

Holding out for a Hero:  
An Experimental Study of Crisis, Leadership, and Vote Choice

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Abstract:

From 9/11, to train bombings in Madrid, among other examples, we live in a world in which individuals frequently find that they must make political evaluations and decisions within the context of security crises. Using data generated from two experiments, we test two hypotheses: in times of security crisis, citizens perceive greater gaps in candidate leadership capabilities, in favor of the incumbent; and, in such contexts, they weight leadership more heavily in the voting booth. We find strong evidence that individuals hold out for a hero in times of crisis, relative to “good” times: they award the incumbent with greater leadership capacity and rely more on leadership in their voting decision.

A version of this paper was presented at the annual meeting of the Midwest Political Science Association Conference, April 20-23, 2006, Chicago, IL. The data collection for the first experiment was supported by a grant from the Institute for Governmental Affairs at the University of California, Davis. For research assistance, we thank Vincent Buffalo, Robert Hester, Caitlin Hunter, Noelle Nasif, Emerald Nguyen, Michael Rivera, Ryan Robison, and especially Carl Palmer; for voice over and recording work, we thank Andy Apodaca. Finally, we are very grateful for feedback received on earlier versions of this paper, including that from Darren Davis, Vince Hutchings, Cindy Kam, Rick Lau, Matt Singer, and Nick Valentino.

Around the globe, citizens increasingly find that they have to make political evaluations and decisions under conditions in which terrorist attacks have occurred or are threatened. In 2004, voters in Spain went to the polls just days after devastating train bombings in Madrid. And, while the congressional midterm elections in the U.S. occurred a little over a year after 9/11, and the subsequent presidential election even later, the threat of another terrorist attack continued to loom over the public during these elections as the media and campaigns primed voters on this issue.

In this project, we seek to understand how security crises influence political evaluations and behavior. We ask whether the factors that influence citizens' vote choice during crises are different from those they rely on in times of relative calm. In particular, we focus on perceptions of leadership qualities. Our argument is that, in times of security crisis, citizens focus attention on strong leaders, projecting additional leadership qualities onto likely candidates and perceiving differences in candidates' leadership capabilities in starker terms. We further assert that individuals weight leadership into their vote choice calculi more heavily in times of crisis compared to other times. We test these hypotheses using two experiments: one implemented just prior to the 2004 U.S. presidential election; and another prior to the 2006 California gubernatorial election.

Our project fills a gap in academic research and has broader implications. With respect to the former, scholars of vote choice generally agree that there are three principal dimensions that influence voting decisions: party identification, issues (policy stances and performance evaluations), and candidate traits. While early studies presented party identification as the primary determinant of vote choice, many subsequent studies have examined the individual and contextual conditions under which issue voting is more or less likely. Less work has focused on

factors that affect the weight accorded to candidate traits, such as leadership, in voting decisions, and missing in particular is a focus on contexts of crisis.

With respect to the latter, the increasing vulnerability of citizens to terrorist attacks makes it particularly important that we understand the effects a security crisis can have on decision-making. The 2004 Spanish elections speak to the extent to which terrorist attacks can influence electoral outcomes: voters shifted loyalties dramatically following the Madrid attacks and traded the incumbent conservative government for one led by the Socialist Worker's Party. As we have further seen in countries as varied as Venezuela and the U.S., the type of leader elected under conditions of crisis can have significant implications for both domestic and foreign policy. In fact, we return to a comparison of Venezuelan and U.S. leadership in our conclusion. For now, let us assert that understanding the potential influence of security crises on political evaluations and behavior is critical.

### **Voting Booth Considerations**

As noted, individuals typically select candidates on the basis of party identification, issues (policy stances and performance evaluations), and/or candidate traits. Campbell et al. (1960) found strong support for party identification being the primary determinant of the vote, some support for candidate traits playing a role, and little evidence of issue voting. The weak findings for issue voting in *The American Voter* led to a large literature challenging those results. Broadly speaking, scholars since have argued that the weights voters assign to all three of these criteria vary across individuals and contexts.

Much research has focused on the factors that condition issue-based voting. At the individual level, scholars have examined how issue voting is influenced by factors such as certainty, political sophistication, interest, media exposure, trust, and risk propensity (e.g.,

Alvarez 1997; Gomez and Wilson 2001; Krause 1997; Morgenstern and Zechmeister 2001; Mutz 1992; Sniderman, Brody, and Tetlock 1991). At the contextual level, scholars have focused on factors such as the salience of issues, the intensity of the campaign, whether candidates and parties offer clearly distinct choices, and the presence of institutions that clarify decision-making responsibility for the voter (e.g., Abramson, Aldrich, and Rohde 2002; Anderson 2000; Carmines and Stimson 1980; Cheibub and Przeworski 1991; Jackson 1975; Kahn and Kenney 1997; Page and Brody 1972; Page and Jones 1979; Pomper 1972; Powell and Whitten 1993; Nie, Verba, and Petrocik 1976).

Much less work has focused on candidate traits, despite their central role in media coverage of U.S. electoral contests. A number of studies have found a direct and strong relationship between voters' appraisals of candidates' traits and their choices for president (e.g., Kinder 1986; Markus 1982; Miller and Miller 1976; Miller and Shanks 1996; Miller, Wattenberg, and Malanchuk 1986). These effects have also been demonstrated in congressional elections (McCurley and Mondak 1995) and in parliamentary elections (e.g., Bean and Mughan 1989; Stewart and Clarke 1992). Yet, while a great deal of literature has examined factors that affect the weight accorded to issues in the vote calculi of individuals, less work has examined factors that influence the weight accorded to candidate traits. Of the few studies that exist, most have looked at individual level factors, such as political sophistication.<sup>1</sup>

A small number of works have considered the relationship between context and candidate traits, focusing mainly on the media and campaigns. For example, Mendelson (1996) found that media priming caused voters to rely more on trust in the candidates, and the issue of the free trade agreement, and less on party identification during the 1988 Canadian election. Meanwhile, Funk (1999) found variation in trait evaluations across electoral contexts and candidates in U.S.

presidential elections. In addition to studies examining the influence of trait evaluations on the vote, a number of studies have analyzed the determinants of trait evaluations (e.g., Funk 1997; Miller, Wattenberg, and Malanchuk 1986; Rahn et al. 1990). Lacking, however, is an analysis of how context influences these evaluations.

We assert that one contextual factor vital to the study of candidate trait evaluations, with respect to both their origin and effects on the vote, is an environment characterized by a security crisis. Many studies in the U.S. suggest that crises influence political behavior. For example, scholars of presidential approval have demonstrated that approval ratings increase at the onset of a crisis, as the public “rallies around the flag” (e.g., Callaghan and Virtanen 1993; MacKuen 1983; Mueller 1970, 1973). Analyzing responses to 9/11, researchers have also shown that, as the perceived threat of terrorist attacks increased, individuals became more supportive of the U.S. being active in the world and of President Bush’s campaign against terrorism, less supportive of rights for Arab Americans, and more likely to trade civil liberties for security (Davis and Silver 2004a; Huddy, Khatib and Capelos 2002; Huddy et al. 2005). Davis and Silver (2004b) have also studied the effects of crisis on voting behavior. In a study conducted late in the spring of 2004, they found that individuals with higher levels of sociotropic threat were less likely to support Bush.

We extend work in this area by assessing the effect that a security crisis has on perceptions of leadership and the weight accorded to leadership in individuals’ vote choices. Further, we improve upon extant work by using an experimental design. Most research related to the weight assigned to candidate traits, and other components of vote choice, has used existing survey data, which makes it difficult to make direct comparisons across different contextual situations. By using an experimental design, in which we manipulate only the salience of a

crisis, we are able to compare contexts of crisis and non-crisis while holding all other factors constant.

