

Writing About the Benefits of an Interpersonal Transgression Facilitates Forgiveness

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The authors examined the effects of writing about the benefits of an interpersonal transgression on forgiveness. Participants ($N = 304$) were randomly assigned to one of three 20-min writing tasks in which they wrote about either (a) traumatic features of the most recent interpersonal transgression they had suffered, (b) personal benefits resulting from the transgression, or (c) a control topic that was unrelated to the transgression. Participants in the benefit-finding condition became more forgiving toward their transgressors than did those in the other 2 conditions, who did not differ from each other. In part, the benefit-finding condition appeared to facilitate forgiveness by encouraging participants to engage in cognitive processing as they wrote their essays. Results suggest that benefit finding may be a unique and useful addition to efforts to help people forgive interpersonal transgressions through structured interventions. The Transgression-Related Interpersonal Motivations Inventory—18-Item Version (TRIM-18) is appended.

Keywords: forgiveness, benefit finding, meaning, LIWC, TRIM

Interpersonal transgressions are a class of interpersonal stressors in which people perceive that another person has harmed them in a way that they consider both painful and morally wrong. Interpersonal transgressions can have negative effects on mental health. For example, discovering that one's spouse has been sexually unfaithful is associated with a sixfold increase in the likelihood of major depressive disorder (Cano & O'Leary, 2000), and the experience of humiliation is associated with a 70% increase in the risk of major depressive disorder (Kendler, Hettema, Butera, Gardner, & Prescott, 2003).

Transgressions frequently elicit a desire to avoid the transgressor, a desire to seek revenge against the transgressor, and a decline in goodwill for the transgressor (McCullough et al., 1998; McCullough, Worthington, & Rachal, 1997). Such motivational reactions themselves can have negative interpersonal, psychological, and health effects. For example, feeling avoidant and vengeful toward one's transgressor impedes the restoration of that relationship (McCullough et al., 1998). In addition, people who tend to feel vengeful or unforgiving after transgressions are prone to depressive symptoms (Brown, 2003) and are more likely to be diagnosed with major depression, generalized anxiety disorder, phobia, and panic disorder (Kendler, Liu, et al., 2003). It is not surprising that thoughts of revenge are among the strongest elicitors of anger (DiGiuseppe & Froh, 2002), and entertaining one's grudges and thoughts of revenge lead to cardiovascular and sympathetic nervous system arousal (Witvliet, Ludwig, & Vander Laan, 2001). Therefore, helping people modify their responses to transgressions

may be useful for helping them improve their relationships as well as their psychological and physical health.

Forgiveness of Transgressions: Is Benefit Finding an Ingredient?

Following a transgression, most people will experience some motivation to seek revenge or to avoid the transgressor and some decline in goodwill for the transgressor. However, some people will experience relatively quick returns to baseline in these motivations; others will experience lingering negative motivations for days, weeks, or even months. We have conceptualized forgiveness as prosocial changes in these transgression-related interpersonal motivations, or TRIMs (McCullough, Bellah, Kilpatrick, & Johnson, 2001; McCullough, Fincham, & Tsang, 2003; McCullough & Hoyt, 2002; McCullough et al., 1998, 1997): When people forgive, they become less avoidant, less vengeful, and more benevolent toward the people who have hurt them. Although some researchers acknowledge that forgiveness can also be conceptualized as an active, deliberative process (Worthington & Scherer, 2004), the unifying feature of forgiveness on which most scholars seem to agree is that forgiveness is a change process by which an individual becomes more positively disposed and less negatively disposed toward an individual who has harmed him or her at some point in the past (Baumeister, Exline, & Sommer, 1998; Enright & Coyle, 1998; McCullough, Pargament, & Thoresen, 2000; Worthington, 2005), irrespective of whether that process occurs effortlessly or more passively.

How do people forgive? Theorists offer diverse answers. Attributional theorists emphasize the role of responsibility attributions (Weiner, 1995). Other work has emphasized the role of empathy for the transgressor (McCullough, 2001; McCullough et al., 2003, 1998, 1997). Interdependence theorists emphasize the role of relationship commitment (Finkel, Rusbult, Kumashiro, & Hannon, 2002). Clinical researchers often emphasize a series of steps that people must complete (e.g., Enright & Coyle, 1998; Worthington, 2001). Clinical trials—including many published in this journal—

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indicate that interventions based on these approaches reduce a wide range of psychological symptoms (Baskin & Enright, 2004; Coyle & Enright, 1997; Freedman & Enright, 1996; Lin, Mack, Enright, Krahn, & Baskin, 2004; Rye et al., 2005).

In the present paper, we consider a new possible ingredient in the forgiveness process: benefit finding. Transgressions come with costs to the victim (e.g., loss of trust, self-esteem, material resources, physical or psychological well-being, etc.). However, focusing on the benefits that one has gained (or might gain in the future) from a transgression could help to negate some of the transgression's psychological costs and, by doing so, encourage forgiveness. This proposition is consistent with other studies showing that one's attentional focus after negative life events (e.g., rumination vs. distraction, focus on the "hot" vs. "cool" features of the event, or affirming key aspects of one's self-image after the event) has implications for emotion, well-being, and social behavior (e.g., Ayduk, Mischel, & Downey, 2002; Koole, Smeets, van Knippenberg, & Dijksterhuis, 1999; Rusting & Nolen-Hoeksema, 1998).

Benefit finding is quite common even after traumatic transgressions such as sexual abuse, rape, and mass shootings (Frazier & Burnett, 1994; McMillen, 1999; McMillen, Zuravin, & Rideout, 1995). Common perceived benefits include realizing one's inner strengths, renewed spirituality, new appreciation for one's life, improved interpersonal relationships, developing new wisdom or new motivation to care for oneself, and readjusting one's priorities in life. Three studies suggest that benefit finding might also encourage forgiveness.

In the first study suggesting this possibility, Zechmeister and Romero (2002) had participants write autobiographical narratives about incidents in which they were either the (a) victim or (b) perpetrator of a transgression that was either (a) forgiven or (b) not forgiven. Only 2% of the victims who did not forgive reported that the transgression had positive consequences, whereas 21% of victims who forgave reported positive consequences (effect size $r = .28$). Only 6% of the unforgiven transgressors reported that the transgression had positive consequences; 26% of the forgiven transgressors reported positive consequences (effect size $r = .26$).

