

## REVENGE IN US PUBLIC SUPPORT FOR WAR AGAINST IRAQ

PETER LIBERMAN\*

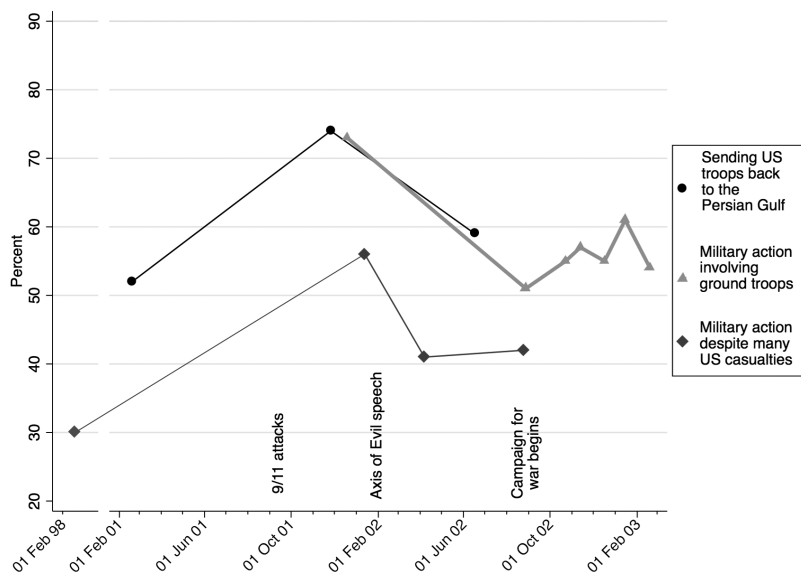
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**Abstract** To better understand how desires to avenge the September 11 terror attacks affected US public support for the 2003 Iraq War, we integrate data from two uncoordinated surveys—one measuring revenge motivations and the other beliefs about Iraqi complicity—completed by overlapping samples drawn from the same online panel. Citizens who mistakenly blamed Iraq for 9/11 were more likely to say that going to war would satisfy their desires for revenge, which in turn predicted greater war support, controlling for political orientations and the perceived security incentives and costs of war. But a substantial proportion of those who said Iraq was not involved in 9/11 also expected war to satisfy desires for revenge, suggesting that a revenge “spillover” effect also contributed to war support. These findings help explain how President George W. Bush was able to bring the nation to war against Iraq, testify to the importance of emotion and moral motivation in public opinion, and demonstrate the utility of integrating data from independent online panel surveys.

US public support for war against Iraq increased following the September 11, 2001, terror attacks, and then ebbed somewhat during the spring and summer of the following year, as shown in [figure 1](#).<sup>1</sup> The surge occurred well before

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1. See [appendix, section 1](#), for question wording and sources. The case for this “9/11 effect” is not undermined by two brief spikes in support for “military action” against Iraq, to 74–76 percent, in 1998–1999. Besides occurring during episodic confrontations with Iraq, these poll questions



**Figure 1. Support for Invading Iraq to Topple Saddam Hussein.**

President George W. Bush began sounding alarms about the Iraqi threat, at first in his January 29, 2002, “Axis of Evil” speech and then more vigorously that autumn, at which point the news media turned its attention from al-Qaeda, terrorism, and Afghanistan to Iraq (Althaus and Largio 2004; Gershkoff and Kushner 2005; Nacos, Bloch-Elkon, and Shapiro 2011; Feldman, Huddy, and Marcus 2015).

One explanation for this heightened public belligerence is that many US citizens mistakenly attributed the attacks to the Iraqi regime led by Saddam Hussein. Polls fielded right after 9/11 and again over the following years found a majority of Americans agreeing that he was at least “somewhat likely” to have been involved. These poll questions inflated affirmations of Iraqi complicity by singling out the Iraqi leader for suspicion and by omitting response options describing lesser terrorist dealings (Althaus and Largio 2004). Still, to the extent that some Americans genuinely blamed Iraq for 9/11, they would have supported war both to neutralize the Iraqi threat and to give Saddam Hussein his “just deserts.”

However, desires for revenge also could have heightened belligerence on the part of those who doubted Iraqi complicity, through psychological “spill-over” effects. Social psychology experiments have shown that anger over

mentioned neither casualties nor troops, and thus tended to attract greater support than those illustrated in figure 1. Many additional items not included in the figure also show a decline in war support over the course of 2002 (Everts and Isernia 2005; Jacobson 2007).

unpunished crimes heightens people's aggressiveness toward uninvolved third parties, in interpersonal, intergroup, and criminal punishment contexts (e.g., Bushman et al. 2005; Lickel et al. 2006; Tetlock et al. 2007). If such spillover effects generalize to political attitudes, pent-up anger and desires for revenge toward al-Qaeda's elusive ringleaders could have led many Americans to support lashing out at symbolic substitutes like Saddam Hussein.

The distinction between mistaken revenge and revenge spillover is an important one. Strong emotions and moral motives can bias judgment about the conscious target of those feelings (e.g., Ginges et al. 2007; Carlsmith and Darley 2008), but spillover effects—sometimes called incidental or halo effects—represent more blatant departures from limited-information rationality. If desires for revenge arouse indiscriminate support for counterproductive wars, moreover, they may open political opportunities for national leaders to wage them.

Past research has not provided clear tests of the mistaken revenge and revenge spillover explanations of public support for the Iraq War. Kull, Ramsay, and Lewis (2003–2004) showed that beliefs about Iraqi involvement in 9/11 predicted war support, but did not address whether this was due to revenge, security, or other non-revenge motives. Other studies found that US citizens most supportive of the death penalty—a proxy for retributiveness—and those most angry at the terrorists were relatively belligerent toward Iraq (Lieberman 2006; Skitka et al. 2006; Huddy, Feldman, and Cassese 2007). Although these studies imply that revenge motives played some sort of role, they lacked data on perceptions of Iraqi involvement, and thus could not address whether angry and vengeful Americans favored war to punish Saddam Hussein for his imagined role in 9/11, or to lash out more indiscriminately. It appears, moreover, that no single survey from the period collected data both on perceived Iraqi guilt *and* on either anger or revenge.

We overcome this obstacle by integrating data from surveys that Knowledge Networks, Inc. (KN; since acquired by GfK, Inc.) conducted for different investigators. One survey included a question about Iraq's connection to al-Qaeda and 9/11, and the other asked whether war would satisfy desires for revenge. As an unintentional consequence of employing samples drawn from the same large online respondent panel, over 350 panelists participated in both surveys, providing critical information on cross-survey associations. Moreover, these associations can be estimated more precisely and with less bias by utilizing the incomplete data collected from those who completed just one of the surveys. Retrospective data integration has not been used previously to analyze online panel surveys, as far as we know, so one of this article's goals is to demonstrate the method's utility for exploiting this increasingly abundant type of opinion data.

Integrating data from the two surveys permits us to differentiate mistaken revenge and revenge spillover. Mistaken revenge would be apparent if those who blamed Iraq for 9/11 expected war to satisfy their desires to avenge the

terror attacks, whereas revenge spillover would better explain why citizens who doubted Iraqi involvement might also have expected war to satisfy such desires. Our results provide evidence of both revenge mechanisms. They add to our understanding of the role of revenge in political attitudes, and suggest that outrage over national injuries inflicted by elusive perpetrators might help political leaders mobilize public support for war against uninvolved states.

## **Revenge and Aggressiveness Toward Iraq**

The 9/11 terror attacks' lethality, targeting of civilians and national symbols, and unfathomable intent inevitably aroused American desires for revenge. To President Barack Obama, the long hunt for Osama bin Laden "was about a lot more than taking a monstrous leader off the battlefield. It was about so much more than that. It was about righting an unspeakable wrong [and] healing a nearly unbearable wound in America's heart" (Biden 2012). Any other accomplices also had to be punished. US citizens who thought Saddam Hussein had been involved would have wanted to destroy his regime, for both security and justice reasons. Indeed, the latter may have outweighed the former. In social psychology experiments on criminal punishment judgments and on cooperation games, people want wrongdoers punished as an intrinsically desirable, moral end in itself, not just to incapacitate threats or to deter future wrongdoing (e.g., Carlsmith and Darley 2008; Nadelhoffer et al. 2013). These findings resonate with research showing that prudential cost-benefit reasoning is often sidelined when "sacred values" are at stake (e.g., Ginges et al. 2007).

The effects of revenge and anger on punitiveness toward uninvolved third parties represent even clearer departures from utilitarian reasoning. Social psychology research has identified three phenomena in which revenge appears to spill over into normatively unrelated judgments and behavior. The best known of these is "displaced aggression," a heightened aggressiveness toward unrelated third parties after having been personally insulted or offended. The effect is generally greater toward those who have engaged in unwanted behavior ("triggered displaced aggression") or who superficially resemble the original offender (e.g., Marcus-Newhall et al. 2000; Bushman et al. 2005; Pedersen et al. 2008; Sjöström and Gollwitzer 2015).

