to engage in emotionally intimate disclosure of a secret and (b) to induce
participants in the two confidant conditions to imagine accepting and non-accepting
TABLE 1

EXPERIMENT 1: SUBJECTIVE RATINGS OF SECRETS

<table>
<thead>
<tr>
<th>Rating</th>
<th>Accepting Confidant</th>
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<td></td>
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<td>$SD$</td>
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<td>2.72</td>
<td>3.14</td>
<td>5.23</td>
</tr>
</tbody>
</table>

NOTE: No group effects were significant at $p < .05$. $N = 87$ and $df = 3$ and 83 for all analyses.

confidants, respectively. To assess whether participants wrote in a manner consistent with the writing instructions, participants’ responses on the first item of the Writing Evaluation Measure were averaged across the two writing sessions. A planned, weighted contrast comparing the mean response of the accepting, non-accepting, and no-confidant groups to the mean response of the trivial group revealed that the emotional nature of the disclosure did differ as a function of condition. Participants who wrote about a secret ($M = 5.73$; $SD = 1.79$) reported significantly greater expression of feelings across both writing sessions than did those who wrote about trivial events ($M = 3.98$; $SD = 1.27$), $t(43.67) = 4.90$, $p < .001$.

Moreover, based on reports at Session 1, participants in the accepting and non-accepting conditions reported imagining a confidant who differed significantly across a number of different dimensions (see Table 2). For instance, compared to the non-accepting group, the accepting group imagined a confidant who was less judgmental and
more capable of admitting her/his faults. Accepting-group participants were also more likely to imagine a confidant who, upon learning about the secret, would be more accepting, less rejecting, less likely to allow the secret to alter her/his impression of the participant, and less likely to share the secret with others. Participants’ responses on the Bond subscale of the WAI corroborated these findings. That is, those in the accepting condition reported having a significantly stronger interpersonal alliance with their imagined confidant than did those in the non-accepting condition. All of these results were in the expected direction and, therefore, supported the effectiveness of the manipulation.

Rater Impressions of Disclosure

For the accepting, non-accepting, and no-confidant conditions, judges’ ratings of participants’ written disclosure were averaged over the two writing sessions and compared across groups (see Table 3). A series of ANOVAs revealed no group differences on any of the four rated dimensions. That is, disclosure across the three groups was judged to be relatively equivalent in terms of openness, $F(2, 63) = 1.64, p > .20$; privacy, $F(2, 63) = .26, p > .77$; meaning-making, $F(2, 63) = .07, p > .92$; and expression of feelings, $F(2, 63) = 1.91, p > .15$.

Health

Group means on self-reported illness at 8-week follow-up (as measured by the SIRS) are shown in Table 4. Scores were analyzed to test the prediction that participants
TABLE 2
EXPERIMENT 1: ACCEPTING AND NON-ACCEPTING PARTICIPANTS’
PERCEPTIONS OF THE CONFIDANT

<table>
<thead>
<tr>
<th></th>
<th>Accepting Confidant</th>
<th>Non-Accepting Confidant</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M  SD</td>
<td>M  SD</td>
<td></td>
</tr>
<tr>
<td>Judgmental</td>
<td>2.68 1.52</td>
<td>5.00 2.66</td>
<td>-3.68**a</td>
</tr>
<tr>
<td>Admits Faults</td>
<td>7.64 1.72</td>
<td>5.17 2.64</td>
<td>3.82***b</td>
</tr>
<tr>
<td>Accepting</td>
<td>8.12 1.51</td>
<td>4.87 2.72</td>
<td>5.08***c</td>
</tr>
<tr>
<td>Rejecting</td>
<td>1.23 .51</td>
<td>4.17 2.29</td>
<td>-6.03***d</td>
</tr>
<tr>
<td>Alter Impression</td>
<td>2.89 2.20</td>
<td>5.96 2.42</td>
<td>-4.66***e</td>
</tr>
<tr>
<td>Would Tell Others</td>
<td>1.68 1.69</td>
<td>4.44 3.15</td>
<td>-3.75**f</td>
</tr>
<tr>
<td>WAI-Bond</td>
<td>74.42 9.09</td>
<td>62.22 14.96</td>
<td>3.40***g</td>
</tr>
</tbody>
</table>

NOTE: For these analyses, n = 49. WAI-Bond = Bond subscale of the Working Alliance Inventory-Client Form.