In the second relevant study, King and Miner (2000) instructed participants to write essays about traumatic events they had experienced (including, but not limited to, interpersonal transgressions). One group wrote only about traumatic aspects of the event, whereas a second group wrote about benefits of the event. A third group wrote about traumatic aspects of the event *and* benefits of the event. A fourth group wrote about emotionally neutral material. The essays of people who wrote about traumatic aspects of the event were more negative and less positive in affective tone than were those of people who wrote about benefits. In addition, people who wrote about benefits were more likely to report that the trauma had been resolved. They were also less bitter about the event than were people who wrote about traumatic aspects of the event.

In the third relevant study, Romero (2004) assigned participants (all of whom had suffered an interpersonal transgression) to one of three conditions in which they wrote on three separate occasions: (a) an emotionally neutral "daily events" condition as in King and Miner (2000), (b) a condition in which they wrote about their deepest thoughts and feelings regarding the transgression, or (c) a condition in which they attempted to express empathy for the transgressor and identify benefits to the self and/or the transgressor that might come from forgiving. Of these three conditions, writing about empathy and possible benefits of forgiveness was most effective in promoting forgiveness. However, this intervention

involved both empathy and benefit finding (and a rather narrow form of benefit finding at that), so the unique and complete effects of benefit finding could not be examined. Nevertheless, these studies provide sufficient impetus to examine the effects of benefit finding on forgiveness more directly.

Mediators of the Benefit-Finding Effect: Language Use and the Therapeutic Writing Paradigm

Benefit finding might promote forgiveness through several mediators. As mentioned above, it might increase the attention people give to the personal benefits associated with the transgression or reduce the attention they give to the personal costs of the transgression. In such a fashion, victims might come to feel that their transgressors owe them smaller "debts," and as a result, their reciprocity-based motivation to avoid the transgressor or seek revenge may lessen (Gouldner, 1960).

The King and Miner (2000) study mentioned above (one of the few experimental studies in the benefit-finding literature, whose methods informed the present work) and the disclosive writing paradigm on which it was based suggest other mediators as well. For example, researchers have been examining the importance of cognitive processing and the expression of affect (Pennebaker, Mehl, & Niederhoffer, 2003) as mediators of the effects of disclosive writing on measures of mental health and physical health. Successful disclosive writing appears to be associated with high levels of positive emotion expression (i.e., use of words such as *happy*, *pretty*, and *good*), moderate levels of negative emotional expression (i.e., use of words such as *hate*, *worthless*, and *enemy*), and high levels of cognitive processing (i.e., use of causal words such as *because* and *hence* and insight words such as *think* and *know*; examples from Pennebaker, Francis, & Booth, 2001). Indeed, King and Miner found that participants in their perceived benefits group wrote essays that demonstrated greater positive emotion and greater use of insight words than did participants in the other conditions.

Theorists who work with process models of forgiveness (e.g., Enright & Coyle, 1998; Worthington, 1998) have also suggested that recognition and expression of moderate amounts of the negative affect (e.g., hurt, fear, and anger) associated with an offense may contribute to forgiveness. In support of this notion, Harber and Wenberg (2005) found that the experience of negative emotion (viz., anger) during an emotional disclosure task regarding an interpersonal offense was correlated with the extent to which the task restored subjective closeness toward the transgressor (which is a well-established correlate of forgiveness). In addition, the proposition that benefit finding may facilitate forgiveness by promoting insight about the transgression is consistent with the work of theorists (e.g., Enright & Coyle, 1998) who have proposed that (a) identifying the meaning that a transgression has for oneself and others and (b) realizing that one might have a new purpose in life because of the transgression one has suffered are important aspects of the forgiveness process. Taken together, these precedents suggest that it would be worthwhile to evaluate whether benefit finding facilitates forgiveness by influencing these emotional and cognitive variables.

Present Study

In the present study, we evaluated the effects of a benefit-finding writing task on forgiveness of a transgressor. To evaluate

the unique effects of benefit finding as distinct from writing about the unpleasant aspects of the transgressions or from writing more generally (as in King & Miner, 2000), we compared the benefit-finding writing task with two other tasks: (a) a task in which people wrote strictly about traumatic features of the transgression and (b) a control task in which people wrote about a topic that was unrelated to the transgression. We also set out to examine whether the effects of these writing tasks were mediated by the types of language that participants used in the essays that they wrote—specifically, words that reflected thinking about the costs and benefits associated with the transgression, expression of affect, and cognitive processing (King & Miner, 2000; Pennebaker et al., 2003).

Method

Participants

Participants were 304 undergraduates (213 women, 91 men; M age = 19.31 years, SD = 2.81, range = 18–45; 156 White non-Hispanic, 72 Hispanic, 44 Black/African American, 32 from “other” ethnic group) who were asked to think about the most recent time when someone with whom they were in a relationship hurt or offended them. They received a small amount of course credit in an introductory psychology course for participating.

Procedures

Recruitment. Participants read a brief description of the study online. If they chose to participate (and if they were able to recall a recent interpersonal transgression), they scheduled a 1-hr appointment in the first author’s laboratory.

Completion of background questionnaire. When participants arrived at the laboratory, a researcher explained that they would (a) complete a brief questionnaire about the most recent occasion in their life when someone hurt or offended them, (b) complete a 20-min writing task, and (c) complete a final questionnaire about their current feelings toward the transgressor. Then, participants completed the initial questionnaire that included a communal strength measure (see *Communal strength* section below) and items that elicited background information (e.g., the length of time since the transgression occurred and a short description of the transgression).

Experimental writing conditions. Next, participants were randomly assigned to one of three writing conditions, blocking on gender. For participants assigned to the traumatic features writing condition (n = 101; 71 women and 30 men), the researcher read the following instructions (participants were given a copy and asked to follow along):

In the questionnaire you just completed, you gave us some information about a harmful thing that someone that you know did to you in the past. For the next 20 minutes, we would like for you to write an essay about that harmful thing they did to you. As you write, please try to address the following points: (a) What actually happened to you? What did this person do to you? (b) How did you feel about the event right after it occurred to you? We would like to know especially about the ways in which you felt angry, afraid, disgusted, or upset after the event occurred. (c) How was your life negatively affected by what this person did to you? In what ways is your life *still* negatively affected by the negative thing that the person did to you? (d) What sorts of negative emotions do you experience at this time in your life when you think about the negative event that occurred to you? As you write, really try to “let go” and experience your feelings about this negative event. Try not to hold anything back. Be honest and candid about this negative event, the negative feelings it created in you, and its negative effects on your life.