Resemblances constituting a common group identity are an important precondition of another revenge-spillover phenomenon, in which members of an injured social group attribute collective responsibility and support aggressive acts against innocent members of the perpetrator's social group (e.g., Lickel et al. 2006; Vasquez, Lickel, and Hennigan 2010). Although this "vicarious retribution" has been studied in the contexts of gang violence and other subnational conflict, it could well generalize to identity-based support for military force.

Spillover also occurs in criminal punishment judgments. Learning about serious, unpunished crimes increases appraisals of uninvolved individuals' misbehavior as more wrongful and deserving of harsh punishment (e.g., Lerner, Goldberg, and Tetlock 1998; Rucker et al. 2004; Tetlock et al. 2007). These "prosecutorial mindsets," moreover, do not appear aimed at restoring deterrence by making an example of an unrelated suspect or offender. They correlate with desires for retributive justice, but not with desires for enhanced deterrence (Rucker et al. 2004; Tetlock et al. 2007).

These three revenge-spillover mechanisms suggest that Americans who remained outraged over 9/11 may have supported lashing out at symbolic substitutes for the elusive al-Qaeda ringleaders. Saddam Hussein's ethnic and (superficial) religious similarities to the actual perpetrators, and his notoriety as a "rogue state" tyrant, made him a particularly tempting target for Americans who felt an urge to lash out.

Both mistaken revenge and revenge spillover could have shaped citizens' war support long after their initial outrage over 9/11 had subsided. Rumination and reminders about an offense readily revive previously experienced anger and desires for revenge, along with their effects on judgment (Bushman et al. 2005; Denson 2013). On the anniversary of 9/11, for example, two-fifths of Americans said they still thought about the attacks every day. Nearly three-quarters of these ruminators said they still felt "very angry" at the culprits, in contrast to only about half of those who thought about the attacks less often (ABC News 2002). Even short-lived emotional episodes can shape beliefs and attitudes that are then stored in long-term memory, resulting in persistent effects on judgment and behavior (Andrade and Ariely 2009; Lodge and Taber 2013).

Despite the plausibility that desires for revenge affected US public support for invading Iraq, these effects remain little understood. As we explain in the next section, previously underutilized data can shed new light on the balance between mistaken revenge and revenge spillover, as well as between symbolic and instrumental motives for revenge.

## Data Integration and Analysis

Although no single survey measured both revenge motives and beliefs about Iraqi complicity, separate surveys tapping each were fielded to a single online panel, resulting in a sizable overlap between the samples. In the following, we first explain our method of integrating the datasets, and the use of multiple imputation to maximize the statistical power and minimize the bias in our estimates of key associations. We then examine whether—consistent with mistaken retribution—blaming Iraq for the attacks predicted feelings that war would satisfy desires for revenge and whether—consistent with revenge spillover—those who thought Iraq was uninvolved also felt that war would satisfy

desires for revenge to some degree. Finally, we provide more demanding tests of both the mistaken-revenge and revenge-spillover hypotheses by examining how expected retributive satisfaction related to support for invading Iraq.

#### RETROSPECTIVE INTEGRATION OF ONLINE PANEL SURVEY DATA

Online surveys are typically administered to samples drawn from large, stable panels of respondents who complete surveys periodically until retired from the panel (Hays, Liu, and Kapteyn 2015). Samples drawn from a single panel, especially within a limited time frame, often intersect, providing valuable information about cross-survey associations. The size of the overlap, and hence the quality of this information, depends on the sizes of the original samples and of the full panel, the sampling frames used, and intervening panel rotation and dropout.

In preparing to analyze such data, researchers can reduce selection bias and increase statistical power significantly by combining the entire survey datasets and imputing the resultant missing data (Deng et al. 2013). Online survey firms typically use random or nearly random within-panel sampling frames to solicit panelists to complete surveys, so that the solicitations for completing any two surveys are essentially random. But individual propensities for panel dropout and survey acquiescence also affect the composition of the intersecting samples, just as in ordinary panel studies. Thus, analysis of just the complete-case intersecting samples can result in biased parameter estimates, and sacrifices the extensive partial data collected from the panelists who completed only one of the surveys.

Missing-data methods developed to minimize attrition bias and to maintain statistical power in ordinary panel studies can do the same for retrospectively integrated survey data. A particularly useful method is multiple imputation (MI; see Rubin [1987]; Little and Rubin [2014]). MI involves generating multiple complete datasets, with the imputed values varying across the datasets according to the degree of uncertainty in the imputation model. Using rules developed by Rubin (1987), these between-imputation variances are then incorporated into the parameters' standard errors when pooling the results of statistical analyses performed separately on each of the completed datasets. By imputing values conditional on all the variables included in the imputation model, MI algorithms correct for biases from attrition (or other causes of missing data) predicted by these variables. Missing data explained by observed variables is referred to as "ignorable missingness," because it can be handled without bias by MI or maximum-likelihood missing data techniques. These techniques do not correct for "nonignorable" missingness caused by non-observed factors, but they yield more efficient and unbiased estimates than complete-case analysis.

MI permits using auxiliary variables (i.e., those not needed for the data analysis) in the imputation model, giving it an important advantage over maximum-likelihood methods for analyzing integrated online survey data. Profile data, typically collected from online panelists upon recruitment, provides a wealth of complete variables that can be employed for this purpose.

The combination of intersecting samples and common profile data makes data collected from a single online panel relatively easy and precise to integrate.

In this article, we integrate two probability surveys that KN administered to adult samples of its US online panel, which at the time numbered 34,748. One was fielded February 1–15, 2003, for the University of Maryland's Program on International Policy Attitudes (PIPA) to measure a wide variety of beliefs and attitudes about Iraq ( $N = 3,163$ ; see Kull, Ramsay, and Lewis [2003–2004]). The other survey, which included questions on revenge, was fielded for the second author March 13–April 9, 2003 ( $N = 3,534$ ; with 81 percent completed prior to the outbreak of war on March 20, we refer to this as the “March” survey).<sup>2</sup> Merging these datasets resulted in a “February–March” dataset of 6,334 unique panelists, with 6 percent having participated in both surveys ( $N = 363$ ), 44 percent only in the February survey, and 50 percent only in the March survey.<sup>3</sup>

We multiply imputed the unit- and item-nonresponses together for the combined dataset, using the Markov Chain Monte Carlo algorithm to generate 100 complete datasets.<sup>4</sup> A large number of MI datasets is recommended to maintain statistical power in cases with extensive missing data (Graham, Olchowski, and Gilreath 2007). The imputation model included all the analysis variables plus additional auxiliary variables, including demographics collected from all respondents upon recruitment into the panel, March items on war support, and items on war support and the Iraq–al-Qaeda connection measured in three other PIPA surveys.<sup>5</sup> Although the intersection was older and less educated than the original samples, if no different in political interest and awareness, MI

2. KN/GfK's use of random-digit dialing and address-based sampling for recruitment into the panel makes it highly representative of the US population, and its within-panel sampling designs employ selection weights to correct for demographic under- and over-representation on the panel (Dennis 2009; Yeager et al. 2011). The February survey included an oversample of five large states, whose regional diversity minimized the impact on our results. KN reported a panel recruitment rate of 49 percent, a profile completion rate of 66 percent, and a study completion rate of 58 percent, yielding a cumulative response rate of 19 percent. For the March survey, KN reported a panel recruitment rate of 45 percent, a profile completion rate of 63 percent, and a study completion rate of 77 percent, yielding a cumulative response rate of 22 percent. See Callegaro and DiSogra (2008) on the computation of response rates for online panels.

3. Missingness generally exceeds the 44 percent and 50 percent levels due to item nonresponse and, especially, to some questions having been given only to subsets of the original samples. For additional details, see the online Supplementary Information (SI), section 1.

4. Mplus 7.1's default (“PX1”) MCMC algorithm, based on the Gibbs sampler, was used to generate the partial correlation blocks in the variance covariance matrices (Asparouhov and Muthén 2010).

