

This is an electronic version of an article to be published in the December 2009 issue of *Mass Communication and Society*. © 2009 Taylor and Francis. *Mass Communication and Society* is available online at: <http://www.tandf.co.uk/journals/HMCS>

**Testing the “Proximate Casualties Hypothesis”: Local Troop Loss, Attention to News, and Support for Military Intervention**

Andrew F. Hayes and Teresa A. Myers

School of Communication

The Ohio State University

Columbus, OH, USA

Corresponding authors

Andrew F. Hayes and Teresa A. Myers

School of Communication

The Ohio State University

3016 Derby Hall

154 N. Oval Mall

Columbus OH 43210

hayes.338@osu.edu

myers.867@osu.edu

614-688-3027 (Hayes)

574-606-4571 (Myers)

### Abstract

In academic and policy circles, it is believed that the American public is casualties-averse when sending its troops into war, and that as casualties mount the public will increasingly call for withdrawal of troops from foreign military interventions. This study tests a variant of this “casualties hypothesis” by examining whether the public conceptualizes the human costs of war in local as well as national terms. Using a massive quantity of public opinion data combined with information on deaths to U.S. soldiers in the Iraq war theater between 2003 and 2006, we show that recent deaths to soldiers from a person’s home state prompt an increase in the likelihood of the person supporting withdrawal of troops, independent of cumulative national casualties and recent casualties to soldiers from elsewhere in the country. These results are explained in terms of journalism norms that make recent, local casualties salient to consumers of news, who then use this salient information when their opinions about the progress of a war are probed.

## Testing the “Proximate Casualties Hypothesis”: Local Troop Loss, Attention to News, and Support for Military Intervention

Debate about the costs and benefits of military intervention in overseas conflicts pervades public discourse in times of war. Through letters to the editor, opinion pieces, editorials in national and local newspapers, talk radio shows, and neighborhood sidewalk chit-chat, the public continuously evaluates and reevaluates the desirability of entering and continuing to engage in a military conflict. Public debates such as these are important in democracies, for it is generally acknowledged that public support for military interventions is crucial for leaders to retain the political capital necessary to enter and maintain prolonged participation in military conflicts (Holsti, 1996; Reiter & Stam, 1998; Russett, 1993, Stam, 1996).

Many scholars have tried to explain the mental calculus that underlies the public’s decision about whether or not to support a military intervention. One common perspective is that the public engages in some kind of cost-benefit analysis, however sophisticated or crude it might be, and supports military intervention when the perceived benefits outweigh the perceived costs (but see Berinski, 2007, who questions whether the public engages in this kind of reasoning). Considerations such as the objective of the intervention, whether it is in the national interest, and the perceived likelihood of victory are believed to enter in this analysis (Burk, 1999; Eichenberg, 2005; Gelpi, Feaver, & Reifler, 2005/6; Jentleson & Britton, 1998; Klarevas, 2002; Larson, 1996). Although there are many factors that can figure into the public’s perception of the costs of an intervention, the perspective that has received the most attention in both academic and policy circles is that the perceived *human* costs of warfare, typically measured in terms of number of soldiers killed in action, plays a central role in whether the public will support a military intervention (Mueller, 1973, 1994). According to this model, the U.S. public is casualties-averse. Although the public may tolerate a small number of casualties early in a war, as a conflict continues and casualties mount, public support for an intervention will

decline, eventually leading to demands for troop withdrawal. This argument, termed the “casualties hypothesis,” was built from Mueller’s comprehensive analysis of the public’s response to the Vietnam conflict. Over the years, considerable research has been conducted examining the relationship between casualties accrued during a military conflict and such public opinion outcomes as perceived progress of the war, whether to maintain military presence or withdraw, and presidential approval, for example. Data from U.S. interventions in World War II (Kriner, 2006), Vietnam and Korea, (Gartner & Segura, 1998), the Persian Gulf (Klarevas, Gelpi, & Riefler, 2006; Mueller, 1994), and others (e.g., Burk, 1999) are consistent with the casualties hypothesis (see Larson, 1996, for a partial summary) yet are difficult to interpret unequivocally for reasons we discuss below.

In the research presented here, we provide empirical support for a variant of the casualties hypothesis by illustrating that the public assesses the costs of war not only in *national* human terms—the focus of the bulk of the existing research—but also in *local* human terms. We test the *proximate casualties hypothesis*, which predicts that above and beyond the effect of national casualties, people’s opinions about whether the country should maintain presence in a military conflict are driven by casualties that have occurred recently and to soldiers who reside in nearby regions of the country—casualties that are likely to be highly salient when people are probed about their opinions about an intervention. Although we are not the first to advance this hypothesis (e.g. Gartner, Segura, and Wilkening, 1997), this study provides one of the largest scale tests of this proposition. Furthermore, unlike those before us, we assess whether attention to news about the conflict moderates the relationship between casualties and support for continued military intervention. Finally, unlike in other studies, the method we use allows us to hone in on the time window in which local, recent casualties exert their largest influence on public opinion.

### Methodology and Criticism of Existing Research

The casualties hypothesis has most frequently been tested in one of two ways. The simplest approach asks people *prospectively*, before military action commences, whether they would support a military intervention even if it meant a certain number of casualties were likely. By manipulating the number of casualties a person is asked to contemplate in a hypothetical war, it is possible to gauge public sensitivity to casualties. For example, Mueller (1994) reports data collected prior to the first Gulf war in 1991 demonstrating that among those who thought the U.S. should attack Iraqi troops in Kuwait, fewer would support such an attack if it meant 10,000 (30%) or 20,000 (23%) casualties, compared to only 1,000 (44%) casualties. Similarly, less of the public felt the war would be considered a success if it involved 5,000 (27%) or 1,000 casualties (37%) compared to only 500 casualties (50%). A variant of this approach asks people their opinions on the use of force in a split-ballot survey, either mentioning or not mentioning the possibility of casualties. For example, Eichenberg (2005) reports a summary of polls taken prior to various military interventions by the U.S. showing that with one exception (the invasion of Panama in 1988-89), support for the use of force was lower when the question prompted the respondents to think about casualties.

This prospective methodological approach suffers from the obvious problem that it ignores or discounts the relevance of what actually happens during military intervention—factors such as the overall economic and social context in which those casualties are occurring *as* they mount, the statements of political elites and journalists offering opinions and commentary on the war, and other information made public by the media that might lessen (or amplify) the effects of casualties on opinions. At best, findings resulting from this methodology offer only a glimpse of the human costs the American public is willing to tolerate in times of war.

The second approach has been to tabulate the cumulative number of casualties as reported by the media or the government as the war progresses and then interpret public opinion about the

war over time in light of these casualties figures. This approach has been taken most frequently by researchers analyzing public opinion and military conflict *retrospectively* (e.g., Burk, 1999; Larson, 1996; Mueller, 1973). Larson's (1996) summary of the data from U.S. interventions prior to 1996 shows that the evidence arising from this approach to studying the casualties hypothesis is mixed. The extent to which public opinion tracks casualties varies considerably across wars and as a function of such things as whether the intervention is perceived to be in the interests of the nation or whether political elites are unified in their support for the intervention.

