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Vicarious Revenge and the Death of Osama bin Laden

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Abstract

Three hypotheses were derived from research on vicarious revenge and tested in the context of the assassination of Osama bin Laden in 2011. In line with the notion that revenge aims at delivering a message (the “message hypothesis”), Study 1 shows that Americans’ vengeful desires in the aftermath of 9/11 predicted a sense of justice achieved after bin Laden’s death, and that this effect was mediated by perceptions that his assassination sent a message to the perpetrators to not “mess” with the United States. In line with the “blood lust hypothesis,” his assassination also sparked a desire to take further revenge and to continue the “war on terror.” Finally, in line with the “intent hypothesis,” Study 2 shows that Americans (but not Pakistanis or Germans) considered the fact that bin Laden was killed intentionally more satisfactory than the possibility of bin Laden being killed accidentally (e.g., in an airplane crash).

Keywords

revenge, vicarious retribution, justice, psychological closure, war on terror

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The killing of former Al Qaeda leader Osama bin Laden by U.S. Navy Sea, Air, Land Teams (SEALs) on May 2, 2011, provoked a wave of relief among the American public. Scholars and the media alike suggested that killing bin Laden represented revenge for the 9/11 terrorist attacks (Mitchell, 2012). The New York Post trumpeted, “GOT HIM! Vengeance at last! U.S. nails the bastard!” and dozens of YouTube videos were posted with the celebratory sound track “Ding Dong the Witch Is Dead.” Although the celebrations outside of the White House and other demonstrations of glee discomfited some, there was no denying that many Americans appeared to feel that bin Laden’s death at the hands of U.S. Special Forces was a monumental event (CNN/Opinion Research Corporation Poll, 2011). An important and heretofore unexplored question, however, is whether the death of this iconic figure led to feelings of satisfaction, reestablished justice, and psychological closure, and/or whether taking this act of revenge reduced desires for additional vengeance or even fed a desire for more.

Public reactions toward the death of bin Laden are a particularly interesting context for investigating the psychological dynamics of revenge. The question of whether or under what circumstances revenge can be satisfying (“sweet”) is of considerable importance for understanding vengeful reactions because these circumstances can tell us something meaningful about what people expect to achieve by taking

revenge. Prior research on the “sweetness” of revenge has mainly focused on dyadic situations in which victims took revenge against a transgressor who behaved unfairly toward them. This research suggests that people anticipate satisfaction from taking revenge (Carlsmith, Wilson, & Gilbert, 2008; de Quervain et al., 2004), but that avengers experience satisfaction, a sense of justice, and psychological closure only when offenders understand *why* revenge has been taken on them (Gollwitzer & Denzler, 2009; Gollwitzer, Meder, & Schmitt, 2011). These findings are in line with the notion that by taking revenge, victims want to communicate that (a) they disapprove of the offense and (b) they are strong and powerful enough to defend themselves. In other words, revenge aims at sending a message—“don’t mess with me.”

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Unlike the acts of interpersonal revenge that prior research has studied, the kind of revenge taken against bin Laden was “vicarious” in the sense that (a) it was sought by members of an aggrieved group rather than by the actual victims (who are dead), (b) it was enacted by others representing these victims (i.e., the U.S. military), and (c) it was targeted not directly against the perpetrators (i.e., the hijackers who had directed the planes into the World Trade Center and the Pentagon), but rather against the person to whom the whole plot was attributed. Theoretical models on vicarious retribution (e.g., Lickel, Miller, Stenstrom, Denson, & Schmader, 2006; Stenstrom, Lickel, Denson, & Miller, 2008) attempt to explain when such retributive reactions are more likely to occur, but have not yet considered whether vicarious retribution¹—seeing a perpetrator suffer at the hands of those who act on behalf of the victims—can be satisfactory, lead to a sense of justice, and enable psychological closure among members of the victimized group. The present research is the first to address this question, and it uses the bin Laden case as a real-world context for this venture.

The two studies presented in this article were designed to test three hypotheses:

Hypothesis 1: Vicarious revenge can evoke a sense of justice achieved and psychological closure among victims to the extent that it is perceived as effective in delivering a message to the perpetrator group (the “message hypothesis”).

Hypothesis 2: Although vicarious revenge can be satisfactory for the victims, it might nonetheless fuel a desire to take even more revenge (the “blood lust hypothesis”).

Hypothesis 3: Vicarious revenge is more satisfactory for victims when it has been carried out intentionally, whereas learning that the perpetrator has been killed accidentally is less satisfactory (the “intent hypothesis”).

The theoretical arguments leading to each of the three hypotheses will be outlined in the following sections.

The Message Hypothesis: Does Vicarious Revenge Aim at Sending a Message?

In interpersonal settings, taking revenge is more likely to evoke perceptions of justice and closure among avengers when the offender signals that she or he understood why revenge was taken against him or her (Gollwitzer & Denzler, 2009; Gollwitzer et al., 2011; see also Miller, 2001). Thus, revenge can be satisfying when it delivers a message to the offender (and to others)—“don’t mess with me.” This finding is also consistent with research showing that a primary concern of victimized people is to reaffirm their status, power, and self-esteem (Foster & Rusbult, 1999; Shnabel & Nadler, 2008).

In cases of *vicarious* victimization, which involves attacks and transgressions between groups (such as terrorist attacks), things are more complicated. The vicarious retribution model (Lickel, 2012; Lickel et al., 2006) posits that the extent to which members of the victimized group identify with their group predicts how strongly these individuals experience outrage and vengeful desires—even if they were not directly harmed. The model further proposes that the extent to which the perpetrator group is perceived as a homogeneous collective entity predicts the likelihood that revenge will be taken—even against those members of the perpetrator group who were uninvolved in the initial attacks. Empirical findings are consistent with these assumptions (e.g., Stenstrom et al., 2008). For example, there is considerable evidence that Americans responded emotionally to the 9/11 attacks even when they were not directly involved or targeted (Skitka, Bauman, & Mullen, 2004); moreover, many of the hostile reactions following the attacks were targeted at groups who bore only a “symbolic relation” to those responsible for 9/11 (Morgan, Wisneski, & Skitka, 2011; Pemberton, 2011; Singh, 2002).

