

## Dead Certain

### Confidence and Conservatism Predict Aggression in Simulated International Crisis Decision-Making

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**Abstract** Evolutionary psychologists have suggested that confidence and conservatism promoted aggression in our ancestral past, and that this may have been an adaptive strategy given the prevailing costs and benefits of conflict. However, in modern environments, where the costs and benefits of conflict can be very different owing to the involvement of mass armies, sophisticated technology, and remote leadership, evolved tendencies toward high levels of confidence and conservatism may continue to be a contributory cause of aggression despite leading to greater costs and fewer benefits. The purpose of this paper is to test whether confidence and conservatism are indeed associated with greater levels of aggression—in an explicitly political domain. We present the results of an experiment examining people’s levels of aggression in response to hypothetical international crises (a hostage crisis, a counter-insurgency campaign, and a coup). Levels of aggression (which range from concession to negotiation to military attack) were significantly predicted by subjects’ (1) confidence that their chosen policy would succeed, (2) score on a liberal-conservative scale, (3) political party affiliation, and (4) preference for the use of military force in real-world U.S. policy toward Iraq and Iran. We discuss the possible adaptive and maladaptive implications of confidence and conservatism for the prospects of war and peace in the modern world.

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You can't fake it. You have to believe it. And I believe it. I believe we'll succeed.

—President George W. Bush, 2006

Today, large-scale violence between societies is widely regarded as costly and destructive for little gain. Although many people recognize the necessity of conflict in certain circumstances (e.g., defense against invasion), war is generally seen as the result of a failure of some better alternative, such as a negotiated settlement (Fearon 1995). When wars occur, therefore, they are often seen to result from poor information or miscalculations (Levy and Thompson 2010).

An evolutionary approach suggests a different explanation. If human decision-making strategies were shaped by the costs and benefits of our ancestral past (as evolutionary psychologists argue), then evolved proximate mechanisms prompting aggressive strategies may be triggered today even when cost-benefit ratios are unfavorable. Although humans are obviously able to evaluate contemporary costs and benefits somewhat rationally, our judgment and decision-making are not immune from the influence of evolved, often subconscious, heuristics and biases as well (Barkow et al. 1992; Fiske and Taylor 2007; Wilson 2004).

In short, we might expect a large degree of “mismatch” between evolved tendencies and the (evolutionarily novel) causes and consequences of those tendencies in modern contexts. Two particular aspects of mismatch have been suggested by evolutionary biologists as important to understanding aggression.

First, Robert Trivers (2000, 2011) and Richard Wrangham (1999) have suggested that overconfidence—confidence beyond that warranted by the evidence—may have been an adaptive strategy in our ancestral past because it improved morale, resolve, persistence, and/or helped to bluff opponents. A recent evolutionary model showed that overconfidence could indeed evolve in competition with accurate or underconfident strategies, under a wide range of conditions (Johnson and Fowler 2011). Individuals with high levels of confidence may also have been better able to recruit fence-sitters to side with them, increasing their probability of victory by increasing coalition size. Today, however, overconfidence is likely to be misplaced because its original signaling and feedback mechanisms are lost in the modern context of mass armies, modern weapons, and military leaders far away from the battlefield.

Second, Aaron Sell and colleagues find an association between conservative political preferences and the endorsement of the utility of force among physically stronger men with a history of fighting (Sell et al. 2009; see also Sell et al. 2012). This may have been an adaptive strategy in the past if physically stronger individuals were more likely to prevail in situations of coercion, competition, and combat, potentiating a socioecological niche in which aggression brought selective advantages—at least for some individuals. Today, however, powerful and conservative individuals may tend to be belligerent even in evolutionarily novel situations in which aggression may not help them to achieve their objectives and are likely to incur significant costs instead.

This study aims to test whether confidence and conservatism are indeed associated with greater aggression in an explicitly modern political setting. As outlined below, confidence and conservatism already play a major role in the political science literature, but there have not been any tests of whether they independently constitute specific causes of aggression in a controlled experimental setting.

## Confidence

One of the things political scientists have learned from the past few decades of research is that there is no single cause of war. Instead, a multitude of factors have been shown to contribute to decisions that lead to the use of force, including individual-level factors such as misperception (Bennett and Stam 2004; Levy and Thompson 2010; Vasquez 1993, 2000). Nevertheless, some particularly pervasive and influential phenomena are repeatedly identified on the eve of war, even though they are difficult to define, quantify, or test. One such factor is overconfidence. Several historians and political scientists have come to the conclusion that, whatever other causes of war may be present in a given case, overconfidence on one or more sides appears to be extremely common and represents a causal factor in the decision to fight (Blainey 1973; Jervis 1976; Johnson 2004; Johnson and Tierney 2011; Lebow 1981; Levy 1983; Stoessinger 1998; Tuchman 1984; Van Evera 1999; White 1968). Indeed, the recent U.S. experience in Iraq and elsewhere has brought the puzzle of why overconfidence occurs and how it can be averted to the forefront of both academic and media attention (Draper 2007; Fallows 2004; Jervis 2003; Walt 2011; Woodward 2005).

When one looks beyond political science, however, the association of overconfidence and war should be no surprise. Evidence from several disciplines shows that overconfidence represents a widespread and powerful bias across a vast range of human activities, ranging from sports to leadership to economics (Camerer and Lovo 1999; Dunning et al. 2003; Ehrlinger et al. 2008; Kanter 2004; Kruger and Dunning 1999; Salvador et al. 2003; Taylor 1989; Van den Steen 2004). Not least, the recent banking crisis highlighted an important role of overconfidence among financial decision-makers (Akerlof & Shiller 2009; Barber and Odean 2001; Ben-David et al. 2006). Psychologists have long documented overconfidence across a variety of judgment and decision-making domains (Peterson 2006; Taylor and Brown 1988), and there is now a considerable literature on its causes, consequences, and sources of variation (Armor and Taylor 1998; Baumeister 1989; Gollwitzer 2011; Lim 1997; Taylor and Brown 1994; Taylor et al. 2003). Nobel prize winner Daniel Kahneman recently concluded that all of the psychological biases he and his colleagues have uncovered over the past 40 years of the “cognitive revolution” promote hawkish decision-making—and many of these biases lead to hawkishness because they produce overconfidence (Kahneman and Renshon 2006). As Dale Griffin and Amos Tversky summed it up, “although overconfidence is not universal, it is prevalent, often massive, and difficult to eliminate” (Griffin and Tversky 2002:248).

However, while it is tempting to extrapolate from studies in psychology and other disciplines to invoke overconfidence as a cause of war, we have almost no experimental data on whether the overconfident biases reported by psychologists also occur

in modern politically relevant contexts (for one recent exception see Johnson et al. 2006). Typically, such studies examine everyday personal events, such as health, driving, or exam performance (for a range of examples see Peterson 2006; Taylor 1989). Several case study analyses suggest that overconfident biases are present in political contexts (Johnson 2004; Van Evera 1999), but since many other factors are present as well it is difficult to know if overconfidence is causal, or how important it is relative to other variables, in promoting conflict. What has been lacking in addressing this issue is controlled, experimental studies to test such hypotheses while holding other factors constant. Laboratory experiments offer one such method.

We previously conducted networked wargames in which subjects played political leaders resolving a dispute. The results clearly showed not only that men (but not women) were overconfident about the probability of success, but also—and critically for a causal argument—that greater levels of overconfidence were associated with a greater likelihood of attacking their opponent (Johnson et al. 2006). This was a significant step in validating a link between overconfidence and aggression. Nevertheless, this earlier study left open the question of whether overconfidence would be associated with aggression in real-world political scenarios, rather than in competitive wargames in which people may have been trying to win, rather than selecting what they felt was the most appropriate strategy. The present study reports the results of people's decision-making behavior in the context of plausible real-world international crises. Beyond this, the added value of the present study is to explore the relationship not only between confidence and aggression, but also between both of these variables and the all-important political variable of conservatism. Accounting for political preferences is crucial to understanding political behavior, including aggression.

## Conservatism

A key factor we expect to affect policy choices in crises is conservatism. Political ideology and political party identification are associated with large individual differences in attitudes to domestic and foreign policy, and there is a long history of research on the causes and consequences of political preferences. For example, differing political preferences powerfully affect voting behavior, support for war (Gartner 1997; Mueller 1973), and perceptions of wars and crises (Jervis 1976; Johnson and Tierney 2006).