## **Theoretical Overview**

In this section we draw on extant literature to argue that citizens threatened by a security crisis focus more on strong leadership, as a trait they value in candidates, compared to other times. From this starting point, we then derive two specific hypotheses. First, citizens project additional leadership capabilities onto likely candidates during times of security crisis. This projection increases the perceived leadership differential between competing candidates, in favor of the incumbent. Second, individuals place greater weight on strong leadership in their voting decision in times of security crisis compared to other times.

### *Crises Affect Perceptions of Leadership*

Security crises are among the most likely contexts to motivate a focus on strong leadership.<sup>2</sup> During times of security crisis, individuals frequently experience heightened anxiety and/or threat (Huddy et al. 2005). Security crises put one's physical security at risk, though they can simultaneously also introduce concerns about the safety of ones' fellow citizens. Scholars of terror management theory posit, and provide evidence to support the contention, that in times of security crisis people experience heightened fears of death, which cause them to turn to leaders who appear capable of providing protection (for a discussion see Landau et al. 2004). Whether they are motivated out of concern for themselves and/or others, in times of security crises, individuals naturally should look for a candidate who possesses the ability to offer such protection – that is, to rescue them from the crisis situation. Under such conditions, then, individuals should look for leaders with strong leadership skills.

Not only are citizens likely to look for a candidate with such traits, evidence and theory suggest that they project *additional* leadership capabilities onto selected individuals during times of crisis. Madsen and Snow (1991) argue that during times of psychological crisis (brought on by economic, social, and/or political factors), citizens become willing to project relevant traits onto likely leaders. They find empirical support for this argument with a principally qualitative case study. A number of experimental studies also find evidence that citizens project additional leadership traits onto a likely candidate in contexts of crisis (e.g., Bligh, Kohles and Pillai 2005; Landau et al. 2004; Merolla, Ramos and Zechmeister 2006). For example, scholars of terror management theory have found that individuals primed to think about 9/11 perceived Bush as a stronger leader than those in a control group (Landau et al. 2004). The posited mechanism resulting in increased perceptions of leadership abilities differs across work by Madsen and Snow (a need to restore political efficacy) and Landau et al. (a concern about one's mortality), but the end result is similar in that individuals not only look for strong leaders, but project relevant traits onto likely individuals who might then be able to rescue them from the crisis situation.

Who these "likely individuals" are will differ across types of crises. We assert that, in the case of an externally-provoked security crisis, the most likely recipient of this leadership boost is the incumbent.<sup>3</sup> As individuals project additional leadership qualities onto the incumbent candidate, they may also deflate perceptions of the challenger's leadership qualities. However, even if evaluations of the challenger remain constant, we should find that citizens perceive the incumbent as a stronger leader, relative to the challenger, during times of crisis. A focus on the incumbent is well-supported by the literature on rally effects, which demonstrates that sitting

presidents receive a boost in approval, across many issue domains, when there is a dramatic foreign policy event (e.g., Bowen 1989; Mueller 1970; 1973).

In summary, the first hypothesis we test is that, under conditions of externally-provoked security crises, individuals project additional leadership capacity onto the incumbent candidate and, thus, perceive the incumbent as relatively stronger on this dimension, compared to his or her challenger (H1).

### *The Weight of Leadership in the Voting Booth*

In addition to projecting leadership onto the incumbent, relative to the challenger, we expect that voters will weight strong leadership traits more heavily in their vote choice calculi in times of crisis compared to other times. For at least three reasons, we assert that individuals will rely more on such trait evaluations to select candidates during times of crisis compared to non-crisis settings.

First, recent studies of the effect of emotions on learning and political behavior suggest that times of anxiety may lead to different decision-processes compared to situations of relative calm. Drawing from studies in neurobiology, Marcus, Neuman, and MacKuen (2000) argue that information is transmitted through two different pathways in the brain, the disposition and surveillance system. Under times of ease, individuals will rely on longer-standing predispositions when asked to make voting decisions. Under times of anxiety, the surveillance system will cause individuals to stop and seek information on candidate qualities, as well as issues. Using data from the American National Election Study, these scholars find that U.S. voters rely more on candidate traits (and issues) when they are feeling anxious and less on party identification. Brader (2005) extended this work using an experimental design and found that subjects exposed to a negatively framed political advertisement with fear cues relied more on

candidate traits and issues relative to those who did not receive the fear cues. Extreme events, such as security crises, elevate individual anxiety, which should then lead to similar tendencies to focus on factors proximate to the campaign, which include candidate traits.

Second, a characteristic of many crisis contexts is that the key issues are valence issues. That is, candidates are inclined to focus on ends (the valence) rather than means (policy stances). Valence issues are those in which candidates all take similar stances, for example “restoring economic growth” and “providing security.” In situations where candidates take similar stances on salient issues, citizens should be inclined to look to other factors (Downs 1957) such as the performance of the incumbent on that dimension and/or the traits of the candidates. The 2004 U.S. election was such a situation: Bush and Kerry both pledged to make America safer; the focus was then on which candidate had the traits and experience necessary to accomplish this end.

Third, another body of scholarship – prospect theory – suggests that, in the context of a security crisis, voters may discount issues and performance evaluations and/or simply place greater than usual weight on candidate traits. Prospect theory argues that in the context of losses, individuals will be more inclined to be risk acceptant, while in the context of gains, individuals prefer outcomes with certainty (Kahneman and Tversky 1979). The theory has implications for voting behavior. If we consider times of crisis as a context of losses, then voters might be more willing to discount party affiliations and even possibly proven track records (unless that track record is one in which the incumbent regime appears to have contributed to the crisis) and give greater weight to other factors such as potential leadership and promises. Empirical support for this argument – that in times of crisis individuals place relatively greater weight on leadership capacity than on other standard vote choice inputs – is suggested in comparative studies. For

example, scholars who have examined the phenomenon of *Fujimorismo*, when Alberto Fujimori assumed a populist leadership position in Peru under times of both security and economic crisis, point to a willingness among people in this type of situation to focus attention on strong personalities as opposed to issues and party affiliations (Roberts 1995; Roberts and Arce 1998). Likewise, Weyland (2003), drawing explicitly from prospect theory, argues that in the midst of Venezuela's recent economic crisis, citizens were more risk-acceptant, seeking strong character traits over performance records.

In sum, the second hypothesis we test is that citizens weight leadership more heavily in their voting decision during times of crisis compared to non-crisis times (H2). Since our focus is on leadership traits, we do not specify hypotheses with respect to how the effect of issues and partisan identification vary across settings. With respect to partisanship, the literature suggests that it should be weighted less under conditions of crisis (e.g., Brader 2005; Marcus, Neuman, and MacKuen 2000). We remain agnostic about the extent to which the importance placed on issues may increase or decrease in times of crisis, since the literature is mixed.<sup>4</sup>

To test these hypotheses we conducted two experiments. The first examines crisis, evaluations of leadership, and voter choice in the 2004 U.S. presidential election (Study 1). The second, intended as both a robustness test and test of the generalizability of our findings, examines these variables in the context of the 2006 California gubernatorial election (Study 2). We find support for our hypotheses in both studies. In what follows, we first present and discuss results from Study 1; we then present a somewhat briefer report of Study 2.

### **An Experiment prior to the 2004 U.S. Presidential Election (Study 1)**

Participants in Study 1 were randomly assigned to one of three groups: *Status Quo* (control), *Good Times* (a treatment designed to diminish concerns of a terrorist attack), or *Crisis*

(a treatment designed to increase concerns of a terrorist attack). Following exposure to the treatments (or no exposure in the case of the control), we asked subjects a number of evaluative and behavioral questions concerning the Republican incumbent candidate, George W. Bush, and his challenger from the Democratic Party, John Kerry.