Neither this past research nor the vicarious retribution model (Lickel, 2012; Lickel et al., 2006) has addressed the question of what people who are indirectly victimized by an attack hope to achieve by seeing revenge being taken against the perpetrators. One answer could be that revenge aims at deterring the perpetrators and other would-be perpetrators from committing a similar attack in the future (McCullough, Kurzban, & Tabak, 2013). In other words, the assassination of bin Laden in 2011 might have evoked a sense of justice and closure among the American public to the extent that they think this assassination has effectively deterred other potential terrorists. A second answer could be that revenge aims at enhancing more general feelings of safety and security. In other words, Americans might have experienced a sense of justice and closure in response to the killing of bin Laden because the United States has now gotten rid of a dangerous enemy. A third answer could be that revenge delivers a message to the perpetrator group—“don’t mess with us” (i.e., the “message hypothesis”; Gollwitzer & Sjöström, in press). Notably, the message hypothesis differs conceptually from the deterrence hypothesis: Deterrence means reducing the likelihood of becoming a victim again, whereas sending a message symbolically reaffirms the victim group’s power and status. In line with the “message hypothesis” (and with the needs-based model of reconciliation; cf. Shnabel & Nadler, 2008), it has been shown that symbolically reaffirming the victim group’s status and power diminishes vengeful inclinations and increases willingness to promote reconciliation (Shnabel, Nadler, Ullrich, Dovidio, & Carmi, 2009). Translated into the present research context, Americans might have experienced a sense of justice and closure to the extent that they perceived that killing bin Laden has conveyed a power-reaffirming message to Al Qaeda and to the rest of the world—over and above the perception that the

killing of bin Laden served a deterrent function or brought back a sense of safety and security.

The Blood Lust Hypothesis: Does Vicarious Revenge Lead to Wanting More?

Although we know that people feel better about acts of revenge that “send a message,” we do not know whether sending a message is sufficient to resolve people’s desires for vengeance. Even if the vengeful act sends a message to the perpetrators, people’s thirst for further vengeance might not be fully quenched. In fact, one could even hypothesize that the desire to seek further revenge even increases after an initial act of vengeance has proven to be “successful” (Bushman, 2002; Stack, 2006). According to the graduation hypothesis (Wright & Hensley, 2003), the initial hedonic pleasure of inflicting pain increases the willingness to continue inflicting it. In a related vein, killing a living being disinhibits people to continue killing (Martens, Kosloff, & Eckstein Jackson, 2010; Martens, Kosloff, Greenberg, Landau, & Schmader, 2007). In the context of the bin Laden assassination, one may assume that even though this event brought a sense of justice and closure to the American public, it may have increased Americans’ thirst for further acts of vengeance against the Arab world, at least in the immediate aftermath of bin Laden’s death. This “blood lust hypothesis,” which has never been tested in previous research, is tested in Study 1.

The Intent Hypothesis: Is Fateful Harm Less Satisfactory Than Revenge?

Finally, we explore whether it merely matters *that* bin Laden was killed or whether it also matters *how* he was killed. Previous research has shown that seeing an offender suffer from fate does not lead to experiences of satisfaction or deservingness to the same extent as taking revenge does (e.g., Gollwitzer & Denzler, 2009). Fate can balance the scales of justice (in terms of “comparative suffering”; cf. Frijda, 1994), but it obviously does not fulfill the same functions as intentional harm-doing. Transferring this to the assassination of bin Laden, we may expect that Americans’ positive reactions toward his death would have been much less pronounced if bin Laden had been killed unintentionally, for instance, in an airplane crash.

For non-Americans, however, things may be different. Whereas the “why” and “how” of taking revenge may be especially important for victims of injustice, neutral parties may construe an act of revenge more in terms of “comparative sufferings.” For example, some studies found that observers of criminal or unethical behavior are less punitive toward offenders when they learn that the offender has suffered from a fateful harm or misfortune (Austin, 1979; Austin, Walster, & Utne, 1976). However, these effects

emerged only in cases where participants were neutral observers of the offense. In studies where participants were victims, the offender’s fate did not diminish their retributive reactions (Craig et al., 1993; Johnson & Rule, 1986). Applied to the present context, imagining that bin Laden had been killed accidentally and unintentionally might be considered “deserved” and even satisfactory for non-Americans, but not for Americans. This “intent hypothesis” is addressed in Study 2.

Study 1

Study 1 has three aims: First, it investigates the degree to which people harbor desires for revenge even many years after an eliciting event. The assassination of bin Laden occurred almost 10 years after the 9/11 terrorist attacks. Given the amount of time that had passed, people’s hot desires for revenge might have long since cooled. Alternatively, and especially given the heinous and unusual nature of the 9/11 attacks, one could argue that the need for vengeance remained fresh, and that people were unlikely to achieve any sense of closure about the attacks until bin Laden has been captured or killed. To test these competing possibilities, Study 1 investigated whether people’s desire for vengeance in 2003 (the year the United States invaded Iraq) predicted their reactions to bin Laden’s assassination in 2011.

A second aim of Study 1 was to test the “message hypothesis” by identifying mediators of the effect of 2003 retributive desires on Americans’ reactions to the death of bin Laden. We investigated whether American participants experienced a sense of justice and psychological closure in response to the killing of bin Laden to the extent that they thought that his death (a) would deter other would-be terrorists from attacking the United States in the future, (b) made the world a safer place, and/or (c) sent a message to the perpetrator group. In Study 1, perceptions of deterrence, safety, and message sent served as potential mediators (operating in parallel) for the relation between a desire for vengeance in 2003 and an experience of reestablished justice and psychological closure in response to bin Laden’s death in 2011.

A third aim of Study 1 was to test the “blood lust hypothesis” and explore to what extent Americans’ reactions to the assassination of bin Laden in 2011 (i.e., justice and closure) predicted their support for continued military involvement in the Middle East and their desire for more revenge. On one hand, people with greater needs to avenge 9/11 might feel that killing bin Laden satisfied this need, which should decrease their support for the “war against terrorism.” On the other hand, the “successful” assassination of bin Laden could instead fuel desires for additional acts of vengeance and increase support for the “war against terrorism.” That is, people who felt a greater sense of justice achieved following bin Laden’s death could also be the most in favor of continuing to remain involved in the Middle East and to seek further revenge.

Method

Participants. Participants were a sample of members of the *Gesellschaft für Konsumforschung* (GfK; formerly Knowledge Networks) panel, who completed measures in 2003 ($n = 3,534$) and who were still available and on the panel in 2011 ($n = 221$).² Of those eligible to participate and still on the panel, 211 participated in the 2011 study in the 2 months following the bin Laden assassination on May 2, 2011. Participants were at least 18 years old and came from a wide variety of demographic backgrounds. Specifically, 61% of participants were female and the average age was 56.92 years ($SD = 12.56$). Moreover, participants' education and income levels also varied widely (Education: 14% completing high school only, 20% some college, 12% associate's degree, 28% bachelor's degree, and 25% post-graduate degree; Income: 6% made less than US\$20,000 per annum, 16% US\$20,000 to US\$39,999; 32% US\$40,000 to US\$74,999; 21% US\$75,000 to US\$99,999; and 26% made more than US\$100,000). GfK recruits panel participants using an address-based sampling method that includes many sub-populations that are traditionally difficult to sample with random digit dialing methods (e.g., cell-phone only households, young adults, low income households). The company provides free Internet service to all panel participants, and participants without computers are provided a free netbook to access the World Wide Web in exchange for participation in occasional surveys. GfK data have been found to be comparable in quality, and in some ways superior, with traditional telephone-based survey methods (Chang & Krosnick 2009).