Although criticized on methodological grounds, classic older studies directly linked conservatism with aggression (Adorno et al. 1950; Altemeyer 1988), and since then a large number of studies related political preferences, and conservatism in particular, to personality variables. Jost et al. (2003) recently conducted a comprehensive review of this literature, including a statistical meta-analysis of factors that had been linked with conservatism. The authors concluded that conservatism was consistently and strongly predicted by a range of social-cognitive motives, including dogmatism, intolerance of ambiguity, lack of openness to experience, mortality salience, and system instability. Also significant but weaker correlates were uncertainty avoidance, integrative complexity, need for order, structure and closure, and fear of threat in general. Jost et al. argued that the key factors underlying social-

cognitive motives and resultant conservative attitudes derived from responses to basic environmental stimuli, including fear, threat, and uncertainty.

However, none of the studies reviewed in Jost et al. (2003), other than the famous texts on “right-wing authoritarianism” (Adorno et al. 1950), directly addressed aggression, especially in the context of political decision-making. The picture is likely to be complicated because we know that other variables also influence people’s preferences regarding the use of military force. For example, Feaver and Gelpi found that military leaders were less tolerant of casualties, while civilian leaders were more hawkish (Feaver and Gelpi 2004). Preference for the use of force has also been found to vary with physical and psychological health and illness (McDermott 2007), stress (Rosen 2004), age (Horowitz et al. 2005), and framing (Johnson and Tierney 2007). We therefore wanted to test explicitly for a link between conservatism and aggression.

Some early work indicated that such a relationship may exist. Etheredge (1978a, b) examined a group of senior U.S. State Department officials and found a relationship between various aspects of their personality (including some related to conservatism) and their foreign policy choices and attitudes. Specifically, he found that officials who embraced higher dominance strategies toward their subordinates and family members proved more likely to endorse the threat of use of military force by the United States in 49 foreign policy crises between 1898 and 1968 (compared with officials who espoused lower dominance personality characteristics). Indeed, he could predict policy preference among individuals based on this one trait with more than 75% accuracy.

This study is timely because it follows several new analyses suggesting that there are fundamental differences in how liberals and conservatives react to threats and make decisions. For example, physiological reactions to threatening stimuli (as measured by eye blinks and skin conductance) increase with the degree of subjects’ conservatism (Oxley et al. 2008). Other work has found significant differences in the activation of key brain regions between liberals and conservatives when performing identical decision-making tasks. For example, more conservative people showed lower activity in the anterior cingulate cortex—a brain region involved in cognitive control and self-regulation—and were consequently less able to alter habitual response patterns to deal with a novel task (Amodio et al. 2007). Another study found that Republicans showed significantly greater amygdala activation (a brain region associated with fear) and Democrats showed greater insula activity (a brain region associated with conscious attention to internal physiological and affective states) when performing a risk-taking task (Schreiber et al. 2009). Finally, as noted in the introduction Sell et al. (2009, 2012) found that physically stronger men with a history of fighting were more likely to adhere to conservative political preferences and to endorse the utility of force in politics.

Although there is a large literature on the social, psychological, neurological, and biological correlates of conservatism (see also Alford et al. 2005), there have been few studies of whether there is a direct association between conservatism and preference for military aggression. We undertake such an examination in the following study.

## Methods

We collected data from 130 male students at the University of California at Santa Barbara in May 2007. Although we have examined sex differences in aggression in previous

studies (Johnson et al. 2006; McDermott and Cowden 2001, 2008; McDermott et al. 2007), we used only male subjects here to maximize statistical power in revealing the effects of other (likely weaker) variables of interest. Age range was 19–43 (mean=22.0, median=20.5, s.d.=4.7). Subjects included some university employees as well as students, the latter of which were studying a wide range of disciplines across the humanities, social sciences, and life sciences. Ethnicity ( $N=83$ ; not all subjects gave all data) was 59.3% Caucasian, 16.9% Asian, 11.9% Hispanic, 1.7% African American, and 10.2% Other. Religious affiliation ( $N=83$ ) was 37.3% Atheist/Agnostic, 20.3% Protestant, 13.6% Catholic, 8.5% Buddhist, 6.8% Jewish, 1.7% Hindu, 11.9% Other. Party identification ( $N=130$ ) was 42.0% Democrat, 15.3% Republican, 26.0% Independent, 8.4% Other, 8.4% Don't Know.

Subjects sat alone at desks and completed a range of paper and pencil questionnaires under supervision. No talking or conferring was allowed. The experiment asked subjects how they would, as U.S. president, respond to three international crises: (1) a “Hostage Scenario” (in which a commercial airliner was hijacked); (2) a “Central Asian Scenario” (a resurgence of the Taliban in Afghanistan); and (3) a “Latin American Scenario” (a possible military coup to oust a socialist leader). Scenarios were counter-balanced, such that the order in which subjects were presented with each of the three scenarios was randomized. Building on previous experience in running experimental wargames (McDermott and Cowden 2001, 2008; McDermott et al. 2007), each crisis was described in around 200–400 words with realistic detail, and each one was presented on a separate sheet of paper (see [Appendix](#) for full text of scenarios).

In each case, subjects could choose from three options: some form of concession or appeasement; some form of negotiation; or some form of military attack. In our design, but not in the order of presentation, we strove to word these options so that aggressiveness increased incrementally, from appeasement to negotiation to attack. For example, in resolving the Latin American scenario, subjects could choose to (a) “let this leader nationalize American interests, but cut diplomatic ties,” (b) “attempt to negotiate fair restitution for American companies,” or (c) “allow US special forces and the CIA to assist the local military leader in staging a coup.” The order of the policy options was also counterbalanced across scenarios.

Each crisis was carefully written in order to resemble a plausible scenario given the political climate at the time of the study. We also used a number of techniques to ensure that the whole range of policy options remained reasonable, so that military aggression was in no way the “best” or “only” realistic option. First, subjects were explicitly told, in underlined text that, “there is no right answer to any of these crisis scenarios.” Second, scenarios included a fair amount of complexity, so that many consequences and actors could be considered in reaching a decision. Third, even the “appease” option was not entirely unattractive (e.g., in the Central Asian scenario, withdrawing U.S. troops included the benefit of “concentrating your military effort on Iraq”). Finally, the aggressive options were not simply a matter of taking a tough line, they were risky military options that entailed potentially high costs for one or both sides (e.g., special forces storming a hijacked aircraft, use of daisy cutter bombs in Afghanistan, and sending U.S. troops to aid a Latin American coup). With these characteristics, subjects were not expected to choose the aggressive options lightly.

## Dependent Variable: Aggression

For each crisis, “aggression” was scored as 1 if subjects chose the appease option, 2 if they chose the negotiate option, and 3 if they chose the attack option. The main dependent variable in our statistical analyses is the level of aggression of the subjects’ chosen policy options summed over all three crisis scenarios (thus a variable ranging from 3 to 9; for the purposes of analysis, we subtracted 3 from all aggression data to scale the variable from 0 to 6).

## Independent Variables

### *Confidence*

For each scenario, subjects were also asked about their level of confidence in their chosen policy as follows: “On a scale of 0 to 10, how likely do you think it is that your chosen course of action will succeed? Please circle your response, where 0 is very unlikely and 10 is very likely.”

This is obviously different from other measures of confidence in the social psychology literature, which tend to focus on psychological, self-esteem-related measures, or estimates of personal effectiveness at a given task (e.g., Taylor et al. 2003). We used the above measure of confidence because we were interested in people’s confidence about the efficacy of their specific policy choices, not their general or personal levels of confidence in everyday life. Our measure was deemed more likely to be associated with their policy decisions in the crisis scenarios. For purposes of comparison, we did take measures of a standard personality inventory for “optimism,” which was (positively but not significantly) correlated with our measure of confidence (see “Results”).

Finally, note that we are using a measure of confidence, not overconfidence. Overconfidence can be defined as an expectation that is not warranted, given the true likelihood of some outcome.<sup>1</sup> By this criterion, there is no way in our hypothetical scenarios to establish whether or not people are overconfident (their policy may or may not have worked in reality, which was an essential element of the experimental design). Therefore, our measure only offers a way of distinguishing individuals who are more or less confident from others in the sample. Note that this does not detract from the ability to test our hypothesis, however, which is simply that subjects who choose more aggressive military solutions to hypothetical international crises will demonstrate greater confidence that their chosen policy will succeed. Overconfidence can be assumed to be more likely at the higher end of this continuum.

