

# “Casualty Sensitivity and the War in Iraq”

Christopher Gelpi  
Peter D. Feaver  
Jason Reifler

Duke University

## Abstract

Since the Vietnam War, policymakers have worried that the American public will only support military operations if the human costs of the war, as measured in combat casualties, are minimal. We find that – while the public is rightly averse to suffering casualties – the level of popular sensitivity to US military casualties depends critically on the context in which those losses occur. Our core argument is that the public’s tolerance for the human costs of war is primarily shaped by the intersection of two crucial attitudes: beliefs about the rightness or wrongness of the war in the first place, and beliefs about the war’s likely success. Both attitudes are important, and the impact of each depends upon the other. However, we find that beliefs about the likelihood of success matter most in determining the public’s willingness to tolerate American military deaths in combat. We assess these and other arguments through a reanalysis of publicly available polls and a detailed analysis of a series of polls we designed explicitly to tap into public attitudes on casualties.

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Ever since the Vietnam War, policymakers have worried that the American public will only support military operations if the human costs of the war, as measured in combat casualties, are minimal.<sup>1</sup> A combination of circumstances makes the public response to the ongoing war in Iraq during the Presidential campaign of 2003-2004 an important opportunity to evaluate this hypothesis. First, the war in Iraq is both the most controversial and most deadly US military operation since the Vietnam War. By Election Day in November 2004 nearly 1,200 American soldiers had been killed in action in Iraq. At the same time, Americans seemed increasingly divided over the President's reasons for going to war—both the Kay report and the 9/11 commission raised questions about the strength of the ties between Saddam Hussein, weapons of mass destruction, and the Al-Qaeda terrorist network. Moreover, the public was deluged with information about the war and its cost in American lives. Combat in Iraq was the most covered story on the major network TV news broadcasts in 2004 with nearly twice as many minutes of airtime as the second most covered story: post-war reconstruction of Iraq.<sup>2</sup> This combination of a costly and controversial war made salient in the context of a Presidential election provides an ideal circumstance for examining the public's response to casualties in war.

In this article, we examine how casualties have affected public opinion on the Iraq war.<sup>3</sup> We argue that constraints placed by American public opinion are not as limiting as

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<sup>1</sup> Except where otherwise noted, we will use the term “casualties” to refer to “deaths.” We recognize that in military parlance, casualties means dead and wounded, a much higher number in any conflict. In popular usage, however, casualties has generally meant dead. In our own polling, except where noted, we used “deaths” in all relevant question wordings so our claims are not contaminated by any public confusion about the terms. In this article we look only at one aspect of the cost equation—“U.S. military deaths in combat,” or “our casualties.” This article is drawn from a larger research project that examines public attitudes towards casualties

<sup>2</sup> See The Tyndall Report summary of 2004 campaign coverage at <http://www.tyndallreport.com>.

<sup>3</sup> This article is drawn from a larger book-length project assessing public attitudes toward casualties more

the conventional wisdom evidently believes. To be sure, the public is not indifferent to the human costs of American foreign policy, but casualties have not by themselves driven public attitudes towards the Iraq war, and mounting casualties did not produce a reflexive collapse in public support. The Iraq case suggests that under the right conditions, the public will continue to support military operations even when they come with a relatively high human cost.

Our core argument is that the public's tolerance for the human costs of war is primarily shaped by the intersection of two crucial attitudes: beliefs about the rightness or wrongness of the war in the first place, and beliefs about a war's likely success. Both attitudes are important, and the impact of each depends upon the other. However, we find that beliefs about the likelihood of success matter most in determining the public's willingness to tolerate American military deaths in combat.

Our findings imply that the American public makes reasoned and reasonable judgments about an issue as emotionally charged and politically polarizing as fighting a war. Indeed, the public forms its attitudes regarding support for the war in Iraq in exactly the way we should hope they would: weighing the costs and benefits. American deaths clearly stand as a cost of war, but they are a cost that members of the public are willing to pay *if* the public thinks the initial decision to launch the war was correct, and if they think that the United States will prevail.

After a brief overview of the literature, our argument proceeds in three stages. First, through an analysis of presidential approval, we examine how the public has

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generally, including scenarios other than the Iraq war. This project is part of a larger effort, "Wielding American Power: Managing Interventions After September 11," conducted by the Triangle Institute for Security Studies and the Terry Sanford Institute for Public Policy at Duke University and funded by the Carnegie Corporation.

actually responded to casualties during the war. We find that the public's willingness to tolerate casualties and continue to support the president varies substantially depending upon the context in which the casualties occur. Second, we examine the factors that shape the public's tolerance for casualties through an analysis of individual-level attitudes toward casualties and the war in Iraq. Finally, because our argument identifies "expectations of success" as the key factor in shaping public casualty sensitivity, we then explore how the public defines success in Iraq and what indicators the public trusts for measuring whether success is likely or not. We close with a summary and some brief conclusions.

### **Conceptions of Casualty Sensitivity**

It is important to distinguish casualty phobia, reflexive opposition to any casualties, from casualty sensitivity. Following Feaver and Gelpi, casualty sensitivity recognizes the human toll as a cost of war.<sup>4</sup> The public would always like to pay less of this cost if possible, but a non-zero human cost does not mean the public will oppose war. Casualty sensitivity is, to put it crudely, one's price sensitivity to the human cost of war. As with other forms of price sensitivity, some members of the public are more sensitive to the costs than others. We see in the public a continuum of casualty sensitivity ranging from the minimally sensitive – those who view casualties as a necessary cost of war and not a determining factor in shaping support – all the way to maximally sensitive – offering support only for military missions that guarantee virtually no casualties.

Casualty phobia represents one end of this continuum, and in these terms, the conventional wisdom since the Vietnam War has been that the American public is best

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<sup>4</sup> Peter D. Feaver, and Christopher Gelpi, *Choosing Your Battles: American Civil-Military Relations and the Use of Force* (Princeton, N.J.: Princeton University Press, 2004).

thought of as casualty phobic. Analysts of American public opinion, however, have not generally endorsed this conventional view. The scholarly consensus has evolved over time and can perhaps best be understood as three interlocking (but not necessarily successive) debates.

The first debate concerns whether casualties affect public support for war according to a fixed pattern of inexorable decline or whether the public views casualties and the use of force through a cost-benefit calculus. Early research during the Vietnam War emphasized what came to be called the “rally round the flag” effect. Viewed this way, public casualty sensitivity was not a debilitating constraint on American military power.<sup>5</sup>

In a pioneering analysis of public opinion regarding Vietnam, Jeffrey Milstein found that public support dropped as the U.S. military commitment increased and as casualties increased, whereas public support climbed when the burden was shifted to the shoulders of the Vietnamese themselves.<sup>6</sup> John Mueller built on this work with a landmark study of public opinion in the Vietnam War (with a comparison to the Korean War).<sup>7</sup> Mueller is famous for arguing that public support for the Vietnam War dropped in

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<sup>5</sup> See Verba, Sidney, et al. “Public Opinion and the War in Vietnam,” *The American Political Science Review* 61, No.1 (June), pp. 317-33, and Waltz, Kenneth *Foreign Policy and Democratic Politics: The American and British Experience*, (Boston: Little Brown, 1967).

<sup>6</sup> Milstein, Jeffrey and William C. Mitchell, “Dynamics of the Vietnam Conflict: A Quantitative Analysis and Computer Simulation,” *Peace Research Society (International) Papers*, 10 (1968); and Milstein, Jeffrey, “Changes in Domestic Support and Alternative Military Actions in the Vietnam War 1965-1968,” Paper delivered at the 23<sup>rd</sup> Annual Meeting of the Western Political Science Association, April 3, 1969; Milstein, Jeffrey, “The Vietnam War from the 1968 Tet Offensive to the 1970 Cambodian Invasion,” in H.R. Alker, K.W. Deutsch, and A.H. Stoetzel, *Mathematical Approaches to Politics*, (New York: Elsevier Scientific Publishing Co., 1973); and Milstein, Jeffrey, *Dynamics of the Vietnam War: A Quantitative Analysis and Predictive Computer Simulation*, (Columbus OH: The Ohio State University Press, 1974).

<sup>7</sup> The central thesis is available in Mueller, John, “Trends in Popular Support for the Wars in Korea and Vietnam,” *American Political Science Review*, 65, 2, (June 1971), pp. 358-375; but the full compilation of polls is found in Mueller, John, *War, Presidents and Public Opinion*, (New York: Wiley & Sons, 1973).

proportion to the log of casualties.<sup>8</sup> Viewed in toto, Mueller's finding cuts *against* the casualty phobia thesis. However, Mueller was arguing that public support dropped reflexively, and more to the point, inexorably. Mueller's oft-quoted study thus fixed in the public mind the idea that support for Vietnam buckled as the bodybag toll mounted and this gradually hardened into the conventional wisdom that the public is reflexively casualty phobic. Mueller later reinforced the "inexorable decline" view with his analysis of public opinion during the first Iraq war, which emphasized that public support was far more precarious than the euphoria over the quick victory might indicate.<sup>9</sup> Other research also showed that there was a direct link between mounting casualties, anti-war protests and then subsequent changes in U.S. governmental policy.<sup>10</sup>

This view of a fixed pattern of declining public support with rising casualties, was challenged in a series of major scholarly investigations assessing public opinion and national security during the Cold War. These studies painted a collective picture of a "rational public," one very capable of responding to elite debates and weighing the complexities of foreign policy.<sup>11</sup> The public, in this way, went through what Alvin

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<sup>8</sup> Mueller, *War, Presidents and Public Opinion*, p. 62.

<sup>9</sup> Mueller, John, *Policy and Opinion in the Gulf War*, (Chicago: University of Chicago Press, 1994). Gartner and Segura revised this argument somewhat, noting that support for the Korean and Vietnam wars declined with logged casualties during periods when the casualty rate was low, but in periods of high casualty rates, then public support drops with marginal casualties, not logged cumulative casualties. See Gartner, Scott, and Gary Segura, "War Casualties and Public Opinion," *Journal of Conflict Resolution*, 42, 3, (September 1998), pp.278-320.

<sup>10</sup> Lorell, Mark and Charles Kelley, *Casualties, Public Opinion and Presidential Policy During the Vietnam War*, R-3060-AF (Santa Monica, CA: RAND Corporation, 1985).

<sup>11</sup> Holsti, Ole and James Rosenau, *American Leadership in World Affairs: Vietnam and the Breakdown of Consensus*, (Boston: Allen & Unwin, 1984); Russett, Bruce, *Controlling the Sword: The Democratic Governance of National Security* (Cambridge: Harvard University Press, 1990); Wittkopf, Eugene, *Faces of Internationalism: Public Opinion and American Foreign Policy*, (Durham, NC: Duke University Press, 1990); Hinckley, Ronald, *People, Polls, and Policy Makers*, (New York: Lexington Press, 1992); Page, Benjamin and Robert Shapiro, *The Rational Public: Fifty Years of Trends in Americans' Policy Preferences*, (Chicago: University of Chicago, 1992); Sniderman, Paul "The New Look in Public Opinion Research," in *The State of the Discipline II*, ed. Ada Finifter, (Washington D.C.: American Political Science Association, 1993); Zaller, John, *The Nature and Origins of Public Opinion*, (New York: Cambridge University Press, 1994); Richman, Alvin, "When Should We Be Prepared to Fight?" *The Public*

Richman called a simple “ends-means” calculus.<sup>12</sup> Applying this approach, Eric Larson found, *contra* Mueller, that a complex cost-benefit calculation fits the data better than a reflexive, logarithmic response.<sup>13</sup> Today, the scholarly consensus is nearly unanimous in favor of the “rational cost-benefit” model, and Larson’s oft-cited version serves as a point of departure for much subsequent research in the field.