*a dfs = 33.96.  b dfs = 36.99.  c dfs = 33.39.  d dfs = 23.97.  e dfs = 47.  f dfs = 32.80.  g dfs = 35.40.

** = p < .01.  *** = p < .001.

in the accepting condition would report fewer illnesses than would those in both the non-accepting and trivial conditions. The planned, weighted contrast comparing the accepting group to the non-accepting and trivial groups did reach significance, t(83) = -2.28, p < .03. So as expected, writing about a secret while imagining an accepting confidant provided a significant health advantage over either writing while imagining a non-accepting confidant or writing about trivial events. A similar weighted contrast was conducted to test the prediction that participants in the no-confidant condition would not differ from the non-accepting and trivial groups on self-reported illness. As predicted, that comparison failed to reach significance, t(83) = -1.18, p > .24, suggesting that
TABLE 3

EXPERIMENT 1: JUDGES’ RATINGS OF WRITTEN DISCLOSURE

<table>
<thead>
<tr>
<th>Rating</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accepting</td>
<td>26</td>
<td>5.94</td>
<td>1.19</td>
</tr>
<tr>
<td>Non-Accepting</td>
<td>23</td>
<td>6.57</td>
<td>1.32</td>
</tr>
<tr>
<td>No-Confidant</td>
<td>18</td>
<td>6.56</td>
<td>.83</td>
</tr>
<tr>
<td>Private</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accepting</td>
<td>26</td>
<td>6.93</td>
<td>1.38</td>
</tr>
<tr>
<td>Non-Accepting</td>
<td>23</td>
<td>7.08</td>
<td>1.55</td>
</tr>
<tr>
<td>No-Confidant</td>
<td>18</td>
<td>7.24</td>
<td>1.12</td>
</tr>
<tr>
<td>Meaning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accepting</td>
<td>26</td>
<td>4.27</td>
<td>1.54</td>
</tr>
<tr>
<td>Non-Accepting</td>
<td>23</td>
<td>4.14</td>
<td>1.31</td>
</tr>
<tr>
<td>No-Confidant</td>
<td>18</td>
<td>4.33</td>
<td>1.48</td>
</tr>
<tr>
<td>Feelings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accepting</td>
<td>26</td>
<td>5.10</td>
<td>.91</td>
</tr>
<tr>
<td>Non-Accepting</td>
<td>23</td>
<td>5.75</td>
<td>1.52</td>
</tr>
<tr>
<td>No-Confidant</td>
<td>18</td>
<td>5.81</td>
<td>.96</td>
</tr>
</tbody>
</table>

NOTE: No group effects were significant at $p < .05$. $N = 67$ and $df = 2$ and 63 for all analyses.

writing about a secret with no particular audience in mind provided no discernable health advantage over writing while imagining a non-accepting confidant or writing about trivial events.

As a follow-up to these between-groups differences, within-cell correlations were conducted on the self-reports of participants in the accepting group only. These correlations were conducted to see if participants’ ratings of how accepting and discreet their confidants were predicted their health at 8-week follow-up. Results did reveal a significant negative correlation between how accepting they perceived their confidants to be and SIRS scores, $r(26) = -.42, p = .04$. The results also revealed a significant positive
<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accepting</td>
<td>26</td>
<td>11.85</td>
<td>6.17</td>
</tr>
<tr>
<td>Non-accepting</td>
<td>23</td>
<td>15.39</td>
<td>6.49</td>
</tr>
<tr>
<td>No-confidant</td>
<td>18</td>
<td>13.28</td>
<td>6.26</td>
</tr>
<tr>
<td>Trivial</td>
<td>20</td>
<td>15.20</td>
<td>5.29</td>
</tr>
</tbody>
</table>