Materials

Desire for revenge for 9/11 in 2003. All study participants had completed a survey in 2003, which included five questions about desires for vengeance for 9/11 in the context of the lead up to and beginning of the 2003 Iraq War. Specifically, participants were asked how much the Iraq War would help resolve "a sense of moral outrage about the 9/11 terrorist attacks," "the need to wipe out terrorists and those who harbor them," "a need to prove that the U.S. cannot be pushed around," "a desire to hurt those responsible for the 9/11 attacks," and "a compelling need for vengeance for the 9/11 attacks" (1 = *not at all* to 5 = *very much*; Cronbach's $\alpha = .91$). This measure provided a useful proxy of participants' desire for vengeance for 9/11 well before bin Laden was assassinated. Asking about vengeance for 9/11 in the context of the Iraq War may seem problematic, given it is now widely accepted that Iraq had no involvement in 9/11. However, a majority of U.S. citizens, according to polls taken at the time, believed that Iraq either was directly involved in the attacks or gave substantial support to Al Qaeda (Althaus & Largio, 2004). These misperceptions were encouraged by U.S. officials (Gershkoff & Kushner, 2005). Not surprisingly, many Americans then and now still believe that Iraq

was implicated in 9/11 (Glaser, 2013). Thus, although assessing the degree to which attacking Iraq would satisfy desires for 9/11 vengeance is merely an indirect measure of desires for vengeance for 9/11 more generally, it is nevertheless useful and even more conservative than asking directly about vengeful desires.

All other measures were collected in 2011, shortly after bin Laden's assassination, and were presented in a random order. Unless otherwise specified, responses were made along a 5-point scale (1 = *not at all* to 5 = *very much*).

Message delivered. Two items measured how much participants thought that killing bin Laden would deliver a message to Al Qaeda or other would-be terrorists. These items were prefaced with the stem, "Now that Osama bin Laden has been killed, to what extent do you think . . ." and had the completions: "a strong message was sent to other would-be terrorists," and "the U.S. showed its toughness to the world" (Cronbach's $\alpha = .81$).

Feeling safer. The extent to which participants now feel safer that bin Laden is dead was measured with three items, prefaced with the stem, "Now that Osama bin Laden has been killed, to what extent do you think . . ." and the following completions, "the world is now a safer place," "the world has now been rid of a dangerous enemy," and "we have eliminated a major threat to the U.S." (Cronbach's $\alpha = .75$).

Deterrence. Participants' sense that killing bin Laden had a deterrent effect was measured with one single item ("Now that Osama bin Laden has been killed, to what extent do you think that other terrorists are more likely to think twice before attacking the U.S.?").

Justice achieved. Participants' belief that killing bin Laden achieved justice was measured with four items. Participants indicated to what extent the death of Osama bin Laden led them to feel that "Justice had been done," "A sense of vengeance at last," "A sense of mission accomplished," and that "The victims of 9/11 have been avenged" (Cronbach's $\alpha = .86$).

Psychological closure. Post-9/11 psychological closure was measured using three items: "To what extent does the death of Osama bin Laden lead to any of the following thoughts or feelings for you?" followed by the target items, "A feeling that you can finally put the events of 9/11 behind you," "A feeling of closure," and "That the war on terror is in some important way now finished" (Cronbach's $\alpha = .76$; see Skitka et al., 2004).

Continued desire for revenge for 9/11. Desires for additional acts of revenge after killing bin Laden were measured by asking to what extent participants still felt "a compelling need for vengeance," "a desire to fight back," and "a desire

Table 1. Descriptive Statistics and Bivariate Correlations Between Measured Variables (Observed Level; Study 1).

Variables	M	SD	Correlations														
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)		
(1) 2003 Desire for revenge	2.46	1.19	1.00														
(2) Message delivered	3.11	1.11	.27**	1.00													
(3) Feeling safer	2.84	0.94	.26**	.69**	1.00												
(4) Deterrence	2.05	1.05	.36**	.54**	.57**	1.00											
(5) Justice achieved	2.81	1.09	.32**	.63**	.58**	.45**	1.00										
(6) Psychological closure	1.71	0.74	-.04	.23**	.22**	.33**	.34**	1.00									
(7) Continued revenge	2.62	1.19	.33**	.42**	.39**	.25**	.52**	-.05	1.00								
(8) Support for war	3.93	1.25	.30**	.39**	.34**	.17*	.32**	-.13	.49**	1.00							
(9) Retributiveness	4.30	1.06	.37**	.25**	.20**	.24**	.30**	-.05	.51**	.31**	1.00						
(10) Political orientation	4.35	1.76	.45**	.16*	.19**	.14*	.13	-.15*	.34**	.36**	.28**	1.00					
(11) Age	56.9	12.6	.10	.15*	.02	.12	.23**	-.09	.28**	.18*	.12	.09	1.00				
(12) Gender (1 = female)	0.61	0.49	-.03	-.06	-.14	.01	-.06	.01	-.24**	-.13	-.07	-.10	.02	1.00			
(13) Education category	n/a		-.33**	-.15*	-.15*	-.24**	-.26**	-.01	-.18**	-.08	-.37**	-.25**	-.14*	-.04	1.00		
(14) Income category	n/a		-.08	.02	.03	-.12	-.09	-.03	-.09	-.05	-.12	-.01	-.25**	.00	.39**	1.00	

Note. $n = 211$. n/a = means and standard deviations cannot be interpreted due to categorization.

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

to hurt those responsible,” when thinking about the 9/11 attacks on the World Trade Center and the Pentagon (Cronbach’s $\alpha = .91$).

Support for continued “war on terrorism.” Continued support for military intervention in the Middle East was measured by asking participants whether they thought the United States should increase, decrease, or cease U.S. military attacks (a) against the Taliban in Afghanistan and (b) against Al Qaeda terrorists (1 = *cease completely* to 6 = *increase a lot*; Cronbach’s $\alpha = .88$).

Control variables. Retributiveness, political ideology, and standard demographics (i.e., age, gender, education, and income) served as control variables in all analyses. Retributiveness, the degree to which people generally have a high need for retribution, or have a retributive personality entirely separate from the events of 9/11 or the assassination of bin Laden, was measured with the following item in the 2011 survey: “People who hurt others deserve to be hurt in return” (1 = *strongly disagree* to 5 = *strongly agree*). Participants’ political orientation was assessed with a single item asking, “When it comes to politics, do you consider yourself a liberal, conservative, or neither?” Participants responded on a 7-point scale with point labels: 1 = *very liberal*, 2 = *moderately liberal*, 3 = *slightly liberal*, 4 = *neither liberal nor conservative*, 5 = *slightly conservative*, 6 = *moderately conservative*, and 7 = *very conservative*.

Results and Discussion

Descriptive statistics and bivariate correlations among all measured variables are displayed in Table 1. First, we checked the quality of our measurement model by conducting

confirmatory factor analyses (CFAs; parameter estimation: full maximum likelihood method).³ The model including seven latent variables (i.e., desire for revenge in 2003, message delivered, feeling safer, justice achieved, psychological closure, continued desire for revenge, support for continued war) fit the data reasonably well ($\chi^2 = 409.23$, $df = 185$, comparative fit index [CFI] = .92, root mean square error of approximation [RMSEA] = .076), and better than a rival model in which all items related to “message delivered” and “feeling safer” loaded on a common factor, all items related to justice and closure loaded on a common factor, and all items related to continued revenge and support for war loaded on a common factor. This alternative model had an unacceptable fit ($\chi^2 = 796.16$, $df = 203$, CFI = .79, RMSEA = .118).