<sup>1</sup> Following previous work (Johnson 2004; Johnson and Tierney 2011), we define confidence as the perceived probability that a specified outcome will occur. For example, low confidence may equate with a belief that one has a 25% chance of victory, while high confidence may equate with a belief that one has a 75% chance of victory. Overconfidence is defined as a level of confidence that exceeds the true likelihood of an outcome. For example, if a tennis player expects to win 75% of their matches but loses them all, this would imply overconfidence.

### *Conservatism*

We also asked people about their political party identification, and their political ideology. For party identification, we employed a standard measure, asking subjects: “Generally speaking, do you think of yourself as a Republican, a Democrat, an Independent, or what?” (to which they could respond Republican, Democrat, Independent, Other, or Don’t Know).

For political ideology, we administered a standard seven-point liberal-conservative scale (Zaller 1992) which asked: “When it comes to politics, do you usually think of yourself as very liberal, liberal, slightly liberal, moderate or middle of the road, slightly conservative, conservative, or very conservative?” This variable also included a “Don’t Know” category, which was excluded where appropriate in statistical analyses. We recorded data on both party identification and political ideology because they may reflect different underlying characteristics, although of course they are, unsurprisingly, correlated (in our data, Republicans had significantly higher liberal-conservatism scores than Democrats; Mann-Whitney  $U$ -test:  $Z=5.31$ ,  $N=54,19$ ,  $p<0.0001$ ). Briefly, ideology is thought to be a composite measure of people’s political beliefs, whereas party identification is thought to be in large part due to socialization that occurs before political beliefs are established (Achen 2002). Recent work by Hatemi et al. (2009, 2011) and Fowler et al. (2009) also suggests that while party identification may derive from socialization, partisan intensity may result from heritable traits.

### *Personality Inventories*

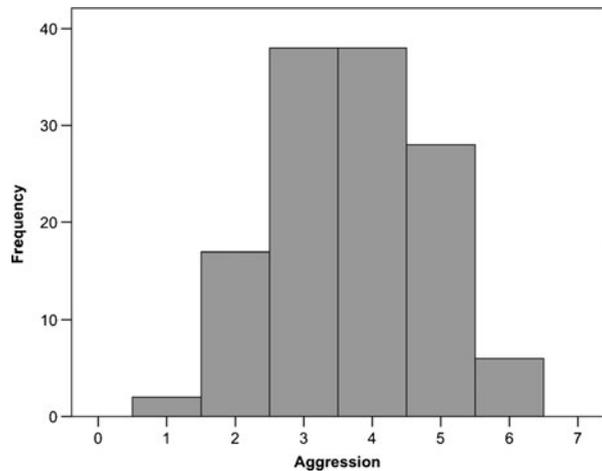
We also administered a set of nine standard personality inventories from the “International Personality Item Pool” (ipip.ori.org). We included them because they were deemed potentially relevant to how different individuals may respond to a hypothetical crisis (McDermott 2004, 2007), and were thus important to include as control variables. These variables were extroversion, agreeableness, conscientiousness, emotional stability, intellect, optimism, leadership, courage, and locus of control.<sup>2</sup> The variables are scored as follows. Each inventory lists ten statements (five for locus of control), such as “Get irritated easily,” and subjects are asked to indicate how accurately each statement describes them on a five-point scale ranging from “very accurate” to “very inaccurate.” A single score for each inventory is calculated as the sum of the responses to all ten statements (some items are reverse-coded as per standard practice).

### Statistical Methods

Levels of aggression summed across all three scenarios followed an approximately normal distribution as shown in Fig. 1. However, a Kolmogorov-Smirnov test rejected a strictly normal distribution ( $Z=1.99$ ,  $N=129$ ,  $p<0.001$ ), and transforming the data

<sup>2</sup> Locus of control is a measure of how much control people perceive they have over the world. People with a relatively “internal” locus of control believe that they and their actions can influence events, whereas people with a relatively “external” locus of control tend to be more fatalist and to believe they cannot influence events, which are instead seen to be controlled by the environment, other people, or some higher power.

**Fig. 1** Aggression summed across scenarios appears to be an approximately normal distribution, but fails a Kolmogorov-Smirnov test ( $Z=1.99$ ,  $N=129$ ,  $p<0.001$ )



to correct for a slight negative skew was not successful (e.g., square root, reciprocal). Therefore, in much of our subsequent analyses we use nonparametric statistics.

Aggression (as well as the liberal-conservative scale) is an ordinal variable. For all correlations we therefore use Kendall's  $\tau_B$  test, which is more appropriate than Pearson's or Spearman's Rank tests for correlations between variables with ordered categories. All tests are two-tailed (which can be considered conservative given our a priori directional hypothesis: confidence, conservatism, and aggression were all expected to be positively related).

For multivariate analyses we use ordered probit models. Ordered probit allows the dependent variable, aggression, to be an ordinal variable. Note that it does not make the assumption that a difference between, say, 3 and 4 on the dependent variable is the same as the difference between 5 and 6. In ordered probit, although the dependent variable is assumed to be normal, slight departures of the dependent variable from normality are unlikely to bias results.

## Results

We found no discernable effects of ethnicity or religion on responses to the crisis scenarios (whether pooled or examined individually). We also found no effect of age on confidence, aggression, or conservatism.

### Incidence of Aggression

Mean aggression was 3.71 (median=4, range=1–6, s.d.=1.14). Figure 1 shows the distribution of summed levels of aggression, and Table 1 shows the breakdown of all responses in each scenario. Across all scenarios combined, negotiate was the most common option, followed by attack and then appease. This ranking of responses was exactly the same within each individual scenario as well—negotiate, then attack, then appease. The frequency of responses to the Hostage and Central Asian crises were

**Table 1** Frequency of chosen policy options for each crisis scenario and all scenarios combined

Scenario	Response		
	Appease	Negotiate	Attack
Hostage Crisis	15 (11.5%)	61 (46.9%)	54 (41.5%)
Central Asian Crisis	13 (10.0%)	61 (46.9%)	56 (43.1%)
Latin American Crisis	12 (9.3%)	95 (73.6%)	22 (17.1%)
Total	40 (10.3%)	217 (55.8%)	132 (33.9%)

remarkably similar, whereas in the Latin American crisis a much larger majority of people chose to negotiate. Table 2 shows descriptive data for the independent variables used.

### Aggression and Confidence

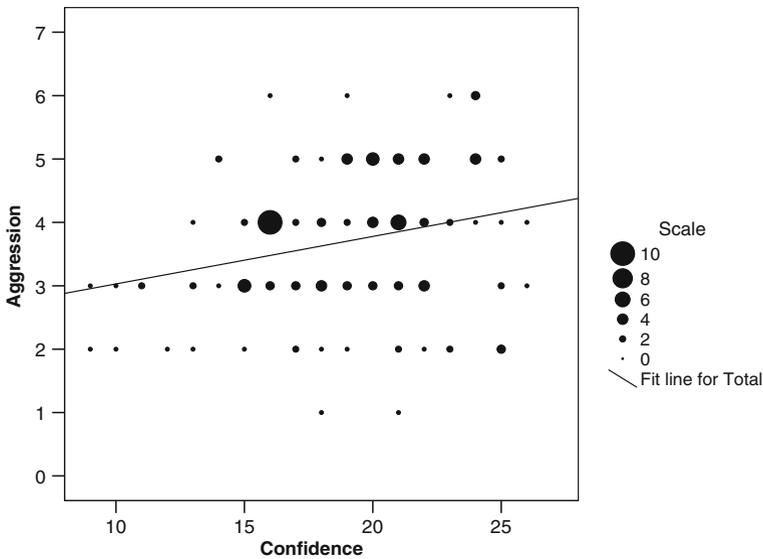
There was a highly significant relationship between the level of confidence subjects ascribed to their chosen course of action and how aggressive it was (Kendall's  $\tau_B=0.19$ ,  $N=129$ ,  $p=0.006$ ; see Fig. 2). That is, people who chose more-aggressive options (e.g., military action) were also more likely to believe that their chosen policy would be successful. On the contrary, people who chose less-aggressive options (e.g., appease) were less likely to believe their chosen policy would be successful.

Within individual scenarios, the correlation was positive in all cases, significant in the Central Asian crisis (Kendall's  $\tau_B=0.17$ ,  $N=130$ ,  $p=0.022$ ) and the Latin American crisis (Kendall's  $\tau_B=0.18$ ,  $N=129$ ,  $p=0.018$ ), but not significant in the Hostage crisis (Kendall's  $\tau_B=0.07$ ,  $N=130$ ,  $p=0.39$ ).