NOTE: SIRS = Seriousness of Illness Rating Scale.

relationship between how likely the confidant was to share the secret with others and SIRS scores, $r(26) = +.58, p = .002$. 
EXPERIMENT 1: DISCUSSION

Experiment 1 explored whether imagining accepting versus non-accepting confidants while disclosing personal secrets would influence longer-term health. The results showed that participants who disclosed secrets while imagining that an accepting confidant would read their writing did report significantly fewer illnesses at 8-week follow-up than did participants either who disclosed secrets while imagining a non-accepting confidant or who disclosed trivial events. No such health advantage materialized for participants who disclosed a secret but imagined no particular confidant.

I suggest that these results have important implications for understanding the mechanisms behind the benefits of revealing personal secrets. Previous research has shown that when people keep a secret, they often do so to avoid being ostracized or rejected by their social groups (see Kelly, 2002, for a review). Indeed, the participants in this experiment reported that they would be quite uncomfortable if others who did not know them very well found out about their secrets. I suggest that individuals come to feel a greater sense of belonging when they reveal their secrets to accepting, discreet confidants. Moreover, I contend that it is in sparing themselves the distress associated with not belonging that individuals who disclose to accepting confidants come to experience fewer illnesses. As the data from this experiment show, the more accepting and discreet participants in the accepting condition found their confidants to be, the fewer illnesses they reported 8 weeks later.
Despite indications that acceptance facilitates the degree to which disclosure of personal secrets results in improved health, a key question remains unanswered. Does acceptance result in health benefits because it changes the nature of the disclosure, or is acceptance curative independent of the disclosure? In other words, one interpretation of these data is that the accepting-confidant instruction fundamentally altered (in ways that went undetected by the judges) the manner in which the accepting group disclosed, and that the uniqueness of that disclosure accounted for the observed health benefits. An alternative interpretation is that accepting-group participants imagined an accepting response to their disclosure, and that this imagined response—not the disclosure, per se—decreased illness reports. After all, some researchers have argued that it is the confidant’s feedback and/or reaction (not the disclosures themselves) that may most powerfully predict the outcome of intimate self-disclosures (e.g., Kelly & McKillop, 1996).

Experiment 2 was designed to address these competing interpretations. In it, an experimental design similar to that in Experiment 1 was used. However, participants were asked to imagine the reactions of accepting or non-accepting confidants after their writing, thereby controlling for any differences in disclosure across conditions. Moreover, participants in the accepting and non-accepting groups were asked to write down the reaction they expected from those respective confidants. I reasoned that such a study would help distinguish between the aforementioned interpretations by isolating the effects of the imagined confidant’s reaction.
EXPERIMENT 2: METHOD

Overview and Design

In a classroom setting, participants \((N = 74)\) were randomly assigned to the same 4 conditions as in Experiment 1. All groups engaged in one 25-min session of anonymous writing. Eight weeks later, participants completed a follow-up survey. Procedures in this study were identical to those in Experiment 1, with the following exceptions. First, to assure equivalent disclosure across groups, participants in the accepting and non-accepting conditions were not asked to imagine their confidants until after they had engaged in the writing exercise. Second, participants wrote for a single (but more lengthy) session only. Third, participants in the accepting and non-accepting conditions were asked to write down the reaction they believed their imagined confidant would have upon learning their secret. And fourth, because the classroom provided a less private atmosphere than did the laboratory, participants were not asked to reveal the exact nature of their secret (although they were free to do so while writing).

I predicted that—unlike those in the no-confidant control group—participants in the accepting group would once again report fewer illnesses in the 8 weeks following the disclosure than would participants in the non-accepting and trivial groups. I also expected that the imagined confidant reactions would differ across the two confidant groups, such that the accepting group would imagine reactions that were more accepting and less judgmental.
Participants

Seventy-four undergraduates from a private Midwestern university earned extra credit in a Psychology of Personality course for participating in the study. Among the participants (48 women and 26 men, mean age = 20.1 years), 59 self-identified as White/Euro-American, 7 as Hispanic/Latino, 4 as African-American, and 4 as Asian-American/Pacific Islander.