Similar tasks tend to improve physical and mental health (Pennebaker, 1997; Smyth, 1998), though they are not associated with the reduction in bitterness and the perception that a trauma has been resolved that results from writing about benefits (King & Miner, 2000). These instructions were similar to those that have been used in other studies of disclosive writing (e.g., King & Miner, 2000); however, our intervention was focused on the negative aspects of the transgression rather than on people’s thoughts and feelings in general about the transgression (Pennebaker, 1997).

In the benefit-finding writing condition (n = 102; 72 women and 30 men), the researcher read these instructions:

In the questionnaire you just completed, you gave us some information about a harmful thing that someone you know did to you in the past. For the next 20 minutes, we would like for you to write an essay related to that harmful thing they did to you. However, as you write, we would like for you to write about *positive* aspects of the experience. In which ways did the thing that this person did to you lead to positive consequences for you? Perhaps you became aware of personal strengths that you did not realize you had, perhaps a relationship became better or stronger as a result, or perhaps you grew or became a stronger or wiser person. Explore these issues as you write. In particular, please try to address the following points: (a) In what ways did the hurtful event that happened to you lead to positive outcomes for you? That is, what personal benefits came out of this experience for you? (b) In what ways has your life become better as a result of the harmful thing that occurred to you? In what ways is your life or the kind of person that you have become better today as a result of the harmful thing that occurred to you? (c) Are there any other additional benefits that you envision coming out of this experience for you—perhaps some time in the future? As you write, really try to “let go” and think deeply about possible benefits that you have gained from this negative event, and possible benefits you might receive in the future. Try not to hold anything back. Be as honest and candid as possible about this event and its positive effects, or potential effects, on your life.

In the control writing condition (n = 101; 70 women and 31 men), the researcher read these instructions:

For the next 20 minutes, we would like for you to write an essay about your plans for tomorrow. Please be very specific about these plans. Imagine yourself waking up tomorrow morning. From that moment on, what will you do? Please describe exactly what you plan to do, in order, and describe the routes you will take to and from all of the places you will go. If, after having written about your plans for tomorrow, you still have time left before the 20 minutes are completed, we would like for you to write about your shoes. Beginning with the pair of shoes that you are currently wearing, please describe them in detail. If time still remains in the 20-minute writing period, please also write about the other types of shoes that you own.

Control tasks like this one typically have no effects on health or well-being (King & Miner, 2000).

Completion of the Transgression-Related Interpersonal Motivations (TRIM) Inventory—18. After completing the writing task, participants completed a measure of forgiveness called the TRIM–18 (McCullough et al., 1998; see description below). Afterward, participants were debriefed, thanked for participating, and dismissed.

Measures

TRIM–18. For a decade, forgiveness has been conceptualized as a process of reducing one’s negative (*viz.*, avoidance and revenge) motivations toward a transgressor and restoring one’s positive motivations regarding a transgressor (McCullough et al., 1997). To measure these motivational changes, in the present study we used the TRIM–18 Inventory (McCullough et al., 1998). The seven-item Avoidance subscale measures

motivation to avoid a transgressor (e.g., "I live as if he/she doesn't exist, isn't around"). The five-item Revenge subscale measures motivation to seek revenge (e.g., "I'll make him/her pay"). Both have high internal consistency ($\alpha \geq .85$), moderate test-retest stability (e.g., 8-week test-retest $r_s \approx .50$), and evidence of construct validity (McCullough et al., 2001, 1998). Items are rated on a 5-point Likert-type scale (1 = *strongly disagree* to 5 = *strongly agree*). A recent addition is a six-item subscale for measuring benevolence motivation (e.g., "Even though his/her actions hurt me, I have goodwill for him/her") that also has good reliability (McCullough et al., 2003; McCullough & Hoyt, 2002). These 6 items are rated on the same 5-point Likert-type scale as are the 12 avoidance and revenge items.

All 18 items have never been factor analyzed jointly, so we submitted them to a factor analysis with oblique rotation. Two factors with eigenvalues greater than one were extracted that explained 65.3% of the item variance. The avoidance items loaded strongly and positively on the first factor; the benevolence items loaded strongly and negatively on this factor (explaining 53.1% of the total item variance). We named this factor Avoidance versus Benevolence motivation (higher scores indicated higher avoidance and lower benevolence). The five revenge items loaded strongly and positively on the second factor (explaining 12.1% of the total item variance). We named this second factor Revenge Motivation. The fact that the avoidance and revenge items marked distinct but correlated factors is consistent with previous research using the 12-item version of the TRIM (McCullough et al., 1998). Items had relatively low cross-loadings (see Appendix). We used the two factor scores ($r = .45, p < .001$) as dependent variables.

Transgression Severity Rating Scale. When participants began the experiment, they wrote short (typically between two-sentence and one-paragraph) descriptions of the harms they had experienced. Later, six research assistants read each of these 304 descriptions and then rated them on four 7-point Likert-type scales (0 = *not at all* to 6 = *extremely*) to indicate how "painful," "serious," "severe," and "harmful" the offense would be perceived by "the average person" who experienced it. A single factor explained 77% of the variance in these four items, with item loadings ranging from .80 to .93. We used the unweighted linear composite of the four ratings as a measure of transgression severity ($\alpha = .93$), and then we combined the six raters' composite scores. The interrater reliability of this six-rater composite, estimated as a generalizability coefficient per Hoyt and Melby (1999), was $\rho^2 = .69$.