**Table 2** Descriptive data for independent variables used in the analyses

	N	Mean	Median	Minimum	Maximum	SD
Ideology <sup>a</sup>	129	3.65	3	1	8	1.86
Confidence	129	19.00	19	9	26	3.86
Optimism	124	38.46	39	16	50	6.71
Locus of Control	129	15.64	15	9	25	3.19
Courage	127	33.73	34	13	49	5.98
Leadership	129	33.88	34	10	50	7.40
Agreeableness	128	38.66	39	20	50	5.90
Conscientiousness	126	34.43	34	17	50	7.67
Emotional Stability	128	35.55	36	16	50	7.54
Extraversion	127	33.08	33	10	49	7.24
Intellect	128	38.70	39	23	50	5.98

<sup>a</sup> The 7-point liberal-conservative scale



**Fig. 2** Aggression increases with confidence that the chosen policy will succeed (Kendall's  $\tau_B=0.19$ ,  $N=129$ ,  $p=0.006$ ). Dot size represents the number of individuals with identical data values

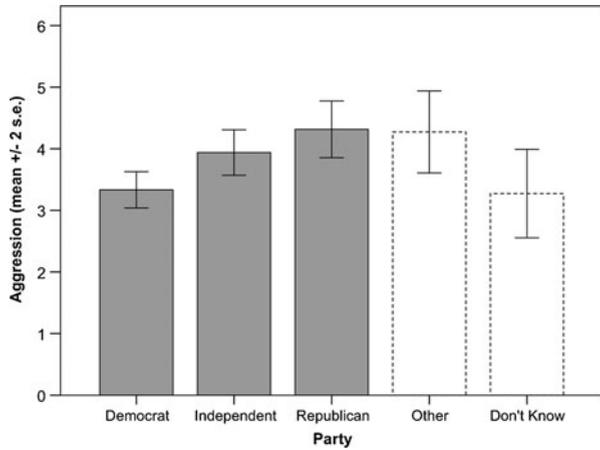
One interesting question was whether subjects' "optimism" scores, a measure of general optimism in everyday life, would reflect their confidence in their chosen solutions to the crisis scenarios. Optimism was correlated (at a marginal level of significance) with confidence (Pearson's  $r=0.16$ ,  $N=125$ ,  $p=0.075$ ). This suggests that everyday optimism scores that psychologists report may be an important contributing factor for understanding confidence in political contexts. However, "optimism" by itself was not related to aggression (Kendall's  $\tau_B=-0.06$ ,  $N=124$ ,  $p=0.42$ ), so the relationship found between confidence and aggression—as we originally hypothesized in our research design—appears to be specific to the context (the crisis scenarios and the chosen policies), rather than a result of individuals' general levels of optimism.

#### Aggression and Party Identification

Figure 3 shows that aggression was higher among self-declared Republicans ( $N=19$ , mean=4.32) than Democrats ( $N=54$ , mean=3.33) or Independents ( $N=33$ , mean=3.94). The difference between Republicans and Democrats was significant (Mann-Whitney  $U$ -test:  $Z=3.18$ ,  $N=54,19$ ,  $p<0.001$ ) but the difference between Republicans and Independents was not (Mann-Whitney  $U$ -test:  $Z=1.42$ ,  $N=33,19$ ,  $p=0.16$ ). This reflects the fact that it is not simply that Republicans are more aggressive than all other people in the sample. Rather, Republicans are somewhat more aggressive than average, while Democrats are somewhat less aggressive than average (the difference between Democrats and Independents was significant in the other direction—Mann-Whitney  $U$ -test:  $Z=2.32$ ,  $N=54,33$ ,  $p=0.020$ ).

Within individual scenarios, Republicans were more aggressive than Democrats in all cases (Fig. 4). This was not far from significance in the Hostage crisis (Mann-Whitney  $U$ -test:  $Z=1.67$ ,  $N=55,19$ ,  $p=0.095$ ), highly significant in the Central Asian

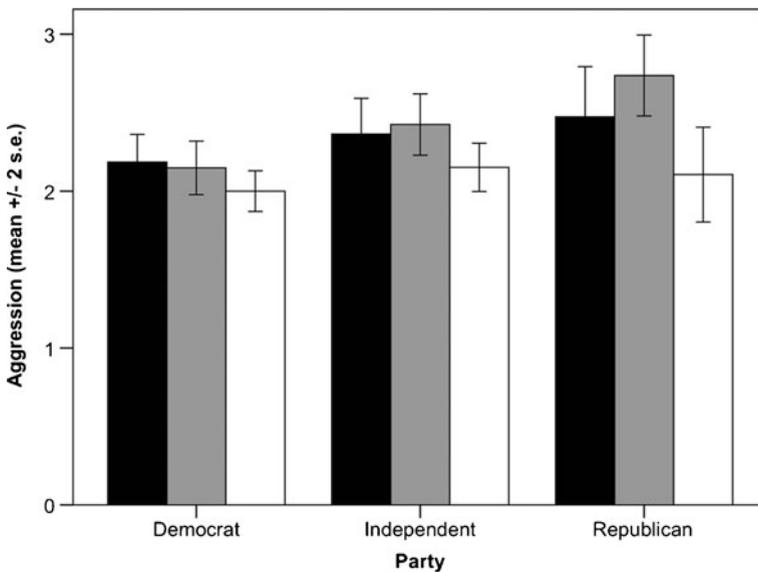
**Fig. 3** Aggression and party affiliation. Republicans were significantly more aggressive than Democrats (Mann-Whitney *U*-test:  $Z=3.18, p<0.001$ ) but not Independents (Mann-Whitney *U*-test:  $Z=1.42, p=0.16$ )



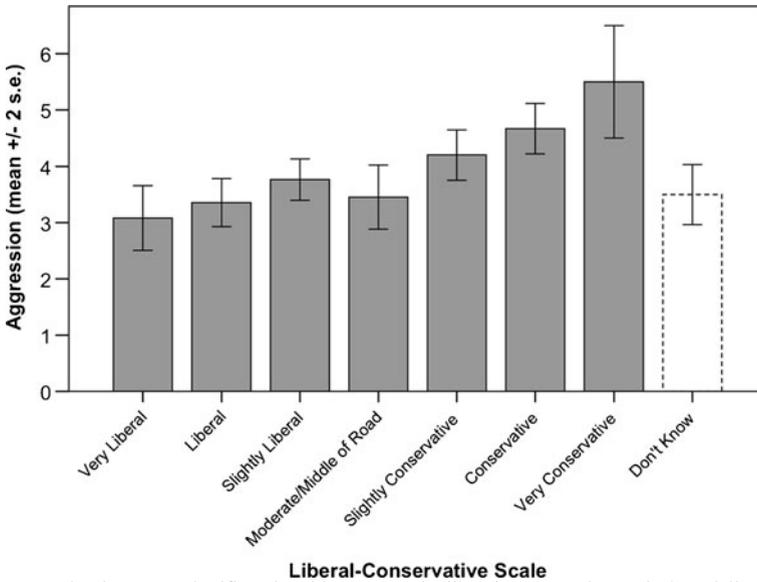
crisis ( $Z=3.61, N=55,19, p<0.001$ ), and not significant in the Latin American crisis ( $Z=0.77, N=54,19, p=0.44$ ).

**Aggression and Political Ideology**

We also found a strong correlation between aggression and the seven-point liberal-conservative scale (Kendall’s  $\tau_B=0.31, N=121, p<0.0001$ ; Fig. 5). Category 8 “Don’t Know” responses were excluded from these analyses. Apart from the “Moderate/Middle of the Road” category, there was a perfectly monotonic increase in aggression along the liberal to conservative spectrum.

