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What is This?

On Near Misses and Completed Tasks: The Nature of Relief

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Abstract

What is the nature and function of relief? Relief has been studied little in psychological science despite its familiarity and pervasiveness. Two studies revealed that relief can result from two distinct situations: the narrow avoidance of an aversive outcome (*near-miss relief*) and completion of an onerous or aversive event (*task-completion relief*). Study 1 found that recollections of near-miss relief were marked by more downward counterfactual thoughts and greater feelings of social isolation than recollections of task-completion relief. Study 2 experimentally elicited the two types of relief and found mediational evidence that relief following near misses elicits feelings of social isolation via its stimulation of counterfactual thinking. That near-miss relief is characterized by counterfactual thinking suggests that it prompts people to contemplate how to avert similar experiences in the future, whereas task-completion relief may serve to reinforce endurance during difficult tasks.

Imagine narrowly escaping a dreadful outcome or summoning the effort to complete a long-overdue project. The feeling that follows such events is palpable and often labeled as relief. Although relief is readily identified and frequently experienced, it is not understood well from the perspective of psychological science. Twenty years ago, Lazarus (1991) noted that "relief might be considered a bona fide emotion . . . but there has been little research on it, and it is little noticed as such" (p. 280). Not much has changed since that observation.

Although in-depth investigations of relief are sparse, the existing evidence supports the notion that relief is a "bona fide" emotion worthy of study. One study found that people judge relief to be a highly prototypical emotion, similar in its emotionality to distress, gladness, and regret (Shaver, Schwartz, Kirson, & O'Connor, 1987). We sought to paint a fuller picture of relief in the current studies. We hypothesized that relief has two manifestations: *near-miss relief* and *task-completion relief*. In two studies, we found that these two forms of relief produce distinct cognitive and emotional outcomes.

Two Manifestations of Relief

Although all experiences of relief are marked by a contrast between a current positive state and a previous negative state (Baas, De Dreu, & Nijstad, 2011; Carver, 2009; Guttentag & Ferrell, 2008; Roseman & Evdokas, 2004), the nature of the negative state can vary in important ways. Some relief experiences follow the completion of an unpleasant experience (i.e., a *factual negative state* that was experienced but has concluded), whereas others follow the avoidance of an unpleasant experience (i.e., a *counterfactual negative state* that was avoided). This distinction is often blurred, such as in a definition of relief as "positively valenced affect that occurs when a threat is removed or avoided" (Carver, 2009, p. 125) and in another definition that identified relief as occurring "after a successful escape or when an anxious situation is resolved" (Baas et al., 2011, p. 796).

To assess the distribution of the antecedents of relief, we conducted a pilot study in which we asked participants (*N* = 91) to generate personal examples of relief. Roughly half (56%) spontaneously generated an example in which they avoided a negative event (near-miss relief), and the other half generated an example in which a negative event came to an end (task-completion relief). These results indicate that people readily identify both experiences as relief. A second pilot study in which Dutch participants and American participants (*N* = 162) read descriptions of the two types of relief and then indicated how often they had experienced each type of relief

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during the previous week also revealed that approximately half of their relief experiences were relief following a near miss (46%), and half were relief following task completion.

We hypothesized two distinctions between near-miss relief and task-completion relief. First, we predicted that, compared with task-completion relief, near-miss relief would be associated with more counterfactual thinking (i.e., imagining what might have been), and particularly with downward counterfactual thoughts of how things might have been worse. Counterfactual thoughts are especially likely to arise when an alternative outcome has been narrowly avoided (i.e., a near miss; Markman & Tetlock, 2000; Roese, 1997; Teigen, 1995). In contrast, a negative state is not avoided but rather endured when difficult tasks are completed, which is not a situation that tends to elicit counterfactual thinking.

This hypothesized difference in counterfactual thinking associated with task-completion relief versus near-miss relief is also consistent with the functional nature of counterfactual thoughts. Counterfactual thoughts arise when they instruct future behavior (Baumeister, Vohs, DeWall, & Zhang, 2007; Epstude & Roese, 2008; Roese, 1997). In cases of near-miss relief, people are likely to benefit from consideration of how they were able to avoid the unpleasant outcome and how they could do the same (or better) in the future. In contrast, task-completion relief follows unpleasant activities that are either unavoidable or deemed ultimately worthwhile; therefore, strategizing about how to sidestep doing them again in the future would not be as valuable.