Communal strength. We measured the communal strength of participants' relationships with their transgressors with Mills, Clark, Ford, and Johnson's (2004) communal strength measure, which includes 10 items (e.g., "How much would you be willing to give up to benefit ____?") that participants completed on an 11-point Likert-type scale to indicate their current degree of communal feeling toward their transgressor. In communal relationships, people are motivated by a desire to meet their partners' needs (Mills et al., 2004). Communal relationships are exemplified by strong marriages, family relationships, and friendships. Conversely, in noncommunal relationships partners tend to behave according to the norm of reciprocity (Clark, 1984). Work relationships and acquaintanceships are typically noncommunal in nature. Mills et al. found that this measure had high internal consistency reliability ($\alpha > .85$) and good evidence for construct validity. In our sample, $\alpha = .94$. We suspected that communal strength would be correlated with forgiveness (McCullough et al., 1998), so measuring it prior to random assignment allowed us to use it as a covariate to increase the statistical power of our primary analyses.

Linguistic Inquiry and Word Count (LIWC; Pennebaker et al., 2001). The LIWC is a software tool for characterizing the grammatical, linguistic, and psychological features of text documents. We used the LIWC program to check each word within each of our participants' essays against LIWC's internal dictionary of over 2,000 words. Each word in each participant's essay was tagged for membership in more than 70 grammatical, linguistic, and psychological categories. Then, after every word was tagged, the relative prominence of each of these categories within each essay was

ascertained by dividing the number of words from a given category (e.g., the number of words that were related to negative emotion) that appeared within the essay by the total number of words within that essay. As noted previously, affect and cognitive words are particularly important mediators of the beneficial effects of disclosive writing (Pennebaker et al., 2003), so we focused here on three LIWC categories: (a) words indicating that the participant experienced positive emotions while writing (e.g., *happy*, *pretty*, and *good*; 261 words in the LIWC internal dictionary), (b) words indicating that the participant experienced negative emotions while writing (e.g., *hate*, *worthless*, and *sad*; 345 words in the LIWC internal dictionary), and (c) words indicating that the participant engaged in cognitive processes such as drawing cause-and-effect conclusions and developing insights while writing (e.g., *because*, *should*, and *maybe*; 312 words in the LIWC internal dictionary). The LIWC program's codes are well validated against human ratings (Pennebaker et al., 2001) and have been useful for understanding a variety of psychological processes (e.g., Cohn, Mehl, & Pennebaker, 2004; Pennebaker et al., 2003; Pennebaker & Stone, 2003).

New LIWC categories for benefit-related and cost-related words. We created two new LIWC categories to measure the extent to which participants wrote about benefits and costs. After perusing the essays that our first 50 participants wrote (roughly 16 from each of the three conditions, or about 16% of all of the essays), the third author created a tentative list of 102 benefit-relevant words (e.g., *learned*, *recovered*, *blessed*, *benefited*, *stronger*) and 127 cost-relevant words (e.g., *devastation*, *violated*, *betrayed*, *unfair*, *broken*). He then rated each of these words on two different scales to indicate how well they reflected the constructs of benefits and costs to the self, respectively, using two 5-point scales (1 = *not at all*, 5 = *extremely*). The second author then completed the same rating task. The interrater reliability of the two-rater composites of the benefit and cost ratings were $\rho^2 = .94$ and $.95$, respectively (Hoyt & Melby, 1999). We created a "benefit" dictionary that consisted of 72 words (or word stems) whose mean benefit prototypicality ratings were greater than 4.0 and whose mean cost prototypicality ratings were less than 2.0. Using an analogous approach, we also created a "cost" dictionary consisting of 82 words and word stems.

Other variables. We also examined whether the effects of the writing tasks differed as a function of participants' gender (0 = female, 1 = male) or the recency of their transgressions. The number of days since participants' transgressions had a log-normal distribution (range = 0–4,725 days, or approximately 13 years), so we applied a natural log transformation (after changing two scores of 0 days to .99 days) to render the distribution approximately normal.

Results

Characteristics of Transgressions

Most participants' transgressions were committed by girlfriends/boyfriends (52%), friends of the same gender (21%), or relatives (15%). A few reported being harmed by friends of the other gender (7%), employers (1%), or "others" (4%). Participants described several types of transgressions, including romantic infidelity (30%); insults by a friend or betrayals of a confidence (20%); rejection, neglect, or insult by a family member (15%); neglect or insult by a romantic partner or ex-romantic partner (12%); termination of a love relationship (10%); rejection or abandonment by a friend or prospective romantic partner (10%); and insults by people other than family or friends (3%). The mean score on the Transgression Severity Rating Scale was 4.01 ($SD = 0.78$) on a scale ranging from 0 (*not at all*) to 6 (*extremely*).

Descriptive Statistics

Means, standard deviations, and correlations among major variables appear in Table 1.

Table 1
Means, Standard Deviations, and Correlations for Major Study Variables

Variable	<i>M</i>	<i>SD</i>	Revenge	Transgression Severity	Communal Strength	% Positive Emotion	% Negative Emotion	% Cognitive Processing	% Cost Words	% Benefit Words
1. Avoidance vs. benevolence	0	1.0	0.45***	0.12*	-0.48***	-0.02	-0.07	-0.15**	-0.05	-0.02
2. Revenge	0	1.0	—	0.01	-0.21***	-0.13*	-0.12*	-0.20***	-0.08	-0.15*
3. Transgression severity	4.01	0.78	—	—	0.05	0.01	0.08	0.02	0.02	-0.09
4. Communal strength	53.42	23.91	—	—	—	-0.10	0.05	-0.01	0.02	-0.13*
5. % positive emotion words	2.29	1.48	—	—	—	—	0.24***	0.58***	0.25***	0.81***
6. % negative emotion words	1.94	1.49	—	—	—	—	—	0.58***	0.81***	0.17***
7. % cognitive processing words	6.73	3.45	—	—	—	—	—	—	0.56***	0.57***
8. % cost words	1.62	1.31	—	—	—	—	—	—	—	0.24***
9. % benefit words	2.64	2.01	—	—	—	—	—	—	—	—

Note. *N*s = 303 or 304.

* $p < .05$. ** $p < .01$. *** $p < .001$.

What Types of Traumatic Features and Benefits Did Participants Write About?