5. The summer PIPA surveys were fielded in June 18–25 ( $N = 1,051$ ), July 11–20 ( $N = 1,060$ ), and August 26–September 3 ( $N = 1,217$ ). Including PIPA's summer war support and Iraq–al-Qaeda–connection items, though not used in the data analysis, improved imputation of missing data on the February versions, because 345 of the March respondents who did not participate in the February PIPA survey completed one or more of the summer ones. Additional details on the imputation model and diagnostic plots showing the plausibility of the imputed values can be found in the online Supplementary Information, section 4.



adjusts for these idiosyncrasies.<sup>6</sup> Unmeasured sources of attrition might still bias our results, but it is unclear that they would do so in a direction systematically favorable to our main hypotheses. Moreover, we adjust for differences between the original survey samples and the US population by controlling for these attributes in our regression analyses.<sup>7</sup>

#### EXPLAINING EXPECTED RETRIBUTIVE SATISFACTION FROM WAR

We measure revenge motives using March items asking how much going to war would “satisfy or resolve” for respondents a “sense of moral outrage about the 9/11 terrorist attacks,” a “need to prove that the US can’t be pushed around,” a “desire to hurt those responsible for the 9/11 attacks,” and a “compelling need for vengeance for the 9/11 terrorist attacks.” Although pluralities said “not at all,” a significant number of citizens said that war would satisfy desires for revenge to some degree (see [figure 2](#)). We combined the highly inter-correlated responses to these items into an additive scale of *Avenges*.<sup>8</sup>

Retributive satisfaction is a valuable, if indirect, measure of retributive motives. Victims and third-party observers typically express satisfaction from seeing wrongdoers punished, and expected satisfaction from revenge correlates highly with the degree of outrage over a crime, in intergroup contexts as well as interpersonal ones ([Maitner, Mackie, and Smith 2006](#)). Moreover, brain-imaging studies have found that neural activity during revenge planning occurs in regions of the brain associated with gratification. The intensity of this activity correlates with the severity and costliness of the punishments imposed ([de Quervain et al. 2004](#); see also [Cikara \[2015\]](#)).

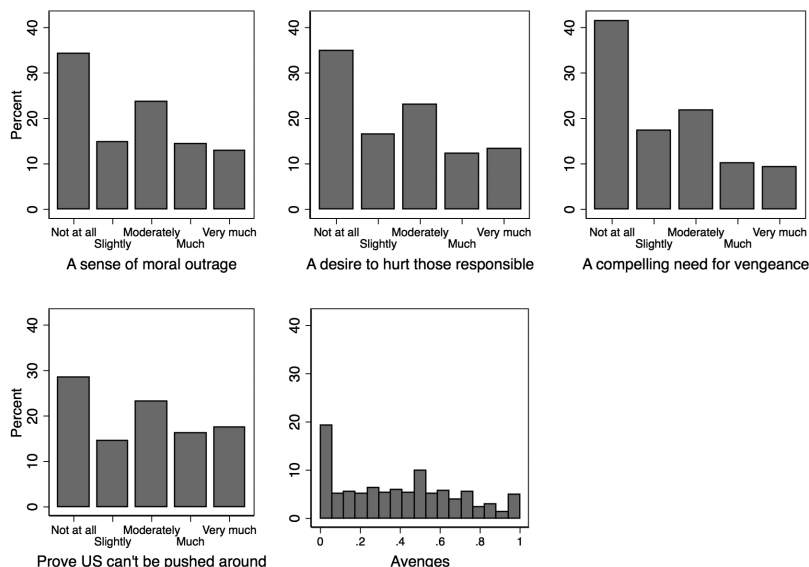
People might not be fully aware of the reasons for their attitudes, and tend to agree post hoc with reasonable-sounding justifications regardless of their actual motivating role ([Lodge and Taber 2013](#)). But widespread norms against retribution—especially when described as “vengeance” and even more so when inflicted on innocents—should mitigate this problem here. People generally exaggerate their instrumental reasons for punishment, and downplay their retributive ones ([Carlsmith 2008](#)). This makes it unlikely that war

6. See the online Supplementary Information, sections 2 and 3, for sample demographics and attrition models.

7. Although nearly identical in partisanship, gender, income, and region to the US population, the combined, unweighted dataset has disproportionate representation from five oversampled states and is somewhat whiter, older, and more educated. See the online Supplementary Information, section 2; the weighted February estimates in that table’s first column are very close to US census figures.

8. After war began on March 20, “would” in the question stem was changed to “did,” but the wording change affected neither *Avenges* nor its relationship with war support. We thus pooled the prewar and wartime cases. Scale reliability for the entire March sample is high (Cronbach’s  $\alpha = 0.89$ ); further analysis of these and other March survey items is provided in the online Supplementary Information, section 5.





**Figure 2. Histograms of Retributive Satisfaction Items and Scale.** Based on unweighted, nonmissing responses to March 2003 items following the stem “How much would [did] going to war satisfy or resolve the following for you?”

advocates, especially those who doubted Iraqi complicity, exaggerated the retributive satisfaction they expected from invading Iraq.

A February 2003 question asking “Please select what you think is the best description of the relationship between the Iraqi government and the terrorist group al-Qaeda” measured perceptions of Iraq’s involvement with al-Qaeda and 9/11. The 20 percent of respondents who chose “Iraq was directly involved in carrying out the September 11 attacks” most clearly blamed Iraq for the attacks, whereas those who selected “no connection at all” (6 percent) or “a few al-Qaeda individuals have visited Iraq or had contact with Iraqi officials” (29 percent) must have disbelieved, or at least strongly doubted, Iraqi involvement. The remaining option—“Iraq has given substantial support to al-Qaeda, but was not involved in the September 11 attacks” (36 percent)—explicitly rules out Iraqi involvement in the attacks. However, those who selected it may have felt that reckless aid to the actual perpetrators justified retributive justice as well as security reasons for destroying the Iraqi regime.

To isolate retributive motives for supporting war, we control for perceived threats, war risks, and relative strength. All three predict both intergroup anger (e.g., Mackie, Devos, and Smith 2000; Cottrell and Neuberg 2005) and support for military force (e.g., Herrmann, Tetlock, and Visser 1999; Gelpi, Feaver, and Reifler 2009), and thus could represent non-retributive-justice mechanisms

causing correlations between expressions of retributive satisfaction and belligerence toward Iraq. Moreover, despite the taboo on revenge, one cannot rule out citizens affirming vengeful motives and Iraqi guilt as post-decisional justifications for prudential war support. Fortunately, the February survey included questions on the likelihood that terrorists would retaliate against the United States for invading Iraq (*Blowback*), the number of expected US casualties from war (*Casualties*), the US ability to defeat Iraq and North Korea simultaneously (*Prowess*), the belief that invading Iraq would help—or at least not hurt—the “war on terrorism” (represented by indicator variables *No impact on WOT* and *Help WOT*), and support for attacking North Korea if it tried to gain WMDs (*Attack N. Korea*, with the option of doing so even if South Korea did not join represented by the indicator *Attack N. Korea alone*). The combined February–March sample also included more limited data, collected in June and July 2003 PIPA surveys, on the belief that Iraq possessed WMDs on the eve of the war (*WMD*).<sup>9</sup>

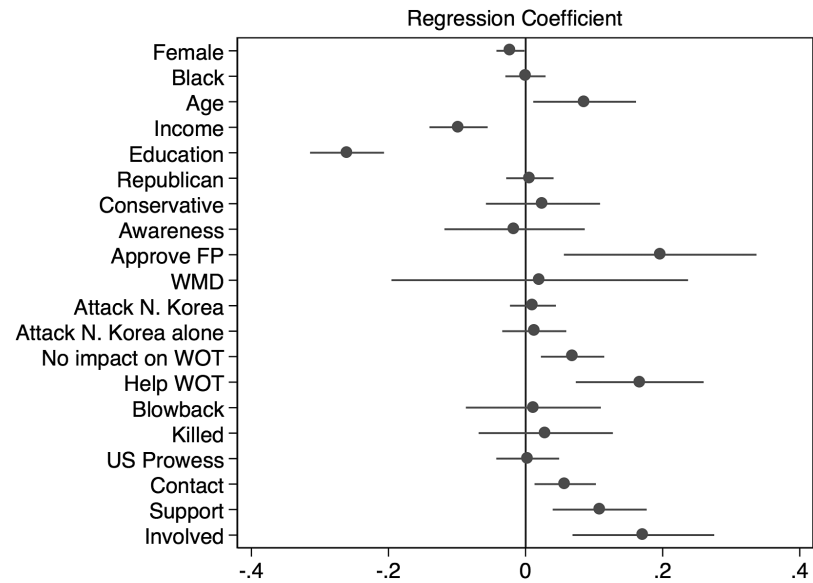
In theory, political partisanship and cue-taking from elite discourse also might have generated spurious associations between *Avenges* and *Iraq War*. Although hardly any US political leaders publicly justified invading Iraq as retribution for 9/11, President Bush claimed that Iraq and al-Qaeda belonged to an “Axis of Evil” and he persistently conflated Iraq and terrorism (Althaus and Largio 2004; Gershkoff and Kushner 2005; Nacos, Bloch-Elkon, and Shapiro 2011). Partisans differed over both going to war and Iraqi involvement in 9/11 (Jacobson 2007; Berinsky 2009; Prasad et al. 2009; Feldman, Huddy, and Marcus 2015). Thus, partisanship or motivated reasoning could have generated correlations between a variety of stated beliefs, attitudes, and feelings about Iraq. To control for such effects, we use standard measures of partisanship, ideology, and political awareness, plus a scale of general approval of US foreign policies.