Hypotheses were tested in a comprehensive structural equation model (see Figure 1). Age, gender, education, income, retributiveness, and political orientation were entered as covariates in the model (these effects are not displayed in Figure 1). This model fitted the data reasonably well ($\chi^2 = 628.48$, $df = 296$, CFI = .89, RMSEA = .074).

A first important finding is that the desire for revenge in 2003 reliably predicted perceived justice in the aftermath of bin Laden’s assassination in 2011, total effect: $B = .24$, $SE(B) = .085$, $p < .01$. This is noteworthy given the large time lag between both measures. Interestingly, the desire for vengeance in 2003 was unrelated to people’s sense of closure after the killing of bin Laden, total effect: $B = .04$, $SE(B) = .099$, $p = .69$. Nevertheless, feelings of closure were significantly associated with perceptions of deterrence: The more people believed in the deterrent function of bin Laden’s assassination, the more they felt a sense of closure toward the 9/11 events; deterrence, in turn, was reliably predicted by desires for revenge in 2003 (see Figure 1). These findings may indicate that those who experienced a stronger desire for

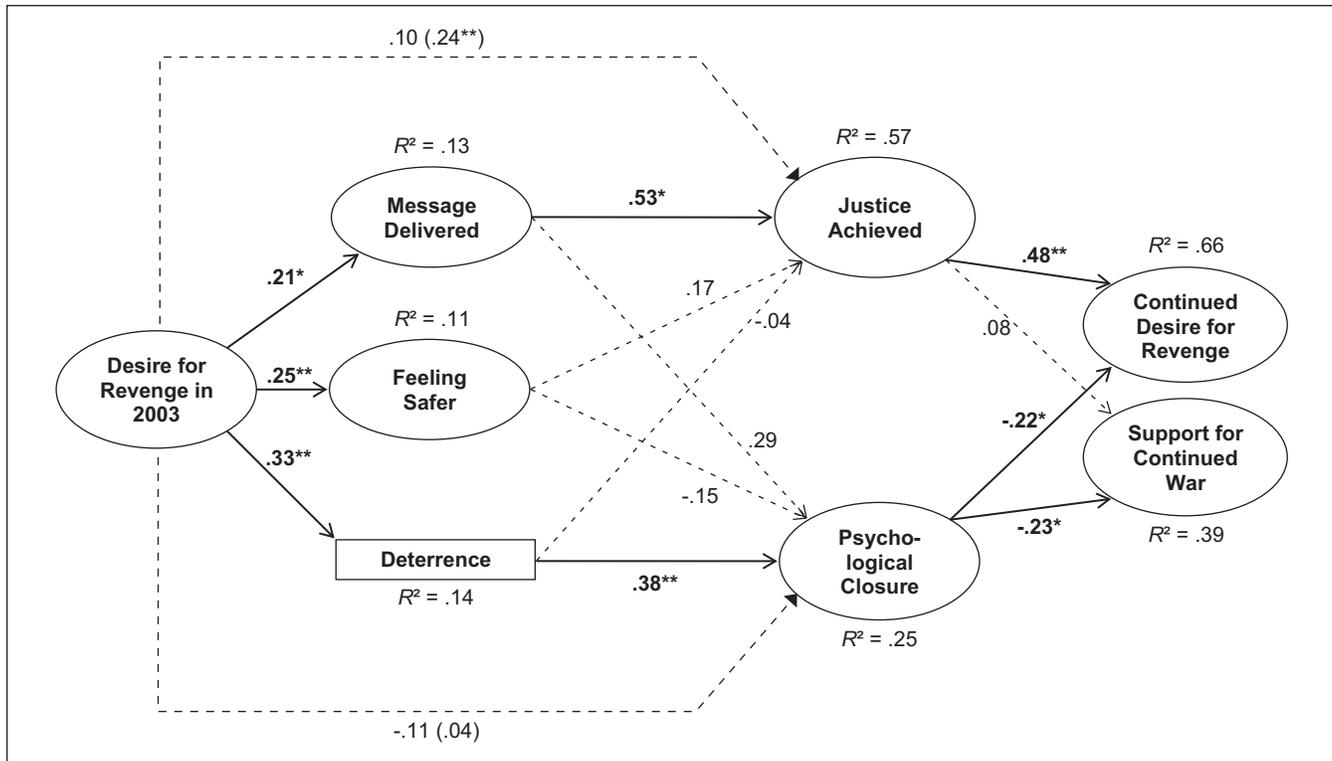


Figure 1. Structural model testing the indirect effect of Americans' desire for revenge in 2003 on justice achieved and psychological closure in response to Osama bin Laden's death in 2011 as well as continued desires for revenge and support for continuing the "war on terrorism" (Study 1).

Note. Effects of the covariates (i.e., age, gender, education, income, political orientation, and retributiveness) are not depicted. Latent variables are displayed in circles, manifest variables in rectangles.

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

revenge in 2003 also felt more closure after bin Laden's death to the extent that they believed his death would deter other potential terrorists from attacking the United States in the future. Again, it should be noted that the total effect was not significant here.

A second important finding is that vengeful desires in 2003 predicted experiences of justice in 2011 via perceptions that a message has been sent (see Figure 1). Thus, consistent with the message hypothesis, we found that the perception that killing bin Laden has sent a message predicted perceptions that justice had been done, independent of whether other potential terrorists would be deterred by this act of vengeance and of whether his death has made Americans feel safer.⁴

A third noteworthy finding is that, consistent with the blood lust hypothesis, a continued desire for revenge in 2011 was negatively predicted by psychological closure, but positively predicted by justice perceptions (once again, controlling for demographics, retributiveness, and political orientation). That is, the more people felt that bin Laden's death contributed to a sense of justice, the more they still expressed a desire to avenge the victims of the 9/11 terrorist attacks. This finding implies that justice and closure are two

psychologically distinct reactions to "successful" vengeance, and ones that have opposite effects on "wanting more" versus "letting go." Justice seems to fuel a desire for more revenge, whereas psychological closure quenches vengeful desires and decreases pro-war attitudes. Unfortunately, the present data do not allow us to search for psychologically meaningful explanations for the positive relation between justice and continued desire for revenge because (a) the 2011 data are cross-sectional, (b) potential mediating variables for this relation have not been measured, and (c) we cannot really determine whether this relation is mainly driven by those who agree that justice has been achieved and therefore want more revenge, or rather by those who do not agree that justice has been achieved and therefore disfavor further acts of revenge. Future research—on revenge in both interpersonal situations and in "vicarious" contexts—should investigate what the positive correlation between justice and continued desires for revenge psychologically signifies.