Participants in the traumatic features condition wrote essays that were quite similar. Initially, most of the participants in this condition focused on the transgression itself, including their thoughts (e.g., disbelief, confusion, attempts to rationalize or justify the event), feelings (e.g., anger, pain, sadness, shock, humiliation), psychosomatic responses (e.g., dizziness, vomiting, sleep changes), and behaviors (e.g., aggression) in response to the transgression. Participants then went on to describe negative consequences for the self (e.g., changes in self-esteem, body image, perceived value as a relationship partner or friend) or relationships (e.g., negative effects on the relationship with the transgressor or on other relationships, loss of trust in people). Thirteen percent of the participants in the traumatic features condition spontaneously described benefits to the self or positively reframed the event in some fashion.¹

Only a few participants in the benefit-finding condition described the offense in much detail. They tended to begin by describing the perceived benefits of the transgression. A list of the reported benefits and their prevalences appear in Table 2. Only 2 participants (both of whose transgressions had occurred in the previous 24 hr) were unable to think of any benefits. A 3rd participant reported that he or she would have been better off without suffering the transgression and could have learned the same beneficial lesson without it.

Manipulation Check

Analyses of the LIWC data revealed that 2.63% ($SD = 1.20%$, 95% confidence interval [CI]: 2.45%–2.81%) of the words in the essays of participants in the traumatic features condition were cost-related words. This was a significantly higher percentage (Cohen's $d = 0.69$) than that for participants in the benefit-finding condition ($M = 1.87%$, $SD = 1.00%$; 95% CI: 1.69%–2.05%), which was significantly higher (Cohen's $d = 2.20$) than that for participants in the control condition ($M = 0.37%$, $SD = 0.36%$; 95% CI: 0.19%–0.55%). Conversely, 4.56% ($SD = 2.01%$, 95% CI: 4.29%–4.84%) of the words in the essays of benefit-finding participants were benefit-related words. This was a significantly higher percentage (Cohen's $d = 1.60$) than that for participants in the traumatic features condition ($M = 2.24%$, $SD = 1.18%$; 95% CI: 1.96%–2.52%), which was, in turn, significantly higher (Co-

hen's $d = 1.23$) than that for participants in the control condition ($M = 1.10%$, $SD = 0.68%$; 95% CI: 0.82%–1.37%). Therefore, the writing conditions appeared to be successful manipulations of benefit-related thinking and cost-related thinking.

Effects of Writing About the Transgression on Forgiveness

A multivariate analysis of covariance with two dependent variables (avoidance vs. benevolence motivation and revenge motivation) revealed that the writing tasks did not interact with gender, recency of the transgression, severity of the transgression, or communal strength, so we did not consider these interactions further.² However, communal strength and transgression severity accounted for unique variance in the two dependent variables, so we retained them as covariates to increase statistical power for the main analysis, which was a one-way

¹ When we removed the data for these participants, the variance in the outcomes that could be attributed to the differences among the three writing conditions increased slightly but not substantially. However, it was statistically more conservative to leave those participants in the analyses, so we did.

² Prior to conducting these analyses, we used the expectation-maximization routine in SPSS to estimate a small amount of missing data. Expectation maximization is a maximum likelihood estimation procedure that yields unbiased estimates of missing data when missingness can be assumed to be at random. The first 60 participants were missing communal strength scores because of an Institutional Review Board delay. Because we randomly assigned participants to conditions, this cause of missingness affected all three conditions equally. Thus, from the perspective of evaluating differences among the three conditions, the missingness was at random and was therefore ignorable. Ten people lacked complete data on the TRIM Inventory, but their missingness came to no more than 3 items per person out of a total of 18 items. Given the high intercorrelations among the 18 items and the small amount of missingness overall, this low amount of missingness was considered so trivial as to be ignorable in any case. As would be expected, the means and standard deviations of the observed and estimated values did not differ substantially. By estimating the missing data, we restored our sample size to 304. For analyses involving the LIWC data, the sample size was 303: One participant wrote his or her essay in Spanish, and we did not translate this essay into English; therefore, it could not be coded with the LIWC software. We did not estimate these missing LIWC data for this participant because, given the low correlations of the LIWC data with the other variables in the data set (see Table 1), estimation would have been poor.

Table 2
Benefits Reported in Benefit-Finding Essays

Benefit	Prevalence in sample (%)
Grew stronger or discovered unknown strength	55
Wiser (i.e., slower to trust in relationships, less naïve)	44
Allowed for new life experiences	29
Strengthened other relationships	26
Became better at communicating feelings	25
Ended a bad relationship	25
Increased confidence	23
Became more kind, more compassionate, less selfish	21
Became more aware of the feelings of others	20
Strengthened the relationship with the offender	19
Learned the importance of forgiveness	18
Learned what a romantic relationship requires	12
Not as concerned about others' opinions/less need to please others	12
Realized the importance of other things and relationships, beyond romantic relationships	8
Learned what not to do in a romantic relationship	8
Learned about qualities to look for in friends	8
Learned the importance of dealing with anger and/or keeping a cool head	7
Learned to stand up for myself	6
Learned to value what I have	6
Importance of caring for myself	6
Learned what to look for in a romantic partner	5
Increased confidence in beliefs/increased faith	5
Other areas of life improved (e.g., athletics, artistic expression, schoolwork)	4
Importance of trusting instincts	4
Clarified sexual orientation	3
Learned the importance of thinking about the consequences of my actions	2
Became an advocate for others in similar situations	2
Provided purpose in life or a future goal	2

(writing task: traumatic features, benefit finding, control) multivariate analysis of covariance with communal strength and transgression severity as covariates. The two dependent variables were the avoidance versus benevolence and revenge motivation factors from the TRIM Inventory.

The writing tasks produced a significant multivariate effect on the dependent variables, Wilks's $\Lambda = .94$, $F(4, 596) = 4.87$, $p = .001$ (two-tailed, as with all tests below), partial $\eta^2 = .03$. This significant multivariate effect was explored with two univariate analyses of covariance. There were significant differences among the three conditions on both dependent measures. Differences among the conditions accounted for small but significant proportions of variance in the avoidance versus benevolence factor, $F(2, 299) = 3.99$, $p = .02$, partial $\eta^2 = .03$, and the revenge factor, $F(2, 299) = 8.87$, $p < .001$, partial $\eta^2 = .06$.