Second, we hypothesized that near-miss relief would be associated with greater feelings of social isolation than would task-completion relief. This prediction derives from the hypothesized difference in counterfactual thinking, in that fixating on a narrowly avoided event may prompt people to attend inwardly as they attempt to determine how to avoid such experiences in the future. When cognitive fixation takes the form of rumination, this process is known to disrupt social connectedness (Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008), and therefore we predicted that attending to one's thoughts about how events could have been different would hinder feelings of social connectedness. Thus, we posited that near-miss relief would have more negative social consequences than would task-completion relief.

Overview of the Studies

In two studies, we tested our hypotheses that near-miss relief would be associated with more counterfactual thinking and feelings of social isolation than would task-completion relief. Study 1 was a retrospective study with a community sample, whereas Study 2 elicited the two types of relief. In Study 2, we also tested the mediation hypothesis that relief type influences feelings of social isolation via counterfactual thinking. Results did not differ by gender, race, or ethnicity, so analyses were collapsed across these demographic variables.

Study 1: Recalling Relief
Method

One hundred fourteen unpaid volunteers (84% female and 16% male; 18–70 years old, mean age = 33.41) were recruited through craigslist.org in Washington, D.C.; Georgia; Nevada; Pennsylvania; California; and Michigan. According to participants' self-reports, 74% were "White/Caucasian," 8% were "Hispanic/Latino," 3% were "Black/African American," 2% were "Asian," and 15% were other races (or multiple races).

Participants were randomly assigned to complete one of two questionnaires that described near-miss relief (near-miss condition) or task-completion relief (task-completion condition) and were asked to report when they had experienced that type of relief in the previous month. Participants also reported their degree of upward counterfactual thinking ("Were you thinking about how things could have been better?") and downward counterfactual thinking ("Were you thinking about how things could have been worse?"). Both counterfactual-thinking measures were rated on 7-point scales (1 = *not at all*, 7 = *very much*). Last, participants reported their feelings of social isolation ("The feeling made me feel more connected to other people"; 1 = *strongly agree*, 5 = *strongly disagree*) and indicated whether they were alone during the relief experience.

Results

Results of two *t* tests supported our hypotheses (Table 1). Participants in the near-miss condition reported feeling more social isolation than participants in the task-completion condition, and participants in the near-miss condition reported having more downward counterfactual thoughts than did participants in the task-completion condition. In addition, analyses showed that participants in the task-completion condition reported more upward counterfactual thoughts than did participants in the near-miss condition.

Approximately half of the participants (52.2%) reported that they were alone during their relief experience. Whether participants were alone or with other people did not vary as a function of relief condition, $\chi^2 < 1$. Therefore, the effect of relief type on feelings of social isolation did not stem from participants in the near-miss condition being physically apart from other people.

Study 2: Eliciting Relief

The results of Study 1 provided support for our hypotheses that near-miss relief is characterized by more downward counterfactual thoughts and greater feelings of social isolation than task-completion relief. However, the retrospective methodology of Study 1 leaves open the possibility that participants integrated personal theories about relief into their memories. Study 2 therefore used laboratory methodology to systematically elicit

Table 1. Comparisons of the Relief Conditions in Each Study

Study and measure	Near-miss relief[a]	Task-completion relief[a]	t	df	d
Study 1					
Downward counterfactual thinking	5.34 (2.1)	4.49 (2.2)	2.05*	104	0.40
Upward counterfactual thinking	3.34 (2.3)	4.39 (2.2)	2.39*	105	0.47
Feelings of social isolation	3.25 (1.5)	2.52 (1.1)	2.87**	107	0.55
Study 2					
Counterfactual thinking	4.24 (2.0)	3.00 (1.8)	2.83**	77	0.65
Feelings of social isolation	1.21 (1.3)	0.54 (1.1)	2.48*	77	0.55
Feeling ashamed	1.57 (1.0)	1.49 (0.9)	0.42	77	0.10

[a]These columns report means, with standard deviations in parentheses.
*$p < .05$. **$p < .01$.

the two types of relief. In Study 2, we also tested the mediating role of counterfactual thinking in the relationship between near-miss relief and feeling socially isolated.