This method of correlating opinion and cumulative U.S. casualties (qualitatively or statistically) does allow assessment of the relationship between mounting casualties and opinion within the context of the progress of a war. However, there are still several limitations to this approach, the most serious being that it confounds the passage of time with cumulative casualties (Gartner & Segura, 1998; Gartner, Segura, and Wilkening, 1997; Smith, 2005). Although a correlation between cumulative casualties and opinion is consistent with the proposition that opinion is influenced by mounting casualties, any other variable that covaries with time (and therefore cumulative casualties) could be responsible for opinion shifts over time. Indeed, Blainey (1973) argues that "war-weariness" accounts for much of the decline in support for a war over time. Such war-weariness can come from a multitude of sources, such as escalating economic costs, the emotional costs of prolonged deployment to the families, increased domestic political turmoil, growing apprehension about the likelihood of victory or defeat, and so forth.

Most relevant to the research reported here, much of the casualties hypothesis research to date emphasizes national, cumulative casualties while making the questionable assumption that information about casualties is disseminated uniformly throughout the nation with equal effect on everyone. It is our contention that above and beyond the effect of cumulative national casualties, people's decisions about whether to continue to support military intervention is driven in part by

*recent* casualties suffered by soldiers who reside in *nearby* locations (see also Gartner & Segura, 1998; Gartner, Segura, & Wilkening, 1997). For instance, conventional approaches to conceptualizing the casualties hypothesis presume that a Californian is as affected by the death of soldiers from New York as he or she is by deaths to soldiers from California. Moreover, it assumes that a soldier killed two months ago has the same impact on current opinion as the death of a soldier two days ago. These assumptions are likely unwarranted, as information about recent and local deaths is likely to be more salient than information about past casualties or casualties on a national scale due, at least in part, to increased local media coverage of recent, local casualties. Furthermore, such salient information is likely to be more accessible to individuals as they respond to opinion requests, and therefore more likely to be used as the basis for opinions expressed in public opinion polls (Edwards, Mitchell, & Welch, 1995; Taylor & Fisk, 1978; Zaller & Feldman, 1992).

There are several mechanisms that likely make these proximate (local and recent) deaths more salient to the public when respondents to polls formulate and articulate their opinions about the events of war. We contend that regional variation in media coverage of casualties is one such mechanism. It is likely that local coverage of deaths varies between regions according to the degree to which specific casualties are deemed *newsworthy* for a particular region. The extent to which events occurring in society are covered by the news depends on how congruent those events are with the “news values” implicit in how journalists and editors decide what is presented as news (Gatlung & Ruge, 1965). Although there is no formal canon of these news values, various conceptualizations of newsworthiness center around such concepts as timeliness, geographic proximity, cultural proximity, importance, novelty, and conflict (see Abbot & Brassfield, 1989; Berkowitz, 1990; Boyd, 1994; Clayman & Resiner, 1998; Fuller, 1996; Harcup & O’Neill, 2001; Harmon, 1989; Herbert, 2000).

It is likely that proximate casualties correspond with the news values of regional news media to a greater extent than do national, cumulative casualties. Consider the value of *timeliness*; timeliness is the extent to which an event is deemed “new” or “recent.” Catchphrases such as “breaking news,” “this just in,” and “newsflash” illustrate the norm of preferring to report recent, rather than older, events. Indeed, newness seems to be inherent in the very label of *news*. Thus, the argument that *recent* casualties are more likely to receive coverage in the media seems convincing – the death of a soldier two days ago is more likely to be covered in the media than the death of a soldier two months ago or two years ago, and thus when people are asked to articulate their opinions to pollsters, such recent events covered by news organizations are more likely to be called to mind and used in the judgment.

Additionally, these news values suggest that coverage of the deaths of soldiers from a certain region would likely be more frequent and in-depth than the coverage of deaths of soldiers from other regions of the country. The value of *geographic proximity* would suggest that media outlets tend to cover stories for which they can find a “local angle.” Clearly, the death of a soldier from the newspaper’s region corresponds to this criterion more than the death of a soldier from outside the region. Therefore, it is likely that those regional newspapers will provide more coverage to those casualties from their own region than to those casualties from other regions. Indeed, in a content analysis of local and national media coverage following the bombing of the USS Cole, Gartner (2004) found that regional coverage did vary by the extent to which a locality was affected by casualties. Local media serving communities that received more casualties covered the tragedy to a greater extent. This evidence lends credence to the argument that *local* casualties will receive more coverage by local news media, with the potential of a correspondingly larger effect on local public opinion relative to proximally distant casualties.

Furthermore, such proximate deaths are likely framed in ways that accentuate their emotional impact on the reader. Individuals from a given region may identify more with local losses; the soldier may have attended the same high school, dated your cousin, worked at the local grocery store, and so forth. This tendency of the news media to tap into this identification is called the value of *cultural proximity*. News outlets not only cover stories which have some link to the cultural lives of their audiences, but are apt to accentuate this “localness.” Surveys indicate that the American public desires local coverage to emphasize the human interest side of a story, and regional media outlets comply (Carpenter, 2007; Heider, McCombs, & Poindexter, 2005; Shaw, 2007). This type of emotional coverage likely enhances the prominence of local losses in that it makes their deaths more salient to individuals from that region (c.f. Aust & Zillman, 1996).

Finally, local losses may be seen as less “routine” as national casualties mount, and as a result, local losses are more likely to be attention-grabbing. News organizations prioritize coverage of events that are *novel*, or can be interpreted as having some new angle. Therefore, as national casualties continue to climb day to day, the death of one more soldier on a national level is a relatively marginal increase. However, the number of deaths suffered at a local level is much smaller; thus, a local death likely signals a relatively larger discrepancy from the status quo, making these local deaths more likely to be interpreted as novel and interesting, resulting in more local media coverage.

In summary, the news values of timeliness, geographic proximity, cultural proximity, and novelty make it reasonable to assume that recent deaths of soldiers from a region will receive relatively more coverage in that region’s news. Furthermore, it is likely that this increased coverage leads to proximate deaths having more weight in peoples’ opinion as to whether to remain in the conflict or withdraw troops.

As noted earlier, we are not the first to advance the proximate casualties hypotheses. Indeed, there is already some support in the extant literature that casualties that occur locally or recently contribute to war-related opinion independent of cumulative national casualties. Using data from casualties and public opinion during the Vietnam war, Gartner et al. (1997) found that Californians residing in counties that had suffered relatively more casualties within the prior 120 days of being interviewed expressed relatively less approval for the U.S. policy in Vietnam. Similarly, Gartner and Segura (1998) found that larger marginal casualties at the national level—those that occurred within the last 120 days—were associated with greater disapproval of the Vietnam and Korean war policies even after accounting for cumulative national casualties. The findings are consistent with earlier research showing that variations in regional media content about political matters predict individual differences in political attitudes (Miller, Goldenberg, & Erbring, 1979).

#### *Moderating Role of Attention to News*

The media represent the most pervasive manner by which a nation's people get information about military interventions. International conflicts, by their very nature, are difficult for individuals to comprehend without media coverage. Although the media play a huge role in influencing the beliefs of the public during times of war, variables relating to media use or attention have rarely been included in studies testing the casualties hypothesis. Even those researchers who have acknowledged the relevance of attention to news have failed to include variables measuring such attention in their models. In the study reported here, we overcome this limitation of existing research.