The 2004 contest between John Kerry and George W. Bush provides an excellent test case for two principal reasons. First and foremost, the 2004 presidential election was a context in which perceptions of crisis were justified and real. That the United States was operating under the shadow of crisis was a fact identified often by the media and by politicians, with both groups frequently warning citizens that Al Qaeda was planning an attack on the United States in the period before or near election time.<sup>5</sup>

Second, for the purposes of this study, we needed a context in which we could raise or diminish the salience of the crisis situation. The 2004 election was one in which three issues dominated the concerns of voters: national security, the economy, and the situation in Iraq (Morin and Balz 2004).<sup>6</sup> This provided an opportunity to make one of the issues, namely national security, more salient than the other issues for those in the crisis treatment. We further needed a treatment condition in which one's security concerns could be diminished. During this election there were many positive indicators about the economy, health, and the environment, which enabled us to make salient conditions of prosperity and well-being in the U.S.

### *Participants and Design*

Our computer-based study ran from October 14 to October 27, 2004.<sup>7</sup> Participants were recruited from undergraduate political science classes at a large public university, in exchange for extra credit. The average age of our 299 subjects was 19.89 years, 52% of whom were female and 56% of whom identified as Democrat; the racial/ethnic profile of the subjects was

such that 42% self-identified as White, 34% as Asian, 12% as Hispanic, and the remainder as Black or Other.

Subjects were randomly assigned to the *Good Times* (n=102), *Status Quo* (control) (n=103), and *Crisis* (n=94) groups. Difference of means tests on basic demographic and dispositional indicators revealed that the only significant difference among the three groups with respect to these variables is a slight under-representation of female subjects in the *Good Times* condition, compared to the other two. Compared to the general population, our student sample is somewhat more interested in the politics, more Democratic, and has a higher proportion of Asians and Hispanics and fewer Whites. Some of these differences are not unexpected; for example, Funk (1997) also finds that her student sample is more informed than a national sample. While these differences should be kept in mind when drawing generalizations from our study, we do not expect them to adversely affect our hypothesis tests; in fact, a more informed and more left-leaning sample provides us with a more stringent test, to the degree that it is more difficult to evoke evaluative and behavioral changes from the better informed and that Democrats are less willing to project additional leadership onto a Republican leader.<sup>8</sup> Furthermore, in recent studies with the same manipulations (but different dependent variables), we have found that our treatments are capable of influencing authoritarian attitudes and policy preferences within both student and non-student samples (Merolla, Ramos, and Zechmeister 2005). In short, while of course caution must be used in generalizing from student samples to the population at large, we are confident that results obtained with this sample are highly suggestive of similar mental and decision processes at work within the general adult population.

### *Procedures*

Subjects reported to the lab in order to participate in a study about “current events.” Once seated, individually, in front of a computer terminal, the program randomly assigned participants to either the *Status Quo* (control) group, or one of the two treatment groups. After a research assistant initiated the program, the subjects were asked some basic socio-demographic questions and their party identification. If assigned to the *Good Times* or *Crisis* condition, these questions were followed by instructions to put on headphones and watch a short presentation. After viewing the treatments (or not for those in the *Status Quo* condition, which proceeded immediately to the next set of questions), subjects completed a short survey, which included questions designed to allow for a manipulation check and questions tapping evaluations of George W. Bush and John Kerry as well as political behavior relevant to the campaign and election.

#### *Treatments*

Subjects in the *Crisis* and *Good Times* conditions were presented with an audiovisual treatment of about one minute and a half in length. The *Crisis* audiovisual treatment sought to make the possibility of another terrorist attack salient in the subject’s mind, to a greater degree than it was already made so by the general election context. Thus, the treatment contained frightening politically-relevant images and information regarding security issues, which included statements such as “...the CIA is warning Americans that al Qaeda has people in the United States on the verge of mounting a large-scale terrorist attack.” The *Good Times* audiovisual treatment exposed subjects to happy images and positive information about the state of the United States and its citizens. Our voiceover noted that “overall, more Americans report in surveys that they are healthier and happier than ever before” and made a number of other similar

upbeat statements about life in the U.S. In short, we sought to induce subjects *not* to think about pending national threats.

The audiovisual presentations were modeled after media clips commonly found on news websites, which combine a slideshow of images with a voiceover.<sup>9</sup> The text for the narration was drawn from news and political reports and edited together by the authors; the images were taken primarily from news archives and assembled by our graduate student computer programmer. In some cases we added text boxes with quotes (which were read within the narration). The voiceover was done by a professional male voice actor.<sup>10</sup>

### **Manipulation Check: Study 1**

Subjects coming to our lab were all being exposed (though of course to varying degrees) to the electoral context of the 2004 election. Our intent and expectation was to elevate national security concerns on the part of the respondents who viewed the *Crisis* treatment, and to decrease these among those who viewed the *Good Times* treatment. We expected the control group to reflect the *Status Quo* within this electoral context, reporting concerns of a terrorist attack that fall in between levels found in the other two groups.

In order to test the performance of our treatment stimuli, we asked respondents to indicate how worried they felt that there would be terrorist attacks in the United States in the near future; subjects responded on a four-point scale where 4 indicated very worried. Figure 1 shows the mean response to this question, by group. Those who received the *Good Times* treatment on average are least worried; those in the *Crisis* treatment are most worried; and, those in the *Status Quo* (control) group fall in between, confirming our expectation that those who entered our labs were already primed by the real election context to be moderately anxious about the possibility of a terrorist attack. Difference of means tests of all pair-wise comparisons are

significant at  $p < 0.05$ , one-tailed.<sup>11</sup> In short, the treatments did have the intended effects on respondents, increasing concerns of a terrorist attack among those who viewed the *Crisis* treatment and decreasing them among those who viewed the *Good Times* treatment.

[INSERT FIGURE 1 ABOUT HERE]

### **Leadership: They giveth and they taketh away**

Our first hypothesis is that individuals project greater leadership capacity onto the incumbent, relative to the challenger, in times of security crisis. In order to measure the extent to which individuals perceived Bush and Kerry as strong leaders, we used the leadership question that is standard in the American National Election Study (ANES). This question asks, “In your opinion, does the phrase ‘he provides strong leadership,’ describe George W. Bush (John Kerry) extremely well, quite well, not too well, or not at all?” The question was embedded in a battery of trait evaluations.<sup>12</sup> We analyze three variables based on the leadership question. The first two (*Bushlead* and *Kerrylead*) are straightforward measures, on a 4-point scale, of the degree to which Bush or Kerry are evaluated as providing strong leadership; the variable is coded such that a “1” indicates “not at all” and a “4” indicates “extremely well.” The third (*Leadership Gap*) is a measure of the difference between individuals’ perceptions of the candidates’ leadership capacities, created by subtracting *Kerrylead* from *Bushlead*. The *Leadership Gap* variable runs from -3 to +3, with higher values indicating better evaluations of Bush relative to Kerry.

We first look at leadership perceptions of Bush and Kerry across our treatment conditions. As Figure 2 shows, mean perceptions of Bush as a strong leader are lowest in the *Good Times* condition, increase slightly in the *Status Quo* condition, and are highest in the *Crisis* condition, as expected. In short, there is a tendency to perceive Bush as a stronger leader in the crisis context. The exact opposite effect obtains for Kerry, where perceptions of him as a strong

leader are highest in the *Good Times* condition and lowest in the *Crisis* condition.<sup>13</sup> With preliminary support for our first hypothesis in these descriptive data, we turn to regression analyses for a more complete test of this hypothesis.