Method

Seventy-nine undergraduates (60% female and 40% male) participated in this study for partial course credit. They arrived at the laboratory individually for an experiment that was ostensibly about music and emotions and were randomly assigned to either the near-miss or the task-completion condition. Participants assigned to the near-miss condition were informed that they would have to sing Morris Albert's classically corny song "Feelings" into an audio recorder in front of the experimenter (Leary, Landel, & Patton, 1996). They listened to the song once while they were alone as preparation. Then the experimenter returned and told participants that the recorder was broken and they would not have to sing after all. Participants assigned to the task-completion condition were also instructed to sing "Feelings." They listened to the song once and then sang the song into a recorder in front of the experimenter. No participants refused to sing.[1]

Next, all participants rated their counterfactual thinking ("To what extent are you thinking about how things could

have turned out differently?"; 1 = *not at all*, 7 = *very much*) and the extent to which they currently felt socially isolated (1 = *strongly disagree*, 5 = *strongly agree*). Finally, participants responded to an open-ended prompt to list any emotions they were feeling and then rated the intensity with which they were currently experiencing a variety of emotions (1 = *very slightly/not at all*, 5 = *extremely*).

Results

The results of *t* tests were consistent with our predictions that the near-miss condition would elicit more counterfactual thinking and feelings of social isolation than the task-completion condition (Table 1).

We next tested whether feelings of social isolation were stronger in the near-miss condition than in the task-completion condition because of increased counterfactual thinking. First, we confirmed that counterfactual thinking and feelings of social isolation were correlated, $r(79) = .34$, $p < .01$. We then conducted a path analysis. The direct path between relief condition and feelings of social isolation was significant, $\beta = -0.27$, $p = .01$. We next tested our hypothesized mediation model (Fig. 1). As predicted, relief condition no longer predicted feelings of social isolation when counterfactual
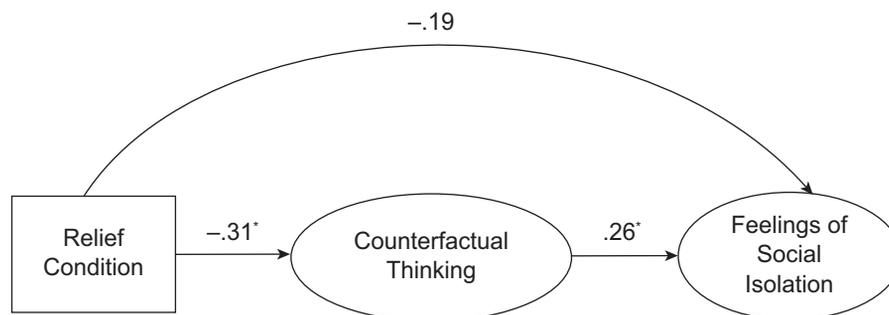

Fig. 1. Path analysis for the proposed mediation model in Study 2. All values are standardized path coefficients. Asterisks indicate significant coefficients (*$p < .05$). Relief condition was coded as either 0 (near miss) or 1 (task completion).

thinking was included as a mediator. Moreover, counterfactual thinking remained a significant predictor of feelings of social isolation, which indicated that there was at least partial mediation. An alternative model in which feelings of social isolation were included as a mediator of the relationship between relief condition and counterfactual thinking was a poor fit: The direct path between relief condition and counterfactual thinking remained significant when the potential mediator was included, $\beta = -0.24$, $p < .05$.

A possible alternative explanation for our findings is that participants in the task-completion condition were more embarrassed than participants in the near-miss condition, such that differences in embarrassment rather than relief type explain the differences in counterfactual thinking and feelings of social isolation. We examined participants' responses in the spontaneous emotion-listing task following the singing experience and found that only 2 participants in the task-completion condition mentioned embarrassment (no participants did in the near-miss condition). We also compared participants' ratings of how ashamed they felt following the task and found no difference between conditions (Table 1). In fact, of the 20 emotions that participants rated (active, afraid, alert, ashamed, attentive, distressed, enthusiastic, excited, grateful, guilty, happy, hostile, inspired, interested, irritable, jittery, nervous, scared, strong, and upset), only 1 (attentive) differed by condition, $t(77) = 2.24$, $p = .03$, $d = 0.60$ (all other ts < 1.72, n.s.). Given that 1 of 20 possible associations might be statistically significant by chance (at $p < .05$), these findings provide strong support that our manipulation specifically elicited relief and not associated emotions.

General Discussion

In two studies, we used diverse methods and samples to investigate the nature of relief. The evidence suggests that relief is a commonly experienced and readily identified emotion, a conclusion that stands in contrast to the dearth of empirical attention that relief has received previously.