Research to date testing the casualties hypothesis has assumed a one-to-one correspondence between actual casualties and knowledge about the number of casualties. But as Lippmann long ago stated, it is not events themselves but our perceptions of events that influence opinion: “we can best understand the furies of war and politics by remembering that almost the whole of each party

believes absolutely in its picture of the opposition, that it takes as fact, not what *is*, but what it *supposes* to be the fact” (Lippmann, 1922, p. 4, emphasis added). Recent evidence in the context of the March 2003 invasion of Iraq shows a remarkable level of misunderstanding among the public about the number of casualties that the U.S. has suffered (Berinski, 2007; Myers, 2007). As Lippmann would have forecast, such misperceptions are related to other beliefs about the war, such as how well it is going and whether troops should be withdrawn or remain in the conflict, independent of the number of national casualties suffered. For instance, Myers (2007) reports that people who overestimate the number of casualties the U.S. has suffered since the invasion of Iraq in 2003 are more likely to believe troops should be withdrawn from Iraq relative to accurate estimators. Conversely, underestimators are more likely to believe troops should remain in the conflict, even after a variety of demographic and ideological controls. Importantly, and most pertinent to our argument, Berinsky (2007) and Myers (2007) show that attention to news about the war predicts accuracy in one’s beliefs about the number of casualties that have occurred, with greater attention corresponding to greater accuracy. This line of argument and evidence suggests that individuals who attend more to the news about a military conflict are more likely to be aware of just how many casualties have been suffered, both locally and nationally. Insofar as casualties (proximate or national) affect public opinion about military intervention, it is expected that such an effect would be more pronounced among those paying greater attention to the news about the conflict.

### *Study Overview*

The study reported here tests the proximate casualties hypothesis using a massive quantity of publicly available data from telephone interviews of U.S. residents, combined with data on U.S. casualties accrued since the U.S. invasion of Iraq in March 2003 archived by the Department of Defense. The combination of opinion and casualties data allows us to quantify, for each respondent,

not only how many deaths had occurred nationally and cumulatively as of the date of the interview, but also how many casualties had been suffered proximally, which we define as casualties to soldiers who reside from the same state of the respondent within  $t$  days prior to the interview. By varying  $t$  from analysis to analysis, we are able not only to assess whether proximate casualties are related to public opinion—specifically, whether a person reports that troops should be withdrawn from Iraq—but to also assess what the “window of impact” is with respect to when local, recent casualties are likely to most influence opinion, if at all. That is, unlike those before us, we do not arbitrarily define temporally proximate deaths (or “marginal deaths,” in the words of Gartner & Segura, 1998) as deaths within 120 days of the interview—a time window which made more sense in the 1960s and 70s when the dissemination of casualties information through the mass media progressed at a much slower pace relative to today. Furthermore, unlike Gartner et al.’s studies, we are able to test the proximate casualties hypothesis using *national* opinion data (rather than only in California, as in Gartner et al., 1997) while simultaneously operationalizing proximity as both temporal *and* geographic proximity (Gartner et al., 1998, used national opinion data but only examined temporal proximity). Finally, the data sets we analyze include a measure of attention to news about the war in Iraq, allowing us to assess whether any effect of casualties (national, proximate, or both) is moderated by attention to news about the conflict.

## Method

### *Survey Data*

Since just after the U.S. invasion of Iraq on March 20, 2003, the Pew Center for People and the Press has conducted numerous national telephone surveys in which they asked questions using the same wordings over time. This study includes the data from 21 of those surveys, all based on random digit dial sampling, that included a consistently-worded question about U.S. military presence in Iraq and that also included a measure of the respondent’s attention to news about the

Iraq war. The earliest interview was conducted on October 15, 2003, and the latest was January 15, 2007. Aggregated across the 21 surveys, the 30,666 respondents in the data were distributed across 48 states and the District of Columbia (residents of Hawaii and Alaska were not recruited by Pew). Because Pew did not stratify sampling by region or state, the sample includes many more residents of populous states (such as California,  $n = 2,945$ ; Texas,  $n = 1,908$ ; New York,  $n = 1,706$ ; Pennsylvania,  $n = 1,617$ ) than less populous ones (such as Wyoming,  $n = 68$ ; North Dakota,  $n = 82$ ; Delaware,  $n = 96$ ; South Dakota,  $n = 100$ ).<sup>1</sup>

*Troop Withdrawal.* The outcome variable in all analyses is whether the respondent believed troops should be withdrawn from Iraq “as soon as possible” rather than remain in the conflict. The question was phrased “Do you think the U.S. should keep military troops in Iraq until the situation has stabilized, or do you think the U.S. should bring its troops home as soon as possible?” A response of “bring troops home” was coded one, and “keep military troops in Iraq” and “don’t know” were coded zero. Thus, we consider a don’t know response as identical to keeping troops in Iraq for the purpose of this analysis, in that both represent *not* explicitly stating that troops should be withdrawn. Those who reported troops should be withdrawn as soon as possible were in the minority (42.1%), with a slight increasing trend over time. Relatively few claimed they didn’t know (4.9%).<sup>2</sup>

*Attention to Iraq News.* In addition, to be included in the data set, the survey had to include a question about attention to news about the war. This question was prefaced by “Now I will read a list of some stories covered by news organizations this past month. As I read each item, tell me if you happened to follow this news story very closely, fairly closely, not too closely, or not at all closely.” The question then read “News about the current situation in Iraq.” Responses were coded with increasing values for increasing attention: not at all closely = 1, not too closely = 2, fairly closely = 3, very closely = 4. Respondents on the whole reported attending to the news very closely

(44.4%) or fairly closely (39.5%), with relatively fewer reporting attending not too closely (11.0%) or not at all closely (5.1%),  $M = 3.23$ ,  $SD = 0.84$ .

*Respondent State and Date of Interview.* The Pew Center includes information in their public data files to derive the state of residence of each respondent. We used the first two digits of the Federal Information Processing Standard (FIPS) code. Pew also includes the exact date of the interview, which we converted to days since the U.S. invasion. So March 20, 2003, would be day = 1. The earliest interview in the data files took place on October 15, 2003 (day = 210) and the latest on January 15, 2007 (day = 1,398).

*Demographics, Political Ideology and Party Identification.* Pew has asked a number of demographic and political orientation questions in their surveys using identical question wording. Although these variables are interesting in their own right, we use them solely as statistical controls in the analyses. Respondents were asked the year they were born, which was then converted into age in years ( $M = 49.72$ ,  $SD = 17.39$ ). Education was obtained from a question asking respondents the highest level of education attained (from 8 years or fewer, coded 1, up to completion of postgraduate training/graduate school, coded 8),  $M = 4.66$  (between “technical or trade school after high school” and “some college”),  $SD = 1.62$ . Ethnicity of the respondent was coded from responses to the question “What is your race? Are you white, black, Asian, or some other?” A dummy variable was used to code whether a person was white (84%) or of some other ethnicity (16%). Sex of the respondent was dummy coded (Male = 1, Female = 0; 52% female).