Pairwise comparisons on the adjusted means conducted with Bonferroni's correction revealed that the benefit-finding condition (adjusted $M = -0.19$, $SD = 0.85$, 95% CI: $-0.36, -0.02$) yielded significantly ($p = .035$) lower avoidance versus benevolence scores (Cohen's $d = -0.36$) than did the control condition (adjusted $M = 0.12$, $SD = 0.86$, 95% CI: $-0.05, 0.28$) and, with marginal significance ($p = .059$), lower avoidance versus benevolence scores (Cohen's $d = -0.33$) than did the traumatic features condition (adjusted $M = 0.09$, $SD = 0.85$, 95% CI: $-0.08, 0.26$). The means of the traumatic features and control conditions did not differ from each other ($p = 1.0$; see Table 3).

Similarly, the benefit-finding condition (adjusted $M = -0.31$, $SD = 0.95$, 95% CI: $-0.49, -0.12$) yielded significantly ($p = .02$) lower revenge scores (Cohen's $d = -0.38$) than did the traumatic

features condition (adjusted $M = 0.06$, $SD = 0.95$, 95% CI = $-0.13, 0.24$). It also yielded significantly ($p < .001$) lower revenge scores (Cohen's $d = -0.58$) than did the control condition (adjusted $M = 0.25$, $SD = 0.95$, 95% CI: $0.06, 0.43$). The means of the traumatic features and control conditions did not differ from each other ($p = .46$). In sum, then, the benefit-finding condition fostered more forgiveness than did the traumatic features condition or the control condition, which did not differ from each other.

Mediational Analyses

Having discovered that the benefit-finding condition was more effective than the other two conditions at promoting forgiveness (a first condition for mediation), we evaluated whether the benefit-finding condition's superiority was mediated by its effects on participants' expression of benefit-related content, cost-related content, negative emotion, positive emotion, and cognitive words in their essays relative to the other two conditions. King and Miner (2000) used a similar analytic strategy to compare the linguistic features of essays from a benefit-finding writing condition, a traumatic features condition, and an emotionally neutral control group (see also Harber & Wenberg, 2005).

To test the second condition for mediation, we tested whether the five putative mediators were influenced by the writing conditions (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). To do so, we conducted five separate regressions in which the five linguistic aspects of participants' essays were used individually as criterion variables. We predicted these criteria with four variables: (a) communal strength, (b) transgression severity, (c) a dummy

Table 3
Means for Dependent Variables and Putative Mediators by
Treatment Condition

Dependent variable / putative mediator	Treatment condition <i>M</i>		
	Benefit finding	Traumatic features	Control
Avoidance vs. benevolence motivation	-0.19 _a	0.09 _b †	0.12 _b
Revenge motivation	-0.31 _a	0.06 _b	0.25 _b
% benefit-related words	4.54 _a	2.24 _b	1.11 _b
% cost-related words	1.87 _a	2.63 _b	0.36 _b
% negative emotion words	2.10 _a	3.24 _b	0.48 _b
% positive emotion words	3.56 _a	2.23 _b	1.07 _b
% cognitive processing words	9.32 _a	8.17 _b	2.68 _b

Note. All means are adjusted for communal strength and transgression severity. Means in a single row with different subscripts are significantly different per pairwise comparisons conducted with Bonferroni's correction for multiple comparisons.

† *p* value for difference between benefit-finding condition and traumatic features condition = .059.

code representing the effect of the traumatic features condition (traumatic features group coded 1, all others coded 0), and (d) a dummy code representing the effect of the control condition (control group coded 1, all others coded 0). The advantage of this coding scheme is that the unique effect of each dummy variable represents the contrast of the group coded 1 from the group coded 0 on both dummy codes (in this case, the benefit-finding condition; Cohen & Cohen, 1983).

In each of these five regressions, the dummy-coded variables reflecting membership in the traumatic features condition and membership in the control condition were both statistically significant ($ps < .001$). The traumatic features condition encouraged the use of (a) a lower percentage of benefit-related words (coefficient [B] = -2.30, $SE = 0.20$), positive emotion words ($B = -1.33$, $SE = 0.15$), and cognitive processing words ($B = -1.16$, $SE = 0.27$) and (b) a higher percentage of cost-related words ($B = 0.76$, $SE = 0.13$) and negative emotion words ($B = 1.14$, $SE = 0.14$) than did the benefit-finding condition (all B s unstandardized; all $ps < .001$). The control group encouraged the use of a lower percentage of benefit-related words ($B = -3.43$, $SE = 0.20$), cost-related words ($B = -1.51$, $SE = 0.13$), positive emotion words ($B = -2.49$, $SE = 0.15$), negative emotion words ($B = -1.62$, $SE = 0.14$), and cognitive processing words ($B = -6.64$, $SE = 0.27$) than did the benefit-finding condition. Table 3 shows the adjusted means of the three conditions for these five mediators and the results of pairwise comparisons conducted with Bonferroni's correction for multiple comparisons.

The third step in examining mediation was to examine whether five hypothesized mediators were associated with the outcome variables (MacKinnon et al., 2002) when both the mediators and the independent variable were used to predict the outcome variables. As a preparatory step in evaluating this condition, we first conducted 10 separate regression models. In these 10 models, we regressed either the avoidance versus benevolence or the revenge factor individually onto one of the five putative mediators, holding communal strength and transgression severity constant (as in the analyses in which we demonstrated that the benefit-finding condition produced more change in the avoidance vs. benevolence and revenge dependent variables than did the other two conditions).

Then, we evaluated whether the five putative mediators uniquely predicted the criterion variables.

In the five regressions using avoidance versus benevolence motivation as a criterion, in only one (the regression involving cognitive processing) was a putative mediator uniquely associated with the putative outcome after controlling for communal strength and transgression severity: The use of cognitive processing words (e.g., *because*, *should*, and *maybe*) was negatively associated ($B = -0.05$, $SE = 0.01$, $p < .01$) with avoidance versus benevolence motivation.

In contrast, four of the five putative mediators had significant unique associations with revenge motivation after controlling for communal strength and transgression severity. Percentage of benefit words ($B = -0.09$, $SE = 0.03$, $p < .01$), percentage of negative emotion words ($B = -0.07$, $SE = 0.04$, $p < .05$), percentage of positive emotion words ($B = -0.10$, $SE = 0.04$, $p < .01$), and percentage of cognitive processing words ($B = -0.06$, $SE = 0.02$, $p < .001$) were all uniquely and negatively associated with revenge motivation.