These studies demonstrated that relief takes on two different forms. The relief following the narrow avoidance of a negative outcome (near-miss relief) and the relief following the conclusion of a difficult or unpleasant experience (task-completion relief) had different associations with counterfactual thinking and feelings of social isolation. Specifically, near-miss relief is characterized by more counterfactual thinking and feelings of social isolation than is task-completion relief. Study 2 provided support for the mediating role of counterfactual thoughts in the relationship between near-miss relief and feelings of social isolation. We propose that counterfactual thinking leads to feelings of social isolation via rumination, but have not yet tested this explanation directly. The difference in social consequences (i.e., feelings of social isolation) observed for the two types of relief does not reflect differing social contexts: Study 1 found that people were equally likely to be alone when they experienced the two types of relief. Instead, the counterfactual thoughts that characteristically accompany near-miss relief seem to have an effect similar to the harmful social consequences of rumination (Nolen-Hoeksema et al., 2008).

The function of relief

The emotion of relief is unusual with regard to its progression from an aversive state of tension to a primarily positive emotional experience. The function of relief likely depends on whether the initial aversive state or the ultimate positive state leaves the stronger impression. Substantial evidence supports the power of negative experiences over positive ones (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001), and this "bad is stronger than good" phenomenon suggests that people might attend more to the initial aversive experience than to the ultimately positive feeling of relief. To the extent that people focus on the initial negative state, the experience of relief may prompt them to strategize about how to avoid the aversive experience in the future (Frijda, 1986; Levenson, 1994; Zeelenberg, Nelissen, Breugelmans, & Pieters, 2008).

The peak-end rule, however, suggests a different prediction. This rule indicates that people judge past experiences by the nature of the experience at its peak and at its end (Kahneman, 1999). Because relief experiences become more positive throughout their course, people may focus on the final positive feeling rather than the initial negative feeling (Fredrickson & Kahneman, 1993). To the extent that people focus on the final positive state, relief may instead serve to reinforce the preceding behavior.

These conflicting possibilities are resolved by recognizing that relief has two manifestations that likely have different functions. Near-miss relief may be suited to promote avoidance of narrowly avoided negative outcomes, whereas task-completion relief may be suited to promote endurance of unavoidable or worthwhile negative experiences.

Although relief's ultimate state is positive, the antecedents of near-miss relief (i.e., narrow avoidance of a negative outcome) focus people on the unrealized negative experience and spur counterfactual thoughts, which are known to elicit behavioral intentions (Epstude & Roese, 2008; McMullen & Markman, 2000; Smallman & Roese, 2009). Therefore, experiencing near-miss relief could increase the likelihood that people will act to avert an unfavorable fate in the future. In contrast, task-completion relief allows people to focus on the positive emotional experience with minimal distraction from downward counterfactual thoughts. This process might reinforce satisfaction in the completion of a job well done (or a job done, in any case) and therefore increase the likelihood that people will repeat the unpleasant experience. When task-completion relief follows the accomplishment of a challenging assignment, it might encourage people to undertake new and potentially enriching challenges (Fredrickson, 1998). When relief follows the endurance of an unwelcome experience, it similarly could encourage perseverance in the face of subsequent trials and tribulations.

Conclusion

Sherlock Holmes famously noted that the absence of events is easily overlooked (Kardes et al., 2006; Kardes & Sanbonmatsu, 2003). In that spirit, we speculate that psychological scientists may have neglected to study relief because relief is an emotion that registers the absence of an event. Our studies are the first to identify near-miss relief and task-completion relief and to detail their distinct situational antecedents, cognitive correlates, and social consequences. Our aim is to bring the neglect of relief to an end, for it is an emotion that deserves study.

Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

Note

1. We tested the effectiveness of our manipulation of relief in a pilot study that included a control condition in addition to the two relief conditions. Participants in the control condition learned that other participants had to sing, but that they would not. All participants rated how relieved they felt (1 = *very slightly/not at all*, 5 = *extremely*). Participants in the near-miss condition (*n* = 49; *M* = 3.10, *SD* = 1.2) and participants in the task-completion condition (*n* = 51; *M* = 3.16, *SD* = 1.2) reported equivalent levels of relief, *F* < 1, and more relief than participants in the control condition (*n* = 54; *M* = 2.48, *SD* = 1.1), *F*s(1, 151) > 7.02, *p*s < .01.

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