Figure 3 plots the coefficients from a regression of *Avenges* on the Iraq–al-Qaeda connection options and the control variables, using the MI combined datasets, with all variables scaled 0–1.<sup>10</sup> The *Contact*, *Support*, and *Involved* coefficients indicate the estimated effect of each view on *Avenges*, relative to those who said “no connection.” Consistent with the mistaken revenge hypothesis, citizens saying that Iraq was “directly involved” expressed significantly higher retributive satisfaction than did those who said “no connection.” *Involved*’s differences with *Contact* and *Support* were also statistically significant (all at  $p < .001$ ).<sup>11</sup>

9. See appendix section 1 for question wording and construction of all variables besides those detailed in the text.

10. The associations of *Avenges* with the demographics, political ideology, interest, and partisanship in the March 2003 complete-case data are preserved in the MI data (compare models 1–2 of the online Supplementary Information, section 6).

11. Arguably, *Approve FP* and *Help WOT* could have been affected by feelings that war would satisfy desires to avenge 9/11, rather than (just) vice versa. If so, controlling for these variables overcorrects the estimated effect of *Support* and *Involved*. Removing these variables from the model increases the coefficient of *Involved* from  $b = 0.18$  to  $0.22$ ; compare models 3 and 4 in the Supplementary Information, section 6.

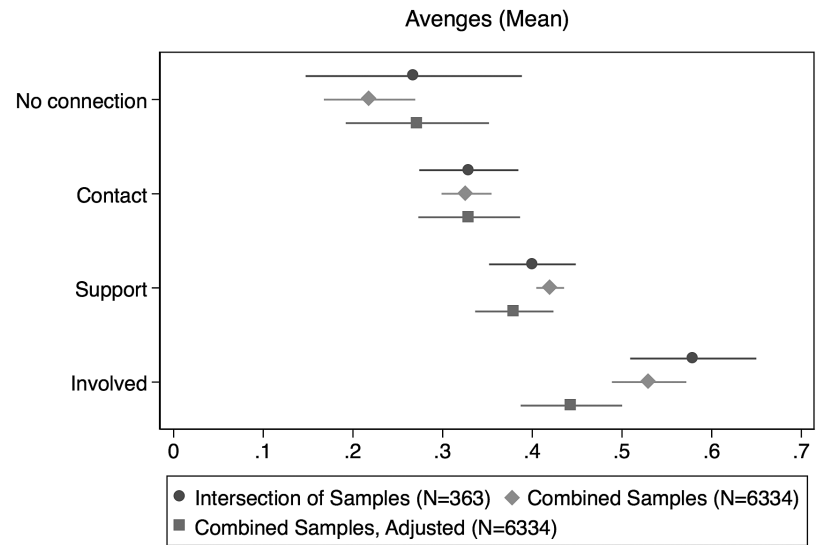


**Figure 3. Predictors of Feeling War Would Satisfy Desires to Avenge 9/11.** Point estimates and 95 percent confidence intervals of unstandardized, multiply imputed OLS regression coefficients. All variables range 0–1. Based on model 1 in [appendix section 2](#) ( $N = 6,334$ ).

Although *Avenges* was highest for citizens who blamed Iraq for 9/11, it was significantly greater than zero for those who did not. This can be seen in [figure 4](#), which plots the estimated means of *Avenges* for each category of Iraq–al-Qaeda ties. Three sets of estimates are presented to check the robustness of this finding: the bivariate estimates using only the intersection of the two surveys ( $N = 363$ ), bivariate results using the combined MI datasets ( $N = 6,334$ ), and the combined MI results adjusted for all the control variables in the model illustrated in [figure 3](#).

The adjusted MI estimates are of particular interest. Because they correct attrition biases, these estimates are more precise than the intersection-only estimates and remove the influence of potential confounders. The adjusted MI estimates also narrow the difference in *Avenges* between those who blamed Iraq and those who did not, compared to the bivariate and intersection-only estimates. This increases our estimate of the prevalence of revenge spillover, and decreases our estimate of the prevalence of mistaken revenge, shaping public support for invading Iraq. However, the broadly similar findings in all three sets of estimates show that they are robust to our modeling assumptions and missing-data procedures.

The citizens who said Iraq had no more than “contact” with al-Qaeda, and who expected at least some retributive satisfaction from war, represent the clearest



**Figure 4. Feeling That War Would Avenge 9/11, by Belief About Iraq’s Involvement.** Predicted means and 95 percent confidence intervals, based on models 1–3 in [appendix section 2](#). The adjusted estimates are for those who said that war would neither hurt nor help the war on terrorism, said that they opposed war with North Korea, said that the United States could not defeat North Korea and Iraq simultaneously, and who were otherwise average (using US census data for age and education to correct for these unrepresentative attributes of the KN samples).

evidence for revenge spillover. Mistaken revenge cannot explain why anyone who did not blame Iraq for 9/11 would have said they anticipated that war would satisfy desires for revenge. However, many of those who said Iraq gave “substantial support...but was not involved” also might not have blamed Iraq for the attacks. Indeed, even some “directly involved” responses may have stemmed from prosecutorial mind-sets aroused by anger over 9/11, motivated reasoning, post-decisional justification, or having been asked specifically about Iraqi involvement, rather than from prior beliefs or misinformation about Iraq. If so, mistaken revenge would not have been the source of their retributive satisfaction.

Retributive satisfaction from war does not appear to have been shaped much by expectations that war would bolster security at low cost. In the model of *Avenges* illustrated in [figure 3](#), most of the control variables tapping perceived security threats and war risks—including *Blowback*, *US Prowess*, *Casualties*, *WMD*, and the North Korea preventive war variables—are all insignificant. Security concerns might be reflected in the elevated levels of *Avenges* among those who said that Iraq had given “substantial support” to al-Qaeda, as well as among those who said that invading Iraq would “help” on the “war on

terrorism.” However, to the extent that people blamed Iraq morally for having aided al-Qaeda and felt that the “war on terrorism” aimed at justice rather than security, these results could reflect retributive motives instead.

Approval of the Bush administration or its foreign policies offers a more plausible non-revenge source of people saying they felt war would satisfy desires to avenge 9/11. Although neither partisanship nor ideology predicts *Avenges* in figure 3, *Approve FP* is a strong predictor (and its presence masks the variation explained by political orientation). Even holding *Approve FP* at its minimum, though, *Avenges* remains significant among those who said “no connection” ( $M = .20$  on a 0–1 scale, 95 percent CI of .11–.29) or just “contact” ( $M = .26$ , 95 percent CI of .18–.34). Moreover, *Avenges* is also not predicted by *Awareness* interactions with partisanship, ideology, or *Approve FP*, the typical tests of cue taking from a polarized elite discourse.<sup>12</sup>

Additional, though fragmentary, data suggests that group-based collective blame contributed significantly to citizens’ feelings that invading Iraq would satisfy desires for revenge. After US Special Forces killed Osama bin Laden in May 2011, we re-contacted the March 2003 survey respondents still remaining on the KN–GfK panel for a new survey (tangentially related findings are reported in Gollwitzer et al. [2014]). A portion of the sample was given a series of questions tapping prejudice against Muslims. Despite being measured eight years later, and thus providing a very noisy estimate of prejudice back in 2003, anti-Muslim prejudice in 2011 was a strong and significant predictor of *Avenges* in both complete-case and MI analyses.<sup>13</sup> Because it is difficult to imagine a mechanism by which retributive satisfaction from invading Iraq would have shaped prejudice against Muslims, vicarious retribution provides a more likely explanation. In other words, many US citizens apparently held the “Muslim world”—including Iraq—collectively responsible for 9/11, arousing desires for collective punishment, even of Muslim actors not deemed directly involved.

#### DID REVENGE MOTIVATE SUPPORT FOR INVADING IRAQ?

If retributive satisfaction reflected a genuine motivation for supporting war, rather than just a side benefit or rationalization, then it should predict war support after controlling for demographics and for political and security reasons for favoring war. Moreover, if mistaken revenge shaped war support, then *Avenges* ought to have mediated the effect of *Involved*. We test these hypotheses using a February 2003 measure of war support, *Iraq War*, that combines PIPA items on whether the United States “should not invade...should only invade Iraq with UN approval and the support of its allies, [or]...should invade

12. See models 5–7 in the online Supplementary Information, section 6.

13. Multiply imputed unstandardized beta, employing variables scaled 0–1,  $b = 0.26$ ,  $p < 0.01$ ; standardized Beta = 0.29. For more details, see the online Supplementary Information, section 11.