As the next part of this third step, we evaluated whether the putative mediators maintained a significant association with the dependent variables that they were hypothesized to mediate (in this case, our avoidance vs. benevolence and revenge variables) when the putative independent variable (in this case, the writing conditions) and the putative mediator (the four linguistic features of participants' essays mentioned in the previous paragraph) predicted the outcomes simultaneously (MacKinnon et al., 2002).

Having found one putative mediator (percentage of cognitive processing words) that was uniquely associated with avoidance versus benevolence motivation and four putative mediators (percentage of benefit words, percentage of negative emotion words, percentage of positive emotion words, and percentage of cognitive processing) that were uniquely associated with revenge motivation, we therefore ran five additional regressions to test this condition. In each of these regressions, one of the two dependent variables was regressed on five variables: (a) one of the relevant putative mediators, (b–c) the two dummy-coded variables representing the effects of the traumatic features and control conditions (vs. the benefit-finding condition), (d) communal strength, and (e) transgression severity.

In only one of these five regressions did any putative mediator maintain a statistically significant association with the dependent variable: Percentage of cognitive processing words had a statistically significant unique association with avoidance versus benevolence motivation ($B = -0.08$, $SE = 0.03$, $p < .01$). In this equation, the dummy-coded variables representing the contrast between the traumatic features and the benefit-finding conditions ($B = 0.20$, $SE = 0.12$, $p > .10$) and the contrast between the control and the benefit-finding conditions ($B = 0.19$, $SE = 0.21$, $p > .35$) were no longer significant.

The fourth step in testing mediation was to evaluate the statistical significance of the mediated effect using Sobel's (1982) test. MacKinnon, Warsi, and Dwyer (1995) demonstrated that testing the statistical significance of the product that results from multiplying the coefficient expressing the association of the putative independent variable and the putative mediator (i.e., the path from X to M) by the coefficient expressing the association of the putative mediator and the putative dependent variable (i.e., the path from M to Y when X is simultaneously used to predict Y) is algebraically equivalent to testing the reduction in direct effect that

results from simultaneously controlling the mediator (cf. Baron & Kenny, 1986). Sobel tests for mediation demonstrated that cognitive processing mediated the superior efficacy of the benefit-finding condition relative to the traumatic features condition, Sobel $t = 2.41, p < .05$, and its superior efficacy relative to the control condition, Sobel $t = 2.87, p < .01$. Therefore, data supported the idea that the benefit-finding condition was more effective than the other two conditions in reducing avoidance versus benevolence motivation in part because it was more effective in promoting cognitive processing during the essay-writing task.

Cognitive processing did not predict unique variance in revenge motivation in the regression equation in which it was added ($p = .26$). None of the other putative mediators did either (all $ps > .35$). Therefore, we concluded that the putative mediators in which we were interested did not mediate the effects of the writing conditions on revenge motivation.

Discussion

Benefit finding is surprisingly common in the aftermath of adversity (McMillen, 1999) and is positively associated with a variety of psychological outcomes (e.g., Affleck & Tennen, 1996). Similarly, writing about traumatic events appears to foster physical and psychological health (Pennebaker, 1997; Smyth, 1998). Combining these two ideas, King and Miner (2000) examined the health effects of writing about the perceived benefits of traumatic experiences. They found that writing about benefits produced some of the same psychological and health benefits as did more standard forms of disclosive writing (e.g., Pennebaker, 1997), but with additional payoffs: For example, when people wrote about the perceived benefits of traumatic events, they felt less bitter about the events and felt that the events had been more fully resolved than did people who wrote about traumatic aspects of the events they had suffered.

King and Miner's (2000) findings, and those from two other studies (Romero, 2004; Zechmeister & Romero, 2002), led us to suspect that writing about the benefits of interpersonal transgressions would help people forgive those transgressions. The present results confirmed this suspicion. When our participants wrote about the benefits or potential benefits of transgressions they had recently suffered (a task that they found remarkably easy to complete), they experienced reductions in avoidance versus benevolence motivation and reductions in revenge motivation—the motivations underlying forgiveness (McCullough et al., 2003, 1998, 1997). The benefit-finding writing condition was more efficacious than a writing condition that had participants consider the strictly negative features of the transgressions they had suffered—a condition that was, as mentioned above, considerably more negative than Pennebaker's (1997) standard writing task. It was also superior to an emotionally neutral control condition that has been used elsewhere (e.g., King & Miner, 2000).

We hasten to note that the condition in which participants wrote about traumatic features of the transgression was not significantly more effective at encouraging forgiveness than was the control condition. This suggests that the major benefits of disclosive writing, at least in terms of forgiveness, came from some ingredient that is more characteristic of the benefit-finding condition than of the traumatic features condition. (We return to this theme below when we discuss mediation.) This is consistent with the work of King and Miner (2000), who found that when people wrote about

the perceived benefits of traumatic events, they ultimately felt less bitter about the event and felt that the traumatic event had been more fully resolved than did people who wrote strictly about traumatic aspects of the event. Therefore, on the basis of King and Miner's research and the present findings, we conclude that at least some of the therapeutic benefits of disclosive writing about an unpleasant or traumatic life event—which might go by names such as “resolution,” “acceptance,” and “forgiveness,” are better obtained with writing tasks that help writers to look for the personal benefits to be gained from the negative experience than from tasks in which writers simply vent their negative emotions or focus on negative aspects of their experience.

The effect of the benefit-finding condition on forgiveness was not large in magnitude: It yielded gains ranging from 0.33 to 0.58 *SD* units relative to the two other conditions. Cohen (1992) proposed that treatment effects of this magnitude in the behavioral sciences should be considered small to medium. Nevertheless, these effect sizes were comparable to those of most other nonclinical interventions (i.e., those lasting 1 or 2 hr) that have been used to facilitate forgiveness in prior research (Baskin & Enright, 2004). These effects would most likely have been larger if the writing task had been repeated over the course of several days (Pennebaker, 1997), which is common in studies of disclosive writing. Given the success of writing about the benefits of a transgression for even 20 min, it seems worthwhile to conduct further research to examine how much more benefit might emerge from a more intensive writing procedure carried out in several different sessions over several days.