The cost-benefit model, however, is not by itself a rebuttal of the casualty-phobia thesis, and, indeed, the model raises what can be considered the second big debate in the academic literature: if the public applies something like an economic rational calculation about war, how inelastic is the public’s “demand” for war?<sup>14</sup> Thus, in more recent work, Mueller explicitly accepts the cost-benefit model, but, writing before 9/11, he argued that the public saw so little benefit in most military missions that in effect the cost-benefit calculation was functionally equivalent to a casualty-phobic posture.<sup>15</sup> Likewise, Louis Klarevas endorses the cost-benefit model, but then elsewhere argues that for some key categories of missions the public sensitivity to casualties is so high that trivial numbers of casualties can produce a “Somalia Syndrome.”<sup>16</sup> Most scholars who have examined public opinion polls closely come down on the other side, however, concluding that the

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*Perspective* Vol.6, No. 3 (April/May 1995), p. 44; Holsti, Ole. *Public Opinion and American Foreign Policy*, (Ann Arbor: Michigan University Press, 1996). For a more skeptical view, but not one that dismisses polling altogether see Althaus, Scott, *Collective Preferences in Democratic Politics: Opinion Surveys and the Will of the People*, (Cambridge: Cambridge University Press, 2003).

<sup>12</sup> Richman, “When Should We Be Prepared to Fight?”

<sup>13</sup> Larson, Eric, *Casualties and Consensus: The Historical Role of Casualties in Domestic Support for U.S. Military Operations*, (Santa Monica, CA: RAND Corporation, 1996).

<sup>14</sup> In fact, the protagonists in this first wave of debate are not quite as sharply contradictory as the literature implies. Part of what Mueller found in the gradual decline of public support for the Korea and Vietnam missions may simply be a result of the fact that as the casualty toll mounted, the “costs” for securing the goals went up, lowering the net cost-benefit calculation.

<sup>15</sup> Mueller, John, “Politics, Death, and Morality in U.S. Foreign Policy,” *Aerospace Power Journal*, Vol.14, No.2 (Summer 2002).

<sup>16</sup> Compare Klarevas, Louis “The ‘Essential Domino’ of Military Operations: American Public Opinion and the Use of Force,” *International Studies Perspectives*, Vol.3, No.4 (November 2002) with Klarevas, Louis, “Trends: The United States Peace Operation in Somalia,” *Public Opinion Quarterly*, Vol.64, No.4 (Winter

demand, while not completely inelastic, is nevertheless not as price sensitive as to approximate casualty-phobia.<sup>17</sup>

The third debate takes the issue of elasticity a step further: what factors shape the “elasticity of demand” for military missions? Put another way, under what conditions will the casualties cause public support for a given mission to decline more rapidly or more slowly? There is a wide scholarly consensus that multiple factors may be at work at the same time.<sup>18</sup> What distinguishes different authors in this third wave of debate, however, is the pride of place they give to certain factors.<sup>19</sup>

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2000), pp.523-540.

<sup>17</sup> This is the bottom line of the following poll-based analyses: Jentleson, Bruce, “The Pretty Prudent Public: Post-Vietnam American Opinion on the Use of Military Force,” *International Studies Quarterly*, Vol 36, No.1 (1992), pp.49-74; Richman “When Should We Be Prepared to Fight?” Kull, Steven, “What the Public Knows that Washington Doesn’t,” *Foreign Policy*, (Winter 1995/96); Larson, *Casualties and Consensus*; Strobel, Warren, *Late-Breaking Foreign Policy: The News Media’s Influence on Peace Operations*, (Washington D.C.: United States Institute of Peace, 1997); Rebecca L. Britton and Bruce Jentleson, “Still Pretty Prudent,” *Journal of Conflict Resolution*, Vol. 42, Issue 4, (August 1998); Burk, James, “Public Support for Peacekeeping in Lebanon and Somalia: Assessing the Casualties Hypothesis,” *Political Science Quarterly*, Vol.114, No.1 (1999), pp53-78; Kull, Steven, and I.M. and Destler, *Misreading the Public: The Myth of a New Isolationism*, (Washington D.C.: Brookings Institution, 1999); Feaver, Peter and Christopher Gelpi, “How Many Deaths are Acceptable? A Surprising Answer” *Washington Post*, (November 7,1999), p.B3; Everts, Philip, “When the Going Gets Rough: Does the Public Support the Use of Force?” *World Affairs*, Vol.162, (2000), pp.91-107; Everts, Philip, “War Without Bloodshed? Public Opinion and the Conflict Over Kosovo,” ed. Philip Everts and Peirangelo Isernia, *Public Opinion and the International Use of Force* (New York: Routledge, 2001); Erdmann, Andrew, “The U.S. Presumption of Quick, Costless Wars,” *Orbis*, Vol.43, No.3, (1999), pp.363-382; Everts, Philip, *Democracy and Military Force*, (New York: Palgrave MacMillan, 2002); Feaver, Peter and Christopher Gelpi, *Choosing Your Battles: American Civil Military Relations and the Use of Force*, (Princeton: Princeton University Press, 2004); Eichenberg, Richard, “Victory Has Many Friends: The American Public and the Use of Military Force,” Working paper, Department of Political Science, Tufts University, (May 2004), available at <http://ase.tufts.edu/polsci/faculty/eichenberg/victory.pdf>.

<sup>18</sup> Larson, Eric, “Putting Theory to Work: Diagnosing Public Opinion on the U.S. Intervention in Bosnia,” ed. Miroslav Nincic and Joseph Leggold, *Being Useful: Policy Relevance and International Relations Theory*, (Ann Arbor: University of Michigan Press, 2000); Klarevas, “The ‘Essential Domino’ of Military Operations.”

<sup>19</sup> Here we list only the factors that might vary from case to case in the current era. There are a number of other arguments emphasizing different factors that would explain changes in the underlying casualty tolerance from what it might have been in previous generations. Thus, Luttwak argues that the public is more casualty sensitive now than in the time of the World Wars because of the lower birth rate. See Luttwak, Edward, “Towards Post-Heroic Warfare,” *Foreign Affairs*, Vol.74, No.3 (1995), pp.109-122; and Luttwak, Edward, “A Post-Heroic Military Policy,” *Foreign Affairs*, Vol.75, No.4 (1996), pp33-44. Moskos argues that the public is more casualty sensitive now because they see that children of the elite are not at risk in most military missions. See Moskos, Charles, “Grave Decision: When Americans Accept Casualties,” *Chicago Tribune* (December 12, 1995), p.25. Sapolsky and Shapiro argue that casualty phobia has driven changes in technology which has, in turn, reinforced casualty phobia by fostering unrealistic

First, Bruce Jentleson argues that the “pretty prudent” public bases its casualty tolerance on “the principal policy objective (PPO)” envisioned by the military operation.<sup>20</sup> PPOs involving “foreign policy restraint” will be accepted by the public as important and thus worth even a serious price; these include the traditional military tasks of using force to coerce an adversary engaged in aggressive action against the United States or its allies. Missions deemed “humanitarian intervention” enjoy public support only if the costs are relatively low. Still other missions, dubbed “internal political change,” enjoy relatively fragile levels of public support.

Second, Eric Larson argues that public casualty tolerance follows domestic elite casualty tolerance.<sup>21</sup> When domestic elites line up in a consensus behind the mission, public support will be robust even in the face of mounting costs, but when domestic elites are divided then even small amounts of casualties will be highly corrosive of public support.

Third, Steven Kull argues that public support for a military mission will be more robust if the public sees that other countries likewise support the mission and thus the

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expectations of what human toll is unavoidable in war. See Sapolsky, Harvey and Jeremy Shapiro, “Casualties, Technology, and America’s Future Wars,” *Parameters*, Vol.26, No.2 (1996), p.119-127. Numerous people have argued that the advent of near-real-time television coverage of military operations has heightened public casualty sensitivity by giving the deaths a vividness and immediacy that makes them more shocking. See, for example, Stech, Frank, “Winning CNN Wars,” *Parameters*, Vol.14, No.3 (1994), pp.37-56; Neuman, Johanna, *Lights, Camera, War: Is Media Technology Driving International Politics?* (New York; St. Martin’s Press, 1996); and Livingston, Steven, *Clarifying the CNN Effect: An Examination of Media Effects According to Type of Military Intervention*, Joan Shorenstein Center on Press, Politics and Public Policy, Research Paper R-18, (Cambridge: Harvard University, 1997). Logically, these works belong in the first or second wave because they are claiming that the public is, in fact, highly casualty sensitive and are blaming a factor that is largely unavoidable and so should apply with equal force to every military mission we might consider. These issues are explored in greater detail in XXXXXXXXXXXX.

<sup>20</sup> Jentleson “The Pretty Prudent Public,” and Jentleson and Britton “Still Pretty Prudent.”

<sup>21</sup> Larson, *Casualties and Consensus*, applies Zaller’s model of how elites cue public opinion. See Zaller, *The Nature and Origins of Public Opinion*.” Larson, “Putting Theory to Work,” offers a model for weighing multiple factors at the same time, including various indices that attempt to measure the public’s perceived utility in a given military mission, expectations of success, and leadership cuing. He gives pride of place, however, to leadership cuing.

United States is not obliged to bear the costs all by itself.<sup>22</sup> Multilateral support may function as an elite cue – “this mission must be worth the cost because lots of other states are supporting it”<sup>23</sup> – or the public may simply prefer to have the burden distributed more evenly.

Finally, Feaver and Gelpi identify expectations of success as the crucial factor in explaining the public’s tolerance of casualties.<sup>24</sup> When the public believes the mission will succeed, then the public is willing to continue supporting the mission, even as costs mount. When the public thinks victory is not likely, even small costs will be highly corrosive. Note that the critical attitude specified here are expectations of eventual future success, not necessarily assessments of how the war is going right now or most recently.<sup>25</sup> In a comprehensive analysis of aggregate public opinion trends from 1981 through 2004, Richard Eichenberg came to a similar conclusion: “successful military

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<sup>22</sup> Kull, Steven, I.M. Destler, and Clay Ramsay, *The Foreign Policy Gap: How Policymakers Misread the Public*, (Washington D.C. Center for Strategic and International Studies, 1997); Kull and Destler *Misreading the Public*; Kull, Steven and Clay Ramsay, “A Rejoinder from Kull and Ramsay,” *International Studies Perspectives*, Vol.1, No.2 (2000), pp.202-205; Kull et al., “American’s on the Conflict With Iraq,” The PIPA/Knowledge Networks Poll, (October 2, 2002).