Political ideology was obtained from a question asking respondents “In general, would you describe your views as...” with response options “very conservative” (coded 1), “conservative” (coded 2), “moderate” (coded 3), “liberal” (coded 4) or “very liberal” (coded 5),  $M = 2.78$ ,  $SD = 0.95$ . Political party identification was coded for each respondent using responses to two questions. All respondents were asked “In politics TODAY, do you consider yourself a Republican, Democrat,

or Independent”? Respondents who claimed they were “Independent” and those who volunteered no preference, some other party, don’t know, or refused were then asked “As of today, do you lean more toward the Republican Party or more to the Democratic Party?” A participant was coded as Republican if s/he reported being a Republican or leaning toward the Republican Party, or a Democrat if s/he reported being a Democrat or leaning toward the Democratic Party. Anyone who responded “Independent” or “No preference” to the first question and who reported not leaning toward either party, or refused the second question was coded as an Independent. Party identification was coded with two dummy variables (Democrats and Republicans) with Independent as the reference category. Using this procedure, 43% of respondents were classified as Republican, 48% Democrat, and 9% Independent.

*Nonresponse.* As is typical in survey data, some respondents did not respond to one or more questions used as predictors in the models. To reduce the amount of data lost to nonresponse, we used a hotdeck imputation procedure (Little & Rubin, 2002). To impute nonresponses, the rows (i.e., respondents) of the survey data file were randomly permuted within state and sex. Any respondent missing on a given variable was assigned the value of respondent nearest to him or her in this randomly permuted data file who was not missing data. This has the effect of assigning a response to nonresponses by randomly sampling without replacement from the distribution of the responses to that question from other respondents residing in the same state and of the same sex as the respondent. We also created six dummy variables (for age, education, ideology, party identification, attention to news, and ethnicity) that were used in the analysis coding whether a case was imputed (0 = no, 1 = yes) on that variable. Most respondents (91.8%) did not require any imputation at all. The variable that required imputation most frequently was political ideology (1,496 cases, or 4.9% of respondents), with the remaining predictor variables in the model requiring imputation on fewer than 2% or cases.

*Casualties Data*

Data on the deaths of U.S. military personnel killed in Iraq were obtained from a database compiled at <http://icasualties.org> from Department of Defense press releases. This database contains information about each U.S. casualty including name, state of residence, location and date of death, and means of death, if known. The individual press releases are archived by the Department of Defense at <http://www.defenselink.mil/Releases/archive.aspx>. Using this population of casualties with their corresponding dates of death, we constructed a database that contained the number of deaths of U.S. military personnel nationally and in each state on each day between March 20, 2003 (the first day of the invasion) and January 15, 2007 (the date of the last interview in the survey data described above).

*Proximate Casualties.* This database was used to create a “proximate casualties datafile which contained the number of U.S. military personnel killed in Iraq no more than  $t$  days ago in each state, with  $t$  ranging from 1 to 30, as well as  $t = 45, 60,$  and 120. This was done for each day of the war. We then merged this information into the survey data file, producing a variable for each respondent quantifying how many casualties of soldiers from the respondent’s state had occurred between the date of the interview and the  $t$  days before the interview. For example, for a respondent from Alabama interviewed on December 9, 2006, there had been 1 death to a soldiers from Alabama in the  $t = 5$  days prior, and 3 deaths in the  $t = 30$  days prior. Additionally, using the same procedure, a variable was created that quantified the number of casualties to soldiers *from all other states* between the date of the interview and  $t$  days before the interview. For example, there had been a combined 25 deaths to soldiers from all states other than Alabama within  $t = 5$  days prior to December 9, 2006. We did not count casualties on the day of the interview because it would be unlikely that deaths that occurred on the same day of the interview would have received media

coverage prior to the interview and, therefore, such casualties could not possibly affect a respondent's opinion at the time of interview.

*Cumulative National Casualties.* We also constructed a variable quantifying the number of *cumulative* casualties that had occurred at a national level as of the date of a respondent's interview. For example, in the case of the respondent from Alabama discussed above, there had been 2930 deaths to U.S. soldiers as of December 9, 2006. We used the log of cumulative national casualties in the analysis to remain consistent with both Mueller's (1973) argument that additional casualties influence opinions less as they mount and Gartner et al.'s (1997, 1998) analysis of the proximate casualties hypothesis using data from the Vietnam and Korean war eras.

## Results

Our analysis focuses on the relationship between casualties and public opinion about troop withdrawal, and whether the relationship between casualties and opinion varies systematically as a function of attention to news about the war. We estimate the probability that a respondent reports that troops should be withdrawn using a multilevel logistic regression model (Guo & Zhao, 2000; Snijders & Bosker, 1999). In this model, the intercept was allowed to vary randomly between states to capture state-level effects not included in the model and also to account for nonindependence resulting from state-level clustering that could bias standard errors. All other effects were estimated as fixed across states. All coefficients and variance estimates were estimated using full penalized quasi-likelihood in HLM version 6. As is standard practice in multilevel modeling, the "baseline" or "null model" was estimated first to assess the variance in the responses attributable to the level-2 unit—state in this case. Although very little of the variance in response was attributable to state ( $ICC < .01$ ), this variance was nevertheless statistically significant,  $\chi^2(48) = 160.745, p < .001$ . In other words, residents residing in different states differed in their support for withdrawing troops from Iraq.

*Cumulative National Casualties*

The next stage of the analysis estimated the withdrawal response from respondent demographics (sex, age, education, and white ethnicity), political ideology, political party self-identification, attention to Iraq news, and the natural log of cumulative national casualties at the time the respondent was interviewed. Thus, this model focuses only on public opinion as national casualties are mounting. We also included the six dummy variables coding missingness to account for any effects in the response attributable to being missing on one or more variables. Because there was no evidence that missingness was related to response in the models reported below, we do not report the coefficients for these dummy variables to save space.

The results of this model are presented in Table 1, model 1. As can be seen, all variables were statistically significant predictors of support for withdrawing troops. Of most interest for the purpose of this paper are the coefficients for attention to Iraq war news and national casualties. Notice that the more the respondent reported attending to news about the war, the *less* likely the respondent reported favoring withdrawal of troops,  $b = -0.078, p < .001$ . Independent of attention to news (and all the other variables in the model), the probability of a respondent reporting he or she supported withdrawal was larger later in the war when cumulative casualties were higher,  $b = 0.240, p < .001$ . Although supporting the casualties hypothesis, this effect is difficult to interpret for reasons already discussed. National casualties are correlated with time and everything else highly correlated with time (e.g., escalating costs, “war-weariness”, and so forth), so this effect could be attributable to anything else that covaries with time. Indeed, the correlation between cumulative national deaths and days elapsed since the invasion was 0.99 in these data. Thus, massive redundancy precludes including both as predictors in the model, as they would cancel out each other’s contribution resulting in both appearing to explain little variation in opinion independent of the other.

--- Table 1 about here ---

Not surprisingly, relative to Independents, Republicans were less likely to report favoring troop withdrawal, whereas Democrats were more likely to do so relative to Independents. Political ideology also predicted troop withdrawal independent of political party identification. The positive coefficient reflects the fact that political liberals were more likely to support withdrawal than political conservatives. Additionally, respondents who were relatively more educated were less likely to support troop withdrawal, as were whites compared to nonwhites, males compared to females, and the older relative to the younger respondents.

