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*Journal of Conflict Resolution* published online 27 June 2013
DOI: 10.1177/0022002713492638

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What is This?
Reassessing American Casualty Sensitivity: The Mediating Influence of Inequality

Douglas L. Kriner¹ and Francis X. Shen²

Abstract

Scholars have long conceptualized public support for war as the product of a cost–benefit calculation in which combat casualties factor significantly. This article argues that, when calculating the human costs of conflict, Americans care about more than just the number of war dead; they also care about the distribution of those casualties across society. Using two original survey experiments, we show that inequalities in sacrifice affect Americans’ casualty sensitivity. We find strong evidence that learning about socioeconomic inequalities in casualties in previous wars decreases Americans’ casualty tolerance toward future military endeavors. These effects are stronger for some mission types, particularly non-humanitarian interventions, than others. The effects are also concentrated among Americans from states that suffered high casualty rates in the Iraq War. Our results suggest that raising public awareness of inequalities in wartime sacrifice could significantly strengthen popular constraints on policy makers contemplating military solutions to future crises.

Keywords

war casualties, casualty sensitivity, public opinion, inequality

The willingness of democratic publics to support costly military endeavors has been a central concern of political science scholarship for more than two millennia.

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Perhaps the most memorable passage of Thucydides’ *Peloponnesian War* recounts Pericles’ funeral oration, in which the great Athenian general and statesman seeks to rally the citizens of Athens behind the war effort in the face of mounting human costs. The foundation of Immanuel Kant’s theory of perpetual peace rests upon the belief that democratic citizens, who must bear the brunt of war most directly, would be reluctant to back costly wars except in the most exigent of circumstances. And in contemporary scholarship, the increased threat that democratic leaders face of removal from office via the ballot box should they pursue overly costly military policies is an oft-emphasized mechanism driving observed differences in the conflict behavior of democratic and nondemocratic states (inter alia Russett 1990; Morgan and Campbell 1991; Bueno de Mesquita and Lalman 1992; Maoz and Russett 1993; Ray 1995; Reiter and Stam 1998; Bueno de Mesquita et al. 2003).

Clearly, there is great interest from academics and policy makers alike in answering the question, Under what circumstances will democratic citizens be willing to support military action, even when it exacts a heavy toll in blood? Gelpi, Feaver, and Reifler (2009) have found that Americans will support even costly armed conflicts provided that they believe success is attainable. Boettcher and Cobb (2006, 2009) have further shown that Americans are also sensitive to how casualties are framed. Building on these foundations, we argue that Americans also consider a war’s broader social consequences when deciding whether or not to support it. Specifically, through a pair of original survey experiments, we show that Americans are less willing to accept casualties in future military endeavors when informed that the costs of war fall disproportionately on the shoulders of a disadvantaged few.

When modeling public support for war, most analyses either explicitly or implicitly employ a cost–benefit framework (inter alia Page, Shapiro, and Dempsey 1987; Gartner and Segura 1998; Gelpi, Feaver, and Reifler 2009). Americans assess the anticipated benefits of using force or continuing an ongoing military action in pursuit of a particular policy goal, weigh these against the tangible and expected future costs of doing so, and support military action as long as the benefits outweigh the costs. Although the costs of war are undoubtedly multifaceted, most scholarship has emphasized the critical importance of casualties in such calculations. Particularly in the smaller scale conflicts waged since World War II, casualties have been the primary way in which most Americans see a war’s costs (Aldrich et al. 2006; Gartner 2008).

To be sure, in the four decades since Mueller’s (1970, 1973) seminal work, the almost mechanistic view of early studies asserting a steady, monotonic decline in public support for war in response to mounting combat deaths has been replaced by a much richer understanding of this critically important relationship. Recent scholarship analyzing a wealth of aggregate- and individual-level survey data has argued that the effects of casualties on public support for war are contingent on the reactions of political elites (Brody 1991; Zaller 1992; Zaller and Chiu 1996; Berinsky 2007, 2009; Howell and Pevehouse 2007; Kriner 2010), casualty rates and framing (Gartner and Segura 1998; Boettcher and Cobb 2006, 2009), the nature of the military mission (Jentleson 1992; Jentleson and Britton 1998; Feaver and...
Gelpi 2004), levels of multilateral support (Kull and Destler 1999; Kull and Ramsay 2001), the types of images used to portray casualties in the mass media (Gartner 2011), and the mission’s ultimate prospects for success (Larson 1996; Eichenberg 2005; Larson and Savych 2005; Gelpi, Feaver, and Reifler 2005/2006, 2009).

However, virtually all of these studies have measured the human costs of war in the same way as the number of war dead in a given period. Undoubtedly, casualty counts receive prominent coverage in the mass media and thus are one of the most readily available metrics that citizens use to assess war costs. Yet, the number of casualties is not the only aspect of war that citizens may care about. Americans may also incorporate information about the distribution of these casualties, both geographically and socially, into their decision calculus. In this study, we break new theoretical ground by reformulating the standard cost–benefit calculation. Our new model examines whether information about the distribution of combat casualties—specifically whether or not they are concentrated disproportionately in socioeconomically disadvantaged communities—influences Americans’ willingness to accept casualties in future military missions.

Our inquiry has significant theoretical and practical implications. First, by investigating the extent to and conditions under which information about casualty inequalities affects Americans’ casualty sensitivity, we make important contributions to theoretical understandings of how democratic citizens assess the human costs of war and incorporate those assessments into their policy judgments. More practically, our findings suggest that if Americans were more aware of the significant socioeconomic inequalities in military sacrifice sustained in recent wars, they may be less willing to accept casualties in a range of future military endeavors. This, in turn, could more tightly constrain risk-averse American policy makers’ freedom of action when considering military responses to foreign crises.

What Scholars and Citizens Know about Casualty Inequality

While the vast majority of wartime opinion studies focus on casualties in the aggregate, in a paradigm shift, Gartner, Segura, and Wilkening (1997) revealed how the uneven distribution of casualties across the United States affects the lens through which different citizens view a war and its costs. In earlier work, we showed how simple aggregate figures mask considerable geographic variation in casualty rates. For example, in the Vietnam War, counties at the 75th percentile of the casualty distribution suffered casualty rates that were more than twice as high as those suffered by counties at the 25th percentile. In the Iraq War, which produced considerably smaller fatal casualty totals, the disparities between high and low casualty communities are just as, if not even more stark (Kriner and Shen 2010).

These differing levels of exposure to a war’s human costs can significantly affect public support for war. Gartner, Segura, and Wilkening (1997) found that, during the Vietnam era, Californians from high casualty counties were less supportive of President Lyndon B. Johnson than were residents of low casualty counties with similar
demographic characteristics. Subsequent scholars have found similar patterns in later wars (Hayes and Myers 2009; Kriner and Shen 2010; Althaus, Bramlet, and Gimpel 2011). Moreover, a related branch of literature has examined the influence of this uneven distribution of war casualties across the country on candidate positioning and voting behavior in multiple conflicts (Carson et al. 2001; Gartner, Segura, and Barratt 2004; Karol and Miguel 2007; Kriner and Shen 2007; Grose and Oppenheimer 2007; Gartner and Segura 2008).