Taken together, these analyses show that bin Laden's death did not fully erase Americans' desire to retaliate against a diffuse group of perpetrators, even though the perception that his assassination "sent a message" predicted feelings that justice was achieved. On the contrary, perceptions of

justice predicted a desire for more vengeance. In sum, our findings are consistent both with the “message” and with the “blood lust” hypotheses.

Study 2

Whereas Study 1 investigated Americans’ reactions to the assassination of bin Laden by measuring their subjective perceptions of justice and closure, Study 2 investigated whether the killing of bin Laden was a “sweet” and satisfactory experience for Americans (compared with Pakistanis and Germans, see below), and whether the possibility that bin Laden had been killed under different circumstances would have made them feel equally satisfied and relieved. According to the “intent hypothesis,” only intentional acts of revenge can elicit satisfaction among the victim group, whereas accidental harm (e.g., an airplane crash) should be less satisfactory. Given that Americans were the targets of the initial attacks, they should be most dissatisfied with the idea of bin Laden being killed accidentally rather than intentionally. Pakistanis and Germans, however, might think differently and consider an accidental death to be just as (or even more) satisfying as an assassination by U.S. Special Forces.

Method

A survey study was conducted in the United States, Pakistan, and Germany between June and December 2011. The United States was included because (a) it was the country targeted in the 9/11 attacks and (b) it carried out the assassination in May 2011. Pakistan was included because the assassination operation violated its territorial sovereignty and revealed weaknesses in its territorial defense capabilities. In addition, nearly 20% of Pakistani Muslims generally approved of bin Laden in surveys conducted during the 2 years prior to his assassination, and 75% held generally negative views of the United States (Pew Research Center, 2011a, 2011b). Thus, the costs of the U.S. assassination to Pakistan were higher, and the balance of sympathies with 9/11 offenders and victims would have reduced the desire for retribution (Gordijn, Yzerbyt, Wigboldus, & Dumont, 2006). Germany was chosen because it is a relatively neutral third party, although it is also a Western ally of the United States that has been named repeatedly as a potential target of Islamic terrorist attacks, albeit one that has escaped any thus far.

Participants. In the United States, 240 adults (58% female, $M_{\text{age}} = 41.7$ years) were sampled by a professional survey agency (Qualtrics Panel) on the basis of census-based representativeness and were paid US\$5; the study was conducted online. In Pakistan, 195 adults (48% female, $M_{\text{age}} = 32.1$ years) were approached in person by bilingual interviewers trained by the sixth author in different regions of the country; 178 respondents could be used for the present analyses

(17 participants aborted the interview). The study was conducted as a fully standardized verbal interview, with interviewers completing the questionnaires in either Urdu or English (the two official languages of Pakistan), depending on the respondent’s preference. In Germany, 153 adults (39% female, $M_{\text{age}} = 29.4$ years) were recruited using different online forums; the study was conducted online. As a reward, participants could win one of 10 Amazon gift cards worth 20€ each (about US\$26). In all three countries, participation was voluntary and based on informed consent.

Materials. First, participants were given a brief report about the actual circumstances of bin Laden’s death and reported their degree of satisfaction as well as other positive emotions (joy, happiness, powerfulness, relief, and excitement; 1 = *not at all* to 6 = *extremely*). Satisfaction was the main dependent variable; the other positive emotions were included merely for the purpose of scrutinizing the measurement invariance of satisfaction across the three countries (see below). Next, participants were presented with five different counterfactual scenarios (see the appendix) that bin Laden had been (a) killed by the Pakistani Secret Service, (b) killed by the British military, (c) killed during an air strike led by U.S. military forces, (d) killed during an accidental airplane crash, and (e) captured alive and taken to court.⁵ After each description, participants reported how much satisfaction they felt when imagining the respective scenario (single-item measure; 1 = *not at all* to 6 = *extremely*).

Vengeful attitudes. Vengeful attitudes were measured with the Vengeance Scale (Stuckless & Goranson, 1992). Participants indicated their agreement with 19 statements⁶ (e.g., “It is important for me to get back to people who have hurt me”); 1 = *completely disagree* to 6 = *completely agree*. Internal consistencies were sufficiently high in each country (Cronbach’s α s = .97, .86, and .93 for the American, Pakistani, and German samples, respectively).

Victim sensitivity. Victim sensitivity was measured with the Justice Sensitivity/Victim Perspective Scale (Schmitt, Gollwitzer, Maes, & Arbach, 2005). Participants indicated their agreement with 10 statements (e.g., “It bothers me when others receive something that ought to be mine”); 1 = *completely disagree* to 6 = *completely agree*; Cronbach’s α s = .92, .86, and .88 for the American, Pakistani, and German samples, respectively).

Control variables. Participants’ age, gender, and education served as further control variables. Given that educational systems differ greatly between countries, we categorized participants into those with and those without a university degree (proportion of participants with university degree: 45%, 71%, and 39% in the American, Pakistani, and German samples, respectively).

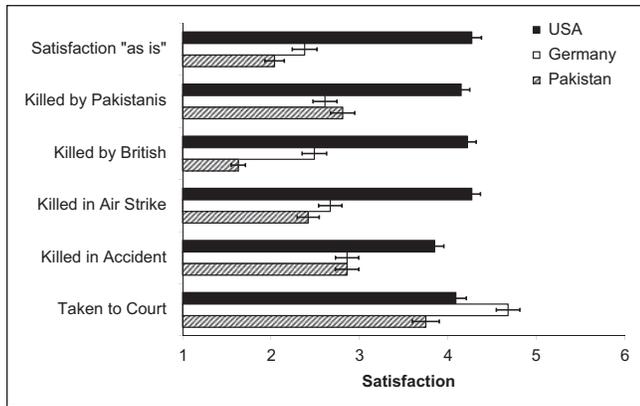


Figure 2. Mean ratings of satisfaction about the killing of Osama bin Laden as it happened, and about five counterfactual scenarios (Study 2).

Note. Capped vertical bars denote standard errors of means.

Translation of materials. Bilingual researchers who spoke Urdu/English or German/English fluently translated the survey. A second researcher whose mother tongue was Urdu or German, respectively, checked the translated versions. CFA showed that satisfaction with the killing of bin Laden as it happened was a reliable indicator of positive emotions in all three countries (Rel's = .74, .54, and .65 for United States, Pakistan, and Germany, respectively). A model constraining factor loadings and intercepts of satisfaction to be equal across all countries fitted the data well ($\chi^2 = 95.95$, $df = 36$, CFI = .97, RMSEA = .09), indicating scalar invariance on satisfaction (Little, 1997). For vengeful attitudes⁷ and victim sensitivity, results indicated metric invariance, which is a prerequisite for interpreting correlative and regressive effects between the three countries.⁸

Results and Discussion

First, we tested whether satisfaction about the killing of bin Laden as it happened differed between the three countries. A one-factorial ANOVA revealed significant differences between the three countries on satisfaction, $F(2, 565) = 113.74$, $p < .001$, $\eta_p^2 = .29$ (see Figure 2). Follow-up tests (Tukey's honestly significant difference [HSD] tests) revealed that Americans experienced significantly more satisfaction about the killing as it happened than Pakistanis, $Diff = 2.23$, $SE(Diff) = 0.16$, $p < .01$, $d = 1.40$, or Germans, $Diff = 1.89$, $SE(Diff) = 0.17$, $p < .01$, $d = 1.11$. The two latter groups did not differ from each other ($p = .16$). These differences might be driven by the fact that Americans were the victims, whereas Germans and Pakistanis were not directly involved in the 9/11 terrorist attacks. Controlling for vengefulness, victim sensitivity, age, gender, and education (dichotomized, see above) did not alter these results, $F(2, 523) = 78.45$, $p < .001$, $\eta_p^2 = .23$.