*The Moderating Role of Attention to News.* Are those paying relatively more attention to news from Iraq more likely to support troop withdrawal as casualties mount or occur proximally. In other words, does attention to news about the war moderate the relationship between casualties and support for troop withdrawal? We answer this question, the interaction between attention and cumulative casualties was added to the model reported in Table 1 (model 1), defined as the product of the respondent's attention and log cumulative national casualties as of the date of the interview. This interaction was statistically significant,  $b = 0.130$ ,  $p < .001$ , and is represented graphically in Figure 1, panel A, plotting the coefficient for casualties as relatively low (one standard deviation below the mean), moderate (the sample mean), and relatively high (the maximum value of 4 on the scale, which was just under one standard deviation above the mean) values of attention. As can be seen, the coefficient for cumulative casualties was larger among those who reportedly attended relatively more to news about Iraq. This should not be taken to mean, however, that such people became increasingly more supportive of troop withdrawal relative to the rest of the sample as casualties mounted. In fact, the opposite is true. Early in the war, when casualties were relatively low, those reporting greater attention to news were less likely to report support for withdrawing

troops. Later in the war, as time passed and casualties mounted, support for troop withdrawal converged to the levels of support seen among those attending relatively less to the news.

--- Figure 1 about here ---

### *Proximate Casualties*

The prior analysis shows that support of withdrawing troops from Iraq increased as a function of mounting national casualties. Any relationship observed between public opinion and proximate casualties—casualties to soldiers from the respondent’s state that have occurred relatively recently—is not fraught with the kind of interpretational ambiguity resulting from the strong correlation between cumulative casualties and the passage of time because the correlation between proximate casualties at time  $t$  and time passed since the invasion is consistently tiny, ranging between  $-.033$  (at  $t = 5$ ) and  $.041$  (at  $t = 29$ ); therefore, because proximate casualties would also be uncorrelated with additional factors correlated with time (such as general war-weariness, perceptions of the likelihood of victory, mounting economic costs, and so forth), these factors cannot serve as alternative explanations for any relationship observed between proximate casualties and public opinion.

To assess the role of proximate casualties in public opinion, we added the number of proximate casualties to the model reported in Table 1, model 2. We estimated this model 33 times, each time including only the number of proximate casualties that had occurred between 0 and  $t$  days prior of the interview,  $t = 1$  to 30, 45, 60, and 120. In addition to demographics, political ideology, party identification, attention to news from Iraq, cumulative national casualties, and the attention  $\times$  national casualties interaction, we also included the number of casualties between 0 and  $t$  days prior the interview to soldiers *not* from the respondent’s state as a further statistical control, to rule out the possibility that any effect due to proximate casualties could be the result of casualties recently suffered by the nation as a whole.

Model 3 in Table 1 reports the results for  $t = 16$ , the time period where the coefficient for proximate casualties was largest. Figure 2 panel A depicts the ratio of the coefficient to its standard error as a function of  $t$  graphically rather than in tabular form for all values of  $t$ . Because of the directional nature of the prediction (as the casualties hypothesis predicts a positive coefficient) we provide a reference line for the  $\alpha = .05$  critical ratio of 1.65 for a one-tailed test in Figure 2. As can be seen in Figure 2, the coefficient for proximate casualties is significantly different from zero one-tailed only in the time window between 15 and 17 days (although there is a clear “bump” in Figure 1 between 10 and 21 days). So 15 to 17 days can be taken as an estimate of the “window of impact” of proximate casualties. That is, the sum of the number of deaths to soldiers from the respondent’s state that have occurred between the date of interview and two to two and half weeks prior to the interview seem to prompt an increased likelihood of supporting troop withdrawal, independent of the number of cumulative national casualties and the number or recent casualties to soldiers from other states. Finally, we should note that in every model that included proximate casualties, the coefficient for log cumulative national casualties remained positive and statistically significant.

--- Figure 2 about here ---

Is the effect of proximate casualties contingent on attention to news about Iraq? This question was answered by interacting each proximate casualties variable (at  $t = 1$  to 30, 45, 60, and 120 days) with attention to Iraq war news and adding the interaction, independently, to the model with variables in Table 1 along with proximate casualties at time  $t$  from the respondent’s state and casualties at time  $t$  from other states. As before, this interaction was formed as the product of attention and proximate casualties as of time  $t$ . Model 4 in Table 1 presents the results for  $t = 23$ , where the interaction was largest, and Figure 2 panel B graphically represents the interaction coefficient relative to its standard error for all values of  $t$ . We again provide a one-tailed test reference line for  $\alpha = .05$  in Figure 2 (as the effect of casualties should be more positive when

attention is higher). There is clear evidence that the effect of proximate casualties is contingent on the respondent's attention to news about Iraq. This coefficient increases around  $t = 12$ , becoming statistically significant between 20 and 24 days, and then hovers just short of statistical significance for several days longer. The interaction at 23 days, where the interaction is largest, is represented graphically in Figure 1, panel B. Notice that among those who pay relatively more attention to news from Iraq, the relationship between proximate casualties and support for troop withdrawal is more positive. Among those paying relatively less attention, the relationship is nearer to zero or even negative.

### Discussion

In this paper we proposed that journalism norms are likely to influence the frequency and form of coverage that local media give to proximate casualties—recent deaths to soldiers from regions nearby—and that such coverage is likely to influence the public's willingness to remain engaged in a foreign military conflict. The analysis we presented is consistent with this argument. Using data from over 30,000 survey respondents collected since the U.S. invasion of Iraq in March 2003, we found that the likelihood of a person reporting that troops should be withdrawn from Iraq was positively related to the number of proximate casualties, independent of cumulative national casualties as of the date of interview, recent casualties to soldiers from other regions of the country, and various demographic and political controls. More specifically, the evidence suggests that recent, local deaths are likely to be most salient to a respondent in a time window between two to three weeks prior to the interview. Furthermore, we found that recent local deaths are positively related to supporting troop withdrawal more so among those who reportedly pay more attention to news about the conflict in Iraq. There was also evidence that mounting national casualties had a larger effect on those attending more to the news, but given the large correlation between

cumulative national casualties and time, this latter interaction has numerous alternative explanations.<sup>3</sup>

A core assumption in our account for how proximate casualties affects public opinion is that local media coverage is likely to be frequent and in-depth for deaths of soldiers that have died recently and originate from locales nearby relative to those from other regions. However, we have no direct measures of media content at the local level or otherwise. We have offered justification for why this content is *likely* to differ in the introduction to this manuscript, and earlier studies do establish a link between variations in media content and political attitudes (Gartner & Segura, 1998; Miller et al., 1979), but we cannot empirically substantiate that it actually is local media content driving the effects we observe. An analysis of coverage of local deaths by local media would greatly add to the depth and texture of the arguments we advance here. A content analysis of local media coverage of casualties could provide insight about what such coverage looks like, such as whether local coverage focuses on the life of the soldier prior to war, the soldier's service in the military, the use of first person sources, and so forth, to accentuate emotional impact. Such an analysis could also be used to assess how to best operationalize "local." We operationalize local at the state-level, on the grounds that local media coverage often includes stories of deaths to soldiers from the state where the newspaper circulates most widely. However, content analyses of media coverage stratified by coverage area (e.g., county, designated market area, state) could clarify patterns of coverage and how "localness" might best be defined. Furthermore, an examination of content across multiple locations would afford answers to such questions as whether large urban newspapers offer more or less coverage of local deaths relative to smaller community papers, whether coverage is qualitatively different for local deaths relative to deaths to soldiers from other regions, and whether coverage of troop deaths in localities where public opinion is against a war differ from coverage in localities where public opinion is in support of the war. Future research, therefore, that

systematically analyzed and described local coverage of troop casualties would greatly benefit research in this area and give us greater insight into the contents of the black-box where media coverage and opinion are linked in the minds of the public.