However, the existing political science literature has paid comparatively less attention to the nature of this uneven distribution of war deaths. At least since World War II, scholars in economics, sociology, and related disciplines have examined the socioeconomic background of those who have given their lives in America’s wars. Although some debate remains, a consensus is emerging that, beginning in the Korean War, American casualties have come disproportionately from counties and places at the bottom of the socioeconomic ladder—that is, with low median incomes and levels of educational attainment as measured by the US census (e.g., Mayer and Hoult 1955; Zeitlin, Lutterman, and Russell 1973; Foust and Botts 1991; Kriner and Shen 2010; though see Barnett, Stanley, and Shore 1992). For example, to examine the nature of this inequality, Kriner and Shen (2010, 29–30) matched the hometowns of all Iraq War casualties from 2003 through 2008 with place-level census data. For this period, they found that communities in the bottom three deciles of median family income sustained 38 percent of the nation’s casualties. By contrast, communities in the highest three income deciles accounted for only 23 percent of Iraq War casualties.

Extending this approach to even more recent data, we obtained Department of Defense records on the hometowns of all service members who died in Afghanistan as of July 4, 2011, and matched this information to the corresponding place-level census data. As in Iraq, there is strong evidence of significant inequalities in the distribution of casualties along socioeconomic lines. In figures almost identical to those for the Iraq War, we found that 36 percent of Afghan War casualties hailed from communities in the lowest three income deciles; by contrast, communities in the top three income deciles had suffered only 23 percent of the total casualty burden. Thus, the data suggest that communities at the bottom rungs of the socioeconomic ladder have suffered casualty rates that are, on average, approximately 50 percent higher than those sustained by communities with higher median incomes and levels of educational attainment.

While the empirical evidence for significant socioeconomic inequalities in military sacrifice is unambiguous, the extent to which citizens are aware of this inequality is less clear. One reason many in the mass public may not know about casualty inequality is simply that the issue receives only sporadic attention in the media. Claims about inequality occasionally appear in op-eds or in documentary jeremiads, such as the discussion of military recruiting patterns in Michael Moore’s Fahrenheit 9/11, but systematic treatments of inequality in the recent wars are rare.

Recognizing the possibility that there is a gap between expert and lay knowledge of casualty inequalities, we endeavored to directly measure public knowledge of the distribution of military sacrifice. In May 2011, we fielded the following question on
a poll conducted by Opinion Research Corporation with a nationally representative random-digit dialing (RDD) sample of 1,009 Americans: “In thinking about the American soldiers who have died fighting in Iraq and Afghanistan, what parts of the United States do you think they are coming from?” Respondents were then asked to pick from the following options: (1) “More casualties are coming from poor, less educated parts of the country”; (2) “More casualties are coming from rich, more educated parts of the country”; and (3) “There is not a significant difference in the share of casualties coming from rich/more educated and poor/less educated parts of the country.”

A plurality of respondents, 45 percent, correctly answered that socioeconomically disadvantaged communities have borne a disproportionate share of the nation’s casualties, and only 3 percent replied that wealthier and more educated communities were paying more than their fair share. However, 44 percent of respondents answered that they believed there was no difference in sacrifice between rich and poor communities, and 8 percent volunteered that they did not know whether inequality existed.

This widespread belief in shared sacrifice is at odds with the facts of inequality in American war deaths. Coupled with the significant share of the public that expressed ignorance concerning whether inequality exists, this misconception raises an important and intriguing question: If Americans were informed about the empirical facts, would they change their opinions and policy preferences?

Inequality and Americans’ Casualty Sensitivity

The public’s willingness to accept casualties factors heavily into policy makers’ calculations of how to respond to an opportunity to use force abroad. The higher the expected casualty sensitivity of the public, the less willing the policy makers will be to use force and, should they choose a military response, the more constrained they will be in its scale, scope, and execution.

In the wake of the Vietnam War, many analysts suggested that the costly and inconclusive conflict in Southeast Asia had sapped the American public’s will to accept significant casualties in the future. Policy makers—civilian and military alike—began to speak of a reflexively casualty phobic public (e.g., Klarevas 2002; Luttwak 1994; Mueller 2002) and argued that the best way to insure public support for military action was to limit, or even to attempt to eliminate altogether, American combat casualties. In 1999, General Hugh Shelton succinctly captured this policy of casualty minimization when he said that any proposed military action would have to meet “the Dover test”—that is, policy makers must be sure that the American public is willing to accept the images of fallen American soldiers returning to Dover Air Force Base after making the final sacrifice. Given the presumed unwillingness of most Americans to stomach casualties in all but the most extreme cases, the Dover test was perceived to place significant restraints on foreign policy makers.

Over the past decade, scholars have challenged this view of an instinctively and irrevocably casualty intolerant American public (e.g., Kull and Destler 1999; Kull
and Ramsay 2001). This recent scholarship has emphasized that it is the mediating influence of a variety of factors, from elite response to media framing to beliefs about a mission’s prospects for success, that determines whether or not casualties dampen war support (Gelpi, Feaver, and Reifler 2005/2006; Boettcher and Cobb 2006, 2009). In addition to analysis of observational data from past conflicts, several recent studies have used survey experimental methods to assess more directly Americans’ willingness to sustain varying levels of casualties in a range of hypothetical military missions. This research has highlighted important differences in levels of casualty sensitivity among military elites, civilian leaders, and the general public (Feaver and Gelpi 2004), as well as the importance of what Jentleson (1992) termed the “principal policy objective” (PPO) of a military mission. Whereas most Americans are willing to tolerate relatively few casualties on military missions only loosely tied to the national interest, when core national security interests are involved, Americans are willing, on average, to accept considerable numbers of casualties in order to achieve vital national goals (Feaver and Gelpi 2004; Gelpi, Feaver, and Reifler 2009).

Thus, it seems that casualty sensitivity depends on the perceived benefits of a military action. Missions such as defending key American allies or combating terrorism are seen as yielding greater direct benefits to the United States than a humanitarian mission or an intervention into the domestic affairs of another nation. As a result, Americans are more willing to pay a higher cost in blood in the former types of conflicts than in the latter.

Here, we shift focus to analyze how Americans assess the multifaceted costs of war. Boettcher and Cobb (2006, 2009) have demonstrated that Americans’ cost calculations are based, in part, on how casualties are framed. Americans are more willing to conclude that the benefits of continuing a war outweigh the costs of doing so if US casualties are presented alongside much higher enemy casualty figures and if strategic politicians employ an “investment frame” emphasizing the importance of not allowing the fallen to have died in vain (see also Nincic and Nincic 1995). Here, we argue that Americans consider not only the number of casualties a military mission will entail but also the distribution of those casualties across the country. We hypothesize that if Americans are informed that US battle deaths are borne by soldiers from socio-economically disadvantaged communities, their aversion to war will increase significantly.

There are strong reasons to think that many Americans may view inequality as a distinct and salient cost of war. The inequalities in sacrifice that have emerged in our nation’s last four major wars violate long-held American norms of shared military sacrifice, and the concentration of battle deaths among segments of society with systematically lower levels of opportunity challenge important components of what scholars have called “the American creed” (e.g., Lipset 1996). Scholars have long noted Americans’ somewhat puzzling willingness to accept considerable inequality among individuals in the economic domain (e.g., Glazer 2003; Bartels 2010). However, with respect to political domains, most Americans continue to embrace a
A stricter norm of egalitarianism (e.g., Hochschild 1981; McClosky and Zaller 1984; Verba and Orren 1985). Concentrating military sacrifice systematically in one segment of society violates such norms. As a result, encouraging Americans to think about the likely distribution of future casualties may influence their willingness to tolerate significant numbers of casualties in future military endeavors.