<sup>23</sup> This mechanism is hypothesized as the critical factor behind a public preference for multilateralism in Grieco, Joseph, “The American Public and the Future of NATO and American Multilateralism,” (Unpublished manuscript, 2003).

<sup>24</sup> Feaver and Gelpi, “How Many Deaths Are Acceptable?” Feaver and Gelpi, *Choosing Your Battles*; Feaver, Peter, “To Maintain that Support, Show Us What Success Means” *Washington Post* (October 7, 2001). Kull, Steven and Clay Ramsay, “The Myth of the Reactive Public: American Attitudes on Military Fatalities in the Post-Cold War period,” ed. Philip Everts and Peirangelo Isernia, *Public Opinion and the International Use of Force* (New York: Routledge, 2001), pp. 223-224) reach a similar conclusion: “...Americans do not and are not likely to respond reflexively to losses by wanting to withdraw from a military operation....provided that the public has support for the operation in the first place and believes that it is likely to succeed.” And van der Meulen, Jan and Marijke de Konink, Risky Missions: Dutch Public Opinion on Peacekeeping in the Balkans,” ed. Philip Everts and Peirangelo Isernia, *Public Opinion and the International Use of Force* (New York: Routledge, 2001), in their analysis of Dutch public opinion surrounding the Bosnian operation, concluded that expectations of success were the best predictor of Dutch casualty tolerance. See also Kull, Steven “Review of Eric Larson’s *Casualties and Consensus*,” *Public Opinion Quarterly*, Vol.61, No.4 (Winter 1997), pp.672-674.

<sup>25</sup> In this way, “expectations of success” is different from the attitude that Gartner and Segura favored in their use of marginal casualty rates. In their words, “...recent casualties send a signal that the war is not going well – a signal that dominates other cost measures when the marginal casualty level is increasing.” Gartner and Segura, “War Casualties and Public Opinion,” p. 295.

operations enjoy high support regardless of other factors that may be present.”<sup>26</sup>

Each of these studies establishes convincingly that the favored factor matters (and most also show that other factors matter, too). But relatively little progress has been made in assessing the relative importance of these factors. In the sections that follow, we assess these and other arguments through a reanalysis of publicly available polls and a detailed analysis of a series of proprietary polls we designed explicitly to tap into public attitudes on casualties.<sup>27</sup> Our method allows us to combine a variety of forms of data that are suited for different types of inferences. First, in order to assess the first two waves of the casualty tolerance debate regarding the inexorable decline of support in response to casualties, we examine aggregate data on Presidential approval and its response to US military deaths in Iraq from the outbreak of the war in 2003 through the Presidential election in November 2004. Next, in order to assess the third wave of debate on the sources of variation in casualty tolerance we examine individual level data on tolerance for casualties in Iraq. This represents important progress in the study of casualty tolerance because so much of the previous work in this area has been hampered by an exclusive reliance on aggregate data.

### **Aggregate Presidential Approval, US Casualties and the War in Iraq**

We collected weekly data on American combat deaths from 1 January 2003

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<sup>26</sup> Eichenberg, “Victory Has Many Friends.”

<sup>27</sup> The proprietary polls include a telephone survey of an RDD national sample of 1203 adults conducted by the Parker Group from 22 September to 12 October 2003 and six additional surveys of national representative samples (using a different and shorter instrument) administered via the internet by Knowledge Networks: Wave 1 (6-20 February 2004, 891 respondents), Wave 2 (25 February – 4 March, 870 respondents), Wave 3 (5 - 18 March, 930 respondents), Wave 4 (19 March – 2 April, 889 respondents), Wave 5 (2 – 16 April, 881 respondents), Wave 6 (17 – 29 April, 899 respondents), and Wave 7 (18-28 June, 900 respondents). The Knowledge Networks data is equivalent to national RDD sample. For more information on the Knowledge Networks methodology, see <http://www.knowledgenetworks.com/>. The full survey instruments are available from the authors.

through 1 November 2004.<sup>28</sup> For the same period, we collected opinion data on three crucial questions: approval of the president in general, approval of the president's handling of the situation in Iraq, and whether the Iraq war has been "worth it."<sup>29</sup> Presidential approval is asked frequently with standardized language, giving us a consistent measure of this attitude. The Iraq approval and "worth it" questions are asked less frequently and their wording varies. For space reasons, we present only our analyses using Presidential approval as our dependent variable; the responses to the three items are strongly correlated and so our results do not change when using the other dependent variables.<sup>30</sup>

Figure 1 displays average weekly approval ratings for President Bush from January 2003 through April 2004. The data clearly indicate the substantial increase in approval that President Bush received after launching the war in Iraq. This bounce is consistent with the extensive literature on the "rally 'round the flag" effect.<sup>31</sup> We divide the number of US military deaths in Iraq into three distinct time periods. The squares show fatalities during the "major combat" phase of the war, which covers the initial invasion of Iraq, the toppling of the Ba'ath regime and movement of coalition forces into a position of occupation in Iraq. The circles represent military deaths that occurred after

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<sup>28</sup> Data were drawn from the following official military news sources: the Army Times, Navy Times, Air Force Times, and Marine Times. The data is available at: <http://www.militarycity.com/valor/honormarch.html>.

<sup>29</sup> Data is available at <http://www.pollingreport.com>. We only included polls with identical wording of the presidential approval question: "Do you approve or disapprove of the way George W. Bush is handling his job as president?" Thus polls like Zogby that introduce the category of "mixed feelings" toward the president were not included in our measure of presidential approval. For weeks in which there were multiple national polls we took the average of these presidential approval ratings. We interpolated the one missing data point to get a continuous 97 observation weekly time-series.

<sup>30</sup> The correlation between overall Presidential approval and approval of the President's handling of Iraq was 0.95. The correlation of both of those variables with aggregate opinion of whether the war in Iraq has been "worth it" is 0.90.

<sup>31</sup> Bruce Russett, *Controlling the Sword: The Democratic Governance of National Security*, (Cambridge, Mass.: Harvard University Press, 1990).

the media began to report a coordinated resistance against the U.S. led occupation in May 2003, but before the Coalition transferred sovereignty to an Iraqi authority in June of 2004. We refer to this as the “occupation” period. Finally, the triangles represent US military deaths that occurred between the transfer of sovereignty to an Iraqi authority and the Presidential election. We refer to this as the “sovereign Iraq” period of the war.<sup>32</sup>

A quick review of Figure 1 shows that US military deaths did not appear to have the same impact on presidential approval in the “major combat,” “occupation,” and “sovereign Iraq” phases of the war. During the major combat phase approval is increasing despite the fact that the US is suffering casualties. We are not arguing that the public was increasing its approval of the president because American soldiers were being killed. Rather, we infer that the public was rallying to support the president despite the casualties because of their confidence in American success. After the onset of the insurgency against US occupation, however, Presidential approval drops steadily as the death toll increases. After the US transfers sovereignty to Iraq, on the other hand, the pattern seems to change once again. During this period US casualties continue to mount at the same rate as during the occupation, but Presidential approval oscillates at about 50% despite the mounting death toll.

*Table 1 About Here*

Thus at first glance the data in Figure 1 seem to call into question the notion that casualties have a consistent or inexorable effect on Presidential approval. Even if one dismisses the shift from major combat to occupation as the fading of a “rally ‘round the flag,” the second shift after the transfer of sovereignty remains a puzzle. Table 1

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<sup>32</sup> Media reports for this coding were drawn from The Tyndall Report, and we identified this “occupation” period as beginning in late May 2003. The data is available at <http://www.tyndallreport.com>.

provides a more systematic analysis of the relationship between American military deaths in Iraq and Presidential approval. In addition to the number of US military deaths, we also accounted for the impact of growth in the Dow Jones Industrial Average (DJI),<sup>33</sup> and we also included measures of the volume of media coverage, as measured by the content of the weeknight news broadcasts of ABC, CBS, and NBC news.<sup>34</sup> We divided media coverage into four periods: pre-war, major combat, occupation, and sovereign Iraq. The pre-war media coverage variable counts the number of minutes that the crisis with Iraq was covered; during the major combat, occupation, and sovereign Iraq phases of the war we recorded the number of minutes per week that the network news broadcasts covered combat between the US military and Iraqi or insurgent forces. Finally, we included dummy variables to mark several important events in the flow of the war in Iraq. In addition to dummy variables for the onset of the combat, occupation and Iraqi sovereignty periods, we included a dummy variable for the capture of Saddam Hussein, which had a significant – though brief - impact on the public’s perception of the success of US operations. We also include a dummy variable for the release of the Kay Report indicating that Iraq may not have possessed stockpiles of weapons of mass destruction as

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<sup>33</sup> Since our dependent variable is overall Presidential approval, it is important that we control for the public perceptions of the overall performance of the US economy. The Dow Jones Industrial Average (DJIA) represents an excellent summary measure of public perceptions of the economy for two central reasons. First, fluctuations in prices across a broad index such as the DJIA reflect changes across a number of economic indicators; traders incorporate a very wide range of information about economic performance into the trades that generate shifts in the DJIA. The DJIA thus serves as something of a composite index of economic factors of political interest. Second, while the members of the public are probably not aware of much of the information that goes into these trades, many of them will be aware of changes in the DJIA because these are so widely published in newspapers and reported on daily radio and TV news broadcasts. Finally, our time-series of Presidential approval is comprised of weekly aggregation, while most aggregate economic indicators are only available on a monthly or quarterly basis. The DJIA, however, is easily aggregated on a weekly basis and is often reported to the public in terms of weekly changes. Growth was measured as the weekly opening price of the DJIA subtracted from the weekly closing price and divided by the opening price.

<sup>34</sup> This measure only records the volume of coverage. It makes no attempt to capture any positive or negative content of the stories. Minutes were aggregated on a weekly basis and data were drawn from the

the Bush Administration had contended.<sup>35</sup> All independent variables were lagged one-week.<sup>36</sup>

Model 1 in Table 1 examines Mueller's hypothesis that support for a war effort will erode with the log of military deaths. Contrary to Mueller's finding on the Korea and Vietnam cases, the log of casualties does not fit the Iraqi war data and, in fact, the overall fit of this model seems to be quite poor. None of the variables associated with the war are statistically significant. The only statistically significant effect in the model is the volume of media coverage of Democratic Presidential candidates. The coefficient for the log of casualties is very small and does not approach significance indicating that casualties – *on average* - had no impact at all on presidential approval during from March 2003 through November 2004.

In model 2, however, we account for the fact that casualties may have had very different effects on Presidential approval during the major combat, occupation and sovereign Iraq phases of the war because of the substantial differences in public expectations of American success. The overall fit of the model is dramatically improved. While model 1 yielded an r-squared of 0.53, making the impact of casualties contingent on the phase of the war increases the r-squared to 0.83. Because of the interactive nature of the relationship between casualties and approval in model 2, calculating the overall

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Tyndall Report.

<sup>35</sup> These dummy variables set a new intercept value for the Presidential Approval time-series after each event occurs. The dummy variables are coded 0 prior to the occurrence of the event and 1 afterwards. Controlling for the initiation of the war as a "rally event" had no impact on the coefficients in Table 1, and the variable was not statistically significant. This is likely due to the fact that the casualties suffered during the major combat phase capture the rally effect.