Measures

As in Experiment 1, the measures used in this study included the SIRS, the Secrets Questionnaire, the WAI, and the Writing Evaluation Measure (see Measures section of Experiment 1 for descriptions). For the standardized measures, reliability estimates for this sample were as follows: SIRS (alpha = .77) and WAI (alpha = .91).

Using the same procedure as in Experiment 1, the written disclosure of secrets was again rated (i.e., for openness, privacy, meaning-making, and venting of feelings) by two independent judges blind to experimental conditions. Intraclass correlations ranged from .50 to .91, with a mean intraclass correlation of .70. In addition, the same two judges provided ratings of the reactions participants in the accepting and non-accepting conditions expected from their imagined confidants. Using a 9-point scale ranging from 1 (complete rejection) to 5 (neither acceptance nor rejection) to 9 (complete acceptance), the judges responded to the item “To what extent did the imagined reaction communicate rejection versus acceptance of the writer?” And using a 9-point scale ranging from 1 (not at all) to 9 (to a great extent), the judges also responded to the item “To what extent did
the imagined reaction communicate negative judgment of the writer/secret?” Intraclass correlations on the two items were .89 and .93, respectively.

The demographic information collected included participants’ self-reported sex, age, and race.

Procedure

Except for the differences mentioned earlier, procedures were almost identical to those in Experiment 1.

Session 1. Credit was given prior to the start of the initial session, and the participants’ right to withdraw without loss of credit was emphasized. After securing participants’ consent, survey packets (which varied by condition) were distributed at random.

To safeguard the integrity of the manipulation and to allow for the administration of the experiment in a group setting, instructions to participants were written (as opposed to read aloud by the experimenter). Participants completed the 3-min, stream-of-consciousness writing task. At this point in Experiment 1, participants were asked to describe a personal secret. In Experiment 2, participants were simply asked to hold a personal secret in mind while completing the Secrets Questionnaire.

Participants then engaged in the 25-min experimental phase of the study, with those in the trivial group again writing about the events of the previous day. The accepting, non-accepting, and no-confidant groups followed instructions very similar to those in Experiment 1. The only difference was that the additional instruction delivered to the accepting and non-accepting groups in Experiment 1 (i.e., the one pertaining to the
imagined confidant) was omitted. Only after the 25 min had elapsed were the accepting and non-accepting groups asked to imagine a confidant and to anticipate that confidant’s reaction:

Please imagine—just imagine—that the diary entry you just wrote will be read by someone—a friend, family member, co-worker, or other acquaintance—who [would] OR [would not] understand and accept you—someone who [would] OR [would not] support you if she or he knew your secret. For the next three minutes, write down what this person would be thinking upon reading your diary.

Participants in the no-confidant and trivial conditions were provided with similar reflection exercises for the purpose of keeping procedures equivalent across groups:

Please take a moment to reflect on the diary entry you just wrote. For the next three minutes, please consider what you’ve written and record any thoughts you have now about [yourself and/or your secret] OR [how you spent your day yesterday].

Afterward, participants in the accepting and non-accepting groups completed the Writing Evaluation Measure and the WAI. Participants in all groups completed the demographic questions.

Session 2. Exactly 8 weeks later, experimenters returned to the classroom to administer the follow-up survey, which consisted of the SIRS. Participants were fully debriefed immediately after survey materials were collected.
EXPERIMENT 2: RESULTS

Subjective Ratings of Secrets

Analyses of the Secrets Questionnaire revealed that groups expressed similar sentiments about their secrets (see Table 5). Specifically, groups did not differ in the degree to which they found their secrets disturbing or private. Moreover, there were no significant differences in how often participants in the four groups had thought about their secret in the previous week or in the extent to which they reported having come to terms with their secret. And the number of individuals to whom participants had revealed their secret prior to the study did not vary by condition. As in Experiment 1, indications are that across conditions, these participants chose to reveal secrets that were actively disturbing, that they had worked to keep private, and that they were still in the process of resolving.