[INSERT FIGURE 2 ABOUT HERE]

In the next analysis we examine the difference in perceptions of leadership, *Leadership Gap*. Our principal independent variables are dummy variables that measure whether the individual was exposed (or not) to the *Status Quo* and *Crisis* conditions. We also control for partisan identification, given that it likely has a strong effect on perceptions of leadership.<sup>14</sup> We measured respondents' party identification with a branching question similar to the one used in the American National Election Study. We created a summary 7-point *Party Identification* scale with higher values being more Republican. Given that our dependent variable consists of ordered categories, we estimated the model using ordered probit. The results are presented in Table 1. The *Crisis* condition has a significant positive effect on the *Leadership Gap* variable.<sup>15</sup> As expected (H1), those exposed to this condition were more likely to report a more positive evaluation of Bush's leadership relative to Kerry's. We also see that party identification has a significant effect in the expected direction. Thus, subjects who self-identify as Republican are more likely to rate Bush as a strong leader relative to Kerry.

[INSERT TABLE 1 ABOUT HERE]

In order to examine the substantive effects of our treatments, we calculated first differences using Clarify (King, Tomz, and Wittenberg 2000; Tomz, Wittenberg and King 2001). We set party identification to its mean value. These results confirm that, if we move a subject from being in the *Good Times* condition to the *Crisis* condition, the probability of falling into a negative value on the difference in leadership measure (-3, -2, or -1), decreases. For example,

the change in the probability of falling into a negative value on the *Leadership Gap* measure is -9.1%. Alternatively, subjects become 8.4 percentage points more likely to fall into a positive value on the measure (1, 2, or 3) when we move a subject from the *Good Times* to the *Crisis* condition.<sup>16</sup>

### **Tipping the Scale**

With support for our first hypothesis, we turn to an evaluation of whether leadership becomes more consequential in the voting decision under the *Crisis* condition compared to the *Good Times* condition. Our dependent variable in this case is whether or not the subject intended to vote for George W. Bush (1) or John Kerry (0). Our principal independent variables are the dummy variables for the *Status Quo* and *Crisis* conditions, and the *Leadership Gap* measure. To create a standard model of vote choice, we also include measures of party identification (*Party Identification*) and a measure of issue stances. The *Issues* variable is a factor derived from a principal components analysis of responses to four policy stance and retrospective questions: defense policy, economic policy, perceptions of the nation's security, and perceptions of the nation's economy.<sup>17</sup> To test whether the weight of leadership becomes more consequential in crisis settings (H2), we also include interactions between the conditions and *Leadership Gap*. Finally, to allow for the possibility that the weight of issues shifts in crisis versus non-crisis settings, we include interactions between the conditions and *Issues*.<sup>18</sup> To refresh, our principal expectation is that the effect of the *Leadership Gap* measure is greater for those in the *Crisis* condition compared to those in the *Good Times* condition. Given that the dependent variable is dichotomous, we estimated the model with probit. The results are presented in Table 2.

[INSERT TABLE 2 ABOUT HERE]

Before turning to the variable specific results, we note that the model performs very well, with 98% of subjects correctly classified and a proportional reduction of error of 0.919. The party identification and issue factor controls are significant and in the expected direction. Thus, individuals who are conservative on issues and Republican are more likely to vote for Bush. Given the presence of interaction terms and the presence of a non-linear model, the interpretation of the coefficients for *Leadership Gap* and the conditions is a bit different from a model with no interaction terms (for a discussion, see Kam and Franzese, forthcoming). The coefficient (and p-value) on the leadership measure represents the coefficient (and p-value) of leadership among those in the *Good Times* condition (in other words, when the *Crisis* treatment and the *Status Quo* treatment are zero). The coefficient (and p-value) on the *Crisis* and *Status Quo* variables represent the coefficients when the *Leadership Gap* measure is zero (which explains in part the negative sign on the coefficient).

Since our main goal is to test whether the effect of *Leadership Gap* increases among those in the *Crisis* condition, we need to examine carefully the interaction terms. A one-tailed t-test on the interaction term for *Leadership Gap* and *Crisis* provides a test of whether the effect of leadership on vote choice increases as the conditioning variable, *Crisis*, increases (see Kam and Franzese, forthcoming). Since *Crisis* is a dummy variable, this is a test of whether the effect of *Leadership Gap* increases as a subject moves from being in the *Good Times* condition to the *Crisis* condition. If we look at the p-value on this interaction term, we find that it is significant. Thus, we find support for our argument that the effect of leadership increases among those in contexts of security crisis (H2). We should note that a similar test conducted on the interaction term between *Leadership Gap* and the *Status Quo* is insignificant. Furthermore, while the Issue factor is significant among those in the *Good Times* condition, both multiplicative terms between

the *Issue* factor and the conditions are insignificant; thus, it does not appear that there is a conditioning relationship between issues and security crises.

[INSERT FIGURE 3 ABOUT HERE]

While the t-tests on the interaction term between *Leadership Gap* and *Crisis* provide a straight-forward test of H2, they do not tell us about the substantive effects of leadership. In order to illustrate the effects, we offer a visual demonstration of how the weight given to leadership is greater for those in the *Crisis* condition compared to those in the *Good Times* condition. In Figure 3 we present the predicted probability of voting for Bush, generated using Clarify, at each level of *Leadership Gap* for those in the *Good Times* and *Crisis* conditions. *Party Identification* and *Issues* were set at their mean values. The predicted probability of voting for Bush increases dramatically at higher levels of the *Leadership Gap* measure among those in the *Crisis* condition, and crosses the 0.5 threshold of voting for Bush at about a 0.5 difference in leadership. While zero is contained within the confidence interval among those from -3 to 0 on the *Leadership Gap* measure, zero is not contained within the confidence interval for those at 1 and greater. To further validate the significance of these results, it is important to note that about 31% of our sample had a value of 1 or greater on the *Leadership Gap* measure. The increase among those in the *Good Times* condition is much less substantial and never crosses the 0.5 threshold. Furthermore, zero is always contained in the confidence interval for those in this condition. In short, the figure demonstrates strong support for H2: in the face of a security crisis, individuals accord greater weight to leadership traits in the voting booth compared to times of relative prosperity and well-being.

### **Holding out for a Governor? (Study 2)**

We received strong support for our hypotheses in the previous experiment. In order to test how general these results are, we conducted a similar experiment in a different electoral context, namely, the 2006 California gubernatorial election. The offices of President and Governor are similar in that they are both executive offices. Thus, citizens may value leadership qualities in both contexts. However, citizens are generally less interested in gubernatorial races compared to presidential races. Thus, familiarity with candidate traits may be weaker. Furthermore, the issues that are relevant vary, with foreign policy and security issues being more relevant at the national rather than state level. Thus, if we find support for our hypotheses in this less likely case, then we can be fairly confident that the results are robust and generalizable to at least some sub-national contexts.

#### *Experimental Design and Treatments*

The study took place just prior to the 2006 California Gubernatorial Election. The candidates included incumbent Republican Arnold Schwarzenegger and Democratic challenger Phil Angelides. Throughout the course of the campaign, Schwarzenegger led by a wide margin in the polls. Thus, the race was nowhere near as close as the 2004 election. Furthermore, national security concerns were not a prominent issue in the election, which presents a more difficult test case for our purposes in that it may be more difficult to raise the salience of terrorist attacks in this context.

Since the results for the Status Quo were weak in the previous study, we only used the *Good Times* and *Crisis* conditions for this study. Subjects coming to the computer lab were randomly assigned to a *Good Times* (n=85) or a *Crisis* condition (n=75).<sup>19</sup> The study was in the field from mid to late October of 2006 and we again used undergraduate students as subjects from the same general pool as that for Study 1, who were compensated with class credit for

participation. The average age of our 160 subjects was 21.27 years, 52% of whom were female, 53% self-identified as white, and 55% of whom identified as Democrat. In difference of means tests of demographic and attitudinal variables across the two conditions, we found that those in the *Good Times* condition were slightly more conservative and less interested in the campaign compared to those in the *Crisis* condition.