Most importantly, we tested whether imagining that bin Laden had been killed under different circumstances would lead to comparable levels of satisfaction as the actual killing did. Mean values are displayed in Figure 2. A 3 (countries) \times 6 (scenarios) mixed ANOVA with country as a between-subjects factor and scenarios as a within-subjects factor revealed a significant interaction effect, $F(10, 2790) = 31.14$, $p < .001$, $\eta_p^2 = .10$. Including the five covariates (see above) did not alter these results, $F(10, 2580) = 22.26$, $p < .001$, $\eta_p^2 = .08$. To break down this interaction systematically, we tested contrasts between satisfaction about the killing as it happened and satisfaction about each of the five alternative scenarios and probed them for significant differences between the three countries, respectively. The five resulting 3 (country) \times 2 (contrast) ANOVAs were tested on a conservative 1% significance level to account for inflated alpha error probabilities as a result of the number of contrasts.

"Killed in Accident" scenario. In line with the intent hypothesis, the Country \times Contrast interaction was significant, $F(2, 558) = 22.52$, $p < .001$, $\eta_p^2 = .08$. Follow-up repeated-measures t tests revealed that, for Americans, imagining that bin Laden had died accidentally led to lower levels of satisfaction ($M = 3.85$, $SD = 1.61$) than the killing as it actually happened did ($M = 4.27$, $SD = 1.68$), $t(238) = 3.40$, $p < .001$, $d = 0.22$. Pakistanis, $t(177) = -5.28$, $p < .001$, $d = 0.40$, and Germans, $t(150) = -3.27$, $p = .001$, $d = 0.27$, however, would have even preferred bin Laden being killed in an accident (see Figure 2). Across all fictitious scenarios, imagining bin Laden being killed accidentally in an airplane crash was the least satisfactory one for Americans, as reflected by the finding that none of the other alternative scenarios elicited lower (forecasted) satisfaction levels compared with the killing as it happened ($ps \geq .26$). This result corroborates the "intent hypothesis" that for victims—but not for unaffected third parties—seeing the offender suffer from fate is less satisfactory than seeing revenge being taken intentionally.

Whereas we assume that these cross-country differences reflect different roles (i.e., Americans being the victims of the 9/11 attacks, Germans and Pakistanis being third-party observers), one might also argue that they rather reflect mean differences in justice-related attitudes. Therefore, we probed the aforementioned Country \times Contrast (i.e., satisfaction difference between actual killing and air crash scenario) interaction effect, while simultaneously controlling for individual differences in vengeful attitudes, victim sensitivity, age, gender, and education. Importantly, the Country \times Contrast interaction effect remained significant, $F(2, 516) = 17.51$, $p < .001$, $\eta_p^2 = .06$. Regarding the covariates, only vengeful attitudes, $F(1, 516) = 6.13$, $p = .01$, $\eta_p^2 = .01$, predicted the difference in satisfaction between the killing as it happened and the air crash scenario. Notably, the three countries did not differ in average vengefulness ($Ms = 2.89$, 2.79, and 2.78 for Americans, Pakistanis, and Germans,

respectively), $F(2, 570) = 0.98, p = .38$. Thus, these individual difference measures cannot explain why Pakistanis and Germans favored an airplane crash, whereas Americans strongly disfavored such a scenario.

Cross-country differences in other scenarios. We will now turn to the other alternative scenarios. The respective Country \times Contrast interaction effects were significant on a 1% level for the “killed by Pakistanis,” the “killed by British,” and the “taken to court” scenarios (both with and without controlling for covariates). Contrasts were tested for the United States, the Pakistani, and the German samples, respectively, to break down these interaction effects. The “killed by Pakistanis” scenario elicited stronger forecasted satisfaction among Pakistanis, $t(177) = 5.59, p < .001, d = 0.42$, but not among U.S. or German respondents, $ps \geq .06$. The “killed by British” scenario, however, elicited more forecasted dissatisfaction among Pakistanis, $t(177) = 3.93, p < .001, d = 0.29$, but not among U.S. or German respondents, $ps \geq .20$. Finally, the “taken to court” scenario elicited much stronger forecasted satisfaction among Germans, $t(150) = 12.21, p < .001, d = 0.99$, and Pakistanis, $t(177) = 9.05, p < .001, d = 0.68$, but not among U.S. Americans ($p = .26$).

Taken together, these findings show that the killing of bin Laden as an act of vicarious revenge was indeed “sweet,” at least for the victims. Americans experienced a moderate degree of satisfaction about the killing as it actually happened, while an accidental killing would have been less satisfactory for them. By contrast, Pakistanis and Germans had an entirely different stance toward bin Laden’s death: Germans, for example, would have preferred seeing him taken to court and face a just trial.

Within-country effects across scenarios. Finally, we will discuss differences in satisfaction between scenarios within countries to complete the picture. First of all, the differences in satisfaction between situations were much smaller in the United States ($\eta_p^2 = .02$) compared to Pakistan ($\eta_p^2 = .21$) or Germany ($\eta_p^2 = .31$). Thus, U.S. Americans expressed more homogeneous levels of (forecasted) satisfaction about different scenarios. It is difficult to tell given the data at hand whether this reflects a culture-specific response set, a ceiling effect for a nation highly satisfied by the demise of its most despised enemy, or a general insensitivity to our manipulation. This is why we prefer interpreting *relative* differences (i.e., differences in forecasted satisfaction between a counterfactual scenario and experienced satisfaction about the killing as it actually happened) instead of *absolute* levels of satisfaction for a specific scenario. Nevertheless, the finding that Americans do not seem to care much about whether bin Laden had been killed by the Pakistanis, the British, or in a U.S. air strike speaks for the “intent hypothesis”: All scenarios (except “killed in accident”) represented intentional acts of confronting Al Qaeda or the Taliban. Conceptually, this finding seems to qualify the psychological interpretation

of the “send-a-message” effect: Even third-party (“vicarious”) revenge can be felicitous for victims, as long as it reflects an intentional act of harming the perpetrator. Future research should test whether this effect can be replicated in other settings.

Pakistanis forecasted significantly higher satisfaction levels in the “killed by Pakistanis” than in the “killed by British” scenario. This pattern is consistent with the greater costs to Pakistan of having its sovereignty violated by a foreign nation, particularly by its former imperial overlord (the United Kingdom), whose Prime Minister moreover had repeatedly expressed concerns that Pakistan would “. . . promote the export of terror” (Watt, 2010).