Manipulation Checks

To assess whether accepting and non-accepting participants’ disclosure conformed to the instructions provided, their responses on the Writing Evaluation Measure and on the WAI were analyzed in a series of t tests (see Table 6). As in Experiment 1, accepting-group participants imagined a confidant who was significantly less judgmental and more capable of admitting her/his faults. Furthermore, those in the accepting group reported that their imagined confidant would be more accepting, less
### TABLE 5
EXPERIMENT 2: SUBJECTIVE RATINGS OF SECRETS

<table>
<thead>
<tr>
<th>Rating</th>
<th>Accepting Confidant</th>
<th>Non-Accepting Confidant</th>
<th>No Confidant</th>
<th>Trivial</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Disturbing</td>
<td>5.90</td>
<td>2.45</td>
<td>5.80</td>
<td>2.40</td>
</tr>
<tr>
<td>Private</td>
<td>6.90</td>
<td>1.74</td>
<td>7.50</td>
<td>2.01</td>
</tr>
<tr>
<td>Thought of</td>
<td>4.45</td>
<td>2.06</td>
<td>4.65</td>
<td>2.62</td>
</tr>
<tr>
<td>Come to Terms</td>
<td>5.40</td>
<td>2.14</td>
<td>6.20</td>
<td>2.22</td>
</tr>
<tr>
<td>Revealed to</td>
<td>2.10</td>
<td>3.97</td>
<td>3.35</td>
<td>5.03</td>
</tr>
</tbody>
</table>

NOTE: No group effects were significant at $p < .05$. $N = 74$ and $dfs = 3$ and 70 for all analyses.

Rejecting, less likely to change her/his impression of the participant, and less likely to share the participants’ secret with others. Accepting-group participants also reported a significantly greater interpersonal bond (as measured by the Bond subscale of the WAI) with their confidants than did those in the non-accepting group. All of these results suggested that the manipulation again had the desired effect.

**Rater Impressions of Disclosure**

Judges’ ratings of participants’ written disclosure were compared across the accepting, non-accepting, and no-confidant groups. A series of ANOVAs revealed no group differences on any of the four rated dimensions. That is, disclosure across the three groups was judged to be relatively equivalent in terms of openness, $F(2, 53) = .70, p > .49$; privacy, $F(2, 53) = 1.01, p > .37$; meaning-making, $F(2, 53) = 1.37, p > .26$; and
TABLE 6

EXPERIMENT 2: ACCEPTING AND NON-ACCEPTING PARTICIPANTS’ PERCEPTIONS OF THE CONFIDANT

<table>
<thead>
<tr>
<th></th>
<th>Accepting Confidant</th>
<th>Non-Accepting Confidant</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Judgmental</td>
<td>2.70</td>
<td>1.53</td>
<td>6.55</td>
</tr>
<tr>
<td>Admits Faults</td>
<td>7.25</td>
<td>1.71</td>
<td>4.25</td>
</tr>
<tr>
<td>Accepting</td>
<td>8.20</td>
<td>.89</td>
<td>4.25</td>
</tr>
<tr>
<td>Rejecting</td>
<td>1.60</td>
<td>1.00</td>
<td>4.90</td>
</tr>
<tr>
<td>Alter Impression</td>
<td>3.15</td>
<td>2.06</td>
<td>4.95</td>
</tr>
<tr>
<td>Would Tell Others</td>
<td>1.95</td>
<td>1.15</td>
<td>3.45</td>
</tr>
<tr>
<td>WAI-Bond</td>
<td>73.90</td>
<td>5.12</td>
<td>52.20</td>
</tr>
</tbody>
</table>

NOTE: For these analyses, n = 40. WAI-Bond = Bond subscale of the Working Alliance Inventory-Client Form.