<sup>36</sup> A Phillips-Perron unit root test indicated that the Presidential approval time-series is trend stationary ( $p < .05$ ). The coefficients in Table 1 use the Prais-Winsten correction for serial correlation in a time-series. The estimated rho for Models 1 and 2 were 0.82 and 0.27 respectively. The initial Durbin-Watson statistics were 1.18 and 1.61, indicating a statistically significant autocorrelation problem for both models. The transformed Durbin-Watson statistics were 2.35 and 2.03, indicating that the Prais-Winsten correction addressed the problem.

effect of casualties for each phase of the war – and the proper standard errors for hypothesis testing – is somewhat more complex. Thus we calculate the overall impact of casualties on Presidential approval for each of the three phases of the Iraq war in Table 2. Clearly the shift from major combat to insurgency against a US occupation had a significant effect on the relationship between casualties and Presidential approval. The coefficient flips from 2.26 to -9.34. Both of these effects are statistically significant. Notice, however, that after the US transfers sovereignty to an Iraqi authority, the impact of casualties shifts again. Consistent with our impressionistic evaluation of Figure 1, the model indicates that between June and November casualties had no impact whatsoever on Presidential approval. The coefficient is reduced to -0.108 and the effect does not approach statistical significance. It is particularly striking to see such an attenuation in the impact of casualties at that time, since the US death toll was the subject of tremendous media coverage through the late summer and early fall of 2004 as the US approached the threshold of 1,000 soldiers killed in action.

*Table 2 About Here*

Importantly, the shift between the occupation and sovereign Iraq phases of the war clearly indicates that the relationship between casualties and Presidential approval is not constant. The data cannot be explained as a brief rally effect followed by a consistent decline in approval due to casualties. This result does not imply that the public did not care about US casualties after the transfer of sovereignty, but it does suggest that the public's tolerance for casualties increased between June and November 2004.

Accounting for the varying impact of casualties improves the fit of the model so much that it allows us to detect the impact of other variables as well. Returning to Table

1, we can see that the volume of media coverage can have varying influences on Presidential approval. For example, media coverage of Iraq evoked a rally effect during both the major combat phase of the war, and prior to the outbreak of the war; but coverage of combat since the onset of the insurgency has had no impact one way or the other. Not surprisingly, we find that media coverage of Democratic Presidential candidates reduces Presidential approval. Other incidents on the ground in Iraq influenced approval as well. The capture of Saddam Hussein boosted approval by nearly 4 percentage points, while the release of the Kay report cut approval back by 3 points. Moreover, we can see that the DJIA does have a statistically significant and substantively important impact on presidential approval.

Our data on casualties and presidential approval closely correspond with those of Eichenberg and Stoll, who analyzed the similar data with a slightly different statistical model and concluded that with every additional 100 casualties and controlling for the rally effect, approval of the President's handling of Iraq dropped 3 percentage points and approval of the President overall dropped by about 1 percentage point.<sup>37</sup> We depart from Eichenberg and Stoll's interpretation by distinguishing between the differing effects of casualties during the major combat, occupation and sovereign Iraq phases of the war. This pattern of varying levels of public casualty sensitivity also fit a pattern that Feaver and Gelpi found when looking at other conflicts, including reanalyzing Mueller's data on public opinion during the Korean and Vietnam wars.<sup>38</sup> When the public appears to be confident in an American victory, then casualties have little effect on popular support.

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<sup>37</sup> Richard C. Eichenberg and Richard J. Stoll, "The Political Fortunes of War: Iraq and the Domestic Standing of President George W. Bush," paper published by The Foreign Policy Centre; The European Think Tank with a Global Outlook, July 2004.

<sup>38</sup> Feaver and Gelpi, *Choosing Your Battles*, pp. 132-144.

But if the public's confidence in victory is shaken, then casualties erode support. When mounting casualties start eroding support, the relationship does appear to be logarithmic. That is, small numbers of casualties will matter early on in a conflict, but as the combat deaths escalate it takes increasingly large increments of military deaths to reduce support. But this relationship is conditional on low expectations of success.

Anecdotal evidence from available polls suggests that these shifts in casualty tolerance relate to the public expectations of success. During the major combat phase, the public was quite confident, and rightly so, that the United States could successfully invade Iraq and remove Saddam Hussein from power. As early as March 27 2003 – prior to the fall of Baghdad – a Time/CNN poll reported that 52% of the public was already willing to label the war a success.<sup>39</sup> But the onset of the insurgency against the occupation in May shook the public's confidence in a successful outcome. In mid-July Time/CNN asked the same question and found that only 39% of respondents felt that the US effort was a success – even though the US had toppled Hussein and occupied Iraq.<sup>40</sup> By November 2003 only 25% of the public stated that the war had been successful.<sup>41</sup> The granting of sovereignty and creation of an Iraqi government also seems to have been a similar – though less dramatic – shift in public optimism. By May of 2004 public confidence reached its Nadir with only 37% of the public stating that the war was going “very well” or “somewhat well.” But by the eve of the election in October 2004, that number had risen to 57%<sup>42</sup>

The attitude tapped by these Time/CNN polls, however, is different from the

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<sup>39</sup> 27 March 2003, Time/CNN/Harris Poll.

<sup>40</sup> 16 July 2003, Time/CNN/Harris Poll.

<sup>41</sup> 18 November 2003, Time/CNN/Harris Poll.

<sup>42</sup> 23 May 2004, CBS News Poll. October data from our survey from October 15 through November 1.

“expectations of success” concept emphasized here. These polls were asking respondents to make a judgment about accomplished fact -- was the war a success now -- rather than a judgment about an eventual fact – was the war likely to be successful. Our thesis is that expectations of future success are the key determinants of public casualty tolerance. That is, the public can accept that the war is not *yet* won and will involve continued and even mounting costs, provided that the events thus far are not convincing the public that eventual success is impossible. But other factors may also have been shifting at this time. More generally, we cannot base inferences about individual attitudes based solely on shifts in aggregate opinion. In fact, one of the principal weaknesses of the current analyses of public opinion and casualty tolerance is the almost exclusive reliance on aggregate data. Thus Mueller, Jentleson, Larson, and often Feaver and Gelpi are left in the difficult position of observing shifts in aggregate support for military operations in published polls and then inferring the cause of fluctuations in support from external events.<sup>43</sup> Such inferences are made even more problematic by the obvious ecological inference problem involved in reaching such conclusions. In order to reach firm conclusions about the process by which individual members of the public form attitudes about tolerating the costs of war we must collect and analyze data on individuals’ opinions.

### **The Sources of Individual Variation in Casualty Tolerance**

Beginning in October 2003 and extending through October 2004 we conducted a series of surveys of public attitudes toward American decisions to use force and toward

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Our question labels the second category “fairly well” instead of “somewhat well.

<sup>43</sup> Mueller, *War, Presidents, and Public Opinion*; Jentleson, *The Pretty Prudent Public*; Rebera L. Britton and Bruce Jentleson, “Still Pretty Prudent,” *Journal of Conflict Resolution*, Vol. 42, Issue 4, (August 1998), p. 395; Larson, *Casualties and Consensus*; Feaver and Gelpi, *Choosing Your Battles*.

the current war in Iraq in particular. Our survey tapped respondents' views about the primary policy objective, the extent of elite consensus and their confidence in victory. Following on work by Jentleson, Larson, Kull, and others, we suggest that members of the American public follow a fairly prudent and reasonable pathway in deciding whether they will tolerate US casualties in a military operation.<sup>44</sup> Our principal difference with Jentleson, Larson and Kull is not over the prudence of the American public, but over the relative importance of various factors in their calculations.

We suggest that respondents' tolerance for casualties in the war in Iraq will be a function of two central explanatory variables: 1) the extent to which they believe that President Bush did the right thing in attacking Iraq, and 2) the extent to which they believe that the United States will emerge victorious from the war. Those who feel strongly that the President "did the right thing" in attacking are expressing a belief that the Bush Administration had good cause for using military force in this case.<sup>45</sup> These perceived reasons could be many – including the desire to enforce UN resolutions, the desire to keep America secure from suspected Iraqi weapons of mass destruction (WMD), the desire to prevent Iraq from sharing suspected WMD with terrorists, the desire to promote human rights and punish a vicious dictator, or the desire to instill democratic governance in the Middle East. Whatever policy goal an individual may emphasize in their own thinking about why the President "did the right thing," we are arguing that it is something for which they would willing to pay a cost if the goal were successfully achieved.

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<sup>44</sup> Jentleson, *The Pretty Prudent Public*; Larson, *Casualties and Consensus*; Larson, "Putting Theory to Work."

<sup>45</sup> Specifically, we asked respondents, "I would like to know whether you think President Bush did the right thing by using military force against Iraq. Would you say that you strongly approve, somewhat approve,

The second variable captures a respondent's judgment about the likelihood that the United States will be able to achieve whatever goals he or she believes are at stake in Iraq. Our measure makes an effort to separate beliefs about likely victory from any expectations of benefits. Specifically, we asked respondents, "regardless of whether you think that the President did the right thing, would you say that U.S. is very likely to succeed in Iraq, somewhat likely to succeed, not very likely to succeed, or not at all likely to succeed." We did not specify for respondents what success might mean; as we discuss below, we probed precisely that question in follow-on surveys.

These two attitudes can combine in four basic combinations. Respondents in the first category, which in this case might be considered the "Bush Base," believe the war was right and that the United States will win. Those in the opposite category, which we would call "the Vietnam Syndrome" believe the war was wrong and the United States will lose. Obviously, we would expect the former group to have much greater casualty tolerance than the latter group. But respondents with intermediate attitudes – the "Noble Failure" view that the war was right but we will lose, and the "Pottery Barn -- we broke it, we'll fix it" view that war was wrong but we will win – pose more interesting theoretical questions that allow us to compare the relative importance of the two attitudes in shaping casualty tolerance.

We contend that expectations of success will matter more and thus the "Pottery Barn" respondent will express a greater tolerance than the "Noble Failure" respondent for the human costs of war. Even if one believes that the US was unjustified in attacking Iraq, an American failure in Iraq could damage its reputation or leave Iraq vulnerable to the infiltration of terrorist groups. All of which would mean that American lives were

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somewhat disapprove or strongly disapprove of his decision?"

lost in vain. Indeed, some could argue that once a conflict has begun America has an intrinsic national interest in winning regardless of the original rationale.