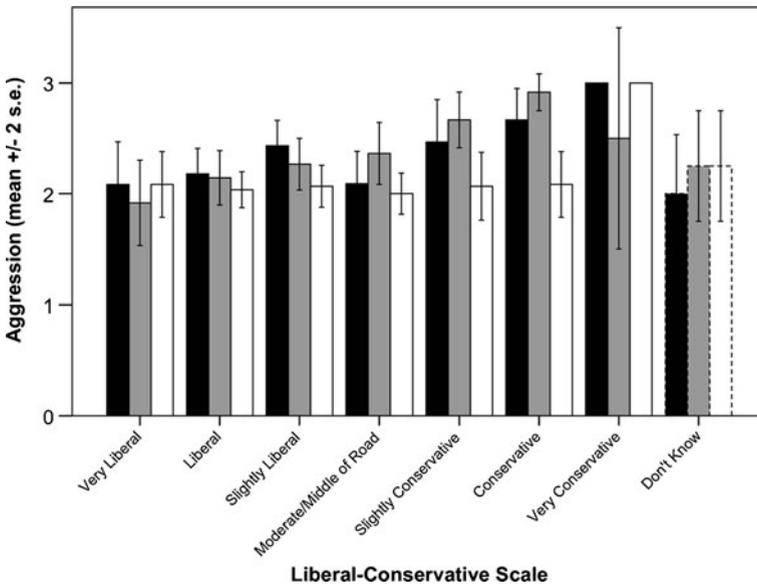


**Fig. 4** Aggression and party affiliation by crisis scenario. Republicans were more aggressive than Democrats in all cases. This was marginally significant in the Hostage crisis (black bars; Mann-Whitney *U*-test:  $Z=1.67, p=0.095$ ), highly significant in the Central Asian crisis (gray bars;  $Z=3.61, p<0.001$ ), but not significant in the Latin American crisis (white bars;  $Z=0.77, p<0.001$ )



**Fig. 5** Aggression increases significantly with score on the liberal-conservative scale (Kendall’s  $\tau_B=0.31$ ,  $N=121$ ,  $p<0.0001$ ; “Don’t Knows” excluded from statistical test)

Figure 6 shows the pattern within each scenario. Aggression was significantly correlated with ideology in the Hostage crisis (Kendall’s  $\tau_B=0.18$ ,  $N=122$ ,  $p=0.022$ ) and the Central Asian crisis (Kendall’s  $\tau_B=0.35$ ,  $N=122$ ,  $p<0.0001$ ), but not in the Latin America Crisis (Kendall’s  $\tau_B=0.05$ ,  $N=121$ ,  $p=0.54$ ).



**Fig. 6** Aggression and political ideology by crisis scenario. Aggression was significantly correlated with ideology in the Hostage crisis (black bars; Kendall’s  $\tau_B=0.18$ ,  $N=122$ ,  $p=0.022$ ) and the Central Asian crisis (grey bars; Kendall’s  $\tau_B=0.35$ ,  $N=122$ ,  $p<0.0001$ ), but not in the Latin America Crisis (white bars; Kendall’s  $\tau_B=0.05$ ,  $N=121$ ,  $p=0.54$ ). Dotted bars represent the “Don’t Know” category

To summarize, people who chose more aggressive options were significantly more likely to have conservative leanings, whether measured by political party affiliation or a more general liberal-conservative scale.

### Aggression and U.S. Foreign Policy Preferences

Do policy choices in these crisis scenarios tell us anything about subjects' real-world foreign policy preferences? To answer this question, we asked subjects about their opinions on Iraq (prior to the 2007 "surge") and Iran. The first question was "The United States is sending about 20,000 troops to Iraq. Do you think this will improve security and reduce killings, or that this will not improve security and reduce killings?" Those who responded that the surge would "improve security and reduce killings" had significantly higher aggression scores in the crises scenarios than those who thought that it would not (Mann-Whitney *U*-test,  $Z=3.24$ ,  $N=31,69$ ,  $p=0.001$ ; Fig. 7). This was also significant or marginally significant when only using data from the Hostage crisis ( $Z=1.74$ ,  $N=31,70$ ,  $p=0.08$ ), Central Asian crisis ( $Z=2.53$ ,  $N=31,70$ ,  $p=0.01$ ), or Latin American crisis ( $Z=1.72$ ,  $N=31,69$ ,  $p=0.09$ ).

We also asked "If it is proven that Iran is helping the Shiites in Iraq, would you favor or oppose bombing Iran over this?" Preference for bombing Iran was positively correlated with aggression scores in the crisis scenarios (Kendall's  $\tau_B=0.28$ ,  $N=114$ ,  $p<0.001$ ; Fig. 8). This relationship was also evident when only using data from the Hostage crisis (Kendall's  $\tau_B=0.25$ ,  $N=115$ ,  $p=0.004$ ) and the Central Asian crisis (Kendall's  $\tau_B=0.29$ ,  $N=115$ ,  $p=0.001$ ), but not the Latin American crisis (Kendall's  $\tau_B=0.002$ ,  $N=114$ ,  $p=0.98$ ).

Interestingly, confidence expressed in the crisis scenarios was also significantly higher among those who thought the surge would help in Iraq ( $Z=2.62$ ,  $N=31,70$ ,  $p=0.009$ ), and positively and marginally significantly correlated with a preference for bombing Iran (Kendall's  $\tau_B=0.15$ ,  $N=115$ ,  $p=0.07$ ).

Unsurprisingly, liberal-conservative scores predicted both preference for the surge in Iraq (Mann-Whitney *U*-test,  $Z=3.33$ ,  $N=70,33$ ,  $p=0.001$ ) and bombing Iran (Kendall's  $\tau_B=0.32$ ,  $N=117$ ,  $p<0.0001$ ).<sup>3</sup> This pattern was also highly significant when comparing Republican and Democrat categories (surge:  $\chi^2=15.8$ ,  $df=1$ ,  $p<0.0001$ ; bombing Iran:  $\chi^2=19.5$ ,  $df=3$ ,  $p<0.001$ ).<sup>4</sup>

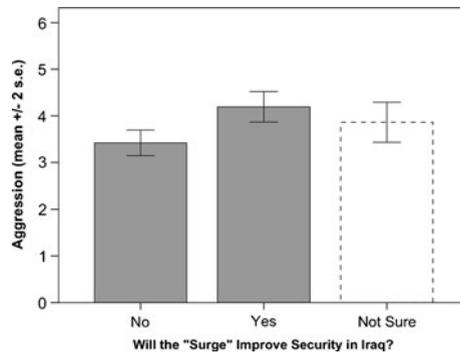
### Relationship Between Confidence and Partisanship

Confidence and the liberal-conservative scale were correlated, though not significantly, with each other (Kendall's  $\tau_B=0.95$ ,  $N=130$ ,  $p=0.15$ ), such that more conservative people tended to be more confident that their chosen policy (whatever it was)

<sup>3</sup> Here, comparing the four-level preference for bombing Iran across the seven-level liberal-conservative scale might be better tested using a chi-square test, but the result is the same:  $\chi^2=51.2$ ,  $df=18$ ,  $p<0.0001$ .

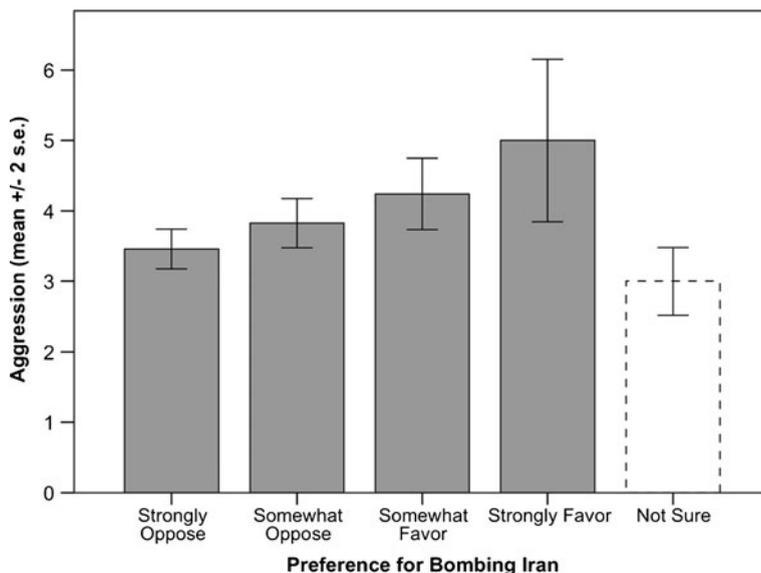
<sup>4</sup> Note that since Republicans/conservatives were more aggressive in the crisis scenarios, it may seem unsurprising that aggression should also correlate with preferences in Iraq and Iran—given that both were associated with President George W. Bush's presidency. While certainly a plausible explanation for these specific results, it further highlights the central finding that conservatives were more aggressive in the crisis scenarios.

**Fig. 7** Aggression in the scenarios was significantly higher among those who thought that the “surge” would improve security and reduce killings in Iraq (Mann-Whitney  $U$ -test,  $Z=3.24$ ,  $N=31,69$ ,  $p=0.001$ )



would succeed. This association was more striking when comparing the two main party affiliations. Republicans were significantly more confident than Democrats (Mann-Whitney  $U$ -test:  $Z=2.74$ ;  $N=19,55$ ;  $p=0.006$ ).