\(^a\) df\(_s\) = 38. \(^b\) df\(_s\) = 26.70. \(^c\) df\(_s\) = 26.04. \(^d\) df\(_s\) = 26.19. \(^e\) df\(_s\) = 23.36.

\(^*\) = p < .05. \(^***\) = p < .001.

expression of feelings, \(F(2, 53) = .56, p > .57\). These findings were expected, given that the manipulation came after the writing.

Ratings of Confidant Reactions

Judges’ ratings of the imagined confidant reactions were analyzed to test the prediction that accepting-group participants would imagine reactions that differed from those imagined by the non-accepting group. Means ratings were compared using \(t\) tests (see Table 7), with results showing that reactions anticipated by the accepting group were
judged to be more accepting and less judgmental than those imagined by the non-accepting group.

### TABLE 7

**EXPERIMENT 2: JUDGES’ RATINGS OF IMAGINED CONFIDENT REACTIONS**

<table>
<thead>
<tr>
<th></th>
<th>Accepting Confidant</th>
<th>Non-Accepting Confidant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M</strong></td>
<td>7.08</td>
<td>3.70</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>1.89</td>
<td>2.49</td>
</tr>
<tr>
<td><strong>t</strong></td>
<td>4.82***</td>
<td>-4.78***</td>
</tr>
</tbody>
</table>

**NOTE:** For these analyses, \( n = 40 \) and \( dfs = 38 \).

*** = \( p < .001 \).

**Health**

Illness reports at follow-up were analyzed to test the idea that the confidant manipulation would influence health. Group means are shown in *Table 8*. As in Experiment 1, the planned, weighted contrast comparing the accepting group to the non-accepting and trivial groups did reach significance, \( t(70) = -2.15, p < .04 \), with the accepting group reporting fewer symptoms. And as expected, the weighted contrast comparing the no-confidant group to the non-accepting and trivial groups did not reach significance, \( t(70) = -.22, p > .82 \).

To determine if the qualities of the imagined confidant predicted participants’ health at 8-week follow-up, assessments of the confidant were collapsed across the accepting and non-accepting conditions and then correlated with self-reported illness.
TABLE 8

EXPERIMENT 2: ILLNESS REPORTS AT 8-WEEK FOLLOW-UP

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accepting</td>
<td>20</td>
<td>12.26</td>
<td>5.63</td>
</tr>
<tr>
<td>Non-accepting</td>
<td>20</td>
<td>15.95</td>
<td>6.78</td>
</tr>
<tr>
<td>No-confidant</td>
<td>17</td>
<td>15.24</td>
<td>4.67</td>
</tr>
<tr>
<td>Trivial</td>
<td>17</td>
<td>15.26</td>
<td>4.89</td>
</tr>
</tbody>
</table>

NOTE: SIRS = Seriousness of Illness Rating Scale.

Results revealed a significant positive correlation between how judgmental participants perceived their confidants to be and SIRS scores, $r(40) = +.36, p < .03$. Results also revealed a significant positive relationship between how likely the confidant was to share the secret with others and SIRS scores, $r(40) = +.34, p < .04$. 

34
EXPERIMENT 2: DISCUSSION

Experiment 2 examined how imagining the reactions of accepting and non-accepting confidants after writing about personal secrets would influence longer-term health. As in Experiment 1, the accepting group reported fewer illnesses at 8-week follow-up than did the non-accepting and trivial groups. In addition, as in Experiment 1, the no-confidant group did not differ in reported illnesses from the non-accepting and trivial groups.

What is unique about Experiment 2 is that the confidant induction came after the writing, suggesting that it was not the differences in writing about the secret per se that led to the health differences, but rather it was the differences in the imagined reactions that led to these differences. The more judgmental and the less discreet participants’ imagined confidants were, the greater the participants’ self-reported illness. These findings are consistent with survey data that show a relationship between facilitative confidant responses and improved well-being (e.g., Lepore et al., 2000; Major et al., 1990). What the present experiment adds to these other investigations, however, is a direct demonstration that the imagined response of the confidant can moderate the health effects of disclosure.
GENERAL DISCUSSION

The present pair of experiments was the first to examine how disclosing secrets to imagined accepting and non-accepting confidants might influence health. The results from Experiment 1 showed that even though judges considered the disclosure of secrets to be similar across the different confidant groups in terms of meaning-making, openness, and expression of feelings, participants who wrote about their secrets with an accepting confidant in mind experienced greater health benefits 8 weeks later than did those who wrote about trivial events or who wrote about their secrets with a non-accepting confidant in mind. And the more accepting and discreet those in the accepting group perceived their confidant to be, the fewer illnesses they reported.