Both Pakistanis and Germans forecasted the highest degree of satisfaction about the “taken to court” scenario. Germans especially favored this scenario over all others. This finding could reflect two factors. Postwar Germany’s inglorious 20th century past has promoted a strong public aversion to the use of military force (e.g., Malici, 2006; Maull, 2000). In addition, Germany’s internal criminal justice system is an exemplar in terms of legal consistency, due process, and fundamental rights, which probably reflects a general cultural priority placed on legalism. This cannot explain Pakistani approval of a legal process, as Pakistan ranks near the bottom of all nations in this regard (World Justice Project, 2013); but Pakistanis’ interest in taking bin Laden to court might reflect the belief among some that he was not in fact responsible for 9/11.

General Discussion

The two studies presented here are illuminating in several ways. First, they provide evidence that Americans psychologically construed the assassination of Osama bin Laden in May 2011 as an act of vicarious revenge in response to the 9/11 terrorist attacks committed by Al Qaeda: Study 1 shows that desires to retaliate against Al Qaeda in 2003 reliably predicted the extent to which Americans felt that justice has been reestablished by killing bin Laden in 2011. This is remarkable given the 8-year interval between the two measurement occasions in which vengeful desires could just as well have cooled off. Our findings from Study 1 support the notion that vengeful desires have a strong persistence over time (Bradfield & Aquino, 1999; Gäbler & Maercker, 2011; Orth, 2004). Possibly, the extent to which participants ruminated about the 9/11 attacks could be a psychological mechanism underlying this remarkable persistence (McCullough, Bono, & Root, 2007; Orth, Berking, Walker, Meier, & Znoj, 2008).

A second important finding from Study 1 is that the extent to which Americans thought that the assassination of bin Laden sent a message to the perpetrator group (i.e., to Al Qaeda and the rest of the world) mediated the effect of 2003 desires for vengeance on 2011 perceptions that justice has been done. Even more importantly, the effect of “sending a

message” on justice was still significant after controlling for perceptions that the assassination might have had a deterrent effect on other would-be terrorists and that the world has become a safer place now. This finding is in line with the notion that revenge can be satisfactory to the extent that a message (“Don’t mess with us!”) is sent to the perpetrator (French, 2001; Miller, 2001). Whereas previous studies have found support for this notion in standardized interpersonal contexts (Gollwitzer & Denzler, 2009; Gollwitzer et al., 2011), the present study is the first to show that the same effect also exists outside the lab in a complex real-world case. On a theoretical level, this finding supports the argument that vicarious revenge can be satisfactory if it effectively sends a message to the perpetrator group (Gollwitzer & Sjöström, in press), and it is also consistent with the notion that symbolically reaffirming one’s power and status is a dominant need of victimized groups (Okimoto & Wenzel, 2010; Shnabel & Nadler, 2008; Shnabel et al., 2009).

Notably, desires for revenge in 2003 had a significant positive indirect effect on psychological closure (via perceptions of deterrence) and a (non-significant) negative direct effect. This suggests that the assassination of bin Laden did contribute to feelings of closure to the extent that it had a deterrent effect on other would-be terrorists, which is in line with the notion that revenge aims at deterring the perpetrators and other would-be perpetrators from committing a similar attack in the future (McCullough et al., 2013). However, perceptions of deterrence were entirely unrelated to feelings of justice achieved.

We also explored whether the assassination of bin Laden quenched Americans’ thirst for revenge for 9/11. Interestingly, although those who harbored vengeful desires in 2003 were more likely to feel a sense of justice after his death, those who were highest in their needs for vengeance indicated that they still “wanted more.” Apparently, applauding bin Laden’s death and wanting more is psychologically no contradiction. On a theoretical level, this finding suggests that even though revenge may bring justice, it is not necessarily the endpoint to a conflict. Rather, taking revenge can instigate desires for additional acts of vengeance (Stack, 2006; see also Wright & Hensley, 2003). In short, victims want revenge for the sake of delivering a message, and taking revenge can bring justice on one hand, but also elicit more “blood lust” on the other. Future research on direct and vicarious revenge could address whether even “satisfactory” vengeful episodes can instigate a desire to “get more,” and whether the relation between a sense of justice (after retaliating) and a continued desire to take revenge can be explained by sheer “blood lust” or by beliefs that more culprits remain at large who need to be punished.

Study 2 extends these findings by showing that Americans not only construed the assassination of bin Laden as an act of just deserts in a cognitive fashion, but that they also felt satisfied in response to his death. In fact, Americans experienced much more satisfaction about the May 2, 2011, events than

Germans or Pakistanis. We argue that this mirrors the different roles of these three countries in the situation: Americans were the collective victims of the 9/11 terrorist attacks. Pakistanis would be expected to be much less enthusiastic about the assassination. Bin Laden, after all, was killed by U.S. military on their ground without being informed ahead of the U.S. Navy’s secret operation. Moreover, ordinary Pakistanis already had scarcely more sympathy for the United States than for bin Laden (Pew Research Center, 2011b).

Germans were also relatively unenthusiastic about the assassination scenarios; they were significantly more supportive of taking bin Laden to court than were Americans. This probably reflects not having been direct victims of the 9/11 attacks and having a culture that is anti-militarist and strongly favors the rule of law. The atypical degree of German anti-militarism potentially limits the generalizability of the present findings. But to the extent Germany’s preference for taking bin Laden to court reflects its legalist culture it can be regarded representative of many other developed democratic societies that are also highly favorable to the rule of law (World Justice Project, 2013). This is a question that cannot be resolved with the current data and must be left to future research.

In line with the intent hypothesis and previous research on “comparative suffering” (Frijda, 1994), we found that Americans (but not Pakistanis or Germans) forecasted the least satisfaction about the “killed in accident” scenario. This finding also resonates with results showing that seeing the perpetrator suffer from fate is less satisfactory for victims than taking revenge and delivering a message with it (Gollwitzer & Denzler, 2009). For less involved parties (i.e., those not directly affected by a provocation), however, revenge seems to be satisfactory as soon as a balance in suffering is achieved.

A possible limitation to these interpretations is that our measure of satisfaction about the five hypothetical scenarios (see the appendix) might not represent a “true” sense of satisfaction experienced by participants; they merely reflect what people *think* they might experience. Notably, research on affective forecasting has shown that events and actions sometimes turn out to have lower hedonic benefits than people had expected (see Carlsmith et al., 2008, who demonstrated affective forecasting errors in the context on revenge). Of course, it would have been ideal to measure people’s true experiences of satisfaction about different scenarios of bin Laden’s death; since this is impossible, measuring satisfaction as we did here is the closest approximation. However, given that the affective forecasting literature has demonstrated that people tend to *overestimate* the intensity of pleasurable experiences (Wilson & Gilbert, 2003), one could assume that Americans’ “true” satisfaction levels about bin Laden having been killed accidentally would have even been lower.