However, inequalities in military sacrifice may not affect public opinion equally in all circumstances. Two mediating factors in particular merit note. First, information about casualty inequalities may affect Americans’ casualty sensitivity to different degrees depending on the precise nature of the proposed military mission. Jentleson (1992) and Jentleson and Britton (1998) categorize American uses of force into three PPOs: “internal policy change,” in which the United States seeks to impose some form of policy change on the internal affairs of another country; “foreign policy restraint,” in which the United States seeks to alter the behavior of another state that threatens American security interests or those of its allies; and “humanitarian intervention,” in which the United States uses force to alleviate human suffering abroad. Based on previous research (Feaver and Gelpi 2004; Gelpi, Feaver, and Reifler 2009), we expect different base levels of casualty sensitivity for missions in each of these categories, with Americans being significantly more willing to tolerate substantial numbers of casualties for a military mission whose goal is foreign policy restraint. Similarly, the influence of past casualty inequalities on future casualty sensitivity may also vary according to the nature of the policy goals being pursued. Two possibilities suggest themselves. On one hand, the inequality cue may significantly influence Americans’ cost–benefit calculations and the level of casualty sensitivity when vital American national interests are not involved, but have less influence when a military mission is firmly rooted in the national interest. Alternatively, humanitarian missions may involve different cost–benefit calculations. Citizens willing to tolerate substantial numbers of American casualties to ameliorate human suffering abroad may be less influenced by the domestic inequality consequences of those casualties than when asked to evaluate the trade-off in the context of other, less emotionally charged goals, such as stabilizing a democratic government.6

A second potential mediating factor is the lens through which individual Americans viewed the Iraq War, which was still ongoing at the time of our survey experiments. Variations in exposure to the war and its human costs may influence how citizens respond to information about casualty inequality. Americans from parts of the country that suffered high casualty rates in Iraq may be more responsive to information about casualty inequalities and more likely to update their casualty sensitivity accordingly than Americans more insulated from the costs of war in their local communities.

Thus, we test three hypotheses in the survey experiments that follow. First, we posit that Americans will become increasingly unwilling to accept large numbers of casualties to achieve future policy goals if informed that past wars have resulted in socioeconomic inequality in military sacrifice. Second, we hypothesize that the
nature of this effect is conditional on the type of military policy objectives being pursued in a future use of force, though we have competing expectations for when these effects should be weakest. Finally, we hypothesize that individuals from parts of the country that suffered disproportionately high casualty rates in the Iraq War will be more influenced by information about casualty inequalities than respondents from other parts of the country.

We test these hypotheses with a pair of survey experiments. The first uses a nationally representative sample of Americans to examine the influence of information about inequality in military sacrifice on a range of military missions. We then follow up with a second experiment, employing a different measure of casualty sensitivity, using treatments that incorporate graphical evidence of inequality and presenting a scenario that involves a larger scale military mission. These extensions provide an important robustness check on the results of the first experiment.

**Experimental Evidence: Inequality and Casualty Sensitivity**

To assess the influence of information concerning casualty inequalities on Americans’ casualty sensitivity, we embedded a survey experiment with a basic structure modeled on those conducted by Feaver and Gelpi (2004) in an Opinion Research Corporation CARAVAN omnibus poll administered in March 2009. CARAVAN is a twice-weekly telephone survey that employs a RDD methodology to ensure a nationally representative sample of adult Americans. All of the respondents received the following information: “When American troops are sent overseas, there are almost always casualties. For instance, roughly 36,000 Americans were killed in Korea, 58,000 in Vietnam, and over 4,000 in Iraq.” Subjects were then randomly assigned to one of the three experimental groups. Those assigned to the control group received no further information and were then asked this question: “In your opinion, what would be the highest number of American deaths that would be acceptable to achieve the following goals?”

After hearing the same prompt with the casualty tallies in Korea, Vietnam, and Iraq, the second group of subjects received the “inequality” treatment which told them that “Many of these casualties have been from poor communities. In fact, in each of these wars America’s poor communities have suffered significantly higher casualty rates than America’s rich communities.” This directly accords with the empirical data, discussed earlier in the article, documenting significant socioeconomic inequalities in sacrifice in each of these conflicts. They were then asked, “Knowing that poor communities will likely bear a greater share of the war burden, in your opinion what would be the highest number of American deaths that would be acceptable to achieve the following goals?”

Finally, subjects in the third group received the “shared sacrificed” treatment, which told them that, “This sacrifice has been shared by rich and poor communities all across America.” They were then asked, “Knowing that all communities will likely share in the war burden, in your opinion what would be the highest number
of American deaths that would be acceptable to achieve the following goals?” Because the actual data on the distribution of casualties do not suggest equality of sacrifice, the construction of the shared sacrifice treatment necessarily involved a selective presentation of the facts. We endeavored to communicate shared sacrifice in a manner that, while not specifying the actual distribution, was also not entirely at odds with reality. Thus, rather than tell subjects that the sacrifice has been shared equally, the treatment simply says that the sacrifice has been “shared.” This is consistent with the factual observation that communities at all rungs of the socioeconomic ladder have experienced at least some casualties; it omits the observation that, in recent wars, those at the bottom of the socioeconomic spectrum have suffered greater battlefield losses than those at the top.

Respondents in all three groups were then presented with four hypothetical military missions for which they were asked to provide a number of acceptable casualties. The first mission aimed to stabilize a democratic government in Liberia; the second, to stop attacks on refugees in Darfur; the third, to halt Iran’s nuclear program; and the fourth, to kill or capture Al Qaeda operatives in Somalia. The first three hypothetical scenarios were designed to represent Jentleson’s three major types of PPOs. The Iran scenario was designed to capture a mission goal of “foreign policy restraint” in which the American action is designed to defend the United States’ direct security interests and those of its allies. The Liberia scenario was most closely aligned with Jentleson’s “internal policy change” objective and is consistent with what Feaver and Gelpi label an “interventionist” military mission. The Darfur scenario allows us to examine the effect of casualty inequality cues on casualty sensitivity for a humanitarian mission (e.g., Jentleson and Britton 1998). Finally, the Al Qaeda in Somalia scenario allows us to investigate whether the dynamics change when the mission is explicitly connected to the war on terror.

By comparing levels of casualty sensitivity across the three treatment groups and four mission types, we can examine the influence of information concerning the distribution of casualties on Americans’ casualty sensitivity and whether this influence varies with the objective of the hypothetical military mission.