Iraq even if we have to go it alone”; on whether war should be employed only “as a last resort after having tried in every way to make the inspection process work,” or “it is necessary to invade Iraq and remove the Iraqi government”; and on invading Iraq despite UN opposition and high expected costs. Although the March 2003 survey included additional war support items, using data collected at a different time than the retributive satisfaction measure limits potential self-justificatory consistency bias.

*Avenges* strongly predicts *Iraq War*, as can be seen from the coefficient plotted in figure 1, from a regression of *Iraq War* on *Avenges*, the Iraq-al-Qaeda connection indicators, and the control variables.<sup>14</sup> Comparison to a baseline model without *Avenges* shows that the *Involved* and *Support* coefficients shrink when controlling for *Avenges*, consistent with *Avenges* partially mediating their effects. A more precise estimate, produced with a path model, finds *Involved*’s indirect effect through *Avenges* to be small but significant ( $b = 0.05$ ,  $p < 0.01$  with bootstrapped standard errors;  $N = 6,334$ ), representing 37 percent of its total effect on *Iraq War*.<sup>15</sup> This result is consistent with a small mistaken revenge effect, although—as with all mediation tests—it might be biased by unobserved covariates and it assumes rather than tests the causal direction among these three variables (Green, Ha, and Bullock 2010).<sup>16</sup>

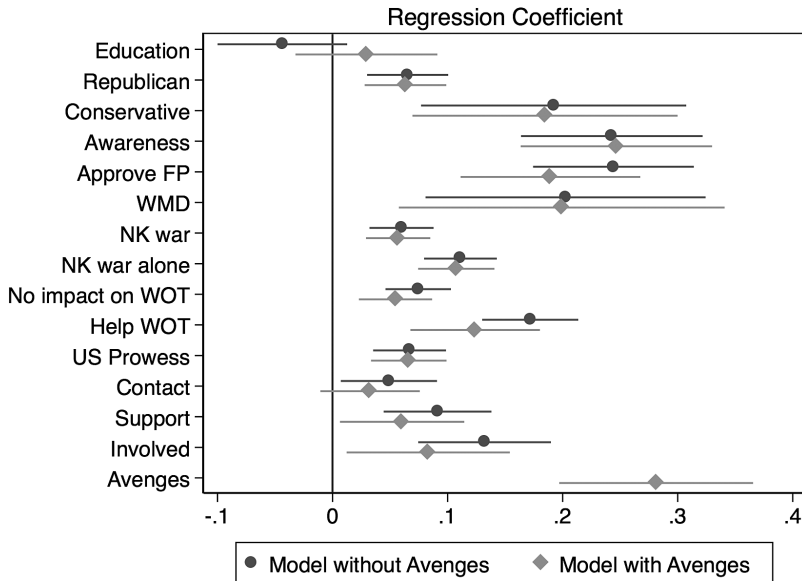
The desires for revenge among many who did *not* blame Iraq for 9/11 were also strong enough to have meaningfully affected war support. The means of *Avenges* for those who said “no connection” and just “contact” are associated with increases in war support of .08–.09 on a 0–1 scale (both differences significant at  $p < .001$ ) over that expressed by citizens who expressed no retributive satisfaction at all, holding the demographic, political, and security controls constant.

These results cannot be explained by security motivations, risk appraisals, or cue-taking from elite discourse. The estimated effect of *Avenges* on war support in figure 5 controls for all the potential confounders mentioned

14. This estimate does not appear to be biased upward by the demographic composition of the surveys’ intersection or by incomplete data on the control variables. The intersection’s only demographic idiosyncrasy that affects the *Avenges*–*Iraq War* association, education, heightens it (see the online Supplementary Information, section 10). Given that the intersection is less highly educated than the February–March dataset and the US population, this idiosyncrasy would have biased our results downward were it not corrected by MI. Confidence in the completed February 2003 control variables is provided by the similarity of their associations with *Iraq War* in the original and MI datasets (compare models 1–2 of the online Supplementary Information section 7). In addition, though somewhat attenuated, *Avenges* remains substantively and statistically significant when dropping the cases with the most missing data (see the online Supplementary Information section 4, models 5–6).

15. Full results provided in the online Supplementary Information section 8.

16. The direct effect of *Involved* remains substantial, perhaps reflecting security motives to neutralize an Iraqi threat, retributive motivation not captured by *Avenges* (due to self-presentation bias or lack of self-awareness), or post-decisional rationalization in claims about Iraqi wrongdoing (Prasad et al. 2009). These alternatives cannot be adjudicated with the present data.



**Figure 5. Predictors of Support for War Against Iraq.** Point estimates and 95 percent confidence intervals of unstandardized, multiply imputed OLS regression coefficients. All variables range 0–1. Based on models 1 and 2 in [appendix section 3](#) ( $N = 6,334$ ), which also control for gender, race, age, income, *Blowback*, and *Casualties*.

earlier, including perceptions of Iraqi WMDs, the invasion's impact on the "war on terrorism," US strength, costs and risks of war, partisanship, ideology, approval of US foreign policy, and political awareness. Moreover, once again, controlling for awareness interactions with partisanship, ideology, and approval of US foreign policy does not alter our main findings.<sup>17</sup>

## Discussion

Retrospectively integrating data from uncoordinated online panel surveys indicates that both mistaken revenge and revenge spillover contributed to US public belligerence toward Iraq. These findings build upon, but go beyond,

17. See the online Supplementary Information section 9, models 1–4. Awareness did heighten war support and the effects of political attitudes on war support, possibly reflecting cue-taking in *Iraq War*. Controlling for *Avenges* diminishes the *Approve FP* and *Help WOT* terms, variables that were also significant predictors of *Avenges* in [figure 3](#). These variables might have influenced war support via *Avenges* or were themselves shaped by *Avenges*. In either case, controlling for *Approve FP* and *Help WOT* could underestimate the effect of *Avenges* (the coefficient of which increases when dropping these variables in model 4 of the online Supplementary Information section 7).



previous studies suggesting that revenge played some sort of role in US public support for the 2003 Iraq War (Lieberman 2006; Skitka et al. 2006; Huddy, Feldman, and Cassese 2007). They also speak to broader theoretical debates about moral motivations for violence (e.g., Fiske and Rai 2014), the revenge motive for war (Lieberman 2006, 2007, 2013, 2014), and instrumental, cost-benefit reasoning about the use of force (e.g., Gelpi, Feaver, and Reifler 2009).

Our analyses control for the Bush administration's most-touted security goals—neutralizing Iraq's WMDs and advancing the “war on terrorism.” Public desires for revenge might have reflected, in part, an intuitive wish to bolster deterrence by showing that the United States “can’t be pushed around,” even if the administration did not publicly endorse this justification for war. But controlling for the belief that invading Iraq would help the “war on terrorism” ought to have attenuated this motive's impact on our results. Moreover, people generally desire message-sending punishments to restore self-esteem and status as much as to deter future offenses (Shnabel and Nadler 2008; Gollwitzer and Denzler 2009; Gollwitzer, Meder, and Schmitt 2011; Funk, McGeer, and Gollwitzer 2014).

Thus, our findings imply that non-instrumental revenge motives contributed to public support for going to war against Iraq. This, in turn, suggests a novel explanation for the post-9/11 rise and decline of public belligerence toward Iraq, illustrated above in figure 1. Anger and desire for revenge likely peaked immediately after the attacks, and then faded over time as anger-arousing reminders and memories diminished and, perhaps, as recognition of Iraq's non-involvement in 9/11 grew.<sup>18</sup>

If stronger in fall 2002 than in spring 2003, popular desire to avenge 9/11 would have had a greater political impact than suggested by data from the later period. The approach of midterm elections made members of Congress particularly sensitive to public preferences when, in October 2002, the Bush administration requested formal congressional authorization for the use of force (Blinder 2007). Thus, quite apart from President Bush's fall 2002 allegations about the Iraqi threat, mistaken revenge and revenge spillover may have loosened further the political constraints on his ability to bring the nation to war against Iraq the following year (generally, see Baum and Potter [2015]; Stein [2015]). In turn, this suggests that other mass-casualty attacks on a powerful nation might again enable its government to attack an uninvolved state.

Our study also illustrates the utility of integrating datasets drawn from the large and growing archives of online survey firms. This method is particularly valuable for research projects requiring a certain combination of variables, in a unique historical context, and measured only by different investigators at different times. However, even when historical context is not a factor, retrospective integration might also prove attractive as simply a more economical

18. The percentage of citizens who said that Iraqi involvement in the attacks was at least “somewhat likely” declined by 7 percent over the year following the attacks (Althaus and Largio 2004).

way to acquire a particular combination of variables than by commissioning an original probability survey.