The procedures of the study were the same as the previous one, except the form of the treatment was different. Instead of developing audiovisual treatments, we had subjects read a *Good Times* or *Crisis* newspaper article about one page in length. The general context of the two conditions was similar to the audiovisual treatments in that we sought to increase concerns of a terrorist attack in the *Crisis* context and to have subjects not think about security threats in the *Good Times* condition. One difference in context was that we made the articles relevant to California, rather than focus on only national conditions. For example, in the *Crisis* condition, subject read the following: “a number of other specific targets have been picked up on terrorist networks, including the public transit systems in California’s major cities, the Bay Bridge, the Staples Center, and banks in Los Angeles and San Francisco.” The text for the articles was drawn from primarily news and political reports in California and edited together by the authors.<sup>20</sup>

### **Manipulation Check: Study 2**

In this study we used several different questions to gauge the effectiveness of our treatment. We first again asked subjects to indicate how worried they felt that there would be terrorist attacks in the near future in the U.S., though for this study we used a seven point scale. Those who received the *Good Times* treatment on average are less worried (mean=3.77) compared to those in the *Crisis* treatment (mean=4.08), and these differences are just outside of

traditional significance levels according to a t-test ( $p < .12$ ). We find more solid evidence that those in the Crisis condition were influenced by the treatment from a comparison of average responses by individuals in that group to a question about the nation's security placed before the treatment and the same question asked after the treatment. Responses to the question after reading the treatment article are significantly ( $p < 0.05$ ) higher (in terms of concern about security) than pre-treatment responses. Furthermore, we also find that subjects in the *Crisis* condition were significantly more likely to agree with the statement that "California is in a state of crisis" (mean=3.51) compared to those in the *Good Times* condition (mean=2.8). In short, the treatments did have the intended effects on respondents, increasing concerns of a crisis among those in the *Crisis* treatment and decreasing them among those in the *Good Times* treatment.

### **Leadership Revisited**

We first evaluate whether those in the *Crisis* condition came to perceive the incumbent, Schwarzenegger, as a stronger leader relative to the challenger, Angelides. As with the previous analysis, we create a *Leadership Gap* measure by subtracting perceptions of Angelides as a strong leader from perceptions of Schwarzenegger as a strong leader. Our principal independent variable is a dummy variable that measures whether the individual was exposed to the *Crisis* condition. Thus, the *Good Times* condition serves as the baseline. We also control for partisan identification as in the previous analysis, as well as interest and ideology, since we found significant differences on the distribution of these measures between the two conditions. The two measures are coded such that higher values indicate more interest in the campaign and being more liberal. The results for the ordered probit are presented in Table 3. The *Crisis* condition has a significant positive effect on the *Leadership Gap* variable. As expected (H1), those exposed to this condition are more likely to report a more positive evaluation of

Schwarzenegger's leadership relative to Angelides. We again generate the first differences using Clarify and find that the change in the probability of falling into a negative value on the *Leadership Gap* measure moving from the *Good Times* to *Crisis* condition is -7.5%, while the change in the probability of falling into a positive value is 9.4%. These effects are similar to those from Study 1. We also see that party identification and ideology have significant effects in the expected direction. These results, coupled with those from the previous analysis, provide strong support for H1.

[INSERT TABLE 3 ABOUT HERE]

### **Leadership and Vote Choice Revisited**

With support for our first hypothesis, we turn to an evaluation of whether leadership becomes more consequential in the voting decision under the *Crisis* condition compared to the *Good Times* condition. Our dependent variable in this case is whether or not the subject intended to vote for Schwarzenegger (1) or Angelides (0). Our principal independent variables are the dummy variable for the *Crisis* condition, the *Leadership Gap* measure, and the interaction between the two. To refresh, we expect to find that the interaction between these two measures is significant and positive (H2). As with the analysis for the previous experiment, we also include measures of party identification and issue stances. We use two issue factors that emerged from a principal components factor analysis. Two issues loaded highly on the first factor, spending on homeland security and services, while prospective evaluations of security and the California economy loaded highly on the second factor. Finally, to allow for the possibility that the weight of issues and partisan identification shifts in crisis versus non-crisis settings, we again include interactions between the conditions and each measure (Issue 1, Issue 2, and Party Identification).<sup>21</sup> The results are presented in Table 4.

[INSERT TABLE 4 ABOUT HERE]

If we look at the p-value on the interaction term between *Leadership Gap* and *Crisis*, we find that it is significant and positive. Thus, we again find support for our argument that the effect of leadership increases in contexts of security crisis (H2). Furthermore, both multiplicative terms between the *Issue* factors and the *Crisis* condition are insignificant; thus, it again does not appear that there is a conditioning relationship between issues and security crises. The weak effects for the issue interactions further support our argument that during times of crisis, candidates may be perceived to take similar stances on relevant issues, which cause individuals to look to other criteria, such as leadership. Finally, in this model we are able to estimate an interaction between partisan identification and the crisis condition and find a significant, negative effect. Thus, those in the *Crisis* condition weighted partisanship less than those in the *Good Times* condition. This finding is in line with literature that finds that individuals high in anxiety weight partisanship less in the voting booth (Marcus, Neuman and MacKuen 2000).

[INSERT FIGURE 4 ABOUT HERE]

To illustrate the substantive effects, we present the predicted probability of voting for Schwarzenegger at each level of *Leadership Gap* for those in the *Good Times* and *Crisis* conditions in Figure 4. *Party Identification* and the two *Issue* measures are set at their mean values. The predicted probability of voting for Schwarzenegger increases dramatically at higher levels of the *Leadership Gap* measure among those in the *Crisis* condition, and crosses the 0.5 threshold of voting for Schwarzenegger at about a 0 difference in leadership. While zero is contained within the confidence interval among those at -3 and -2 on the *Leadership Gap* measure, zero is not contained within the confidence interval for the remaining values. The

increase among those in the *Good Times* condition is much less substantial and only crosses the 0.5 threshold at about 2.5 on the *Leadership Gap* measure. In short, we find strong support for H2: during times of security crisis, individuals weight leadership traits more heavily in the voting booth.

## **Discussion and Conclusion**

Our data and analyses support our contention that the context of a security crisis causes a magnification of perceptions of leadership (with respect to the incumbent), and causes individuals to view candidates in starker terms on this dimension. Subjects in our *Crisis* conditions rated the incumbent (Study 1, George W. Bush; Study 2, Arnold Schwarzenegger) higher on perceptions of leadership relative to their challenger (Study 1, John Kerry; Study 2, Phil Angelides) compared to those in the *Good Times* conditions. In other words, the crisis context caused subjects to perceive the two candidates in starker terms on this dimension, in favor of the incumbent. We also found support for our contention that perceptions of leadership qualities become more consequential in the voting booth during times of crisis compared to normal or “better” times. Subjects in our *Crisis* conditions weighted the difference in leadership measure more heavily in their vote choice calculi compared to those in the *Good Times* condition. These findings emerged for two different types of office: presidential and gubernatorial.

One potentially enlightening direction for further work in this area is to run similar studies in other countries, as we believe institutional context may partially determine the extent to which individuals focus on candidate traits in times of crisis, over other factors. In particular, we expect differences in the effects of crises on candidate traits in systems with weakly institutionalized parties and/or incentives to campaign in personalistic ways compared to more

institutionalized systems where electoral rules create incentives to develop party, more so than candidate, reputations. The weight given to candidate traits during times of crises should be more pronounced in the former type of institutional system.