As might be expected, respondents’ answers to the casualty sensitivity questions were not normally distributed. In each of our modules, we observed very high standard deviations in the number of acceptable casualties. A handful of outlying values accounted for much of this observed variance. For example, in the Al Qaeda in Somalia scenario, 75 percent of our sample replied that they would accept 2,000 or fewer casualties to achieve the stated policy objective. However, thirty-four respondents in our sample (fewer than 5 percent) reported a willingness to accept 100,000 or more casualties in such a scenario. Simply comparing means across the treatments would be quite sensitive to these outliers. To ensure that the outlying values did not skew our results, we divided responses into three categories: (1) subjects who would accept between 0 and 50 casualties to achieve a mission’s goals, (2) subjects who would accept between 51 and 5,000 casualties, and finally (3) subjects who would accept more than 5,000 casualties. The first category represents a very
high degree of casualty sensitivity. Missions as diverse as the First Persian Gulf War and the deployment of American Marines to Beirut in the 1980s exceeded this casualty threshold. Such a high level of casualty sensitivity could seriously hamstring the flexibility of an administration contemplating a military response to an international crisis. By contrast, the third category represents a low degree of casualty sensitivity. Respondents in this group were willing to suffer even more casualties than what the United States suffered in the Iraq War to achieve the given policy goal.

Table 1 presents the percentages of respondents in the three casualty sensitivity categories for each of the four scenarios in each treatment group. Because respondents were randomly assigned to the treatment and control groups, the differences in means are unbiased. To ensure that the randomization worked, we compared the background characteristics of subjects assigned to each of the three conditions. We found no evidence of systematic demographic differences across the baseline and treatment conditions.

In 2009, even after six years of war in Iraq and eight in Afghanistan, the American public was not uniformly casualty phobic; rather, levels of casualty sensitivity varied significantly across mission types and experimental treatments. Consistent with our main hypothesis, in three of the four hypothetical military scenarios, we found that even modest cues about inequalities in sacrifice significantly influenced
Americans’ casualty sensitivity. Beginning with the scenario of stabilizing a democratic government in Liberia, 40 percent of respondents were willing to accept fifty or fewer casualties to achieve this goal in the control group. This percentage increased to 50 percent among respondents informed about socioeconomic inequalities in casualties sustained in previous wars.

Moreover, the effect of the inequality cue on casualty sensitivity was not limited to the Liberia scenario, which involved an “internal policy change” PPO. Rather, even in the two “foreign policy restraint” scenarios—Iran and Al Qaeda in Somalia—we continued to see evidence for the influence of the inequality cue. Whereas only 29 percent of respondents were in the high casualty sensitivity category in the control baselines in the Iran weapons of mass destruction scenario, this figure increased to 37 percent among the respondents in the inequality treatment. Similarly, in the Al Qaeda in Somalia scenario, the relevant figures were 22 percent in the control group and 33 percent in the inequality treatment.

The shared sacrifice treatment, by contrast, had no significant effect on casualty sensitivity. In none of the cases was the relevant percentage in this treatment group statistically different from that in the control group. Finally, while the inequality cue substantially increased the percentage of respondents in the high casualty sensitivity group versus the control group baseline in three of the four hypothetical scenarios, it had relatively less influence on the percentage of respondents in the low casualty sensitivity group—that is, those respondents willing to accept more than 5,000 casualties to achieve the stated policy goal. In both the Liberia and the Iran missions, the percentages in the low casualty sensitivity category were statistically indistinguishable across the control and two treatment groups. However, for the Al Qaeda in Somalia scenario, the percentage of respondents in this low sensitivity category was significantly lower in the inequality treatment than in either the control or shared sacrifice treatment group.

Finally, we note that the varying levels of casualty tolerance across mission types were consistent with expectations from prior research. In the control group column, we observed the greatest percentage of respondents (40 percent) in the high casualty sensitivity category (0 to 50 casualties) in the Liberia scenario—an intervention into the internal affairs of another nation—and the greatest percentage (22 percent) in the low casualty sensitivity category (more than 5,000 casualties) in the mission to combat an Al Qaeda threat in Somalia.

As a robustness check on the differences in means presented in Table 1, we also estimated a series of ordered probit models using the three-point scale dependent variable described previously (0–50 casualties, 51–5,000 casualties, and more than 5,000 casualties). These models both afford more efficient estimates of each treatment’s effect on casualty sensitivity and also allow us to control for a number of demographic variables including each subject’s partisanship, gender, educational attainment, income, race, age, and marital status.

The results presented in Table 2 are virtually identical to those observed in the difference in means analysis. In both the Liberia and the Al Qaeda in Somalia
models, the coefficient for the inequality treatment variable was negative and statistically significant. The relevant coefficient in the Iran scenario model failed to reach conventional levels of statistical significance; however, the difference between the inequality and shared sacrifice treatment variables was statistically significant, \( p < .05 \). Finally, first differences obtained from simulations yield estimated effect sizes similar to those observed in Table 2. For example, in the Iran model, the probability of the median independent respondent in the shared sacrifice group being in the high casualty sensitivity category (zero to fifty casualties) was .34. In the inequality treatment group, by contrast, this probability increased to .46.

Thus, in both “internal policy change” and “foreign policy restraint” PPO mission types, we found evidence that Americans informed about past inequalities in sacrifice were less willing to accept more than a small number of casualties in a future military endeavor than were their peers not informed about such inequalities.

Table 2. Ordered Probit Analysis of Casualty Sensitivity.

<table>
<thead>
<tr>
<th></th>
<th>Liberia</th>
<th>Darfur</th>
<th>Iran</th>
<th>Al Qaeda</th>
</tr>
</thead>
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<td>(-0.337^{***})</td>
<td>(-0.014)</td>
<td>(-0.185)</td>
<td>(-0.402^{**})</td>
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<td></td>
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<td>(0.161)</td>
<td>(0.155)</td>
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</tr>
<tr>
<td>Latino</td>
<td>0.202</td>
<td>0.144</td>
<td>0.077</td>
<td>0.023</td>
</tr>
<tr>
<td></td>
<td>(0.258)</td>
<td>(0.262)</td>
<td>(0.254)</td>
<td>(0.183)</td>
</tr>
<tr>
<td>Age</td>
<td>(-0.079^{***})</td>
<td>(-0.038^{*})</td>
<td>(-0.039^{**})</td>
<td>(-0.050^{**})</td>
</tr>
<tr>
<td></td>
<td>(0.021)</td>
<td>(0.020)</td>
<td>(0.019)</td>
<td>(0.021)</td>
</tr>
<tr>
<td>Married</td>
<td>(-0.335^{**})</td>
<td>(-0.168)</td>
<td>(-0.395^{***})</td>
<td>(-0.079)</td>
</tr>
<tr>
<td></td>
<td>(0.153)</td>
<td>(0.150)</td>
<td>(0.145)</td>
<td>(0.151)</td>
</tr>
<tr>
<td>Observations</td>
<td>537</td>
<td>518</td>
<td>515</td>
<td>532</td>
</tr>
</tbody>
</table>

Note: Dependent variable is a three-point ordinal scale measuring respondents’ self-reported casualty tolerance in each mission (0–50 casualties, 51–5,000 casualties, and more than 5,000 casualties). Robust standard errors in parentheses. All significance tests are two-tailed.