If we look within party-affiliation categories (note the smaller sample sizes), then the correlation between confidence and aggression was positive but not significant among Republicans (Kendall's  $\tau_B=0.04$ ,  $N=19$ ,  $p=0.82$ ), Democrats (Kendall's  $\tau_B=0.05$ ,  $N=55$ ,  $p=0.66$ ), and “Other” (Kendall's  $\tau_B=0.13$ ,  $N=11$ ,  $p=0.62$ ); positive and significant among Independents (Kendall's  $\tau_B=0.33$ ,  $N=33$ ,  $p=0.02$ ); and negative but not significant among “Don't Knows” (Kendall's  $\tau_B=-0.06$ ,  $N=11$ ,  $p=0.80$ ). This suggests that, apart from Independents, the strong relationship between confidence and aggression (Fig. 2) is driven by difference: across political preferences. In the next section, we conduct multivariate analyses to determine whether partisanship and confidence can independently explain variance in aggression.



**Fig. 8** Aggression in the scenarios was higher among those who favored bombing Iran if it was found to be assisting Shiites in Iraq (Kendall's  $\tau_B=0.28$ ,  $N=114$ ,  $p<0.001$ )

Before moving on to the multivariate analyses, it is worth exploring one alternative hypothesis. One might expect that people—of any party—should show greater confidence as policy options become more aggressive, because if more aggressive actions are potentially more costly, one should perhaps be more confident about the outcome before engaging in them (we call this the “cost hypothesis”). We see three reasons to reject this hypothesis.

First, it can be argued that the indirect costs of concession or negotiation may be just as high as the immediate and more obvious costs of military conflict, and we have no reason to believe that this did not factor into subjects’ decisions.

Second, even if the cost hypothesis is partly explaining the results, it cannot account for the difference in confidence between people of different political preferences. If people who choose more aggressive options are more confident because such options are deemed more costly, then why is this more true for Republicans or conservatives than Democrats or liberals?

Third, we can test the cost-hypothesis by asking whether more-conservative individuals are more confident (than less-conservative individuals) when comparing people who chose the same specific policy (concession, negotiation, or military attack) in a given scenario. If confidence were determined primarily by how aggressive the chosen policy option is, then we should not expect a difference between, say, Republicans and Democrats when comparing their confidence in the same policy choice. We looked at this by comparing Republicans and Democrats split by both scenario and by each specific policy choice (asking for example, whether Republicans were more confident than Democrats when they both chose to negotiate in the hostage scenario). Republicans were more confident in every single case but one (the exception being that Republicans were less confident than Democrats about the attack option in the Latin American scenario). None of these differences were statistically significant (Mann-Whitney *U*-tests: all  $Z < 1.75$ , all  $p > 0.08$ ). However, note that the lack of significance here is likely due to the sample sizes becoming very small once we split the data both by scenario and by policy choice (range: 8–53 subjects per test), and because these analyses were limited to Republicans versus Democrats (Independent, Other, and Don’t Know subjects were excluded).

Overall, there is no compelling evidence for the cost hypothesis, and Republicans were systematically, though not significantly (in small sample tests), more confident across the board in all of their policy choices than their Democratic counterparts.

### Multivariate Analysis

We next used an ordered probit model to examine the effect of multiple independent variables on aggression. Table 3 shows the results of ordered probit models for (A) aggression pooled across all scenarios, (B) the Hostage crisis, (C) the Central Asian crisis, and (D) the Latin American crisis. Each of these models has three versions: model 1 includes confidence but not ideology or party identification, model 2 includes confidence and ideology, and model 3 includes confidence and party identification. All models include all nine personality inventories as controls, but to ease presentation we omit these results (few of these variables were significant in any of the models, but wherever they were significant this is stated in the text below).

**Table 3** Ordered probit models for aggression pooled across all scenarios (model A1,2,3), the Hostage crisis (B1,2,3), the Central Asian crisis (C1,2,3), and the Latin American crisis (D1,2,3). Models only include subjects that answered the ideology question (i.e., they exclude “Don’t Knows”). Political party identification entered as a dummy variable (1=Republican, 0=Democrat). Personality inventories were included as independent variables but are omitted from the table for clarity of presentation

	Model A			Model B			Model C			Model D		
	Pooled1	Pooled2	Pooled3	Hostage1	Hostage2	Hostage3	Asian1	Asian2	Asian3	Latin1	Latin2	Latin3
PooledConfidence	0.072** [0.026]	0.065* [0.026]	0.066+ [0.039]									
HostageConfidence		0.008 [0.063]	-0.041 [0.070]	-0.066 [0.105]								
AsianConfidence				0.109+ [0.066]	0.096 [0.064]	0.129 [0.087]				0.134* [0.060]	0.137* [0.061]	0.079 [0.114]
LatinConfidence												
Ideology		0.244** [0.066]		0.222** [0.081]				0.312** [0.089]			0.033 [0.090]	
Party			0.874* [0.340]		0.579 [0.392]				1.205** [0.447]			0.441 [0.439]
cut1												
Constant	-1.116 [1.306]	-0.541 [1.348]	-1.388 [1.968]	-2.401+ [1.361]	-1.992 [1.372]	-2.812 [1.833]	-0.287 [1.319]	0.481 [1.453]	0.192 [1.998]	0.120 [1.044]	0.243 [1.051]	0.018 [1.469]
cut2												
Constant	0.075 [1.188]	0.657 [1.235]	0.098 [1.843]	-0.887 [1.343]	-0.422 [1.349]	-1.198 [1.812]	1.330 [1.307]	2.233 [1.447]	2.083 [2.003]	2.620* [1.046]	2.747** [1.051]	2.447 [1.491]
cut3												
Constant	1.114	1.752	1.146									

**Table 3** (continued)

	Model A			Model B			Model C			Model D		
	Pooled1	Pooled2	Pooled3	Hostage1	Hostage2	Hostage3	Asian1	Asian2	Asian3	Latin1	Latin2	Latin3
cut4	[1.166]	[1.216]	[1.842]									
Constant	1.885	2.587*	2.024									
	[1.162]	[1.222]	[1.852]									
cut5												
Constant	3.030*	3.802**	3.354+									
	[1.209]	[1.300]	[1.924]									
Observations	111	111	67	112	112	68	112	112	68	111	111	67
bic	392.346	385.820	249.737	261.436	259.056	179.433	253.400	244.119	160.264	208.110	212.659	148.732

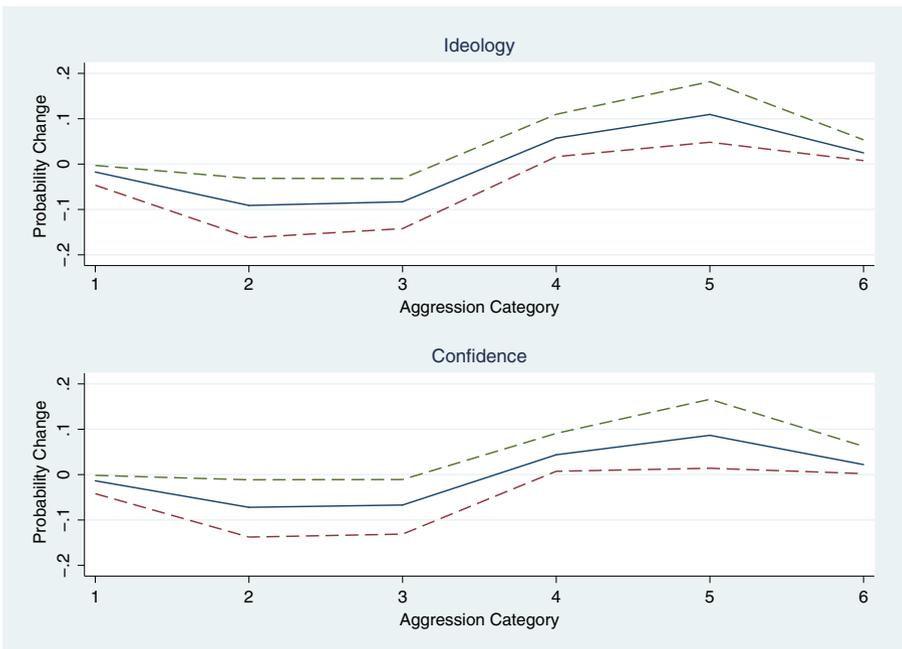
Standard errors in brackets

+  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ .

Excluding these personality inventories altogether from our multivariate analyses had no substantive effect on our results.

Confidence is significant in the pooled data (A1) and Latin American crisis (D1), marginal in the Central Asian crisis (C1), and not-significant in the hostage crisis (B1). Locus of control and agreeableness were also of marginal significance in the pooled model (A1). In the pooled data, confidence remains significant when ideology is added (which is also significant itself; A2), and marginally significant when party identification is added (which is again significant itself; A3).

Coefficients in nonlinear models such as ordered probit are not directly interpretable. Instead, we calculated the substantive effects generated by changes in “ideology” and “confidence” variables for the second pooled model (A2) using the “Clarify” algorithm (King et al. 2000). Here we ask: what is the change in predicted probability of being in each category of the dependent variable (aggression) when one variable (either ideology or confidence) moves from its sample 25th percentile level to the 75th percentile level and all other variables are held at their median? We plot these predicted changes along with associated confidence intervals in Fig. 9. For example, for both the ideology and confidence variables, the probability of being in category 4 (that is, scoring 4 on aggression) increases by nearly 10%. Increasing the change in the independent variable of interest (e.g., from the minimum to maximum) of course



**Fig. 9** Effects of changes in ideology and confidence for the pooled ordered probit model (model A2 in Table 3), using the “Clarify” algorithm (King et al. 2000). The lines show the change in the predicted probability of being in each category of the dependent variable (aggression) when the ideology variable (upper panel) or confidence variable (lower panel) moves from its 25th to 75th percentile level and all other variables are held at their median. For both variables, the probability of being in category 5, for example, increases by nearly 10%

increases these estimates. This gives us further evidence that these variables are not only statistically significant but also produce reasonable effect sizes.

### Robustness Checks

We emphasize the ordered probit results because the dependent variable represents ordered categories. However, the seven categories of the dependent variable (aggression) could be treated as a scalar variable. Therefore, here we check results using an ANOVA model, which is relatively robust to deviations from normality—with appropriate caution in interpreting the results. All models included all nine personality variables.

To mirror the ordered probit models above, ANOVA Model A included confidence but neither party nor ideology. The overall ANOVA model was marginally significant ( $F=2.22$ ;  $df=10,105$ ;  $p=0.061$ ; adjusted  $R^2=0.07$ ), with a single significant predictor variable: confidence ( $F=7.68$ ;  $df=1,105$ ;  $p=0.007$ ). Agreeableness was of marginal significance ( $F=3.63$ ;  $df=1,105$ ;  $p=0.059$ ).

Model B included confidence and ideology (but excluded party identification). This was the best-fitting ANOVA model, significant overall ( $F=3.36$ ;  $df=11,99$ ;  $p=0.002$ , adjusted  $R^2=0.17$ ), with two significant predictor variables: the liberal-conservative scale ( $F=11.36$ ,  $df=1$   $p=0.001$ ) and confidence that the policy would succeed ( $F=5.68$ ,  $df=1$   $p=0.019$ ).

Model C included confidence and party identification (but excluded ideology). Party was a categorical variable constrained to Democrat, Independent, and Republican. The overall ANOVA model was significant ( $F=2.22$ ;  $df=12,82$ ;  $p=0.018$ , adjusted  $R^2=0.13$ ), with three significant predictor variables: party ( $F=3.91$ ;  $df=2,82$ ;  $p=0.024$ ), confidence ( $F=4.58$ ;  $df=1,82$ ;  $p=0.035$ ), and agreeableness ( $F=4.25$ ;  $df=1,82$ ;  $p=0.043$ ).

To summarize, a variety of methods confirmed the same basic result: people's level of aggression in responding to hypothetical crises was significantly predicted by their confidence that their chosen policy would succeed, by their score on the liberal-conservative scale, by their political party affiliation, and by their preference for the use of military force in real-world U.S. policy toward Iraq and Iran. These results were supported whether looking at individual variables, multivariate ordered probit models, or alternative ANOVA models.

### Discussion

Our study identified two consistently significant factors in explaining aggression: confidence and conservatism. Subjects who chose more-aggressive options—military action rather than negotiation or negotiation rather than appeasement—were significantly more likely to believe that their favored policy would be successful, to have conservative leanings, and to declare themselves as Republicans. These aggressive policy preferences were reflected in their views on real-world current events as well. Subjects who chose more-aggressive options (and who were more confident) in the hypothetical scenarios were more likely to believe that the surge in Iraq would improve security, and more likely to favor bombing Iran.

There are obviously many limitations of this kind of experiment. First, hypothetical scenarios can rarely be completely divorced from real-world political events. In some ways this is useful because it makes the scenarios more salient and realistic. On the other hand, subjects may have associated a given scenario with the party then in power (e.g., Republican George W. Bush's administration) and thus favored whatever strategy they perceived their own political party to support at the time of the study. The experiments, conducted in May 2007, may also have been influenced by the U.S. election campaign and an increased likelihood of partisan thinking. However, this may have served to increase salience and political knowledge rather than introducing a bias in any particular direction.

Second, because our findings are correlational, we do not know whether people who were more disposed to confidence were, as a consequence, more likely to chose the most aggressive option or, alternatively, whether people who chose aggressive options subsequently became more likely to believe it would work. Because we asked people's level of confidence after they had made their policy choice, at first glance this suggests a role for cognitive dissonance in rationalizing decisions that have already been made (Cooper 2007; Festinger 1957; Jervis 1976). However, that does not predict greater confidence in decisions that were more aggressive, only greater confidence in whatever decision was made (aggressive or otherwise). Therefore, cognitive dissonance cannot explain our results.

Despite some important limitations, the present study suggests that confidence and conservatism are associated with aggression in crisis decision-making. Confidence has long been claimed to underlie aggression in historical case studies of war (Blainey 1973; Johnson 2004; Van Evera 1999), but quantitative and experimental evidence has been lacking. We previously found support for such a link in controlled wargame experiments (Johnson et al. 2006), but we did not know until the present study whether decision-makers' levels of confidence would predict aggressive policy preferences in plausible real-world crisis decisions (rather than in a competitive game against another player). As we show here, although Republicans and conservatives were more confident than Democrats and liberals, confidence explains variance in aggression independently of the variance explained by partisanship. Confidence, it seems, is a powerful factor that exerts an influence beyond political ideology. Interestingly, even where political preferences failed to explain variation in aggression—in the Latin American scenario—confidence still was a significant predictor of aggression (see bivariate and probit model results).

The Latin American crisis was the one exception to an otherwise consistent pattern of results. Absolute levels of aggression in this scenario were lower than in the other scenarios—across all political parties and across all levels of the liberal-conservative scale. Military action may thus have been seen by all subjects, across partisan divides, as potentially expedient and effective in the Hostage and Central Asia cases but not in Latin America. Subjects may have approached policy options in this scenario more as a reflection on past U.S. administrations' policies in the region, rather than on the basis of their own ideology. Of course, it could also be the case that subjects did not find the region of Latin America to be as important, or to require as active an intervention, as more strategically critical regions such as the Middle East and Central Asia. Alternatively, since Latin America is geographically closer to our

subjects, participants may be more concerned about potential spillover effects from military action in this region affecting their own security and quality of life. Given the number of Hispanics in this sample (11.9%), some individuals may also have had family members in this region whose safety or interests remained prominent in thinking through which options they might support.

It is common to associate conservatism with aggression in the present political climate given the Bush administration's foreign policy record and the 2002 National Security Strategy. Conservatism, however, has historically been associated with isolationism, containment, and offshore balancing (Dueck 2008; Mearsheimer 2001), and many conservative thinkers express the opinion that the United States should not be the world's "policeman". Thus, conservatives are suspicious of the use of force in certain domains. Nevertheless, recent research suggests that conservatives are psychologically, physiologically, and neurologically more sensitive to uncertainty and threats in the environment. Our study adds to this literature by demonstrating that conservatives are also significantly more likely to react to threats aggressively, even in differing political contexts. Robert Draper summed up the essence of George W. Bush's presidency, dominated by the wars in Afghanistan and Iraq, in two words: "dead certain" (Draper 2007). Bush's decision-making style was characterized by both strong conservative ideals and an unwavering belief in ultimate success. Our study suggests that this phenomenon is not confined to Bush or the neo-cons. Confidence and conservatism are strong predictors of aggression.