Experiment 2 extended these results—first, by not telling participants to imagine their respective confidants until after writing about their secrets and, second, by having them write down the imagined reactions from the accepting versus the non-accepting confidants. Analysis of judges’ ratings showed that the participants in the accepting group imagined more accepting and less judgmental responses from their confidants than did participants in the non-accepting confidant group. And, as in Experiment 1, those participants in the accepting group reported experiencing significantly fewer illnesses in the 8 weeks following the writing than did the non-accepting-confidant and trivial-writing groups. Moreover, the more discreet and the less judgmental the accepting and
non-accepting groups found their confidants to be, the fewer symptoms they reported 8 weeks later.

I suggest that the findings from these experiments support the contention that revealing secrets to confidants is helpful to the extent that the confidant can help the secret-keeper feel accepted by others or feel a sense of belonging. As described earlier, when people keep secrets, they often do so because they imagine that others would reject them if their secrets were to be revealed (see also Kelly, 2002, for a review). I contend that it is through alleviating the distress associated with not belonging (i.e., because of one’s secrets) that individuals who disclose to accepting confidants come to experience fewer illnesses. I also suggest that both acceptance and discretion are important parts of feeling a sense of belonging—acceptance because it directly conveys a sense of fitting in with others and discretion because it prevents potentially rejecting confidants from becoming privy to the secrets. Indeed, both experiments provided (a) between-groups evidence that imagining an accepting confidant for the disclosure of one’s secrets causes fewer illnesses and (b) correlational evidence that it is the accepting and discreet nature of that confidant that is linked to this reduction in illnesses.

Like so many other studies using Pennebaker’s (e.g., Pennebaker & Beall, 1986) writing paradigm, these experiments replicated the quite remarkable result that writing about secrets or private traumas actually causes health benefits. However, it is important to point out that I specifically studied secrets, as opposed to the private traumas that Pennebaker and his colleagues have studied. So on the one hand, results from these experiments fill a crucial gap in this literature by demonstrating that qualities of the confidant can moderate the health effects of disclosure. On the other hand, it is important
to be precise about the extent to which these findings are used to understand the mechanisms behind how disclosing previously undisclosed events influences health. When I say that acceptance is a crucial mechanism behind the benefits of disclosing secrets to a confidant because it enhances a sense of belonging, I am precisely talking about secrets, as these are typically kept to avoid being rejected or ostracized. It remains to be seen whether a similar mechanism underlies the benefits of disclosing traumatic events that do not leave one feeling ostracized.

That being said, these results still do point to the importance of understanding the interpersonal—not just the intra-personal—mechanisms behind the health benefits of revealing secrets. So far, intra-personal processes have been the focus of researchers studying the health benefits of disclosure. In fact, these researchers have emphasized that gaining new insights is a crucial component of the benefits of revealing either secrets or private traumas (e.g., Kelly et al., 2001; Lepore, Silver, Wortman, & Wayment, 1996; Pennebaker, 1997, 2001; Pennebaker & Graybeal, 2001; Pennebaker & Seagal, 1999). Given these results, which showed the importance of having an accepting confidant, perhaps future research could explore how acceptance or feeling a sense of belonging may underlie the gaining of insights or constructive meaning-making. In essence, perhaps enhancing a sense of belonging is an element of what one might consider constructive meaning-making. For example, when Kelly et al. (2001) asked participants to try to gain a new perspective or make meaning of their secrets while writing about them, some made statements like, “I realized that the rape was not my fault, that I had been blaming myself all these years, when really I couldn’t do anything about it.” I suggest that at one level
such statements represent a new perspective; and at another, deeper level, they imply that
the person can be accepted or belong to the group despite the secret event.