Mediators of the Effects of the Writing Conditions on Forgiveness

We examined five possible mediators of the effects of the writing conditions on forgiveness. To our surprise, neither the percentage of benefit-related words nor the percentage of cost-related words in people's essays mediated the effects of the benefit-finding condition on forgiveness. Perhaps this is because our essay-based measure of benefit finding did not adequately measure the benefit-finding construct. However, it may be that the efficacy of the benefit-finding condition was not due to its ability to help people focus on the benefits (vs. costs) of a transgression but rather to its ability to facilitate another of the five mediators we evaluated: cognitive processing. When we controlled for the effects of the writing conditions on the use of cognitive processing words during the essay task, the salutary effects of the benefit-finding condition on avoidance versus benevolence motivation relative to the other two conditions disappeared. This suggests that the benefit-finding writing task was superior to the other two tasks at reducing avoidance motivation because it was so much better than the other two conditions at encouraging cognitive processing of the transgression—that is, at helping people to create essays involving insight, cause-and-effect relations, and connections among the various elements. Previous work has shown that successful disclosive writing is associated with high levels of cognitive processing (King & Miner, 2000; Pennebaker et al., 2003).

Pennebaker et al. (2003) observed that when people write about negative life events, a high number of cognitive processing words suggests that the writers have developed coherent stories or narratives surrounding the negative life events about which they are writing. This is a particularly exciting insight because it suggests

that one of the key ingredients for coping with negative life events is developing a coherent narrative for interpreting them—that is, a way of making sense of why they happened and their implications for one's future. The proposition that benefit finding may facilitate forgiveness by helping people find meaning in the transgressions that they have suffered harkens back to the theoretical writing of Enright and colleagues (e.g., Enright & Coyle, 1998), who proposed that both (a) identifying the meaning that a transgression has for oneself and others and (b) realizing that one might have a new purpose in life because of the transgression one has suffered are important elements in the forgiveness process. It appears that benefit finding might help to create elements such as those that Enright and his colleagues have proposed.

Of course, other mechanisms are probably also responsible for some of the effects of the benefit-finding intervention. For example, the differential efficacy of the three conditions on revenge motivation was not mediated by cognitive processing or any of the other variables that we explored using the LIWC software. This means that many other candidate mediators, including increased empathy for the transgressor (McCullough et al., 1997; Romero, 2004), reduced rumination about the transgression (McCullough et al., 2001), and social connectedness (Romero, 2004) should be explored in future research.

Limitations and Directions for Future Research

The present findings have a few limitations. First, the fact that the dependent measures were self-reports limits our ability to know whether the writing tasks created behaviorally relevant changes in our participants' representations of their transgressors. Second, our results do not indicate how long the effects of the benefit-finding writing task lasted. Did the writing conditions create long-term changes in participants' representations of their transgressors, or did the reductions in avoidance and revenge motivation that the benefit-finding condition created dissipate a few moments after participants left the laboratory? Future studies should extend the benefit-finding writing procedure over the course of several days and measure forgiveness for several weeks after the experiment is concluded. The use of growth modeling for operationalizing forgiveness as a change process (McCullough et al., 2003) and for studying the effects of forgiveness interventions (McCullough & Root, 2005) would be particularly useful for this purpose. Third, more work should be done to explore the mediators responsible for the links between benefit finding and forgiveness. Fourth, the applicability of these findings to nonstudent populations and to populations who have undergone serious forms of interpersonal trauma (e.g., sexual assaults or homicides of loved ones) remains to be shown.

Fifth and finally, it is unclear that the effects of writing about benefits on forgiveness would lead to changes in the psychological and physical health outcomes that have been associated with forgiveness in past research (Brown, 2003; Rye et al., 2005; Witvliet et al., 2001). These are all useful and important directions for future research.

Summary

Benefit finding is remarkably common in the face of adversity and has been associated with a variety of positive psychological outcomes. In this work, we demonstrated that writing about ben-

efits can facilitate forgiveness as well. People who write about the benefits of transgressions they have encountered become less avoidant, more benevolent, and less vengeful toward their transgressors as a result. These results provide strong justification for more research on the value of benefit finding for helping people overcome the negative interpersonal, psychological, and health effects of interpersonal transgressions. It also provides some encouragement for efforts to integrate benefit finding into ongoing efforts to use forgiveness as a component of clinical interventions for prevention and treatment.

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Appendix

Transgression-Related Interpersonal Motivations Inventory—18-Item Version, With Factor Loadings

Item	Correlation with Factor 1	Correlation with Factor 2
I'll make him/her pay.	.32	.76
I am trying to keep as much distance between us as possible.	.81	.37
Even though his/her actions hurt me, I have goodwill for him/her.	-.75	-.59
I wish that something bad would happen to him/her.	.46	.76
I am living as if he/she doesn't exist, isn't around.	.80	.32
I want us to bury the hatchet and move forward with our relationship.	-.83	-.30
I don't trust him/her.	.75	.35
Despite what he/she did, I want us to have a positive relationship again.	-.88	-.38
I want him/her to get what he/she deserves.	.38	.77
I am finding it difficult to act warmly toward him/her.	.76	.36
I am avoiding him/her.	.84	.42
Although he/she hurt me, I am putting the hurts aside so we could resume our relationship.	-.86	-.33
I'm going to get even.	.25	.77
I forgive him/her for what he/she did to me.	-.71	-.46
I cut off the relationship with him/her.	.85	.38
I have released my anger so I can work on restoring our relationship to health.	-.81	-.33
I want to see him/her hurt and miserable.	.46	.84
I withdraw from him/her.	.85	.45

Note. Items were rated on a 5-point scale (1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, and 5 = *strongly agree*). Coefficients are loadings from the structure matrix resulting from principal components analyses using oblimin rotation with Kaiser normalization. Loadings indicate the correlations of the individual items with the two correlated factors ($r = .45$). Factor 1 accounted for 53.1% of total item variance, and Factor 2 accounted for an additional 12.1% of total item variance.

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