In order to compare our argument about the interactive impact of “rightness” and expected success to other prominent arguments about the sources of casualty tolerance, we also included control variables to capture the effects hypothesized by Jentleson, Larson and Kull. Specifically, as we noted above, Jentleson argues that casualty tolerance will be higher when the public believes that the primary policy objective (PPO) of the mission involves the defense of the United States (and/or its allies) against attack from outside. In terms of the debate surrounding the war in Iraq, this attitude was most centrally captured by the debate over extent to which the war in Iraq should be considered a part of the Bush administration’s “war on terrorism.” In the wake of the 9/11 attacks on Washington DC and New York City, the war on terrorism was widely – and understandably - perceived as addressing a threat to the U,S, homeland. The Bush administration argued that Iraq posed a similar threat to the U.S. homeland, by virtue of the possible nexus between alleged Iraqi pursuit of WMD and alleged Iraqi links to terrorists who might use them. Even the Administration’s third pillar -- namely the humanitarian argument about ridding the region of Hussein’s oppressive rule and thereby creating the conditions for democracy to take hold in the Middle East – had a link to the broader war on terror, since the Administration maintained that the spread of democratic freedoms was the most effective long-term solution to addressing the root-causes of terrorism. If individuals did not perceive any link between Iraq and the broader war on terror, then, the case for war rested on a strictly humanitarian argument (or perhaps a legalistic one about enforcing UN resolutions). Thus in Jentleson’s terms, the central

factor determining respondents' casualty sensitivity should be the extent to which they believe that the Iraq war is linked to the war on terrorism.<sup>46</sup>

Larson's model of the public's cost-benefit evaluation of war includes a wide range of variables, but he gives pride of place to public perceptions of an elite consensus in support of the mission. According to this view, the public takes cues from the elite in deciding whether to support a military operation. To the extent that elites from across the political spectrum in support of an operation, members of the public would also be supportive. Measuring the actual extent of elite consensus presents difficult problems, complicating analyses of the aggregate relationship between consensus and public support. Since we are analyzing individual level attitudes, however, the key variable for Larson should be the extent to which a respondent perceives an elite consensus in support of the war. Thus we asked respondents whether they believed that Republican and Democratic leaders agree that the US should remain in Iraq until the Iraqi government is stable and secure.<sup>47</sup>

Finally, Steven Kull's recent work has emphasized public attitudes toward multilateralism as critical in determining public tolerance of casualties. Numerous polls indicate that the American public looks favorably on gaining allied support for US military operations and on gaining UN Security Council authority for using force. However, this minimal level of multilateralism does not adequately measure the impact that multilateralism should have on casualty tolerance and the war in Iraq. After all, even

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<sup>46</sup> We asked respondents, "which of the following best describes your beliefs about the war in Iraq and the war on terrorism?" Respondents were then given four possible response categories: 1) Iraq is the "central front" in the war on terror, 2) the war in Iraq is "an important part of the war on terrorism, but it is not the central battle; 3) Iraq is "not a part of the war on terrorism;" and 4) the war in Iraq is "a distraction from the war on terrorism."

<sup>47</sup> Specifically we asked, "Do you think America's political leaders – both Republican and Democrat – agree that the US troops should remain in Iraq until the new Iraqi government is

many policy makers who are widely viewed as “unilateralist” would agree that *ceteris paribus* it is better to have multilateral international support. The critical question is what should the United States do if it is *unable* to obtain international legitimization for a particular mission? With regard to UN authorization, for example, should the President proceed with a mission alone if he deems it necessary and cannot persuade the UN to sanction force? Or should the President postpone the mission until he is able to obtain support from the Security Council? To the extent that multilateralism has a substantive constraining effect on US policy, we contend that it implies the latter attitude. Thus Kull’s argument about the impact of multilateralism on public support implies that respondents who hold the latter belief should be substantially less willing to tolerate casualties in Iraq, since the President chose to launch the attack without explicit UN approval.<sup>48</sup>

### **Measuring Casualty Tolerance**

Our dependent variable is the respondents’ willingness to continue support military operations in Iraq as the human cost continues to mount. Specifically, we asked, “regardless of whether you think the President made the right decision in attacking Iraq, as you know the United States is engaged in an ongoing military operation there and has suffered about \_\_\_\_ military deaths in combat.<sup>49</sup> Would you support continued US military action in Iraq until a new Iraqi government can take over if it resulted in no additional US military deaths?” If a respondent answered affirmatively, we asked again,

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stable and secure?” Respondents could answer yes or no.

<sup>48</sup> Specifically, we asked: “Before deciding to take military action, the president often seeks the approval of international organizations like the United Nations. What should the president do if he is not able to gain that approval? The response options were: 1) “He should not take military action period, regardless of whether he can get international approval;” 2) “He should delay military action until he receives international approval;” 3) “He should take military action even without international approval if he thinks it is necessary;” and 4) “He should not seek international approval before deciding to take military action.”

raising the number of deaths. (Those who answered negatively were skipped to the next question.) In the October 2003 survey each respondent had a chance to answer if they would support the war if there were up to 500 deaths, then to 5,000, finally to 50,000, jumping to the next level if the respondent stated that he or she would continue to support the operation. The lowest casualty threshold – 500 deaths was updated in subsequent survey as the number of US combat deaths increased.<sup>50</sup> We continued to ask about tolerance for a number of casualties that was about 200-400 higher than the number of US casualties at the time of the survey. Since the rate of US military deaths has remained quite consistent since the end of major combat operations, our question essentially asks respondents if they are willing to continue supporting the war in Iraq for at least the next 3 to 6 months.<sup>51</sup>

This series of questions produces a five category ordinal variable. The first category, represents those who said they would not support the war even if no more US

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<sup>49</sup> For each wave of the survey we inserted the appropriate death toll at the beginning of the wave.

<sup>50</sup> Note that any potential bias from changes in question wording would tend to *exaggerate* the apparent casualty sensitivity in the new surveys. As we are arguing that the public is more casualty tolerant than commonly believed, this poses no problems for our analysis.

<sup>51</sup> We believe that this measure of casualty tolerance does a better job of gauging the policy relevant issue of continued support of an ongoing military operation than do other more commonly used measures of casualty sensitivity. For example, analysts often evaluate responses to questions about whether the war in Iraq has been “worth it” as measures of casualty tolerance. But after asking whether the Iraq war has been “worth it,” we probed respondents about why the war was or was not “worth it.” Approximately 45% of respondents who felt that the Iraq war was not “worth it” indicated that the primary reason they felt that way was “the U.S. should not have gone to war over this issue in the first place.” Less than one-third of those who stated the war was not “worth it” stated that their most important reason for their response was the number of US soldiers killed. Moreover, in October 2004 more than 25% of the respondents who stated that the Iraq war had not been “worth it” still stated that they would support the war if there were as many as 1,500 US combat deaths. Thus “worth it” questions appear to tap some mixture of respondents’ views about casualty tolerance, their evaluation of the reasons for fighting, and their evaluation of the prospects of success, making those data less useful for evaluating relationships among those various attitudes. We believe that our measure more effectively isolates attitudes about the willingness to pay costs and frames the question in a way most relevant to policy makers: will the respondent be willing to continue to support an ongoing military operation in the face of rising costs. This distinction may explain why public opposition to the war – measured in terms of electoral consequences for the president or the extent of public demonstration and outcry - has not grown as swiftly as the number of respondents saying the war has not been “worth it.”

deaths; one might think of this as a “stop now” sort of response. The second category represents those who stated that they would support the war if no more US soldiers were killed, but would not support the war if there were a total of 500 US military deaths. We would label these respondents as “casualty phobic” because they are willing to support the operation, but only if the human costs are minimally higher than they were at that point (around 300 combat deaths). As noted above, third category of respondents essentially offers policymakers a “window of opportunity” to prosecute the war. They stated they would support the war despite an additional 200 to 200 deaths, but would not support the war if 5,000 Americans were killed. The remaining categories of respondents were varying levels of “Iraqi hawks,” promising continued support the war even if casualties mounted to levels far in excess of anything military experts expected given the situation in October 2003. The fourth category promised continued support if 5,000 US soldiers were killed but would withdraw their support if the US suffered 50,000 military deaths. The fifth category of respondents stated that they would support the war even if the US suffered 50,000 deaths.

We followed up the October 2003 poll with a series of short polls from February through June 2004, asking a similar casualty question updated to reflect the new casualty tally. In the surveys from February through April we set the “window of opportunity” threshold for casualty tolerance at 1,000 US military deaths. In June 2004, we increased the “window of opportunity” to 1,500 because of the increasing US death toll. Finally in the last two weeks of October 2004 we conducted a larger survey in the context of the impending Presidential election. On this survey the “window of opportunity was also set at 1,500. On this larger survey we also gathered data on respondents’ attitudes toward

elite consensus, the perceived primary policy objective (PPO) of the Iraq war, and their views on the importance of multilateralism in the US of force.

*Table 3 About Here*

Table 3 presents the summary statistics for the questions used to construct our ordinal dependent variable. These are separate samples, not panel data, limiting our ability to draw inferences about changes over time. However, the results suggest four important points. First, our survey question appears to be tapping into real attitudes because the numbers are stable yet move in sensible ways; as the casualty toll mounts, the proportions in the various groups shift accordingly, except for the “Iraqi hawks” whose professed casualty tolerance vastly exceeds the actual mounting death toll.

Second, like most questions about tolerance for casualties, our surveys tend to exaggerate public casualty sensitivity.<sup>52</sup> While mounting casualties did shift the aggregate response to our casualty tolerance question, they did not do so by as much as the earlier survey responses suggested they would.<sup>53</sup> Moreover, the response options capture only crude jumps. Someone who might tolerate up to 2000 or even 4000 casualties but not 5000 is coded as accepting “at least 1000” in our data. Third, even with this biased estimator, the public shows more casualty tolerance than the conventional wisdom expects. Finally, consistent with our expectations from the aggregate data analysis, our data suggest that public casualty tolerance actually increased between June and October 2004. This increase occurred despite the massive media coverage given to passing the threshold of 1,000 US combat deaths in Iraq. Specifically,

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<sup>52</sup> See Feaver and Gelpi, *Choosing Your Battles*, for an account of question wording effects and the use of hypothetical scenarios to measure casualty tolerance

<sup>53</sup> One possible explanation for this phenomenon is “sunk costs” thinking on the part of the respondents. That is, as the US pays higher costs in Iraq, the public may become more determined to ensure that those

in October 50% of the respondents stated that they would be willing to tolerate 1,500 US military deaths, while only 44% expressed that view in June.

These summary results tell an important and interesting story, but the data are even more valuable to us as a tool for tapping into the micro-foundations of public attitudes on casualties: how does the public form its attitudes on casualties and which factors are the most important?

### **Analyzing Individual Attitudes Toward Casualty Tolerance**

The results of our individual-level analysis of public tolerance for casualties in Iraq in October 2004 are displayed in Table 4. We use ordered logit, which is analogous to linear regression, but is the most appropriate statistical method for analyzing our ordinal measure of casualty tolerance. The results provide strong support for each of our expectations regarding the nature of the public's tolerance for casualties. Interpretation of the specific coefficients requires some care because of the interactive nature of the relationship between perceived rightness or wrongness of the war, expected success and tolerance for costs, but a careful review of the coefficients in the model indicates that our interactive model of the "rightness" of the war and expectations of success has a very significant impact on tolerance for casualties.<sup>54</sup>

*Table 4 about here*

The coefficient for respondents' attitudes about whether President Bush "did the

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losses are not in vain.