\* \( p < .10 \). \^{**} \( p < .05 \). \^{***} \( p < .01 \).
Inequality concerns run deep, affecting casualty sensitivity toward both “wars of choice”—that is, military missions endeavoring to affect change in a foreign country—and “wars of necessity” that are firmly grounded in the national interest. However, information about casualty inequality did not affect casualty sensitivity equally in all scenarios; rather, in the humanitarian mission to stop attacks on refugees in Darfur, we saw no evidence of any statistically significant differences in levels of casualty sensitivity across the control and treatment groups. Table 2 shows that roughly a third of Americans would accept fewer than fifty casualties to protect refugees in Darfur regardless of the inequality cue received; similarly, the percentage of respondents in the low casualty sensitivity category willing to accept more than 5,000 casualties to achieve this aim ranged between 12 percent and 14 percent across the three treatment groups. Finally, in the multivariate analyses, the coefficients for both treatments were substantively small and statistically insignificant. The divergence between Darfur and the other three scenarios suggests that the influence of inequality concerns on Americans’ casualty sensitivity is at least partially contingent on the nature of the policy goal being pursued. And while we can only speculate from the limited data available, this result is consistent with the conjecture that the nature of Americans’ cost–benefit calculations is different when a mission’s primary objective is humanitarian.

The Mediating Influence of Local Iraq War Casualties

The preceding results strongly suggest that Americans react negatively to inequality in war sacrifice; however, the influence of inequality concerns on casualty sensitivity may be conditional on a mission’s policy objective, as we found little evidence that inequality cues influenced subjects’ willingness to bear casualties for a humanitarian intervention. We now turn to our third hypothesis, that individuals from parts of the country that had suffered high casualty rates in Iraq might have been more receptive to the casualty inequality cue than respondents from low casualty parts of the country.

Our CARAVAN survey contained information on each respondent’s home state of residence. Even at the state level, there was considerable variance in Iraq casualty rates across the country. For example, seven states as of 2009 had suffered casualty rates of fewer than twelve dead per million residents, whereas five states had suffered casualty rates more than double that benchmark. This variation in state casualty rates is presented graphically in Figure 1. Dark states on the map suffered disproportionately high casualty rates, while states with light shading suffered disproportionately low casualty rates.

To examine whether the casualty inequality treatment had its greatest impact on the preferences of subjects from high casualty states, we divided our survey sample into two groups: respondents from states in the top half of the state casualty rate distribution and respondents from states in the bottom half of this distribution. We then estimated an ordered probit model using the three-point-scale dependent
variable (0–50 casualties, 51–5,000 casualties, and more than 5,000 casualties). This model included dummy variables for the two experimental treatments, a dummy variable identifying whether or not each subject resided in a high casualty state, the interaction of that variable with the inequality treatment and a range of demographic controls to account for each respondent’s partisanship, gender, educational attainment, race, age, and marital status. Results are presented in Table 3.

Consistent with our hypothesis, we found that the effects of the casualty inequality treatments were strongest among residents of communities that had experienced the highest casualty rates in the Iraq War. In all four hypothetical military scenarios—even in the Darfur model, which previously yielded null results—we observed a negative and statistically significant coefficient for the inequality–high casualty state interaction variable. Indeed, the results from this additional analysis suggest that the negative effect of the inequality treatment on casualty tolerance is confined entirely to the half of our sample that lived in states that had suffered higher than average casualty rates in Iraq.

To illustrate the substantive size of each variable’s influence on the probability of a respondent exhibiting the highest level of casualty sensitivity (zero to fifty casualties), Figure 2 presents a series of first differences generated using simulations from the Al Qaeda in Somalia model. The horizontal line at .20 represents the baseline probability for the median independent respondent from a high casualty state being in the high casualty sensitivity category. Each dot on the plot estimates the predicted probability for a respondent being in this category if that variable is increased from 0 to 1, or, in the case of age, from its median value to one standard deviation above the median. Error bars represent 95 percent confidence intervals around the point estimates. As shown in Figure 2, learning of casualty inequalities in Iraq and Afghanistan more than doubled the predicted probability of a respondent from a high casualty state expressing the highest level of casualty sensitivity. Additional simulations reveal almost

Figure 1. Iraq casualty rates by state, March 2009.
identically sized effects for the inequality–high casualty state interaction in the Liberia and Iran models.

The negative effect for the inequality cue among high casualty state residents in the Darfur scenario is perhaps somewhat surprising, given the lack of any evidence of a relationship between the inequality cue and casualty sensitivity in the model in Table 2. However, simulations do reveal that the negative effect in the Darfur model was significantly smaller—roughly half as strong—as the effects for casualty inequality in the other scenarios. For the median independent respondent in a high casualty state, simulations reveal that receiving the casualty inequality cue increased the predicted probability of being in the highest casualty sensitivity category from .32 to .42.

Table 3. The Influence of Inequality on Casualty Sensitivity among Residents of High casualty States.

<table>
<thead>
<tr>
<th></th>
<th>Liberia</th>
<th>Darfur</th>
<th>Iran</th>
<th>Al Qaeda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inequality</td>
<td>0.059</td>
<td>0.272</td>
<td>0.217</td>
<td>0.006</td>
</tr>
<tr>
<td></td>
<td>(0.214)</td>
<td>(0.198)</td>
<td>(0.218)</td>
<td>(0.183)</td>
</tr>
<tr>
<td>Inequality × High casualty state</td>
<td>−0.770***</td>
<td>−0.552**</td>
<td>−0.781***</td>
<td>−0.785***</td>
</tr>
<tr>
<td></td>
<td>(0.276)</td>
<td>(0.272)</td>
<td>(0.281)</td>
<td>(0.266)</td>
</tr>
<tr>
<td>Shared sacrifice</td>
<td>−0.048</td>
<td>0.014</td>
<td>0.132</td>
<td>−0.065</td>
</tr>
<tr>
<td></td>
<td>(0.162)</td>
<td>(0.146)</td>
<td>(0.159)</td>
<td>(0.156)</td>
</tr>
<tr>
<td>Republican</td>
<td>−0.355</td>
<td>0.115</td>
<td>−0.068</td>
<td>0.320</td>
</tr>
<tr>
<td></td>
<td>(0.337)</td>
<td>(0.483)</td>
<td>(0.322)</td>
<td>(0.274)</td>
</tr>
<tr>
<td>Democrat</td>
<td>−0.515</td>
<td>0.089</td>
<td>−0.483</td>
<td>0.100</td>
</tr>
<tr>
<td></td>
<td>(0.336)</td>
<td>(0.485)</td>
<td>(0.326)</td>
<td>(0.260)</td>
</tr>
<tr>
<td>Male</td>
<td>0.073</td>
<td>0.110</td>
<td>0.316***</td>
<td>0.062</td>
</tr>
<tr>
<td></td>
<td>(0.136)</td>
<td>(0.123)</td>
<td>(0.124)</td>
<td>(0.126)</td>
</tr>
<tr>
<td>Education</td>
<td>−0.015</td>
<td>0.015</td>
<td>0.029</td>
<td>0.019</td>
</tr>
<tr>
<td></td>
<td>(0.046)</td>
<td>(0.044)</td>
<td>(0.044)</td>
<td>(0.045)</td>
</tr>
<tr>
<td>Income</td>
<td>−0.012</td>
<td>0.012</td>
<td>0.018</td>
<td>−0.028</td>
</tr>
<tr>
<td></td>
<td>(0.025)</td>
<td>(0.022)</td>
<td>(0.024)</td>
<td>(0.025)</td>
</tr>
<tr>
<td>White</td>
<td>−0.174</td>
<td>−0.190</td>
<td>−0.061</td>
<td>−0.427**</td>
</tr>
<tr>
<td></td>
<td>(0.225)</td>
<td>(0.224)</td>
<td>(0.243)</td>
<td>(0.207)</td>
</tr>
<tr>
<td>Black</td>
<td>−0.239</td>
<td>−0.445</td>
<td>−0.499</td>
<td>−0.551</td>
</tr>
<tr>
<td></td>
<td>(0.301)</td>
<td>(0.288)</td>
<td>(0.333)</td>
<td>(0.339)</td>
</tr>
<tr>
<td>Latino</td>
<td>0.195</td>
<td>0.089</td>
<td>0.048</td>
<td>−0.033</td>
</tr>
<tr>
<td></td>
<td>(0.250)</td>
<td>(0.262)</td>
<td>(0.238)</td>
<td>(0.174)</td>
</tr>
<tr>
<td>Age</td>
<td>−0.079***</td>
<td>−0.037*</td>
<td>−0.039**</td>
<td>−0.049**</td>
</tr>
<tr>
<td></td>
<td>(0.021)</td>
<td>(0.019)</td>
<td>(0.019)</td>
<td>(0.021)</td>
</tr>
<tr>
<td>Married</td>
<td>−0.335**</td>
<td>−0.145</td>
<td>−0.391***</td>
<td>−0.047</td>
</tr>
<tr>
<td></td>
<td>(0.149)</td>
<td>(0.144)</td>
<td>(0.142)</td>
<td>(0.147)</td>
</tr>
<tr>
<td>High casualty state</td>
<td>0.328**</td>
<td>0.007</td>
<td>0.234</td>
<td>0.044</td>
</tr>
<tr>
<td></td>
<td>(0.158)</td>
<td>(0.144)</td>
<td>(0.160)</td>
<td>(0.153)</td>
</tr>
<tr>
<td>Observations</td>
<td>537</td>
<td>518</td>
<td>515</td>
<td>532</td>
</tr>
</tbody>
</table>