Not all projects will be as amenable to this approach as ours. The precision of our cross-survey estimates benefited from a relatively large intersection between surveys, which was due in turn to relatively large original sample sizes, surveys being fielded within a short span of time, and a stable respondent panel of tractable size. Since 2003, the KN–GfK panel has grown from 35,000 to 55,000 members, and some online panels (such as YouGov–Polimetrix’s) are so enormous that random samples will yield infinitesimal intersections. However, one might still find ample intersections between surveys that jointly target specialized panel subpopulations, such as those with political profile data, and such datasets will also possess complete profile variables likely to be useful for both imputation and analysis.

More routine depositing of datasets in open-access archives, and including unique panelist serial numbers rather than just the industry-standard survey-specific serial numbers, would facilitate such research in the future. Also helpful would be the further development of statistical techniques and software routines tailored for the analysis of intersecting survey samples, such as methods for integrating three datasets and algorithms to re-weight combined datasets. New tools for correcting non-ignorable attrition biases in panel studies with refreshment samples would also be useful for analyzing intersecting surveys, which have similar—though more extreme—missing-data issues (Si, Reiter, and Hillygus 2015).

## Appendices

### Appendix Section 1. Measures and Question Wording

QUESTION WORDING AND SURVEY ORGANIZATIONS FOR [FIGURE 1](#) (all data from iPoll Databank, Roper Center for Public Opinion Research, University of Connecticut)

*Sending US troops.* Would you favor or oppose sending American troops back to the Persian Gulf in order to remove Saddam Hussein from power in Iraq? (Gallup)

*Military action involving ground troops.* Do you think that the US should or should not use military action involving ground troops to attempt to remove Saddam Hussein from power in Iraq? (Harris/Time/CNN)

*Military action despite substantial US casualties.*

- (1) Would you favor or oppose taking military action to force Saddam Hussein from power if...it would result in substantial US military casualties? (February 1998, Gallup/CNN/USA)

- (2) As part of the US (United States) war on terrorism, would you favor or oppose taking military action in Iraq to end Saddam Hussein's rule, even if it meant that US forces might suffer thousands of casualties? (January and August 2002, Pew Research Center for the People and the Press)
- (3) Do you favor or oppose taking military action against Iraq and Saddam Hussein if it would require a major commitment of American ground forces with a possibility of a significant number of casualties? (April 2002, NBC News/*Wall Street Journal*)

QUESTION WORDING AND MEASURES FOR KNOWLEDGE NETWORKS SURVEYS (all items from February 2003 PIPA survey, unless noted otherwise)

*Avenges, No Connection, Contact, Support, Involved.* Provided in text.

*Iraq War.* An additive scale of three equally weighted variables (complete-case Cronbach's  $\alpha = 0.92$ ; scale combined post-imputation):

- (1) There has been some discussion about whether the US should use its troops to invade Iraq and overthrow the government of Saddam Hussein. Which of the following positions is closest to yours... The US should not invade, the US should only invade Iraq with UN approval and the support of its allies, [or] The US should invade Iraq even if we have to go it alone.
- (2) Which of the following positions is closer to yours... Even if the UN showed too little resolve in dealing with Iraq the past, we can and should insist that it do a better job this time. War should only be used as a last resort after having tried in every way to make the inspection process work, [or] Past experience has shown that with time the UN will lose its resolve in the inspection process, and Iraq will become increasingly uncooperative. Therefore, it is necessary to invade Iraq and remove the Iraqi government.
- (3) [A four-level ordinal variable constructed from three branching questions allowing those favoring invasion in each question to express a still higher level of support in the next:] 1. Do you favor... The UN seeking to disarm Iraq of its weapons of mass destruction through a strengthened inspection process, [or] The UN passing a new resolution authorizing an invasion to overthrow the Iraqi government. 2. If the UN Security Council does not pass a new resolution authorizing the invasion of Iraq, would you then favor... The UN continuing the inspection process [or] The United States and some other countries invading Iraq anyway? 3. What if the cost of invading and occupying Iraq would be hundreds of billions of dollars for the US, would you... Favor continuing the inspection process for the time being, [or] Still favor invading Iraq?

*No Impact WOT, Help WOT.* Indicators based on single item asking: "If the US were to go to war with Iraq, how do you think this would affect America's war on terrorism? Do you think it would...help the war on terrorism, hurt the war on terrorism, or have no significant effect either way?"

*Attack N. Korea, Attack N. Korea alone.* Indicators constructed from the following items: “If US diplomatic and economic efforts do not succeed in stopping North Korea from developing nuclear weapons, should the US move toward taking military action against North Korea?”. If yes, “What if South Korea is strongly opposed to the US moving toward taking military action? Would you still favor moving towards military action or not?”.

*Prowess.* “Do you think the US could or could not successfully fight a war against Iraq and North Korea at the same time?”.

*Blowback.* Pooled responses to two February 2003 PIPA split-sample items with slightly different wording: “If the UN [approves invading Iraq and the US does so together with a number of allies/does not approve and the US and a few allies invade Iraq], what do you think are the chances that there will be a major terrorist attack against the US as a form of revenge? Please answer on a scale of one to one hundred, with 0 meaning no likelihood, 100 meaning that such an attack is certain, and 50 meaning that there is a 50 percent chance of this happening.” Recoded into deciles and rescaled 0–1.

*Casualties.* “About how many American soldiers do you imagine would die in a war with Iraq?” The highly skewed open-ended responses were recoded into deciles before being scaled 0–1; logging the raw data yielded very similar results.

*WMD.* Pooled responses to identical PIPA June and July questions asking: “Please indicate your position on the question of whether, just before the war, Iraq had weapons of mass destruction. Please answer on a scale of 0 to 10 with 0 meaning you are completely certain that Iraq did NOT have weapons of mass destruction, 10 meaning that you are completely certain that Iraq DID have weapons of mass destruction, 5 meaning you are unsure.”

*Approve FP.* An additive scale of six equally weighted 10-level items (complete-case Cronbach’s  $\alpha = 0.92$ ; combined prior to imputation):

- (1) Overall, how well do you think the US government is managing its foreign policy—that is, dealing with international problems and handling relations with other countries around the world? Please answer on a scale of 0 to 10, with 0 being very poorly and 10 being very well.
- (2) How well do you think the US government is dealing with the following international problems and issues? Please answer on a scale of 0 to 10, with 0 being very poorly and 10 being very well...The situation with North Korea? The spread of nuclear weapons?
- (3) How well do you think the US government is handling relations with the following countries? Please answer on a scale of 0 to 10, with 0 being very poorly and 10 being very well...Russia? China? Our European allies?

*Awareness.* An additive scale of equally weighted items; the first six are from the February survey, the remainder from political affairs profile data pre-collected for two-thirds of the March sample (complete-case Cronbach's  $\alpha = 0.59$ ; combined post-imputation).

- (1) "Select from this list of [10] countries the five which are the permanent members of the UN Security Council." [Correct answers minus wrong answers, rescaled 0–1]
- (2) "Does the US have or not have the power to veto any decision of the UN Security Council?" [Yes = 1; No = 0]
- (3) "What is the name of the lead UN weapons inspector in Iraq?" [Response options: Hans Blix = 1; all others—Kofi Annan, Gerhard Schroeder, Javier Solana—or missing = 0]
- (4) "Just based on what you know, is it your impression that the US currently has or does not have troops based in South Korea?" [Yes = 1; No = 0]
- (5) "How closely are you following the news on the situation in Iraq?" [Response options: very closely, somewhat closely, not too closely, not at all, rescaled 0–1]
- (6) "Did you watch or hear any part of Secretary of State Colin Powell's recent speech to the United Nations?" [Yes = 1; No = 0]
- (7) Average of: How often do you... Watch national network news programs such as *NBC Nightly News*, *ABC World News Tonight*, or the *CBS Evening News*?... Watch local news programs on television? [Response options: "Three times a week or more," Every week or almost every week," One to three times a month," "Less than once a month," and "Never," rescaled 0–1]
- (8) "In general, how interested are you in politics and public affairs?" [Four response options from "very interested" to "not at all interested," rescaled 0–1]
- (9) "It is a citizen's duty to keep informed about politics even if it is time-consuming." [Five response options from "strongly agree" to "strongly disagree," rescaled 0–1]

*Republican.* Constructed from items in the KN political profile data included in the March 2003 dataset and PIPA partisanship items. In the KN political profile data, "not strong" Democrat and Republican options are combined into the "strong" partisan categories to provide a five-level item comparable to the PIPA item, which asked, "In politics today, do you think of yourself as strong Democrat, leaning toward Democrat, leaning toward Republican, strong Republican, independent, or other?" For both measures, independents and "other" are coded as a middle category. The responses were then pooled across surveys, using the profile data when available and otherwise the earliest available PIPA measure.