<sup>54</sup> There is no simple "goodness of fit" measure for ordinal logit models. Pseudo r-squared measures vary widely and other intuitive measures like the percentage of correct predictions are also arbitrary. See Demarchi, Gelpi, and Grynaviski, "Untangling Neural Nets," *American Political Science Review*, (June 2004). The best available measure of fit for dichotomous logit or probit models is the Receiver Operating Characteristic curve (See Demarchi, Gelpi and Grynaviski, "Untangling Neural Nets." But this measure is not appropriate for polytomous dependent variables. If one uses the model in Table 3 to make dichotomous predictions about whether respondents will fall in the "window of opportunity" category (tolerate at least 1,500 US deaths), the area under the ROC curve in this model is a respectable 0.78 (95% confidence

right thing” represents the impact of respondents’ views regarding the rightness of the war on their tolerance for casualties *when respondents believe that the US is not very likely to succeed*. Similarly, the coefficient for respondents’ attitudes about whether the US is likely to succeed in Iraq represents the impact that expectations of success have on respondents’ tolerance for casualties *when they strongly disapprove of the President’s decision to go to war*. As expected, the coefficient for expectations of success is larger than the coefficient for the justification of the war. A chi-squared test reveals that this difference is statistically significant (chi=13.04, 1 d.f.,  $p < .00$ ###number missing). This result indicates that expectations about victory have a greater impact on casualty tolerance when respondents are skeptical about the justification of the war than do their views about the rightness of the war have when they are skeptical about victory.

Those who are skeptical of the rightness of the war yet expect to win may be willing to pay higher costs than those who believe in the cause yet expect to lose, but the results in Table 3 also clearly indicate that these attitudes interact and work together in determining an individual’s tolerance for casualties. The coefficient for the interaction term, “Right Thing x Success,” is positive and statistically significant, indicating that each of our key variables – views of the rightness of the war, and expectations of success – has a greater impact on casualty tolerance as the *other* variable increases. That is, one’s expectations regarding success have a greater impact on casualty tolerance if one believes that Bush was right to attack Iraq than if one believes that Bush was wrong to do so. Similarly, one’s views regarding the rightness of the war have a greater impact on casualty tolerance if one expects the United States to win the war than if one is skeptical of success.

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interval 0.76 to 0.81).

While our argument concerning the sources of casualty tolerance receives strong statistical support, so do the arguments made by Jentleson, Larson, and Kull. Each of the control variables measuring perceptions of the links between Iraq and the war on terror, perceptions of an elite consensus, and support for international constraints on the US use of force are statistically significant in the expected direction. Specifically, both the belief that Iraq is a part of the war on terror, and the belief that Democratic and Republican leaders all support a continued US presence in Iraq, significantly increase a respondent's casualty tolerance. On the other hand, the multilateralist belief that the US should delay using force in order to obtain UN approval reduces casualty tolerance in this case.

So we find statistical support for all of the four central arguments about the sources of casualty tolerance. But how important are these various attitudes relative to one another? The substantive effects of the “rightness” of the war and expectations of success are displayed in Figure 2. The vertical axis displays the probability that they would tolerate at least 1,500 casualties.

*Figure 2 about here*

The axis running from left to right depicts changes in a respondent's attitude about the likelihood that the US will succeed in Iraq, while the axis running from the front of the figure to the back depicts changes in a respondent's attitude toward whether President Bush “did the right thing” in choosing to use force against Iraq. The columns depicting predicted casualty tolerance clearly demonstrate the interactive nature of the relationship between these variables. Not surprisingly, casualty tolerance is at its lowest point in the left-front “Vietnam Syndrome” corner of Figure 4 when a respondent strongly disapproves of the decision to attack and thinks we are not at all likely to

succeed, and casualty tolerance is at its highest in the right-rear “Bush Base” corner when a respondent strongly approves of the decision to attack and thinks that the US is very likely to succeed. But what the figure also clearly demonstrates is that the impact of each of these variables on an individual’s willingness to pay costs and support the war varies dramatically. For example, if we examine each row of columns moving from front to back we can see the impact that changes in a respondent’s attitude toward the rightness of the war has on his or her tolerance for casualties at each level different level of expectations regarding American success. Similarly, if we examine each row of columns moving from left to right we can see the impact that expectations of success depending on the respondent’s level of approval for the initial attack.

Turning to the far left-hand column we can see that there is virtually no change in a respondent’s casualty tolerance as we move from the front to the back of the figure. This row captures the effect of changes in a respondent’s attitude toward the rightness of the war when he or she believes that victory is “not at all likely.” Under these circumstances changes in one’s attitude about whether President Bush “did the right thing” in attacking Iraq has no impact on tolerance for casualties. Specifically, increasing a respondent’s attitude toward the justification for the attack from “strongly disapprove” to “strongly approve” only increases the probability that a respondent will provide the Bush Administration with a “window of opportunity” to prosecute the war only increases from 20% to 23%.

Moving to the far right-hand row, we can see that the impact of respondent’s attitudes toward the rightness of the war becomes much more important if the respondent is optimistic about the prospects for success. Our model predicts a 50% chance that a

respondent who “strongly disapproves” of the President’s decision but still believes that the US is “very likely” to succeed will tolerate at least 1,500 casualties. However, in this case increasing the respondent’s view of Bush’s justification for the war to “strongly approve” increases the likelihood that he or she would tolerate at least 1,500 casualties to over 90%.

The same type of interactive relationship holds for the impact of expectations of success, but the relationship is stronger in this case. As the front row of columns indicates, for a respondent who “strongly disapproves” of the decision to use force, increasing his or her optimism from “not at all likely” to succeed to “very likely” to succeed increases the probability that he or she will tolerate at least 1,500 casualties from 20% to 50%. But if a respondent already “strongly approves” of Bush’s decision to attack, then increasing his or her level of optimism from “not at all likely” to succeed to “very likely” to succeed increases the probability that he or she will support a “window of opportunity” for the President increases from 23% to over 90%.

So which attitude is more important: attitudes toward the rightness of the attack, or toward the likelihood of success? Clearly both attitudes are important and they work together in determining a respondent’s threshold for the tolerable human costs of war. However, the results also indicate that – at the margin – attitudes toward expectations of success are more influential than attitudes toward the rightness or wrongness of the conflict. The greater influence of expectations of success can be seen in several places in Figure 2. First, it is illustrated through a comparison of the right-front and left-rear corners of the figure. By comparing the left-rear and right-front columns, we can see that the “Pottery Barn” respondent – skeptical of the justification, but optimistic regarding

success – has a 50% chance of tolerating 1,500 casualties, while the “Noble Failure” respondent has only a 23% chance.

One can also see the greater impact of expectations for success by examining some of the intermediate columns. For example, our model predicts that no matter what their views on the justification of the war, a majority of respondents will not tolerate at least 500/1000 casualties if they also believe that victory is “not very likely” or “not at all likely.” Even among those who “strongly approve” of the decision to attack, just under 50% of such respondents will tolerate 1,500 casualties if they think that victory is “not very likely.” However, expectations of success have a considerably greater impact. Our model predicts that 75% of respondents who “somewhat disapprove” of Bush’s decision to attack will nonetheless tolerate at least 1,500 US military deaths if they believe that victory is very likely. This implies that the President can garner the support from a majority of those who are moderately skeptical of the war’s justification by persuading them that victory is very likely.

Of course, these two attitudes are not the only factors determining a respondent’s willingness to tolerate costs in war. As we noted above, we also find support for arguments made by Jentleson, Larson, and Kull. Substantive effects of these variables and the demographic controls are displayed in Table 5. With regard to Jentleson’s contention that PPO is the key to public support, we find that those who believe that the war in Iraq is the “central front” in the war on terrorism are 10% more likely to tolerate 1,500 casualties than a respondent who believes that Iraq is a distraction from the war on terror. Perceptions of an elite consensus supporting a US troops in Iraq also raises the likelihood that a respondent will tolerate 1,500 combat deaths by 14%. Finally,

consistent with Kull's emphasis on multilateralism, we find that those who believe that the US President should refrain from using force until he obtains UN sanction were 6% less likely to tolerate 1,500 US military deaths.

While the variables identified by Jentleson, Larson, and Kull all influence tolerance for casualties, the substantive impact of these variables does not approach the influence of the interaction of the "rightness" of the war and expectations of success depicted in Figure 1. While other factors may bump the proportion of respondents who are in the "window of opportunity" up or down by 10% to 20%, the interaction of "rightness" and success can have as much as a 70% shift up or down in the proportion of respondents in the "window." Once we account for this interaction, other factors recede in terms of their relative importance.

However, these results do not necessarily imply that the overall impact of the perceived PPO, elite consensus and multilateralism are minimal. The effects displayed in Table 5 are estimated on the assumption that attitudes toward the "rightness" of the war and expectations of success remain constant. Thus our results could indicate that variables such as elite consensus, perceived PPO and multilateralism influence casualty tolerance indirectly through their impact on attitudes toward the "rightness" of the war and its prospects for success.<sup>55</sup>

We found that a number of demographic factors also had a significant impact on the public's tolerance for casualties.<sup>56</sup> With one exception, these effects were in the direction one would expect from intuition and previous research, but none of these effects approach the substantive importance of a respondent's expected value calculation

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<sup>55</sup> For an examination of this issue, see Gelpi, Feaver, and Reifler, *Paying the Human Costs of War*.

<sup>56</sup> Feaver and Gelpi, *Choosing Your Battles*.

regarding the tolerable cost of the war.

*Table 5 about here*

Somewhat surprisingly, we find that respondents who are older than 59 are about 13% more likely to tolerate at least 1,500 casualties in Iraq than respondents under 30 years old.<sup>57</sup> This effect is quite robust across our 9 waves of surveys, but it differs from previous findings on the impact of age.<sup>58</sup> Second, we find that women are about 6% less likely than men to support a “window of opportunity” for continuing the war.<sup>59</sup> Third, we find that minority are about 15% less likely than white respondents to tolerate at least 1,500 casualties. It is worth noting, however, that while demographic patterns regarding casualty tolerance such as the gender gap are consistent across a variety of conflicts, minority respondents appear to be less supportive of some wars and more supportive of others.<sup>60</sup> Education also has a significant impact on the public’s tolerance for casualties in Iraq. Specifically, we find that a college-educated respondent is about 20% more likely than a respondent who has not completed high school to tolerate at least 1,500 casualties in Iraq.<sup>61</sup>

Finally, and perhaps not surprisingly, party identification has a significant impact on casualty tolerance – especially in the midst of an election year. Debates over the war in Iraq have often been depicted as highly – if not predominantly – partisan contests. It is true that if one makes a simple comparison of partisanship and casualty tolerance, one finds very strong effects. For example, our data indicate that more than 83% of our respondents who identify as Republican or leaning Republican stated that they would be

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<sup>57</sup> Our measure divides respondents into four age categories: 18-29, 30-44, 45-59, and over 59

<sup>58</sup> Feaver and Gelpi, *Choosing Your Battles*.

<sup>59</sup> Ibid.

<sup>60</sup> Ibid.

willing to tolerate at least 1,500 casualties in October 2004.<sup>62</sup> But less than 35% of those who identified as Democratic or leaning Democratic stated that they would be willing to tolerate that many casualties.