In prior investigations of the casualties hypothesis in the context of the Vietnam and Korean wars, researchers have focused on 120 days as the “window of impact” of proximate deaths on opinion. The bump and spike in the coefficient for proximate casualties in the 2 to 3 week window we observed is much earlier than reported in previous studies, but consistent with the faster pace by which news about casualties disseminates to the public in the 21<sup>st</sup> century compared to the Vietnam and Korean eras. The 10 day lag apparent in Figure 2 probably reflects the time it takes for a battlefield death to translate into local news coverage. When a soldier dies, the Department of Defense is notified, the death investigated if need be, next of kin notified, and a press release issued. It takes time for local media to notice a press release relevant to its audience, assign a reporter to the story, conduct interviews, and get the article written and into circulation. Once the story is made public, its salience is not indefinite but dissipates with time. Our data suggest that this process, from time of death to the dissipation of the salience of the death in the minds of respondents to opinion polls takes somewhere between 10 and 21 days. An investigation of the evolution and life cycle of local coverage of battlefield casualties could give credence to this claim. The time lag between date of death and release of a local news story about a local casualty would be an interesting variable for future content analysts of war coverage to code and could also substantiate this claim.

Two caveats to our analysis and interpretation are in order. First people with different political leanings tend to use or prefer different sources of information (Hollander, 1996; Iyengar & Hahn, 2007; Stroud, 2007). Furthermore, knowledge about military conflicts varies significantly by the type of media that individuals attend to (Kull, Ramsay, & Lewis, 2003/4). We cannot rule out

using these data that people who chose different content received different messages about the justification for war, the extent to which casualties suffered are worth the cost, and so forth. In other words, our measure of attention to news carries with it the extent or frequency of reception of messages that likely differ in content, perhaps widely, depending on the news source the person chooses. People who attend to news about the war the same amount probably get very different messages from their preferred media source, which probably has different effects on opinions independent of information conveyed by those sources about the number of casualties that have occurred recently, cumulatively, nationally, and locally.

Finally, we acknowledge that we have emphasized the media as the primary conduit of information flow from the battlefield to the public about local casualties at the expense of attention to another important path—interpersonal discussion. Information about deaths to friends, neighbors, and workmates probably disseminates most quickly to some segments of the public through social networks. The detection of casualties effects on public opinion through interpersonal discussion requires a measure of interpersonal discussion not available in the datasets we used. Furthermore, our use of state as the operationalization of “local” works against finding such effects, which would probably appear as a “bump” in the coefficient for proximate casualties in Figure 2 earlier in time. Effects due to interpersonal discussion would be more likely to surface if “local” was operationalized more finely, as county or even neighborhood, for example. Regardless, we cannot say definitively that the two to three-week time lag window we observe for the effect of proximate casualties is attributable exclusively to media channels of communication.

## References

- Abbott, E. A. & Brassfield, L. T. (1989). Comparing decisions on releases by television and newspaper gatekeepers. *Journalism Quarterly*, 66, 853-856.
- Aust, C. F., & Zillman, D. (1996). Effects of victim exemplification in television news on viewer perception of social issues. *Journalism and Mass Communication Quarterly*, 73, 787-803.
- Berinsky, A. (2007). Assuming the costs of war: Events, elites, and American public support for military conflict. *Journal of Politics*, 69, 975-997.
- Berkowitz, D. (1990). Refining the gatekeeping metaphor for local TV news. *Journal of Broadcasting and Electronic Media*, 34, 55-68.
- Blainey, G. (1973). *The causes of war* (3<sup>rd</sup> ed.). New York: Free Press.
- Boyd, A. (1994). *Broadcast journalism, techniques of radio and TV news*. Oxford: Focal.
- Burk, J. (1999). Public support for peacekeeping in Lebanon and Somalia: Assessing the casualties hypothesis. *Political Science Quarterly*, 114, 53-78.
- Carpenter, S. (2007). U.S. elite and non-elite newspapers' portrayal of the Iraq War: A comparison of frames and source use. *Journalism and Mass Communication Quarterly*, 84, 761-776.
- Chang, T. K. & Lee, J. W. (1992). Factors affecting gatekeepers' selection of foreign news: A national survey of newspaper editors. *Journalism Quarterly*, 69, 554-561.
- Clayman, S. E. & Reisner, A. (1998). Gatekeeping in action: editorial conferences and assessments of newsworthiness. *American Sociological Review*, 63, 178-199.
- Edwards, G. C., Mitchell, W., & Welch, R. (1995). Explaining presidential approval: The significance of issue salience. *American Journal of Political Science*, 39, 108-134.
- Eichenberg, R. C. (2005). Victory has many friends: U.S. public opinion and the use of military force, 1981-2005. *International Security*, 30, 140-177.
- Fuller, J. (1996). *News values: Ideas for an information age*. Chicago: University of Chicago

Press.

Gartner, S. S. (1997). *Strategic assessment in war*. New Haven, CT: Yale University Press.

Gartner, S. S. (2004). Making the international local: The terrorist attack on the USS Cole, local casualties, and media coverage. *Political Communication, 21*, 139-159.

Gartner, S. S. & Segura, G. M. (1998). War, casualties and public opinion. *The Journal of Conflict Resolution, 42*, 278-300.

Gartner, S. S., Segura, G. M., & Wilkening, M. W. (1997). All politics are local: Local losses and individual attitudes toward the Vietnam War. *Journal of Conflict Resolution, 41*, 669-694.

Galtung, J. & Ruge, M. (1965). The structure of foreign news: The presentation of the Congo, Cuba and Cyprus crises in four Norwegian newspapers. *Journal of International Peace Research, 1*, 64-91.

Gelpi, C., Feaver, P. D., & Reifler, J. (2005/6). Success matters: Casualty sensitivity and the war in Iraq. *International Security, 30*, 7-46.

Guo, G., & Zhao, H. (2000). Multilevel modeling for binary data. *Annual Review of Sociology, 26*, 441-462.

Harcup, T. & O'Neill, D. (2001). What is news? Galtung and Ruge revisited. *Journalism Studies, 2*, 261-280.

Harmon, M. D. (1989). Mr. Gates goes electronic: The what and why questions in local television news. *Journalism Quarterly, 66*, 857-863.

Heider, D., McCombs, M., & Poindexter, P. (2005). What the public expects of local news: Views on public and traditional journalism. *Journalism and Mass Communication Quarterly, 82*, 952-967.