*Conservative.* From KN political profile data: “In general, do you think of yourself as...extremely liberal, liberal, slightly liberal, moderate, slightly conservative, conservative, extremely conservative.”

## Appendix Section 2. OLS Regression Predicting Retributive Satisfaction (*Avenges*)

	Model 1 2/03 ∪ 3/03		Model 2 2/03 ∪ 3/03		Model 3 2/03 ∩ 3/03	
	b	(SE)	b	(SE)	b	(SE)
Female	-0.02	(0.01)*				
Black	-0.00	(0.01)				
Age	0.09	(0.04)*				
Income	-0.10	(0.02)***				
Education	-0.26	(0.03)***				
Awareness	-0.02	(0.05)				
Republican	0.01	(0.02)				
Conservative	0.03	(0.04)				
Approve FP	0.20	(0.07)**				
WMD	0.02	(0.11)				
War against N. Korea						
NK war	0.01	(0.02)				
NK war alone	0.01	(0.02)				
Impact on WOT						
No impact WOT	0.07	(0.02)**				
Help WOT	0.17	(0.05)***				
Blowback	0.01	(0.05)				
Killed	0.03	(0.05)				
US Prowess	0.00	(0.02)				
Iraq-al-Qaeda						
Connection						
Contact	0.06	(0.02)*	0.11	(0.02)***	0.06	(0.02)
Support	0.11	(0.03)**	0.20	(0.03)***	0.13	(0.07)*
Involved	0.17	(0.05)**	0.31	(0.04)***	0.31	(0.07)***
Constant	0.18	(0.06)**	0.22	(0.03)***	0.27	(0.06)***
Model statistics						
Adj. R-sq.	0.27		0.09		0.09	
N	6,334		6,334		363	

NOTE.—Table entries are multiply imputed unstandardized regression coefficients, with two-tailed significance levels indicated by: \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ . All variables range from 0–1. Models 1–2 use the combined, datasets, whereas model 3 analyzes data from only those who responded to both the February and March surveys (imputing only item-nonresponses).

### Appendix Section 3. OLS Regression Predicting Support for the Iraq War

	Model 1 2/03 ∪ 3/03		Model 2 2/03 ∪ 3/03	
	b	(SE)	b	(SE)
Female	-0.05	(0.01)***	-0.05	(0.01)***
Black	-0.08	(0.02)***	-0.08	(0.02)***
Age	-0.16	(0.03)***	-0.19	(0.04)***
Income	0.05	(0.02)*	0.08	(0.02)***
Education	-0.04	(0.03)	0.03	(0.03)
Awareness	0.24	(0.04)***	0.25	(0.04)***
Republican	0.07	(0.02)***	0.06	(0.02)***
Conservative	0.19	(0.06)**	0.18	(0.06)**
Approve FP	0.24	(0.04)***	0.19	(0.04)***
WMD	0.20	(0.06)**	0.20	(0.07)**
War against N. Korea				
NK war	0.06	(0.01)***	0.06	(0.01)***
NK war alone	0.11	(0.02)***	0.11	(0.02)***
Impact on WOT				
No impact on WOT	0.07	(0.01)***	0.05	(0.02)***
Help WOT	0.17	(0.02)***	0.12	(0.03)***
Blowback	-0.02	(0.02)	-0.02	(0.02)
Killed	-0.08	(0.03)**	-0.08	(0.03)**
US Prowess	0.07	(0.02)***	0.07	(0.02)***
Iraq-al-Qaeda connection				
Contact	0.05	(0.02)*	0.03	(0.02)
Support	0.09	(0.02)***	0.06	(0.03)*
Involved	0.13	(0.03)***	0.08	(0.04)*
Avenges			0.28	(0.04)***
Constant	-0.17	(0.05)***	-0.22	(0.05)***
Model statistics				
Adj. <i>R</i> -sq.		0.45		0.52
<i>N</i>		6334		6334

NOTE.—Table entries are multiply imputed unstandardized regression coefficients, with two-tailed significance levels indicated by \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ . All variables range from 0–1.



## Supplementary Data

Supplementary data are freely available at *Public Opinion Quarterly* online.

## References

- ABC News. 2002. *ABC News September 11th Adult Poll, September 2002 (ICPSR 3553)*. Ann Arbor: Inter-University Consortium for Political and Social Research.
- Althaus, Scott L., and Devon M. Lario. 2004. "When Osama Became Saddam: Origins and Consequences of the Change in America's Public Enemy #1." *PS: Political Science & Politics* 37:795–99.
- Andrade, Eduardo B., and Dan Ariely. 2009. "The Enduring Impact of Transient Emotions on Decision Making." *Organizational Behavior and Human Decision Processes* 109:1–8.
- Asparouhov, Tihomir, and Bengt Muthén. 2010. *Bayesian Analysis Using Mplus: Technical Implementation*. Technical Report. Los Angeles: Muthén and Muthén. Accessed at <https://www.statmodel.com/download/Bayes3.pdf>.
- Baum, Matthew A., and Philip B. K. Potter. 2015. *War and Democratic Constraint: How the Public Influences Foreign Policy*. Princeton, NJ: Princeton University Press.
- Berinsky, Adam J. 2009. *In Time of War: Understanding American Public Opinion from World War II to Iraq*. Chicago: University of Chicago Press.
- Biden, Joseph. 2012. "Speech to the Democratic National Convention (Prepared Remarks)." *Washington Post*, September 6.
- Blinder, Scott B. 2007. "Going Public, Going to Baghdad: Presidential Agenda Setting and the Electoral Connection in Congress." In *The Polarized Presidency of George W. Bush*, edited by George C. Edwards III and Desmond S. King. New York: Oxford University Press, 325–50.
- Bushman, Brad J., Angelica M. Bonacci, William C. Pedersen, Eduardo A. Vasquez, and Norman Miller. 2005. "Chewing on It Can Chew You Up: Effects of Rumination on Triggered Displaced Aggression." *Journal of Personality and Social Psychology* 88:969–83.
- Callegaro, Mario, and Charles DiSogra. 2008. "Computing Response Metrics for Online Panels." *Public Opinion Quarterly* 72:1008–32.
- Carlsmith, Kevin M. 2008. "On Justifying Punishment: The Discrepancy between Words and Actions." *Social Justice Research* 21:119–37.
- Carlsmith, Kevin M., and John M. Darley. 2008. "Psychological Aspects of Retributive Justice." *Advances in Experimental Social Psychology* 41:193–236.
- Cikara, Mina. 2015. "Intergroup Schadenfreude: Motivating Participation in Collective Violence." *Current Opinion in Behavioral Sciences* 3:12–17.
- Cottrell, Catherine A., and Steven L. Neuberg. 2005. "Different Emotional Reactions to Different Groups: A Sociofunctional Threat-Based Approach to 'Prejudice.'" *Journal of Personality and Social Psychology* 88:770–89.
- de Quervain, Dominique J.-F., Urs Fischbacher, Valerie Treyer, Melanie Schellhammer, Ulrich Schnyder, Alfred Buck, and Ernst Fehr. 2004. "The Neural Basis of Altruistic Punishment." *Science* 305:1254–58.
- Deng, Yiting, D. Sunshine Hillygus, Jerome P. Reiter, Yajuan Si, and Siyu Zheng. 2013. "Handling Attrition in Longitudinal Studies: The Case for Refreshment Samples." *Statistical Science* 28: 238–56.
- Dennis, J. Michael. 2009. *Description of Within-Panel Survey Sampling Methodology: The Knowledge Networks Approach*. Technical Report, Knowledge Networks. Accessed September 15, 2015, at <http://www.knowledgenetworks.com/ganp/docs/KN-Within-Panel-Survey-Sampling-Methodology.pdf>.
- Denson, Thomas F. 2013. "The Multiple Systems Model of Angry Rumination." *Personality and Social Psychology Review* 17:103–23.
- Everts, Philip, and Pierangelo Isernia. 2005. "The Polls—Trends: The War in Iraq." *Public Opinion Quarterly* 69:264–323.