The results we present here have important implications for political science. First, our work extends some of the literature on the effects of emotions on political behavior. Marcus et al. (2000) did not distinguish the conditions under which issues or traits would be more consequential in voting decisions, since they were dealing with general anxiety. We have identified one context in which the weight of traits might be more consequential: conditions of security crisis. In future work, it will be interesting to test whether this applies across different types of crisis settings, or is only a feature of security crises. Second, our work speaks to the literature on crises and political behavior by focusing on another dimension that few scholars have investigated, namely the determinants of trait evaluations and their effects on voting decisions (as an exception, see Davis and Silver 2004b).<sup>22</sup>

Our results also shed insight into the behavior of political leaders and, at the extreme, may reveal potential dangers to the quality of representation and democracy. What do Hugo Chávez and George W. Bush have in common? Both have primed the public to be concerned about crises and have benefited politically from such reminders. In the 2004 election, the Bush campaign used every opportunity to remind voters about the threat of terrorist attacks. Chávez has frequently reminded the Venezuelan public about economic woes, border trouble with Colombia, and possible attacks by the United States. Representation may suffer in contexts of crisis if citizens focus more on traits. A strong leader can be held accountable in the domain of whether or not another crisis occurs. However, such a leader may also be able to enact policies that do not necessarily reflect the wishes of the public in other issue domains.

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**Table 1. Ordered Probit Analysis of Difference in Perceptions of Leadership, Study 1**

Variable	Coefficient (Standard Error)
Status Quo	0.171 (0.145)
Crisis	0.246** (0.149)
Party Identification	0.391** (0.035)
Cut 1	-0.983** (0.194)
Cut 2	0.016 (0.150)
Cut 3	0.933** (0.148)
Cut 4	1.829** (0.163)
Cut 5	2.562** (0.193)
Cut 6	3.591** (0.252)
N	299
LR Chi-squared	135.02
Prob>Chi-squared	0.000
Pseudo R-squared	0.130

Indicator of significance: \*\*p<0.10, one-tailed

**Table 2. Probit Analysis of Vote Bush, Study 1**

Variable	Model 3
	Coefficient (Standard Error)
Difference in Leadership	0.654** (0.285)
Difference in Leadership* Crisis	1.908** (0.746)
Difference in Leadership* Status Quo	-0.215 (0.413)
Crisis	-2.696** (1.120)
Status Quo	-0.560 (0.603)
Party Identification	0.602** (0.144)
Issues	1.239** (0.575)
Issues * Crisis	-1.066 (0.953)
Issues * Status Quo	-0.044 (0.608)
Constant	-3.103** (0.727)
N	251
Wald Chi-Squared	75.84
Prob>Chi-Squared	0.000
Pseudo R-squared	0.882
% Correctly Predicted	98.0%
Proportional Reduction in Error	0.919

Note: The interaction terms refer to the slope of leadership holding the conditions at 1 and the slope of issues holding the conditions at 1. Robust standard errors are reported in parentheses.

Indicator of significance: \*\*p<0.10, one-tailed

**Table 3. Ordered Probit of Difference in Perceptions of Leadership, Study 2**

Variable	Coefficient (Standard Error)
Crisis	0.254** (0.169)
Party Identification	0.279** (0.064)
Ideology	-0.220** (0.088)
Interest	-0.164 (0.141)
Cut 1	-3.701** (0.683)
Cut 2	-2.481** (0.573)
Cut 3	-1.486** (0.561)
Cut 4	-0.368 (0.560)
Cut 5	0.443 (0.571)
Cut 6	1.256** (0.588)
N	159
LR Chi-squared	88.20
Prob>Chi-squared	0.000
Pseudo R-squared	0.148

Indicator of significance: \*\*p<0.10, one-tailed

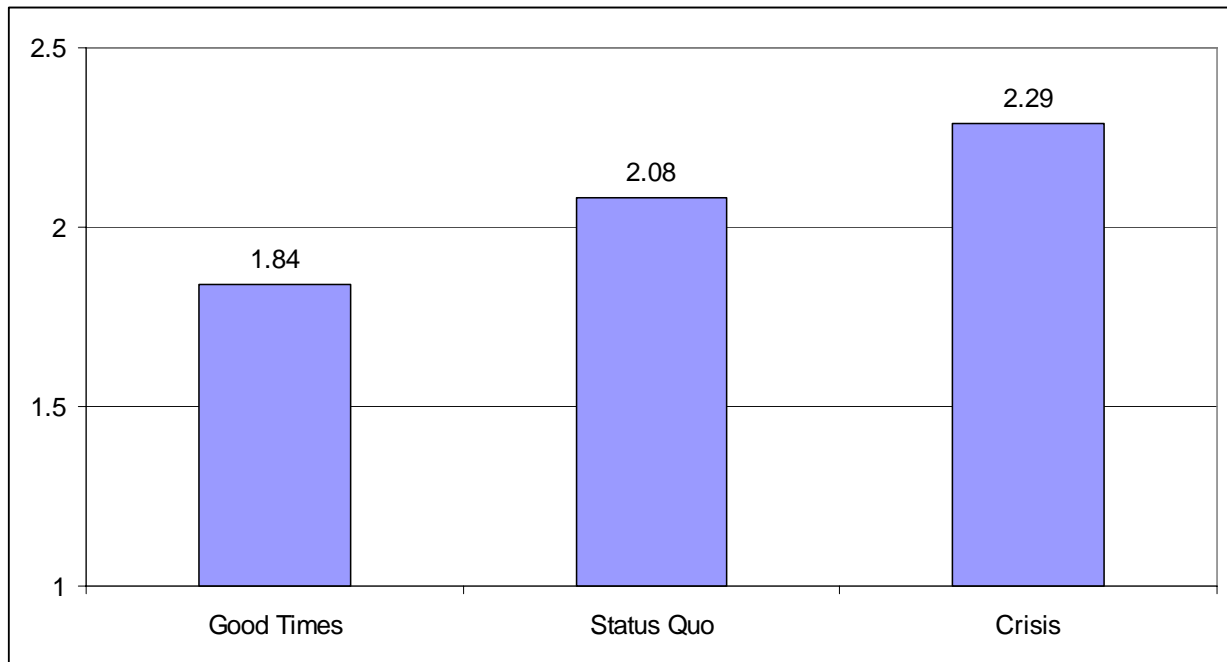
**Table 4. Probit Analysis of Vote Schwarzenegger , Study 2**

Variable	Model 3 Coefficient (Standard Error)
Difference in Leadership	0.836** (0.276)
Difference in Leadership* Crisis	0.584** (0.450)
Crisis	0.544 (0.630)
Party Identification	0.347** (0.100)
Issues 1	0.214 (0.248)
Issues 2	0.028 (0.176)
Party Identification * Crisis	-0.247** (0.159)
Issues 1 * Crisis	-0.358 (0.353)
Issues 2 * Crisis	-0.002 (0.288)
Constant	-1.939** (0.442)
N	143
Wald Chi-Squared	51.24
Prob>Chi-Squared	0.000
Pseudo R-squared	0.565
% Correctly Predicted	89.51%
Proportional Reduction in Error	0.659

Note: The interaction terms refer to the slope of leadership holding the conditions at 1 and the slope of issues holding the conditions at 1. Robust standard errors are reported in parentheses.

Indicator of significance: \*\*p<0.10, one-tailed

**Figure 1. Worry About a Terrorist Attack, by Condition (Study 1)**



Note: The standard deviations for the three mean values are as follows: Good Times, 0.741; Status Quo, 0.813; Crisis, 0.771. All pair-wise comparisons are significant at  $p < 0.05$ , one-tailed.