Herbert, J. (2000). *Journalism in the digital age: Theory and practice for broadcast, print and*

- on-line media*. Oxford: Focal Press.
- Hollander, B. (1996). Talk radio: Predictors of use and effects on attitudes about government. *Journalism and Mass Communication Quarterly*, 73, 102-113.
- Holsti, O. R. (1996). *Public opinion and American foreign policy*. Ann Arbor: University of Michigan Press.
- Iyengar, S., & Hahn, K. S. (2007). Red media, blue media: Evidence of ideological polarization in media use. *Paper presented at the annual meeting of the International Communication Association, San Francisco, CA*.
- Jentleson, B. W. (1992). The pretty prudent public: Post-Vietnam American opinion on the use of military force. *International Studies Quarterly*, 36, 49-74.
- Jentleson, B. W. & Britton, R. L. (1998). Still pretty prudent: Post-Cold War American public opinion on the use of military force. *Journal of Conflict Resolution*, 42, 395-417.
- Klarevas, L. J. (2002). The “essential domino” of military operations: American public opinion and the use of force. *International Studies Perspectives*, 3, 417-437.
- Klarevas, L. J., Gelpi, C., & Reifler, J. (2006). Casualties, the war, and public opinion. *International Security*, 31, 186-198.
- Kriner, D. L. (2006). Examining variance in presidential approval. *Public Opinion Quarterly*, 70, 23-47.
- Kull, S., Ramsay, C., & Lewis, E. (2003-2004). Misperceptions, the media, and the Iraq War. *Political Science Quarterly*, 118, 569-598
- Larson, E. V. (1996). *Casualties and consensus: The historic role of casualties in domestic support for U.S. military operations*. RAND Corporation.
- Lippmann, W. (1922). *Public opinion*. New York: Free Press.

- Little, R. J. A. & Rubin, D. B. (2001). *Statistical analysis with missing data* (2<sup>nd</sup> ed.). Hoboken, NJ: Wiley.
- Miller, A. H., Goldenberg, E. N., & Erbring, L. (1979). Type-set politics: Impact of newspapers on public confidence. *American Political Science Review*, 73, 67-84.
- Mueller, J. E. (1973). *War, presidents, and public opinion*. New York: Wiley.
- Mueller, J. E. (1994). *Policy and opinion in the Gulf war*. Chicago: University of Chicago Press.
- Myers, T. A. (2007). Stay in Iraq?: The (mis)perception of casualties and wartime public opinion. *Paper presented at the annual meeting of the Midwestern Association for Public Opinion Research, Chicago, IL*
- Reiter, D. & Stam, A. C. (1998). Democracy, war initiation, and victory. *American Political Science Review*, 92, 377-389.
- Russett, B. (1993). *Grasping the democratic peace*. Princeton, NJ: Princeton University Press.
- Shaw, D. (2007). Really local. *American Journalism Review*, 29, 54-57.
- Smith, H. (2005). What costs will democracies bear?: A review of popular theories of casualty aversion. *Armed Forces and Security*, 31, 487-512.
- Snijders, T., & Bosker, R. (1999). *Multilevel analysis: An introduction to advanced multilevel modeling*. London: Sage Publications.
- Stam, A. (1996). *Win, lose or draw: Domestic politics and the crucible of war*. Ann Arbor: University of Michigan Press.
- Stroud, N. J. (2007). Media effects, selective exposure, and Fahrenheit 9/11. *Political Communication*, 24, 415-432.
- Taylor, S. E., & Fisk, S. T. (1978). Saliency, attention, and attribution: Top of the head phenomena. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (vol 11, pp. 249-288). New York: Academic Press.

Zaller, J. & Feldman, S. (1992). A simple theory of survey response: Answering questions versus revealing preferences. *American Journal of Political Science*, 36, 579-616.

## Footnotes

<sup>1</sup> The Pew Research Center for the People & the Press bears no responsibility for the analyses or interpretations of the data presented here.

<sup>2</sup> By this choice, we are not suggesting that we believe those who say they do not know and those who say the military should stay in Iraq have the same attitude. Our focus in the analysis we report here is on modeling the likelihood a person reporting the U.S. should withdraw rather than saying something else, and whether this likelihood increases as a function of proximate casualties. We saw no need for the purpose of this analysis to model attitudinal differences between those who report something other than a withdraw response.

<sup>3</sup> We ran an identical set of analyses after discarding participants who said they didn't know or refused to answer the question about withdrawing troops. The results were largely the same. The only notable difference was a slightly weaker interaction between proximate casualties at some values of  $t$  and attention (with the interaction changing from significant to marginally significant in a few instances).

Table 1.

*Multilevel logistic regression model estimating the probability of respondent claiming troops should be withdrawn from Iraq.*

		Model 1		Model 2		Model 3		Model 4	
		<i>b</i>	<i>se(b)</i>	<i>b</i>	<i>se(b)</i>	<i>b</i>	<i>se(b)</i>	<i>b</i>	<i>se(b)</i>
<b>Fixed Effects</b>									
	Male	-0.504***	0.026	-0.504***	0.025	-0.505***	0.025	-0.505***	0.025
	Age	-0.003***	0.001	-0.003***	0.001	-0.003**	0.001	-0.003**	0.001
	Education	-0.210***	0.008	-0.209***	0.010	-0.209***	0.010	-0.209***	0.010
	White	-0.710***	0.036	-0.709***	0.040	-0.710***	0.040	-0.709***	0.039
	Democrat	0.434***	0.044	0.434***	0.043	0.433***	0.043	0.433***	0.043
	Republican	-0.905***	0.047	-0.904***	0.044	-0.904***	0.044	-0.905***	0.044
	Ideology	0.220***	0.015	0.220***	0.015	0.220***	0.014	0.220***	0.014
	Attention to Iraq News (Attn)	-0.078***	0.016	-0.080***	0.012	-0.080***	0.012	-0.080***	0.014
	Log national casualties	0.240***	0.026	0.244***	0.022	0.238***	0.026	0.246***	0.025
	Attn × Log national casualties	--	--	0.130***	0.025	0.130***	0.025	0.127***	0.025
	Proximate casualties ( <i>t</i> =16)	--	--	--	--	0.017*	0.009	--	--
	Recent deaths in other states ( <i>t</i> =16)	--	--	--	--	0.001	0.002	--	--
	Proximate casualties ( <i>t</i> =23)	--	--	--	--	--	--	0.003	0.004
	Recent deaths in other states ( <i>t</i> =23)	--	--	--	--	--	--	-0.000	0.001
	Attn × Prox. Casualties ( <i>t</i> =23)	--	--	--	--	--	--	0.010*	0.005
<b>Random Effects</b>									
	Intercept								
	Estimate	-0.408***		-0.408***		-0.402***		-0.406***	
	Variance	0.008***		0.008***		0.007***		0.008***	

\*  $p < .05$     \*\*  $p < .10$     \*\*\*  $p < .001$

Note: All predictors are grand mean centered, with the exception of the interactions, which are based on products of grand mean centered variables. Results are from the unit-specific model with robust standard errors.  $n = 30,666$  respondents (level-1 unit) distributed across 48 states and the District of Columbia (level-2 unit).