Addressing Limitations

A seeming limitation of this work is that I have relied on participants’ self-reports
of their illnesses to see if they received health benefits from writing to accepting
confidants. One could argue that people who are instructed to imagine accepting
confidants, as compared to those who are instructed to imagine non-accepting confidants,
may be more motivated to seem healthy at the end of the study as a response to the
demand characteristics of the research. However, I have several reasons to believe that
the results were not a mere response to demand characteristics. First, participants were
told about the accepting confidant 8 weeks before filling out their illness measure. This is
a long time to keep the motives of the researchers in mind. Second, a close inspection of
the SIRS, the illness measure, reveals that it asks about whether participants have
experienced colds, warts, bronchitis, fever, headaches, back pains, diarrhea, constipation,
etc., in the past 8 weeks. It seems very unlikely that people would say they had fewer of
these concrete symptoms as a means of pleasing the researchers. If anything, they might
have been more likely to admit these kinds of symptoms if they were happy with the
researchers (i.e., who had them writing to accepting confidants). Moreover, the forms
were completely anonymous and used a password that only the participants could identify
to match up their previous questionnaires. Such anonymity may have reduced any
particular responsiveness to demand characteristics of the experiments. Finally, given that
medical doctors rely heavily on self-reports to assess illnesses, I think it is appropriate to use symptom self-report measures in research on the health effects of disclosure.

Another limitation is that participants only imagined the responses of the confidant; they did not actually reveal their secrets to anyone. My response to this kind of criticism is that having participants imagine their confidants would have presented a problem in the case of null findings, which would have made me wonder if the manipulation had been strong enough. But I did detect health benefits for the accepting confidant group through their simply imagining the accepting audience for their disclosures. My purpose here was to try to identify a mechanism that may underlie the benefits of revealing to a confidant, rather than to describe what actually does happen when people reveal their secrets to others. I suspect that these results might be amplified by an actual disclosure to a highly discreet and accepting confidant, but not qualitatively different. By the same token, potentially devastating effects could occur with an indiscreet or judgmental confidant. I chose to have confidants imagined as a way of protecting the well-being of participants, and yet was still able to reach the research goal of identifying an important mechanism that may underlie the health benefits of revealing to different confidants.

Conclusion

The present experiments are the first to examine how disclosing secrets to different imagined confidants might influence health. Both experiments demonstrated that whether participants wrote about their secrets with an accepting or non-accepting
confidant in mind, or were told about the respective confidants after their writing, those in the accepting groups experienced greater health benefits 8 weeks later.
APPENDIX A:
SERIOUSNESS OF ILLNESS RATING SCALE (SIRS)

Please circle “1” if you have experienced any of the following problems since your first visit to the lab (approximately 9 weeks ago), and circle “0” if you have not. (The date of your first lab visit is noted on the small envelope you were given.) Males may skip items 27, 30, and 33.

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APPENDIX B:

WORKING ALLIANCE INVENTORY-CLIENT FORM (BOND SUBSCALE)

Please provide answers to the following statements using the scale below. In each blank, substitute the name of the person who you imagined would read your diary entry.

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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Always</th>
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</table>

1. I feel uncomfortable with ______________________.
2. ______________________ and I understand each other.
3. I believe ______________________ likes me.
4. I believe ______________________ is genuinely concerned for my welfare.
5. ______________________ and I respect each other.
6. I believe ______________________ is not totally honest about his/her feelings toward me.
7. I am confident in ______________________ ’s ability to help me.
8. I feel that ______________________ appreciates me.
9. ______________________ and I trust one another.
10. My relationship with ______________________ is very important to me.
11. I have the feeling that if I say or do the wrong things, ______________________ will not accept me.
12. I feel ______________________ cares about me even when I do things that he/she does not approve of.