**Figure 2. Perceptions of Bush and Kerry as a Strong Leader, by Condition (Study 1)**

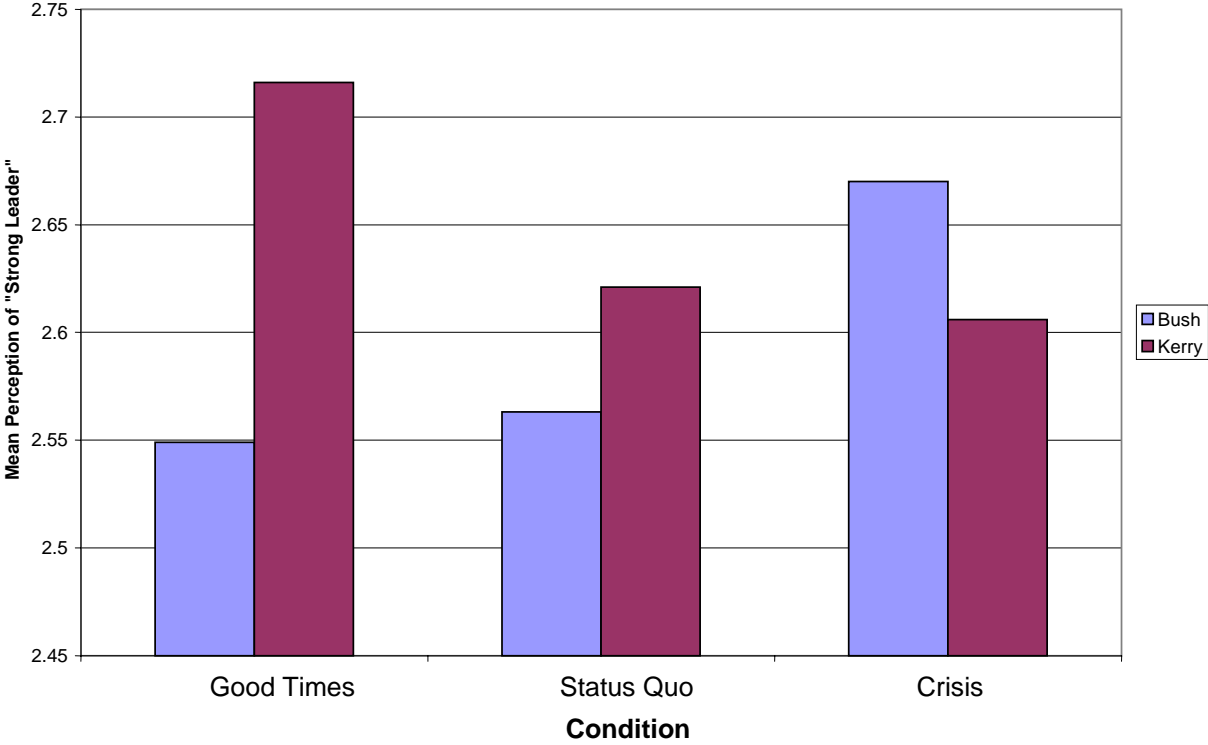
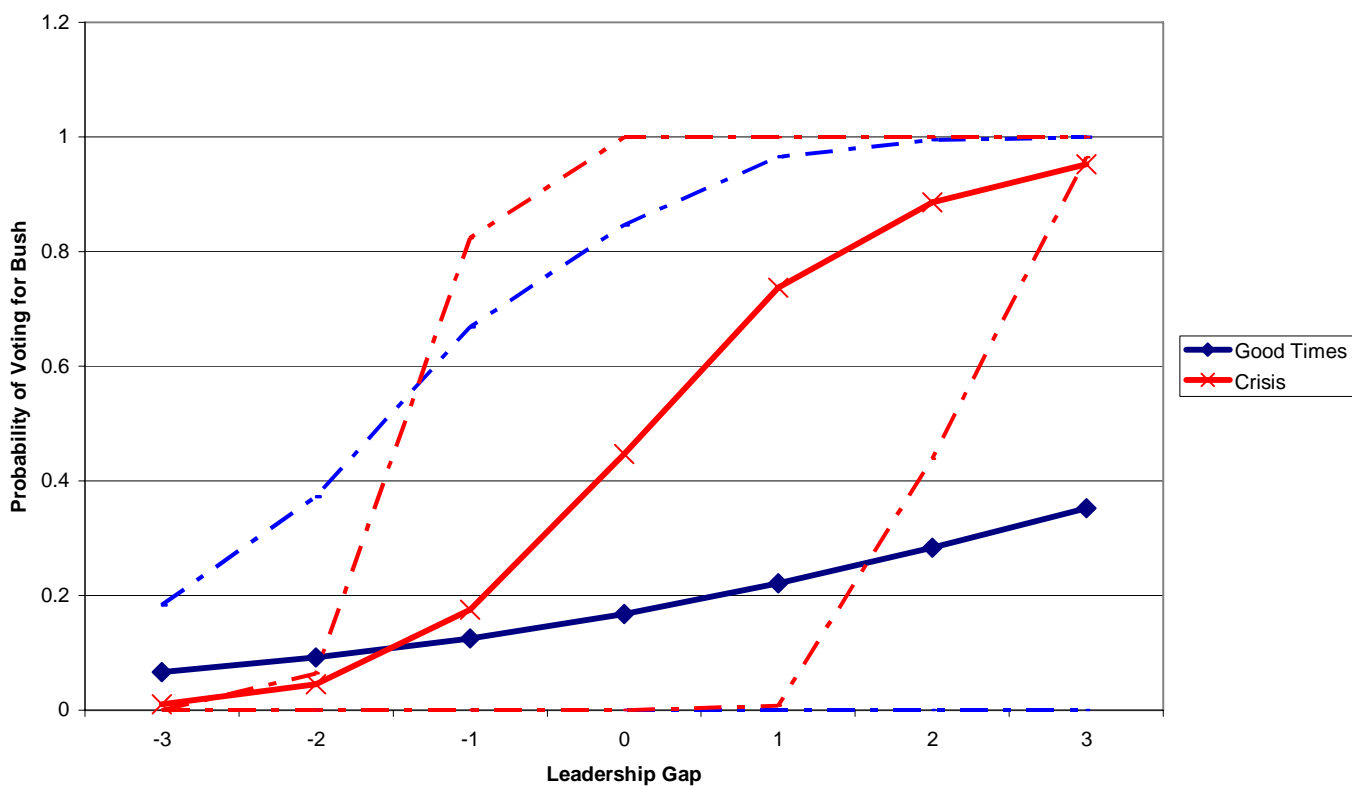
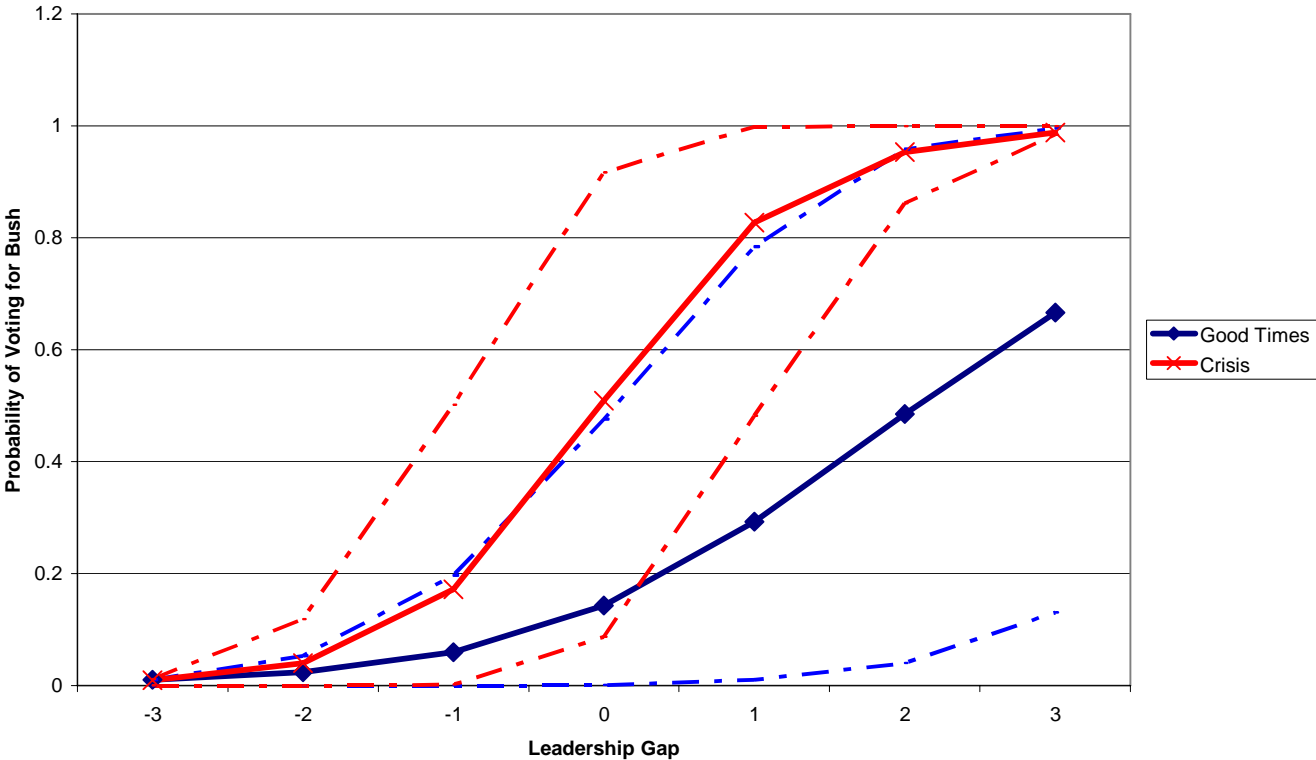