- Feldman, Stanley, Leonie Huddy, and George E. Marcus. 2015. *Going to War in Iraq: When Citizens and the Press Matter*. Chicago: University of Chicago Press.
- Fiske, Alan Page, and Tage Shakti Rai. 2014. *Virtuous Violence: Hurting and Killing to Create, Sustain, End, and Honor Social Relationships*. New York: Cambridge University Press.
- Funk, Friederike, Victoria McGeer, and Mario Gollwitzer. 2014. "Get the Message: Punishment Is Satisfying If the Transgressor Responds to Its Communicative Intent." *Personality and Social Psychology Bulletin* 40:986–97.
- Gelpi, Christopher, Peter D. Feaver, and Jason Reifler. 2009. *Paying the Human Costs of War: American Public Opinion and Casualties in Military Conflicts*. Princeton, NJ: Princeton University Press.
- Gershkoff, Amy, and Shana Kushner. 2005. "Shaping Public Opinion: The 9/11–Iraq Connection in the Bush Administration's Rhetoric." *Perspectives on Politics* 3:525–37.
- Ginges, Jeremy, Scott Atran, Douglas Medin, and Khalil Shikaki. 2007. "Sacred Bounds on Rational Resolution of Violent Political Conflict." *Proceedings of the National Academy of Sciences* 104:7357–60.
- Gollwitzer, Mario, and Markus Denzler. 2009. "What Makes Revenge Sweet: Seeing the Offender Suffer or Delivering a Message?" *Journal of Experimental Social Psychology* 45:840–44.
- Gollwitzer, Mario, Milena Meder, and Manfred Schmitt. 2011. "What Gives Victims Satisfaction When They Seek Revenge?" *European Journal of Social Psychology* 41:364–74.
- Gollwitzer, Mario, Linda J. Skitka, Daniel Wisneski, Arne Sjöström, Peter Liberman, Syed Javed Nazir, and Brad J. Bushman. 2014. "Vicarious Revenge and the Death of Osama Bin Laden." *Personality and Social Psychology Bulletin* 40:604–16.
- Graham, John W., Allison E. Olchowski, and Tamika D. Gilreath. 2007. "How Many Imputations Are Really Needed? Some Practical Clarifications of Multiple Imputation Theory." *Prevention Science* 8:206–13.
- Green, Donald P., Shang E. Ha, and John G. Bullock. 2010. "Enough Already About 'Black Box' Experiments: Studying Mediation Is More Difficult Than Most Scholars Suppose." *Annals of the American Academy of Political and Social Science* 628:200–208.
- Hays, Ron D., Honghu Liu, and Arie Kapteyn. 2015. "Use of Internet Panels to Conduct Surveys." *Behavior Research Methods* 47:685–90.
- Herrmann, Richard K., Philip E. Tetlock, and Penny S. Visser. 1999. "Mass Public Decisions to Go to War: A Cognitive-Interactionist Framework." *American Political Science Review* 93:553–73.
- Huddy, Leonie, Stanley Feldman, and Erin Cassese. 2007. "On the Distinct Political Effects of Anxiety and Anger." In *The Affect Effect: Dynamics of Emotion in Political Thinking and Behavior*, edited by W. Russell Neuman, George E. Marcus, Ann Crigler, and Michael MacKuen. Chicago: University of Chicago Press, 202–30.
- Jacobson, Gary C. 2007. "The Public, the President, and the War in Iraq." In *The Polarized Presidency of George W. Bush*, edited by George C. Edwards III and Desmond S. King. New York: Oxford University Press, 245–84.
- Kull, Steven, Clay Ramsay, and Evan Lewis. 2003–2004. "Misperceptions, the Media, and the Iraq War." *Political Science Quarterly* 118:569–98.
- Lerner, Jennifer S., Jennifer H. Goldberg, and Philip E. Tetlock. 1998. "Sober Second Thought: The Effects of Accountability, Anger, and Authoritarianism on Attributions of Responsibility." *Personality and Social Psychology Bulletin* 24:563–74.
- Liberman, Peter. 2006. "An Eye for an Eye: Public Support for War against Evildoers." *International Organization* 60:687–722.
- . 2007. "Punitiveness and US Elite Support for the 1991 Persian Gulf War." *Journal of Conflict Resolution* 51:3–32.
- . 2013. "Retributive Support for International Punishment and Torture." *Journal of Conflict Resolution* 57:285–306.
- . 2014. "War and Torture as 'Just Deserts.'" *Public Opinion Quarterly* 78:47–70.

- Lickel, Brian, Norman Miller, Douglas M. Stenstrom, Thomas F. Denson, and Toni Schmader. 2006. "Vicarious Retribution: The Role of Collective Blame in Intergroup Aggression." *Personality and Social Psychology Review* 10:372–90.
- Little, Roderick J. A., and Donald B. Rubin. 2014. *Statistical Analysis with Missing Data*. 2nd ed. Hoboken, NJ: John Wiley & Sons.
- Lodge, Milton, and Charles S. Taber. 2013. *The Rationalizing Voter*. New York: Cambridge University Press.
- Mackie, Diane M., Thierry Devos, and Eliot R. Smith. 2000. "Intergroup Emotions: Explaining Offensive Action Tendencies in an Intergroup Context." *Journal of Personality and Social Psychology* 79:602–16.
- Maitner, Angela T., Diane M. Mackie, and Eliot R. Smith. 2006. "Evidence for the Regulatory Function of Intergroup Emotion: Emotional Consequences of Implemented or Impeded Intergroup Action Tendencies." *Journal of Experimental Social Psychology* 42:720–28.
- Marcus-Newhall, Amy, William C. Pedersen, Mike Carlson, and Norman Miller. 2000. "Displaced Aggression Is Alive and Well: A Meta-Analytic Review." *Journal of Personality and Social Psychology* 78:670–89.
- Nacos, Brigitte L., Yaeli Bloch-Elkon, and Robert Y. Shapiro. 2011. *Selling Fear: Counterterrorism, the Media, and Public Opinion*. Chicago: University of Chicago Press.
- Nadelhoffer, Thomas, Saeideh Heshmati, Deanna Kaplan, and Shaun Nichols. 2013. "Folk Retributivism and the Communication Confound." *Economics and Philosophy* 29:235–61.
- Pedersen, William C., Brad J. Bushman, Eduardo A. Vasquez, and Norman Miller. 2008. "Kicking the (Barking) Dog Effect: The Moderating Role of Target Attributes on Triggered Displaced Aggression." *Personality and Social Psychology Bulletin* 34:1382–95.
- Prasad, Monica, Andrew J. Perrin, Kieran Bezila, Steve G. Hoffman, Kate Kindleberger, Kim Manturuk, and Ashleigh Smith Powers. 2009. "'There Must Be a Reason': Osama, Saddam, and Inferred Justification." *Sociological Inquiry* 79:142–62.
- Rubin, Donald B. 1987. *Multiple Imputation for Nonresponse in Surveys*. New York: J. Wiley and Sons.
- Rucker, Derek D., Mark Polifroni, Philip E. Tetlock, and Amanda L. Scott. 2004. "On the Assignment of Punishment: The Impact of General-Societal Threat and the Moderating Role of Severity." *Personality and Social Psychology Bulletin* 30:273–84.
- Shnabel, Nurit, and Arie Nadler. 2008. "A Needs-Based Model of Reconciliation: Satisfying the Differential Emotional Needs of Victim and Perpetrator as a Key to Promoting Reconciliation." *Journal of Personality and Social Psychology* 94:116–32.
- Si, Yajuan, Jerome P. Reiter, and D. Sunshine Hillygus. 2015. "Semi-Parametric Selection Models for Potentially Non-Ignorable Attrition in Panel Studies with Refreshment Samples." *Political Analysis* 23:92–112.
- Sjöström, Arne, and Mario Gollwitzer. 2015. "Displaced Revenge: Can Revenge Taste 'Sweet' If It Aims at a Different Target?" *Journal of Experimental Social Psychology* 56:191–202.
- Skitka, Linda J., Christopher W. Bauman, Nicholas P. Aramovich, and G. Scott Morgan. 2006. "Confrontational and Preventative Policy Responses to Terrorism: Anger Wants a Fight and Fear Wants 'Them' to Go Away." *Basic and Applied Social Psychology* 28:375–84.
- Stein, Rachel M. 2015. "War and Revenge: Explaining Conflict Initiation by Democracies." *American Political Science Review* 109:556–73.
- Tetlock, Philip E., Penny S. Visser, Ramadhar Singh, Mark Polifroni, Amanda Scott, Beth Elson, Philip Mazzocco, and Phillip Rescober. 2007. "People as Intuitive Prosecutors: The Impact of Social-Control Goals on Attributions of Responsibility." *Journal of Experimental Social Psychology* 43:195–209.
- Vasquez, Eduardo A., Brian Lickel, and Karen Hennigan. 2010. "Gangs, Displaced, and Group-Based Aggression." *Aggression and Violent Behavior* 15:130–40.
- Yeager, David S., Jon A. Krosnick, Linchiat Chang, Harold S. Javitz, Matthew S. Levendusky, Alberto Simpser, and Rui Wang. 2011. "Comparing the Accuracy of RDD Telephone Surveys and Internet Surveys Conducted with Probability and Non-Probability Samples." *Public Opinion Quarterly* 75:1–39.