Describing such partisan differences, however, is not the same thing as explaining them. Our analysis indicates that much of the reason for the deep partisan divide over the war in Iraq is not due to party loyalty per se. Instead, these differences in tolerance for war costs are largely due to differing estimations among Democrats and Republicans about the underlying questions about the rightness/wrongness of the war and expectations of success. Once we account for a respondent's views regarding the "rightness" of the war and their expectations for success, partisanship has only a modest impact on casualty tolerance. Specifically, Table 5 indicates that a respondent who identified him or herself as "strongly Democratic" is only about 10% less likely to tolerate at least 1,500 US casualties than if he or she had identified as "strongly Republican" – holding constant the respondent's views on the "rightness" and likely success of the war.<sup>63</sup>

Of course, like the perceived PPO, elite consensus, and multilateralism, partisanship may be a key factor in determining those underlying values. Partisanship is especially important in shaping respondent's attitudes regarding whether President Bush "did the right thing" in choosing to attack Iraq. Nearly 60% of our respondents who identified as Republican or leaning Republican stated that they "strongly approved" of the President's decision to attack. Just over 90% stated that they either "strongly" or

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<sup>61</sup> Education level is coded into four categories: less than a high school diploma, completed high school, some college, and BA or higher degree.

<sup>62</sup> We code party identification as a 7 category variable with the following labels: strong Republican, not strong Republican, leans Republican, undecided/independent, leans Democrat, not strong Democrat, strong Democrat.

<sup>63</sup> This result suggests that support for the war and the President may be related but distinct attitudes. See Gelpi, Reifler, and Feaver. "Iraq the Vote."

“somewhat approved.” Only about 40% of Democrats “strongly” or “somewhat approved.” The pattern is similar but not quite as strong with regard to expectations of success.

Finally, the results in Table 4 describe the structure of public attitudes toward casualties in October 2004. But how robust is this structure? In order to ensure that the process we were observing is robust over time, we performed a similar analysis across the other 8 waves of surveys from October 2003. Unfortunately, we were not able to collect data on the control variables for the Jentleson, Larson, and Kull arguments, but we can demonstrate the robustness of the causal process we hypothesize. Analyses of the other survey waves are displayed in an appendix. The coefficients for all the key variables of interest remain very stable across this period, indicating that our results are quite robust.

### **How Does the Public Define and Measure Success in Iraq?**

Across a number of surveys, using a variety of methods on both aggregate and individual level data, the same consistent conclusion emerges: public expectations of success are trumps in determining public support for paying the human costs of war. This helps explain why public support for the war remained fairly robust, despite an unexpectedly bloody and long counter-insurgency, and despite serious doubts being raised about several of the chief justifications for the war: to wit, Americans remained fairly optimistic about the prospects for success in Iraq. But the central role of “expectations of success” begs the obvious *next* question: how does the public define and measure success in Iraq? Perhaps the public measures success in terms of bodybags, in which case our argument is circular and the conventional wisdom is largely correct.

To address this issue, beginning February 2004, we followed up our expectations

of success question with several additional questions probing the meaning and measurement of success. We asked respondents what success meant to them, based on a range of possible answers that were prominent in public discussions. Table 6 presents results to this question.

*Table 6 About Here*

Several remarkable patterns emerge. First, the responses to the question of the definition of success are very stable, astonishingly so when one considers that this was seven different national samples polled over five very turbulent months. A “stable and democratic government” was always the number one choice, followed closely by “Iraqis provide for their own security” and “Iraqis able to live peaceful, normal everyday lives.” Second, the findings strongly suggest that the public moved on from the WMD and terrorism arguments even as events on the ground moved past those *casus belli* as well. The public did not treat the apparent absence of WMD stockpiles as a sign that it was time to declare victory and go home. On the contrary, the public moved on to define success in prospective terms that had relevance to the Iraqi situation as it stood in the winter-spring of 2004. Third, the findings suggest that the public may have taken its cues on defining success from the Bush Administration, which was itself shifting its rhetorical emphasis from the WMD argument to the importance of establishing a stable democracy in the Middle East.<sup>64</sup>

We also asked respondents how they believed one could best to judge whether the US is on a path toward success. That is, we asked respondents what measures they use to track and estimate future success, again directing respondents to choose from a list of

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<sup>64</sup> Dana Milbank and Mike Allen, “U.S. Shifts Rhetoric on its Goals in Iraq,” *Washington Post*, 1 August 2003, p. A14.

plausible factors. Table 7 presents the results to these questions.

*Table 7 About Here*

As with definitions of success, the results on tracking success were remarkably stable over the seven polling waves, with one important exception. Although the relative rankings never changed, the number one indicator, “whether Iraqis are cooperating with U.S. authorities and not protecting terrorists and insurgents,” increased markedly in prominence as time progressed. This shift is especially noteworthy because it may help to explain both the erosion of confidence in the Spring of 2004 and its stabilization during the summer and fall. The Fallujah and Sadr uprisings that began in mid-March 2004 were dramatic signs that the coalition had not won the Sunni hearts and minds and might, indeed, be in danger of losing a key Shiia constituency as well. Moreover, this ominous view was compounded by reports that the Iraqi security forces trained by the coalition to take over the policing function failed spectacularly in that job.<sup>65</sup> But the transfer of sovereignty to Iraq and the creation of an Iraqi government appears to have stemmed this tide – at least for a time.

Most importantly, these results show rather convincingly that our model of casualty tolerance is not a circular argument. The public does not measure success in terms of whether our soldiers are being killed or wounded nor whether the terrorists/insurgents are being killed or wounded. The measures adopted by the public are rather different, and indeed come closer to the “winning the hearts and minds” idea that most experts (and, indeed, Bush administration rhetoric) would identify as the critical factor.<sup>66</sup>

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<sup>65</sup> Richard Sisk, “Iraqis Now Fight Alongside U.S.,” *New York Daily News*, 15 May 2004, p. 7.

<sup>66</sup> Public attitudes and elite rhetoric are clearly correlated in this case, but we cannot determine the direction

## Conclusions

The political campaign season of 2003-2004 provides an unusually good opportunity to examine the American public's tolerance for paying the human costs of war. Our findings challenge the conventional wisdom on public opinion and American foreign policy, but corroborate much of what other academic studies have found. As Mueller would expect, public opinion does "harden" to the costs of war as the conflict drags on. Contrary to Mueller's expectations, however, public support for the President has not declined inexorably with US casualties. Instead, our analysis of presidential approval shows that the impact of casualties on public approval for the President has varied dramatically between the "major combat," "occupation," and "sovereign Iraq" phases of the war.

What can explain this variation in public tolerance for casualties? Consistent with much of the recent work on public opinion in wartime, we find that members of the public appear to be engaging in simple but clear calculations about the expected value of continuing to engage in armed conflict. That is, individuals make judgments about the potential benefits of the conflict and weigh those potential gains by the probability that their government will be able to achieve them.

More specifically, our findings suggest that believing the war was the "right thing to do" combines with expectations of success to determine an individual's tolerance for the human costs of war. Once one takes account of the interaction of these two attitudes, other prominent variables in the literature have only a modest direct impact on casualty tolerance. This interaction effect even outweighs the independent impact of partisanship. Rather than implying that those other factors are not important, however, it seems likely

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of causal influence.

that many of the variables identified in the literature – such as the partisan cues, primary policy objective, elite consensus, and multilateral support – may be most important through their impact on respondent’s views about the “rightness” of the war and the prospects for success.

While both the “rightness” of the war and expectations of success are important, our data and analyses indicate that success appears to be the more important factor in this relationship.<sup>67</sup> Not only do expectations of success have a larger marginal impact on casualty tolerance, but the public also has remained optimistic about success even as has remained divided regarding the justification for the war.

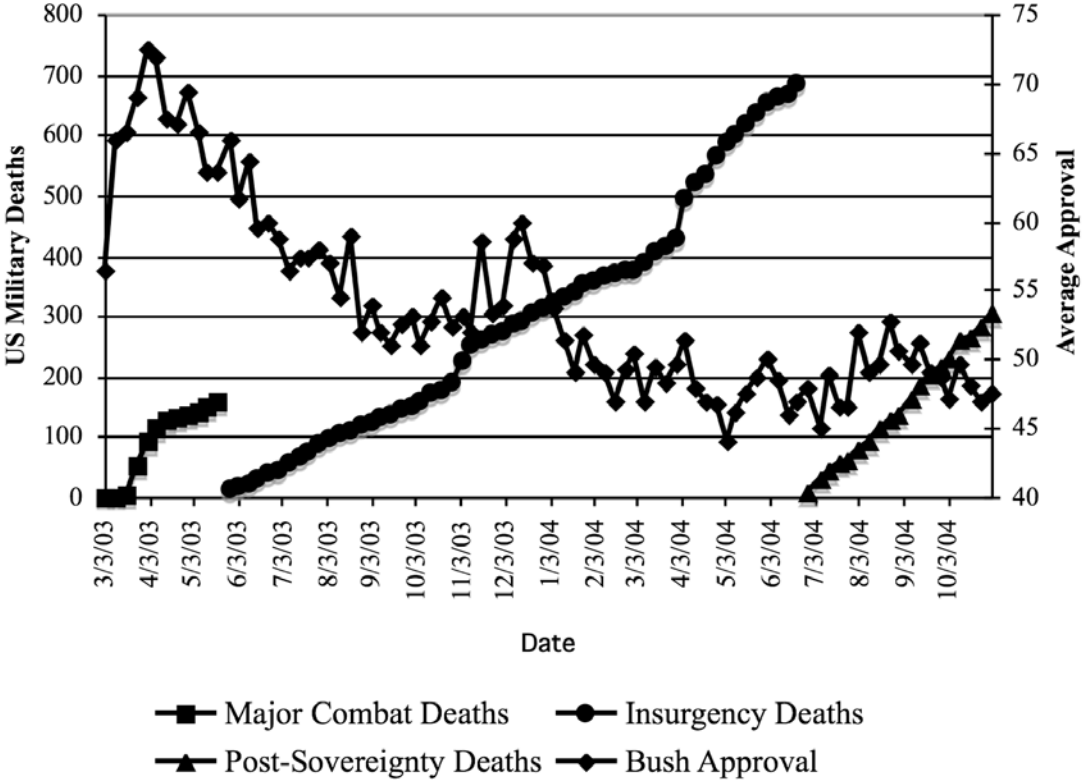
Furthermore, the public does not measure success in terms of body bags. On the contrary, the public claimed to focus on whether the coalition was in fact winning over the hearts and minds of the Iraqi people, as measured by Iraqi willingness to cooperate with coalition forces. The high correspondence between public responses and Bush administration rhetoric in this area suggests that leadership may be a key component.

Finally, our findings allow for a contingent prediction about the current Iraq conflict: public support for the Iraq war will collapse if and when a majority of the public comes to believe that success is no longer likely. After more than two years of a long and bloody counterinsurgency, a sizable minority reached this conclusion and thus public support for the war dropped somewhat. But our findings suggest that policymakers should focus on delivering success rather than on delivering casualty-free military operations.

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<sup>67</sup> Expectations of success is trumps on casualty tolerance, but our analyses, presented elsewhere, find that the rightness/wrongness factor matters more for other factors, including Presidential approval and presidential vote choice. Analyses available from the authors upon request.