Figure 3: Predicted Probability of Voting for Bush at Different Values of the Leadership Gap, by Condition



Note: Dotted lines indicate confidence intervals.

Figure 4: Predicted Probability of Voting for Schwarzenegger at Different Values of the Leadership Gap, by Condition



Note: Dotted lines indicate confidence intervals.

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<sup>1</sup> These generally have found that less sophisticated voters rely more on personal factors (Glass 1985; Miller, Wattenberg and Malanchuk 1986) and less on issue-based considerations compared to high sophisticates (Aldrich, Gronke and Grynaviski 2003; Glass 1985).

<sup>2</sup> Other candidate traits studied by scholars are likely less important for times of security crisis. For example, while empathy may be seen as an important trait when individuals feel economic stress, it is not the type of trait that should be high on the list for protecting the nation from external threats.

<sup>3</sup> If the situation were such that the incumbent is perceived as the cause of the given crisis, or is otherwise discredited for handling the crisis, then citizens will likely look to the challengers for help and project strong leadership traits onto them.

<sup>4</sup> The theory of affective intelligence suggests that issues may be weighted more heavily during times of crisis compared to non-crisis settings. However, prospect theory suggests that issues may be weighted less during times of security crisis. While not the central focus of this study, we test for the relative influence of issues in times of crisis and report these results.

<sup>5</sup> See, for example, the numerous references to terrorists' plots to influence the 2004 Presidential election archived at *The New York Times* and CNN.com.

<sup>6</sup> Values were arguably a fourth issue salient around the time of the election, though discussion of this issue really picked up after the election rather than during the campaign.

<sup>7</sup> While random assignment should mitigate against external influences on our results, we tracked news reported in the *NY Times* during the two weeks our study was in the field. We did not find any spikes in the coverage of news surrounding national security.

<sup>8</sup> Student subjects are also a convenient population and previous studies in this research domain have obtained compelling results with similar subject pools (e.g., Hunt, Boal and Dodge 1999; Kirkpatrick and Locke 1996; Landau et al. 2004).

<sup>9</sup> In situations of crisis, citizens may be exposed to even greater levels of media coverage than our short treatments provide; if this is the case, our design may perhaps under-estimate the effect of crisis on evaluations and behavior.

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<sup>10</sup> Though only a brief summary of the treatments are offered here, we invite the reader to view the complete texts of both treatments and especially the visual images used in our Web Appendix at <http://wfs.cgu.edu/merollaj/holdingout>.

<sup>11</sup> To apply a strict test, our difference of means tests assume unequal variance.

<sup>12</sup> We also asked how well the following phrases described each candidate: “he is moral”; “he is intelligent”; “he really cares about people like you”; and, “he is honest”.

<sup>13</sup> The fact that Kerry obtains higher ratings than Bush in the *Good Times* and *Status Quo* conditions is due largely to the fact that our sample contains a greater number of Democrats compared to Republicans; this makes the fact that the results are the reverse in the *Crisis* condition— without controlling for partisanship – even more notable. In addition to this descriptive information, we did run ordered probit analyses of *Bushlead* and *Kerrylead*, controlling for partisanship and with the *Good Times* condition as the baseline. For *Kerrylead*, we found that both the *Crisis* and *Status Quo* conditions were significant and negative (p-values are 0.10 and 0.08, one-tailed, respectively). For *Bushlead*, the *Status Quo* condition is insignificant, while the *Crisis* condition is positive and marginally significant (p-value is 0.12).

<sup>14</sup> We ran a model with the female dummy variable, but it was not significant. We also tested for partisan interactions with the treatment conditions and they did not enhance the model, according to a likelihood ratio test.

<sup>15</sup> Given the unidirectional nature of our expectations, one-tailed tests of significance are appropriate for our analyses (see Hanushek and Jackson 1977, pp. 68-69).

<sup>16</sup> As a check against the possibility that *all* trait evaluations, not just leadership, were affected by our treatments, we explored the effect of our treatment on other trait evaluations. We did not find any significant effects for the treatment for differences in perceptions of morality, honesty or cares. Quite interestingly, possibly because of its closer connection to leadership capacity, we did find that Bush was more likely to be perceived as smart in the *Status Quo* and *Crisis* conditions. In short, though, these results make us even more confident in asserting that, in times of crisis, people focus on leadership capacity and, indeed, hold out for a hero.

<sup>17</sup> We found a single factor with an eigenvalue over 1.0 (the eigenvalue is 1.82) and therefore scored that factor as *Issues*. The factor is scored such that higher values should increase the likelihood of voting for Bush. We drew the economic policy (spending and services), defense spending, and retrospective national economic evaluation

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questions directly from the ANES. The retrospective national security question mirrored the ANES retrospective national economic question, by substituting “nation’s security” in place of “the economy”.

<sup>18</sup> We would have also liked to include interactions with partisan identification but were unable to because of high collinearity.

<sup>19</sup> The study also included a treatment group exposed to a condition concerning California’s levees; as this is not the focus of the current analysis, this group is excluded from our analyses here.

<sup>20</sup> Though only a brief summary of the treatments are offered here, we invite the reader to view the complete texts of both treatments in our Web Appendix.

<sup>21</sup> We do not include interest and ideology in these models since they were highly insignificant and the pattern of results remains the same.

<sup>22</sup> Davis and Silver (2004b), using survey data collected in the Spring of 2004 in the state of Michigan, find that those who believed a terrorist attack was more likely were *less* likely to support Bush. Our results seemingly contrast with these results, though caution must be used in making direct comparisons due to the different variables used in the two studies, the difference in timing, and the different populations that were sampled.