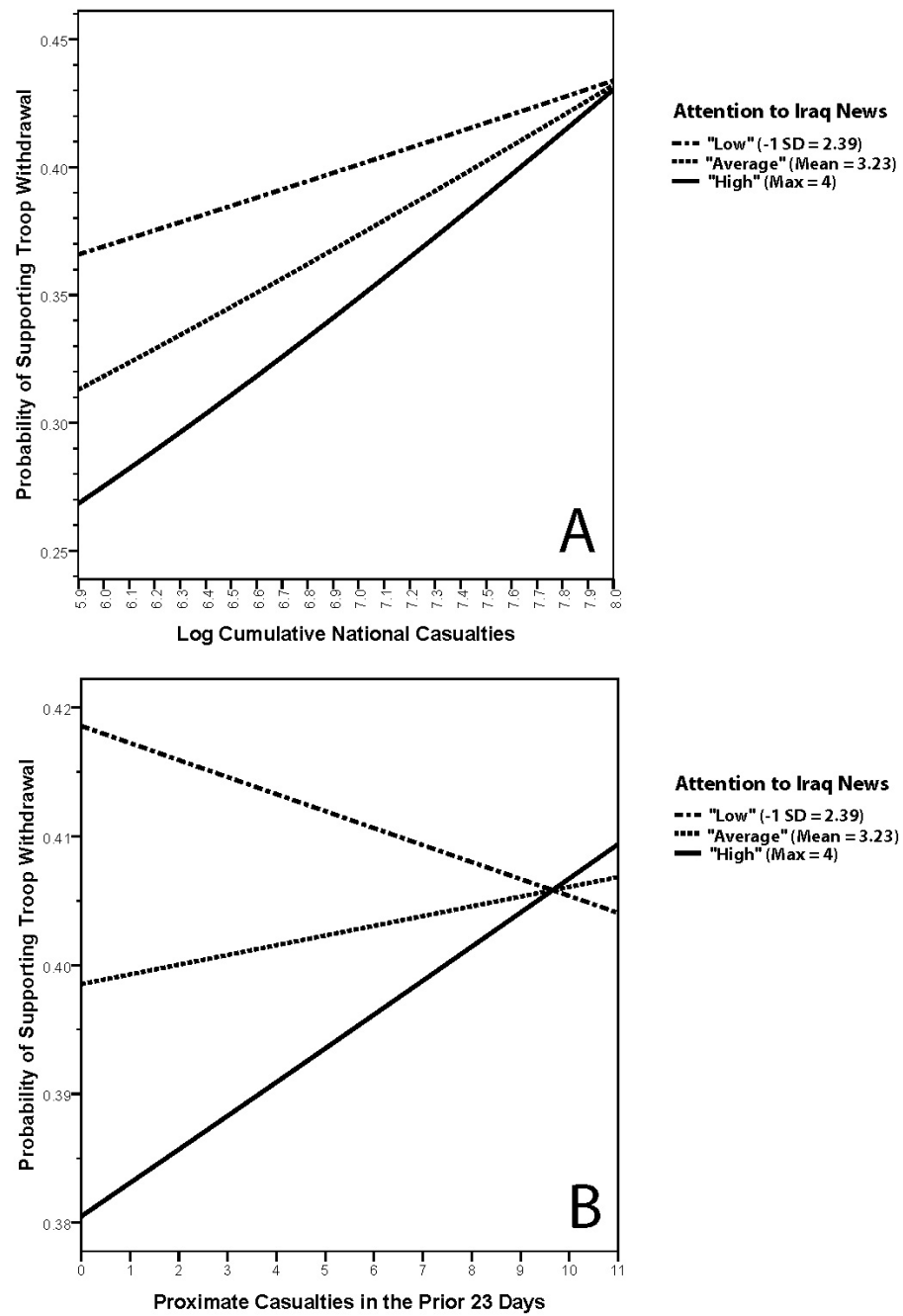


Figure 1. *Probability of supporting troop withdrawal as a function of attention to Iraq news and cumulative national casualties (A) and proximate casualties in the 23 days prior to the interview (B)*

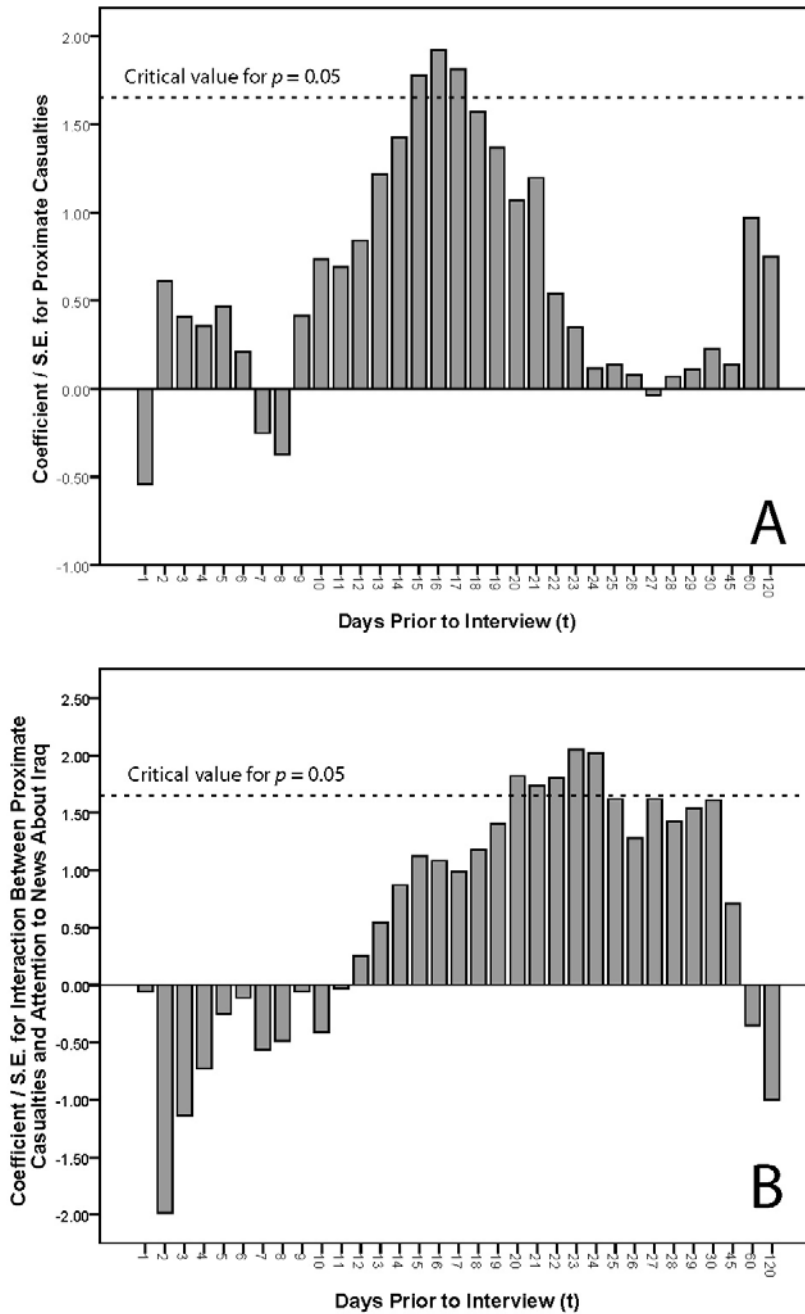


Figure 2. Critical ratios (coefficient divided by its standard error) for the multilevel logistic regression coefficient for proximate casualties (A) and the interaction between proximate casualties and attention to Iraq news within  $t$  days prior to the interview (B).