Taken together, the present studies provide empirical evidence for hypotheses that can be plausibly deduced from basic social-psychological research on revenge and

retribution and that can be applied to a real case that has a strong significance not only for Americans, but also for people in many other countries. The assassination of bin Laden, especially the way he was killed, has sparked some controversy over the rightfulness of the operation called “Neptune’s Spear,” although these discussions were, at the same time, overshadowed by the immense sense of relief and satisfaction that swept through the Western world after bin Laden’s death was announced. A content analysis of newspaper headlines on May 2, 2011, shows that newspapers (especially those in liberal-leaning regions of the United States) tended to frame his assassination in terms of justice restoration (Bowman, Lewis, & Tamborini, in press). Interestingly, the Neptune’s Spear operation and its alleged success was even an issue in the 2012 U.S. presidential election campaign: In the third TV debate between President Barack Obama and Republican nominee Mitt Romney on October 22, 2012, in Boca Raton, Florida, Obama directly linked bin Laden’s death to the experience of justice and closure:

You know, after we killed bin Laden, I was at Ground Zero for a memorial and talked to a young woman who was 4 years old when 9/11 happened . . . And she said to me, you know, by finally getting bin Laden, that brought some closure to me. And when we do things like that, when we bring those who have harmed us to justice, that sends a message to the world . . . (National Public Radio [NPR], 2012)

Our findings are largely consistent with these words. They show that bin Laden’s death was indeed related to perceptions of reestablished justice among Americans, and that the belief that a message had been delivered is one of the driving forces underlying these perceptions. That said, successfully delivering a message does not necessarily end people’s desires for vengeance—instead, our results were also consistent with the notion that taking revenge is associated with a continued desire to take retribution. Our second study shows that at least for victims, harm that comes to perpetrators must be intended—and not due to the leveling hand of fate.

Our findings also contribute to the growing literature on vicarious retribution, a concept that has received increasing attention in recent years (e.g., Lickel, 2012). Although the present research was not designed to test the full vicarious retribution model, it shows that this concept can be meaningfully applied to the bin Laden case (see also Pemberton, 2010, 2011). Future research might explore whether this model, in combination with the present findings, can be applied to other intergroup conflicts as well. For instance, the vicarious retribution model could be conceptually enriched by including the notion that a central goal underlying vicariously vengeful desires is to deliver a power-reaffirming message (Gollwitzer & Sjöström, in press; Shnabel et al., 2009). Ultimately, research on the features and functions of intergroup vengeance may help us understand many severe and bloody intergroup conflicts—including terrorism and “wars

on terror”—in more detail, and to develop means and structures that might help prevent or reduce the number of casualties that accompany these conflicts on either side.

Appendix

Counterfactual Scenarios

Scenario 1: “Killed by Pakistanis”

On May 2, 2011, Pakistani President Asif Ali Zardari announced the death of Osama bin Laden. According to reports, a special unit of Pakistani Secret Agency Inter-Services Intelligence (ISI) stormed the Al Qaeda leader’s hideout in Pakistani town Abbottabad at night. During this operation, bin Laden was shot in the head and killed.

Scenario 2: “Killed by British”

On May 2, 2011, United Kingdom Prime Minister David Cameron announced the death of Osama bin Laden. According to reports, a special team of the British Army stormed the Al Qaeda leader’s hideout in Pakistani town Abbottabad at night. During this operation, bin Laden was shot in the head and killed.

Scenario 3: “Killed in air strike”

On May 2, 2011, U.S. President Barack Obama announced the death of Osama bin Laden. On Monday early morning, U.S. military forces attacked Taliban groups in an air strike in Afghanistan ordered by the commander-in-chief and killed several people. It was found later that one of the killed persons was Osama bin Laden.

Scenario 4: “Killed in accident”

Al Qaeda leader Osama bin Laden died on May 2, 2011, in an air crash near the Afghan-Pakistani border. DNA tests provided irrefutable evidence that Osama bin Laden was among the killed persons. The plane crash was caused by a technical failure.

Scenario 5: “Taken to court”

Al Qaeda leader Osama bin Laden was caught on May 2, 2011, in his property in Abbottabad, Pakistan, by U.S. Navy Sea, Air, Land Teams (SEALs). This terrorist leader will now face a court trial and be held responsible for his deeds.

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Notes

1. The terms *retribution*, *revenge*, and *retaliation* will be used synonymously in this article.
2. Panelists are retired from the panel on average after 3 years.
3. Several error variables were allowed to correlate after inspecting model fit and modification indices: In the *2003 Desire for Revenge* scale, the items "The Iraq war helps resolve a desire to hurt those responsible for the 9/11 attacks" and "The Iraq war helps resolve a compelling need for vengeance for the 9/11 attacks" were the only items that directly address the idea of taking revenge against those responsible for the 9/11 attacks. The same applies to the items "I feel a compelling need for vengeance" and "I feel a desire to hurt those responsible" in the *2011 Continued Desire for Revenge* scale. In the *Justice Achieved* scale, the items "Justice had been done" and "A sense of vengeance at last" are more directly related to a general notion of just deserts than the other two items. Thus, measurement errors for the respective item pairs were allowed to correlate.
4. The (total) indirect effects of desire for revenge in 2003 on justice achieved, $B = .14$, $SE(B) = .06$, $p = .03$, and on psychological closure, $B = .15$, $SE(B) = .05$, $p < .01$, were both significant. Although there are strong theoretical arguments to assume that perceptions of message delivered, feeling safer, and deterrence predict experiences of justice and closure (and not vice versa; cf. Gollwitzer, Meder, & Schmitt, 2011), we also tested a rival model in which the order of mediators (message delivered, feeling safer, deterrence) and outcomes (justice and closure) was reversed, so that desires for revenge in 2003 now predicted perceptions of message delivered, feeling safer, and deterrence via justice and closure (cf. MacCallum, Wegener, Uchino, & Fabrigar, 1993). This model yielded comparably strong indirect effects, message delivered: $B = .17$, $SE(B) = .06$, $p = .01$; feeling safer: $B = .16$, $SE(B) = .06$, $p = .01$; deterrence: $B = .06$, $SE(B) = .05$, $p = .18$. Thus, this alternative model is equally viable, but it does not perform better than the model depicted in Figure 1.
5. The counterfactual scenarios were presented in a randomized order in the U.S. and the German questionnaire. However, this was not possible for the Pakistani sample.
6. The original scale consists of 20 items, but one item ("It is usually better to show mercy than to take revenge") turned out to be missing in the Pakistani questionnaire.
7. The scale consists of positively and negatively coded items. A confirmatory factor analysis (CFA) model with only the 10 positive items fitted the data considerably better than the entire scale model. Therefore, measurement equivalence was tested with the reduced 10-item scale. In the main analyses, the entire scale was used.
8. Models in which the factor loadings were constrained to be equal in all countries did not fit worse than models in which this restriction was omitted (vengeful attitudes: $p = .09$; victim sensitivity: $p = .07$).

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