Note: Robust standard errors in parentheses. All significance tests are two-tailed.
*p < .10. **p < .05. ***p < .01.
We have argued that local exposure to casualties heightens the influence of the inequality cue; if correct, this would suggest that informing more Americans about the existence of significant inequalities in sacrifice would increase their casualty sensitivity. Figure 2 illustrates this effect.

**Figure 2. Factors influencing high casualty sensitivity for Al Qaeda in Somalia mission.**

Note: The solid line at probability = .20 represents the baseline probability of being in the high casualty sensitivity group for an independent respondent with all variables set equal to their median value or 0 (in the case of dummy variables). Each dot represents the point estimate for setting the relevant dummy variable equal to one, or increasing a nonbinary variable from its median to one standard deviation above the median. Error bars present ±2 standard deviations from the point estimate, as determined from simulations.

**Personal Income as an Alternative Mediating Factor**

We have argued that local exposure to casualties heightens the influence of the inequality cue; if correct, this would suggest that informing more Americans about the existence of significant inequalities in sacrifice would increase their casualty sensitivity.
sensitivity. However, an alternative possibility is that a citizen’s personal socioeconomic status may condition the influence of the inequality treatment. For example, low-income respondents may be particularly sensitive to information that casualties are being borne disproportionately by poor communities. Because high casualty states are populated by more low-income Americans than are low casualty states, this dynamic might be responsible for the relationships observed previously.

To test this alternative hypothesis, we reestimated the models in Table 4 including an interaction between the inequality treatment cue and each respondent’s income, rather than the high casualty state interaction. In each of the four scenarios, the coefficient for the income interaction variable failed to reach conventional levels of statistical significance; full results are presented in the online appendix (http://people.bu.edu/dkriner/research.html). It is whether a respondent hails from a high casualty state, and not his or her personal income, that is the most important factor moderating the influence of the inequality cue.

Thus, there is strong evidence that Americans’ experience with war through the lens of their local communities serves as a filter when processing information about inequalities in war deaths. Having witnessed the human costs of war more acutely, respondents from high casualty communities are significantly more likely to dampen their casualty tolerance in future military missions in response to information about past and anticipated inequalities in casualty rates.

### Second Study: Follow-up Experiment Confirming the Influence of Inequality

Our RDD telephone survey experiment provided strong support for each of our three hypotheses. However, the experimental design was limited in three ways. First, following Feaver and Gelpi (2004), we asked respondents to give a number of “acceptable” casualties for four hypothetical scenarios. A significant limitation with this

<table>
<thead>
<tr>
<th>Table 4. Casualty Sensitivity by Mission Type and Inequality Cue, Follow-up Experiment.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Al Qaeda in Somalia (small scale)</td>
</tr>
<tr>
<td>High casualty sensitivity (0–50 casualties)</td>
</tr>
<tr>
<td>Moderate casualty sensitivity (51–5,000 casualties)</td>
</tr>
<tr>
<td>Low casualty sensitivity (&gt;5,000 casualties)</td>
</tr>
<tr>
<td>Ukraine (large scale)</td>
</tr>
<tr>
<td>High casualty sensitivity (0–50 casualties)</td>
</tr>
<tr>
<td>Moderate casualty sensitivity (51–5,000 casualties)</td>
</tr>
<tr>
<td>Low casualty sensitivity (&gt;5,000 casualties)</td>
</tr>
</tbody>
</table>

Note: Columns may not sum to 100 percent because of rounding. Percentages in boldface are significantly different from the control, \( p < .10 \). Percentages in italics are significantly different from the other treatment group, \( p < .10 \).
approach concerns the use of the word *acceptable*. The idea that American casualties can ever be “acceptable” may have been discomforting for many respondents, and indeed, approximately 15 percent refused to answer our casualty sensitivity questions. Second, the four scenarios, which allowed us to investigate the effect of information about casualty inequality across a range of mission types, were presented sequentially. This raises the possibility that subjects’ casualty tolerance answers to later scenarios may be biased by subjects’ desire to maintain consistency with their responses in prior scenarios. Third, while our four scenarios covered the full range of mission types described in previous research, each scenario involved a hypothetical conflict that could plausibly be addressed through a limited scale military mission. It is possible that, in a scenario that would require a large-scale American military response, information about casualty inequalities might affect Americans’ casualty tolerance differently or not at all.

To address these concerns, we embedded a follow-up experiment in an online survey conducted in August 2010 that was administered to a sample of 1,210 adults recruited via Mechanical Turk. Although this sample is not nationally representative, it is considerably more diverse than undergraduate samples routinely used in many international relations studies of public opinion (e.g., Maoz et al. 2002; Rousseau 2002; Mandel 2006; Boettcher and Cobb 2006; Gartner 2008; Nyhan and Reifler 2010). Moreover, recent research by Berinsky, Huber, and Lenz (2012) demonstrates that replicating experiments on samples recruited in this way yields very similar results to previously published studies with nationally representative samples. Summary statistics for the sample’s demographics are presented in the online appendix.