**Figure 1: Presidential Approval and Casualties from War in Iraq**



**Figure 2: Impact of Belief in US Success and Rightness of War on Tolerance for Casualties in October 2004**

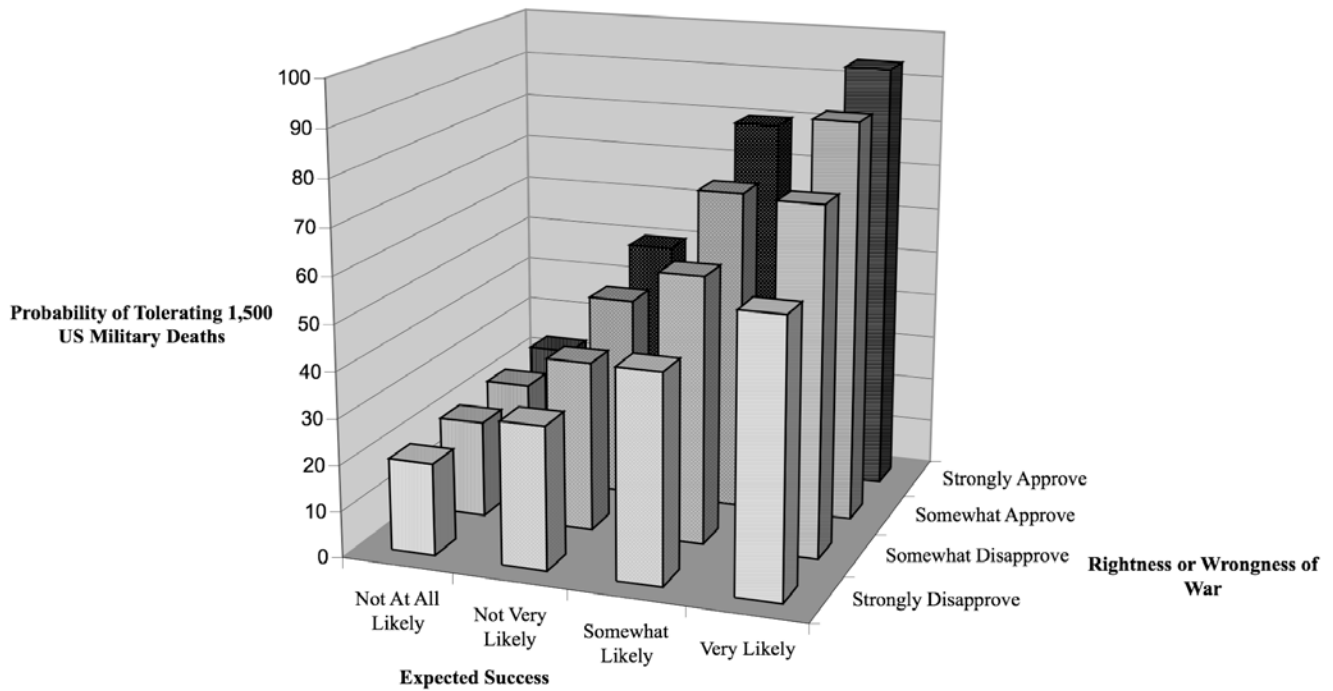


Table 1: Casualties and Presidential Approval: January 2003-November 2004		
	Model 1: Constant Impact of Casualties	Model 2: Contingent Impact of Casualties
Log of Total Casualties	0.101	2.255
	(0.12)	(4.21)**
Casualties x US Occupation		-11.642
		(6.29)**
Casualties x Iraq Sovereign		-2.363
		(0.28)
US Occupation	-1.634	55.157
	(0.60)	(5.41)**
Iraq is Sovereign Again	-3.340	-3.377
	(0.78)	(0.06)
After Saddam Hussein Captured	-2.625	3.850
	(1.08)	(2.30)*
After Release of the Kay Report	-1.047	-3.034
	(0.43)	(2.03)*
Pre-War Media Coverage of Iraq	0.042	0.061
	(1.28)	(2.19)*
Media Coverage Major Combat	0.026	0.030
	(1.93)	(3.49)**
Media Coverage of Insurgency	0.017	0.008
	(1.58)	(0.80)
Media Coverage of Sovereign Iraq	0.021	-0.008
	(0.91)	(0.37)
Media Coverage of Democrats	-0.032	-0.036
	(2.28)*	(2.61)*
Percent Growth in DJI Index	9.890	26.441
	(0.78)	(1.92)
Constant	55.790	53.348
	(13.49)**	(21.25)**
Observations	96	96
R-squared	0.53	0.83
Absolute value of t statistics in parentheses* significant at 5%; ** significant at 1%		

Table 2: The Contingent Impact of Casualties on Presidential Approval During the Iraq War			
Phase of Iraq War	Coefficient for Impact of Casualties	Standard Error	Level of Statistical Significance
Major Combat	2.26	0.536	< .001
US Occupation	-9.34	1.77	< .001
Iraqi Sovereignty	-0.108	8.48	< .990

Table 3: *Public Tolerance for US Military Deaths in Iraq, October 2003- October 2004*

	22 Sep -12 Oct n= 1,203	6-20 Feb n=891	25 Feb -4 Mar n=870	5-18 Mar n=930	19 Mar -2 Apr n=889	2-16 Apr n=881	17-29 Apr n=899	18-28 June n=900	15 Oct -1 Nov n= 1,125
Opposed regardless of US Deaths	15%	23%	21%	23%	22%	24%	24%	24%	23%
Will not tolerate 500/1000/1500 US Deaths	24%	31%	31%	33%	32%	30%	28%	31%	27%
Tolerate at least 500/1000 US Deaths	32%	19%	22%	20%	21%	17%	17%	16%	20%
Tolerate at least 5,000 US Deaths	16%	14%	14%	13%	11%	15%	16%	13%	17%
Tolerate at least 50,000 US Deaths	11%	11%	11%	10%	12%	12%	13%	15%	16%
Refused to answer	1%	2%	1%	1%	1%	1%	2%	1%	1%
Approximate US Deaths as survey begins	300	520	535	540	565	600	685	800	1,100

Table 4: The Individual Sources of Public Tolerance for Casualties in Iraq: October 2004	
Bush Did Right Thing	0.038 (0.27)
US Will Succeed	0.582 (4.18)**
Right Thing X Will Succeed	0.241 (3.64)**
Perceived Elite Consensus	0.645 (5.19)**
Oppose Force without UN Approval	-0.333 (3.45)**
Terrorism is PPO in Iraq War	0.158 (1.99)*
Female Respondent	-0.242 (2.01)*
Non-White Respondent	-0.666 (3.91)**
Age	0.122 (2.07)*
Education Level	0.273 (4.24)**
Party Identification	-0.084 (2.25)*
Observations	995
Absolute value of z statistics in parentheses * significant at 5%; ** significant at 1%	

Table 5: <i>Additional Sources of Casualty Tolerance in Iraq: October 2004</i>		
Explanatory Variable	Change in Explanatory Variable	Change in Probability of Tolerating at least 1,500 US Military Deaths
Perceived Elite Consensus	No to Yes	+14%
Oppose Force Without UN	No to Yes	-6%
Terror is Iraq War PPO	“Distraction” to “Central Front”	+10%
Age	18-29 to 60+ Years Old	+8%
Gender	Male to Female	-5%
Race	White to Non-White	-16%
Level of Education	No H.S. to College Degree	+18%
Party Identification	Strong Rep. to Strong Dem.	-11%

Table 6: *The Public's Understanding of Success in Iraq*

	6-20Feb <i>n=891</i>	25 Feb-4 Mar <i>n=870</i>	5 Mar-18 Mar <i>n=930</i>	19 Mar-2 Apr <i>n=889</i>	2 Apr- 16Apr <i>n=881</i>	17 Apr-29 Apr <i>n=899</i>	18-28 June <i>n=900</i>
Provide for their own security and maintain order	24	24	21	24	25	25	25
The Iraqi economy is rebuilt and oil production is restored	5	4	5	6	5	4	4
An Iraqi government that is stable and democratic is established	29	33	29	29	30	29	28
Iraqis are able to live peaceful, normal everyday lives	24	24	27	24	23	24	22
The Iraqi government is prevented from producing weapons of mass destruction	5	4	3	4	5	3	4
The Iraqi government is prevented from supporting international terrorist organizations	11	10	12	11	11	12	9
Iraq is not a threat to its neighbors							8
Refused	3	1	2	1	2	2	1

Table 7: *The Public's Measurement of Success in Iraq*

	6-20Feb <i>n=891</i>	25 Feb-4 Mar <i>n=870</i>	5 Mar- 18 Mar <i>n=930</i>	19 Mar- 2 Apr <i>n=889</i>	2 Apr- 16Apr <i>n=881</i>	17 Apr- 29 Apr <i>n=899</i>	18-28 June <i>n=900</i>	15 Oct - 1 Nov <i>n=1,125</i>
How well the Iraqi economy is doing, including how much oil is being produced	8	7	8	7	6	5	7	6
What services, such as education, health care and utilities, are being provided to Iraqis	25	26	26	27	23	21	25	19
How soon Iraq can hold free elections	18	18	17	17	14	15	13	14
Whether Iraqis are cooperating with U.S. authorities and not protecting terrorists or insurgents	30	32	29	29	35	38	34	39
How many attacks are made against U.S. soldiers and Iraqis who cooperate with the U.S	7	7	8	8	8	10	10	8
How many U.S. soldiers are killed or wounded	3	3	2	3	2	3	3	4
How many terrorists and insurgents are killed or arrested	2	2	2	2	3	3	4	4
How much money the U.S. has to spend	4	4	5	4	4	3	3	4
Refused	3	2	3	2	4	3	2	2

Appendix: Robustness of Casualty Tolerance Model: October 2003 – June 2004					
	June 2004	April 2004	March 2004	Feb. 2004	Oct. 2003
Bush Did Right Thing	0.378 (2.82)**	0.226 (2.19)*	0.293 (2.86)**	0.202 (1.90)	0.535 (1.59)
US Will Succeed	0.677 (4.94)**	0.394 (3.83)**	0.552 (5.52)**	0.412 (3.99)**	0.925 (4.85)**
Bush Right X Succeed	0.129 (1.95)*	0.276 (5.48)**	0.175 (3.63)**	0.238 (4.68)**	0.469 (1.26)
Female Respondent	-0.425 (3.35)**	-0.572 (6.31)**	-0.549 (6.16)**	-0.348 (3.89)**	-0.646 (5.64)**
Non-White Respondent	-0.581 (3.56)**	-0.475 (4.04)**	-0.247 (2.22)*	-0.380 (3.32)**	-0.602 (3.98)**
Age	0.136 (2.21)*	0.221 (4.95)**	0.166 (3.78)**	0.096 (2.24)*	0.084 (1.49)
Education Level	0.163 (2.59)**	0.289 (6.42)**	0.309 (6.98)**	0.334 (7.24)**	0.162 (2.60)**
Party Identification	-0.105 (2.98)**	-0.113 (4.39)**	-0.075 (2.87)**	-0.027 (1.07)	-0.141 (4.87)**
Observations	881	1725	1776	1721	1065
Absolute value of z statistics in parentheses * significant at 5%; ** significant at 1%					