Of course, although confidence and conservatism may lead to more aggressive behavior, this does not mean that such behavior is necessarily ineffective or undesirable. The use of force may sometimes be a better policy than negotiation or appeasement (e.g., against Hitler). Mainstream international relations theory stresses the fact that in international politics there is no world government or Leviathan to control what states do. In such an "anarchic" world, aggression may be unfortunate but essential for survival (Mearsheimer 2001; Waltz 1979). For similar reasons, aggression is likely to have been an adaptive strategy in human evolutionary history to avoid exploitation and maximize survival and reproductive success (Gat 2006; Keeley 1996; LeBlanc and Register 2003; Wrangham and Peterson 1996). High levels of confidence and conservatism may have been an advantageous trait in this evolutionary history of intra- and intergroup conflict at least for some individuals, increasing the probability of victory by boosting resolve, morale, perseverance, and the credibility of deterrence (Johnson 2004; Johnson and Fowler 2011; Johnson et al. 2011; Trivers 2000; Wrangham 1999; Sell et al. 2009).

A problem arises because human proximate mechanisms underlying aggression were calibrated for the prevailing distributions of costs, benefits, and risks in the social and physical environment of the Pleistocene. In today's very different world, high levels of confidence or conservatism may be maladaptive when triggered in modern settings involving mass armies, modern weapons, and decisions made far from the battlefield—none of which existed in the ancestral environment in which our brains evolved.

Confidence and conservatism might continue to be adaptive, however, if they are triggered in settings that are evolutionarily relevant, where evolved signals and feedback mechanisms work in similar ways to the way they did in the past. For example, garnering public support to resist invasions or persevere with long wars

might fall under this category. Evolutionarily relevant signals might, therefore promote acts of military and political aggression that improve one's strategic position or combat effectiveness. As Carl von Clausewitz wrote in the early nineteenth century, "Boldness in war . . . must be granted a certain power over and above successful calculations involving space, time, and magnitude of forces, for wherever it is superior, it will take advantage of its opponents' weakness" (von Clausewitz 1976:190). The relevant question, therefore, is not whether conservatives are "too" aggressive and "too" confident, but rather: when are conservative hawks or liberal doves more likely to make the most effective policy choices? And what conditions are most likely to engender support from both sides of the political divide? These pose interesting new avenues for future experiments to further our understanding of human aggression.

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## Appendix

### International Crises Scenarios

For each of the following scenarios, please read the description carefully. Then please make a decision about what you would do in this situation. As much as possible, try to really imagine being the leader confronted with this decision. Do not act as if you were any particular leader, but rather act as yourself in the role of leader. In each decision, you will be asked to mark your most preferred decision option. **There is no right answer to any of these crisis scenarios.**

[New page in original]

### Hostage Scenario

A commercial airliner en route from New York to Tel Aviv, Israel, is hijacked and forced to land at the Riyadh International Airport in Saudi Arabia. The passengers are predominantly Israeli, but a number of Americans and other nationals are on board as well.

You know that the hijackers are Palestinians, but their specific affiliation is not clear at this point. They are demanding the release of a number of Palestinians held in Israeli jails. They also want safe passage for themselves to an undisclosed location.

The relevant parties are Israel, the Palestinian hijackers, the Saudis, and the Americans. Each group has a set of objectives. The Israelis primarily want the safe return of the passengers. They also want to maintain the credibility of their deterrent against terrorism and to make sure that their strategic interests remain unchanged. The Palestinian hijackers primarily want the release of their nationals from Israeli prisons. They also want to damage Israel's image internationally and to assure their own safe passage out of Saudi Arabia. The Saudis primarily want to demonstrate their control

of the situation and to maintain control among their own people. They would also like to maintain the status quo in their relations with other Arab nations. The Americans would like to assure the safety of their passengers, deter similar terrorist actions in the future, and broker this situation to a successful conclusion to demonstrate international leadership.

#### QUESTION A

As the president of the United States, faced with this situation, what is your most preferred option for action?

- 1. Encourage a Special Forces assault in an attempt to rescue the hostages.
- 2. Act as a broker between Israel and the Palestinian hijackers to arrange a trade, in which passengers are released in small groups, in return for the release of a few Palestinian prisoners.
- 3. Put pressure on the Israelis to release the Palestinian prisoners in order to secure the release of the passengers unharmed.

#### QUESTION B

On a scale of 0 to 10, how likely do you think it is that your chosen course of action will succeed? Please circle your response, where 0 is very unlikely and 10 is very likely.

0 1 2 3 4 5 6 7 8 9 10

[New page in original]

### Central Asian Scenario

The newly established democratic government of Afghanistan has become increasingly unpopular due to the continuing strength of Islamic fundamentalism, economic decline, internal political dissension and violence, and their crackdown on the highly profitable heroin trade. An armed rebellion by millennia-old clan-based [groups led by] warlords has been continuing in the southern and eastern regions. When government troops encircle some of these rebel forces, the resurgent Taliban, in concert with the local warlords, intervene with a sizeable military force. On the third day of the operation, it seems possible from the size and direction of these attacks, that these Taliban forces will once again take over the capital city of Kabul. The resurgent Taliban are calling for an “international brotherhood of Islamic states,” while the Russians warn that “Islamic fundamentalism will not be allowed to set up positions of strength along the Russian border.”

U.S. pentagon military strategists are pessimistic about the ability of the United States to successfully control this military action given the number of American troops that are currently pinned down in Iraq. They see a slim hope for success only if the United States seizes a window of opportunity to interdict key mountain passes and to forestall the resurgent Taliban from setting up air defenses and logistics to support their further operations. Renewed major U.S. military intervention might require the insertion of special mountain forces, conventional bombing, and the possible use of 15,000-ton “daisy cutter” bombs. The U.S. dominates in aerial forces, but is in an unfavorable position in the local military balance on the ground. The latest intelligence data suggests that the mountainous border region between Afghanistan and Pakistan continues to shelter most of the top leaders of Al Qaeda, including Osama

bin Laden. Many Taliban leaders support these terrorists in their campaign against American forces in the region.

The Russians' main goal is to prevent an unstable situation on its border, but the Russian government would not mind extending its influence throughout the region as well. The United States is reluctant to let the Russians do all the work, in case they take over the territory entirely and move into nearby areas that control important oil pipelines necessary to both the U.S. and Western Europe.

#### QUESTION A

As the president of the United States, faced with this situation, what is your most preferred option for action?

- 1. Withdraw American forces from the increasing difficulties in Afghanistan and concede the area to the local Taliban forces, concentrating your military effort on Iraq.
- 2. Use special mountain forces, conventional bombing, and the possible use of 15,000-ton "daisy cutter" bombs to block the key mountain passes in Afghanistan.
- 3. Stress diplomatic solutions to the crisis and act to sponsor ceasefire negotiations between the local government, important warlords, and the Russian and Pakistani governments.

#### QUESTION B

On a scale of 0 to 10, how likely do you think it is that your chosen course of action will succeed? Please circle your response, where 0 is very unlikely and 10 is very likely.

0 1 2 3 4 5 6 7 8 9 10

[New page in original]

### Latin American Scenario

A country in Latin America recently elected a socialist leader who has just socialized the nation's industries, including a number of important American corporate concerns. This country is the leading exporter of coffee, cocoa, and bananas to the United States. In addition, it is an important supplier of certain raw materials, including copper. As a result, American companies stand to lose billions of dollars, and adequate supplies of these goods into the United States could be disrupted, likely leading to critical shortages of coffee, chocolate, fruit, and plumbing material in America. A strong military leader who is quite sympathetic to American interests is waiting in the wings, eager to take power from the elected socialist leader, but he needs outside help in order to accomplish this goal. As president of the United States, you have been under a great deal of pressure from major corporate businesspeople and important political donors to do something about this situation, and to roll back the government takeover of these American companies. These leaders have threatened to back your opponent in the next election unless you do something to reverse this seizure of American property.

#### QUESTION A

As the president of the United States, faced with this situation, what is your most preferred option for action?

- 1. Attempt to negotiate fair restitution for American companies.
- 2. Let this leader nationalize American interests, but cut diplomatic ties.
- 3. Allow US special forces and the CIA to assist the local military leader in staging a coup.

## QUESTION B

On a scale of 0 to 10, how likely do you think it is that your chosen course of action will succeed? Please circle your response, where 0 is very unlikely and 10 is very likely.

0 1 2 3 4 5 6 7 8 9 10

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