To grapple with the problem of simply asking subjects for a number of “acceptable” casualties, we employed a sequential method developed by Gelpi, Feaver, and Reifler (2009). Rather than asking respondents to state a number of acceptable casualties, we instead began by asking each subject whether she would be willing to support a given use of force if it produced no casualties. If the respondent said yes, she was then asked a follow-up question about whether she would continue to support the mission if it resulted in $X$ number of casualties. The sequence began with 50 casualties, then increased to 500, 5,000, 10,000, 50,000, 100,000, and finally concluded with more than 100,000 casualties. In this way, respondents could be placed on an eight-point ordinal casualty sensitivity scale without ever having to state a specific number of “acceptable” casualties.

We further modified our previous experimental approach in three ways. First, while we replicated one of the scenarios from the RDD experiment exactly—the mission to combat Al Qaeda in Somalia—we also added a new hypothetical scenario that suggested a use of force significantly larger in scale than those described previously. Specifically, we asked respondents to consider a scenario in which “a future president has decided to send American troops to repel a Russian invasion of Ukraine, a former Soviet Republic that is now an ally of the United States.” Second, instead of asking all subjects about each scenario sequentially, we randomly assigned respondents to either the Somalia or Ukraine scenarios; in this way, answers to the former cannot bias answers to the latter.
Finally, we took advantage of the opportunity to add graphics to an online survey to add visual evidence for both the casualty inequality and the shared sacrifice treatments drawn from the literature (Kane 2005; Kriner and Shen 2010). Complete wording for both treatments for the Somalia scenario is presented in the online appendix. Table 4 presents the difference in means across the treatment and control groups for both scenarios.

In the Al Qaeda in Somalia module, respondents informed about inequality in military sacrifice in Iraq and Afghanistan were significantly less likely to support a costly military mission against terrorists in the Horn of Africa. Indeed, the effect sizes for the inequality treatment are very similar to those observed in the RDD experiment. Learning of casualty inequality in previous wars increased the percentage of respondents in the high casualty sensitivity group by 12 percent from the control group baseline. Similarly, the inequality treatment decreased the share of respondents in the low casualty sensitivity group by 9 percent from the control group baseline.

In the larger scale mission scenario to defend Ukraine against Russian aggression, the size of the treatment effects was even larger. For example, 78 percent of respondents in the casualty inequality treatment would not support the use of force in this scenario if it entailed fifty or more casualties versus 59 percent in the control group and 51 percent in the shared sacrifice group. Thus, the follow-up experiment continues to offer evidence for the influence of inequality concerns on Americans’ casualty sensitivity, even when measured through a different method and with respect to a large-scale hypothetical military mission.

As a robustness check, we estimated ordered probit models for both scenarios using the full eight-point dependent variable and controlling for each subject’s partisanship, gender, educational attainment, income, race, and age. Full results are reported in the online appendix.

Most importantly, in both scenarios, the ordered probit models revealed a negative and statistically significant relationship between the casualty inequality treatment and subjects’ willingness to tolerate casualties. Moreover, in both treatments, the estimated size of the effects was considerable. For example, first differences derived from simulations show that the casualty inequality cue increased the predicted probability of the median independent respondent tolerating fewer than fifty casualties in the Al Qaeda in Somalia scenario from .57 in the control group baseline to .72. Similarly, in the Ukraine scenario, the casualty inequality treatment increased the predicted probability of the median independent respondent tolerating fewer than fifty casualties in the Ukraine scenario from .60 in the control group to .78. These results, obtained through a different experimental design including a new hypothetical scenario, strongly complement the findings from the first experiment emphasizing the influence of inequality concerns on Americans’ casualty sensitivity.

**Conclusion**

Gelpi, Feaver, and Reifler (2009) have shown that Americans’ willingness to accept casualties in military endeavors hinges crucially on beliefs about mission success.
When Americans think about the sacrifices they are willing to make, they want to know “Are we doing the right thing? Are we winning?” Our results in this article suggest that Americans also want to know, “Are we doing it the right way? Is everyone pitching in?” Our experimental results suggest that when Americans perceive that military sacrifice is being shared, they are more tolerant of casualties than when they perceive that some segments of society are bearing a disproportionate burden of wartime sacrifice.

This evidence suggests that the “cost” side of the cost–benefit calculation is considerably more complex than is often acknowledged in the wartime opinion formation literature. Americans do not appear to judge the human costs of war solely in terms of the number of soldiers who die on foreign battlefields. They also take into account the distribution of those casualties across the country.

Given the widespread lack of knowledge concerning the reality of socioeconomic inequalities in military sacrifice, the experimental evidence takes on practical political importance as well. Although we recognize the need to be cautious about generalizing from experimental results to real-world politics (e.g., Gaines, Kuklinski, and Quirk 2007; Barabas and Jerit 2010), our results suggest that if the issue of inequality in sacrifice ever gained traction it could significantly affect the calculations of policy makers in both the legislative and the executive branches. Previous research has shown that presidents and members of Congress alike can face retribution at the ballot box for pursuing costly military policies (e.g., Cotton 1986; Gartner, Segura, and Bar ratt 2004; Grose and Oppenheimer 2007; Kriner and Shen 2010). This could present policy makers with a daunting choice; seeking to avoid an electoral backlash, they could either choose to heighten the importance of casualty minimization or casualty avoidance as a central tenet of American military policy making (as policy makers did in the aftermath of Vietnam), or they could consciously adjust military manpower policies to ameliorate inequality in sacrifice. In short, greater attention to the inequality costs of war could significantly increase the strength of popular constraints on policy makers contemplating military solutions to future crises.

Finally, the experimental results suggest a number of promising grounds for future research. Additional study is clearly needed to understand the mechanisms by which inequality cues may become more salient. For example, we have speculated that the altruistic nature of humanitarian intervention policy goals may blunt the downward effect of the casualty inequality cue on casualty tolerance, but additional research with more finely grained data is needed to explore the nature of these calculations directly. Similarly, future research should explore the extent to which our results about the effect of inequality on support for war vary according to the manpower selection mechanism in place. It could be that the all-volunteer nature of the modern American military might mitigate the influence of the inequality cue. Our experimental treatments did not address the cause of socioeconomic inequalities in military sacrifice, only its existence. If inequality arises primarily because of differential rates of volunteering for military service, will citizens react differently than if inequality is produced through a combination of governmental policies? Future
studies could also investigate further the mechanisms that tie local exposure to casualties—here measured as residing in a high casualty state—with the casualty inequality cue. Finally, additional research might examine how financial costs, and inequalities in how they are borne, influence cost–benefit calculations concerning support for war. For instance, how would citizens react to different cues about the tax burden of war, a burden that falls disproportionately on the wealthy, and how would they update their military policy preferences accordingly? By pursuing research trajectories in such directions, future scholarship can further explore the complex interrelationships among war costs, inequality, and a democratic public’s support for war.

Declaration of Conflicting Interests
The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding
The author(s) received no financial support for the research, authorship, and/or publication of this article.

Notes
1. There are, however, several important exceptions. For example, Gartner and Segura (1998) examine the influence of the racial makeup of American casualties in Vietnam and point toward literatures in demography and sociology on the socioeconomic backgrounds of Vietnam War casualties. Similarly, Kriner and Shen (2010) document the concentration of American casualties in socioeconomically disadvantaged counties and places in the Korean, Vietnam, and Iraq Wars.

2. Very similar disparities emerge when examining the distribution of casualties across communities by educational attainment. For example, Kriner and Shen (2010) found that communities in the lowest three education deciles (in terms of percentage of residents with a college degree) suffered 41 percent of casualties, whereas communities in the top three education deciles suffered only 23 percent of the casualty burden. Our analysis of data from the war in Afghanistan reveals a similar pattern. As of July 4, 2011, 41 percent of Afghan war casualties came from communities in the bottom three education deciles versus only 24 percent from communities in the top three education deciles.

3. For robustness checks on our analysis of Afghanistan War casualties, including discussion of similar results at the state level, please see the online appendix. For a discussion of how these inequalities arise and the relative importance of selection into the military and occupational sorting within it, see Kriner and Shen (2010).

4. For example, the only news outlet to give the issue sustained attention that we were able to find was the low-circulation *Austin American-Statesman*. Moreover, some analysts continue to cast doubts on inequality in sacrifice. For example, in a 2005 Heritage Foundation report, Kane analyzes the hometowns of all military recruits in the aftermath of September 11 and finds that upper-middle-class communities are strongly represented
in the military. However, because those who die in war are far from a random slice of the active duty military as a whole, inequalities in who dies in war can still emerge, even from a military that overall may mirror the composition of society as a whole.

5. This survey, which produced a sample of 1,009 respondents from the continental United States, was conducted from May 19 to 22, 2011.

6. A third possibility is that the influence of the inequality cue may be contingent on the base level of casualty sensitivity in each scenario. The lower the base level of casualty sensitivity, the greater the potential influence of the inequality treatment, simply because there is more room for movement.

7. This survey, which produced a sample of 1,003 respondents from the continental United States, was conducted from March 26 to 29, 2009.

8. This question wording is also very similar to that used by Boettcher and Cobb (2009) to assess Americans’ continued casualty tolerance in the Iraq War. Feaver and Gelpi (2004) discuss the inherent difficulty in using such questions to measure casualty tolerance, and they pay particular attention to problems with using the word “acceptable” to describe casualties. For many, this word may trigger intense emotions; indeed, in various studies, including ours, casualty sensitivity questions routinely have the largest number of respondents who refuse to answer. Nevertheless, we followed Feaver and Gelpi’s lead since alternative phrasings to “acceptable” introduce potential problems as well. In more recent work, Gelpi, Feaver, and Reifler (2009) have developed a new method of measuring casualty sensitivity. We discuss this method in more detail shortly and employ it on a follow-up experiment using an online sample recruited via Mechanical Turk. The results from this follow-up study strongly confirm the results from the random-digit dialing sample experiment. In fact, the treatment effects are virtually identical in magnitude across the two experiments for the one common hypothetical scenario.

9. Previous scholarship on public attitudes toward war has used a range of experimental approaches from those involving abstract hypothetical scenarios in which an unspecified country may attack or threaten another (e.g., Tomz 2007; Horowitz and Levendusky 2011), to more realistic hypotheticals involving actual countries and more detailed scenarios (e.g., Gelpi, Feaver, and Reifler 2009; Herrmann, Tetlock, and Visser 1999), to actual ongoing wars (Boettcher and Cobb 2009; Gartner 2011). Each approach has its strengths and disadvantages. The first maximizes experimental control, but is the furthest removed from the real world; the final approach using actual ongoing conflict scenarios minimizes external validity concerns, but poses the most difficulties for achieving full experimental control. In both of our experimental studies, we chose the middle course and employed a series of plausible hypothetical scenarios involving real countries. This approach allowed us to examine the influence of the inequality treatments on support for a full range of military mission types and also allowed us to craft scenarios that were plausible and in many cases based on recent or ongoing events (e.g., the Bush administration did send American troops to Liberia to bolster its democratically elected government in 2003; for years, there has been a national conversation over whether to use force to halt Iran’s nuclear program) to bolster the external validity of our results. A ripe ground for
future research is to conduct similar experiments using either purely abstract or ongoing conflicts as the experimental scenario to assess the influence of inequality cues.

10. Feaver and Gelpi (2004, 108–109) follow a similar approach, but employ six categories: 0; 1–50; 51–500; 501–5,000; 5,001–50,000; and more than 50,000. We prefer three categories, particularly in Table 1, to ease comparisons across high and low casualty sensitivity groups; however, as shown in the online appendix, the ordered probit results presented in Tables 2 and 3 are virtually identical when using Feaver and Gelpi’s six categories instead of our three. An additional issue that arises when trying to measure casualty sensitivity in this way is how to treat respondents who answered 0 to all four scenarios. In their analysis, Feaver and Gelpi (2004) drop these respondents, arguing that they represent “spoiled ballots.” Here, we follow Feaver and Gelpi and exclude these respondents from the analysis; however, as shown in the online appendix, replicating the ordered probit analyses in Tables 2 and 3 with these respondents yields very similar results.

11. In the Liberia, Darfur, and Al Qaeda in Somalia scenarios, the difference between the shared sacrifice treatment and the control is even in the unexpected direction. However, in every scenario but Darfur, the difference in means between the inequality and shared sacrifice treatments is in the expected direction, and in the multivariate models reported in Table 2 the coefficients for the two treatments are significantly different from one another in each scenario.

12. The coefficient for the shared sacrifice treatment variable is negative in the Liberia and Al Qaeda in Somalia models; however, in both models, the inequality and no inequality coefficients are significantly different from one another.

13. Such a dynamic would parallel that observed in recent research concerning the draft and its influence on public opinion. For example, Horowitz and Levendusky (2011) found that reinstating the draft significantly dampens public support for war, but particularly for young men and parents with children.

14. We also considered other possible mediating factors that might be correlated with residence in a high casualty state. For example, if high casualty states are disproportionately Republican (however, in our sample, 47 percent of respondents from high casualty states identified with or leaned toward the GOP versus 39 percent in low casualty states), partisan identification may be the key factor mediating the relationship, not the state’s casualty rate. To account for this, we also estimated the models in Table 3 with inequality–partisan interactions. In each case, the interaction variables were insignificant and the main effects continued to hold.

15. Similarly, Boettcher and Cobb (2009) asked respondents “how many more American military deaths should be tolerated in order for the United States to complete the military mission in Iraq?”

16. However, this would suggest that responses should be similar across the four scenarios, and we observed significant variation in individual responses to the four scenarios (correlations ranged from .41 to .53).

17. More generally, for a defense of the use of student samples, see Druckman and Kam (2010).

18. On the use of Mechanical Turk samples, see also Kittur, Chi, and Suh (2008); Paolacci, Chandler, and Ipeirotis (2010); Mason and Suri (2010); Ross et al. (2010); Buhrmester,
Kwang, and Gosling (2011). An additional concern regards the quality of the answers given by an online convenience sample. As a measure of quality control, we concluded the survey with an attention filter validated by previous research (Oppenheimer, Meyvis, and Daviden 2009). Embedded in a paragraph of text was an instruction for respondents to ignore the question itself and to check the other box and enter the numeric sequence 1, 2, 3 instead. Eighty-two percent of subjects answered the attention filter correctly. Results are virtually identical if those who did not answer the attention filter correctly are excluded from the analysis.

References


