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# The Impact of Uncertainty, Threat, and Political Identity on Support for Political Compromise

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## Abstract

This work examines the impact of uncertainty and threat on support for political compromise. In Study 1, uncertainty, threat, and support for compromise were measured. Uncertainty increased support for compromise only when paired with positive or neutral affect. Studies 2 and 3 used an experimental design to examine the impact of incidental affect on support for political compromise as a function of political identification. Uncertainty was more likely to increase support for compromise in positive or neutral contexts and for political moderates and liberals. The combination of uncertainty and threat led conservatives to express reduced support for compromise.

Everyone in America understands Obamacare is destroying jobs. It is driving up health care costs. It is killing health benefits. It is shattering the economy. All across the country in all 50 states— ... it doesn't matter if you are talking to Republicans or Democrats or Independents or Libertarians—Americans understand this thing is not working.

— Senator Ted Cruz (R-TX, September 24, 2013;  
“Sen. Ted Cruz’s Marathon Speech,” 2013)

In fall 2013, the U.S. Congress reached an impasse over budget negotiations that resulted in a partial government shutdown. This inability to compromise was, at least in part, driven by conflict between Democrats and Republicans over the Patient Protection and Affordable Care Act (ACA; also referred to as Obamacare). Although the law was passed and signed into law on March 23, 2010, and upheld by the Supreme Court on June 28, 2012, many elected officials in Congress remained critical of the legislation and were pushing to withdraw funding. The views of the American public during this time were mixed, with around 40% of the public supporting efforts to defund the ACA (Blumenthal, 2013). Many Americans expressed negative feelings about the law, with more than half expressing worry and around 30% expressing anger (Connor, 2013). Of interest, however, a majority of Americans also expressed some degree of uncertainty and doubt about these attitudes (Blumenthal, 2013). So, although Senator Cruz (see epigraph) expressed certainty about the

threat that the ACA posed, public opinion data suggest the American public may have been less certain about that conclusion. The present work was designed to investigate how the affective responses from the public, namely, uncertainty and threat, contributed to attitudes about Congress and the government shutdown during this period. The situation in late 2013 is an excellent example of how emotion can impact politics and can be better understood in light of social psychological theory.

## Uncertainty, threat, and political behavior

Social and political psychologists have offered differing perspectives on how uncertainty may affect political behavior. Political scientists have suggested that *familiar* negative situations (more certain) are more likely to lead to aversion and partisanship, whereas *unfamiliar* situations (more uncertain) are more likely to lead to anxiety, deliberation, and compromise (e.g., MacKuen, Wolak, Keele, & Marcus, 2010; Marcus, Neuman, & MacKuen, 2000). However, the effect of uncertainty may not be quite so straightforward. Contrary to the view that uncertainty *increases* deliberation and compromise, a large body of research in social psychology suggests that uncertainty has the opposite effect. Uncertainty has been shown to lead to increased confidence in and dedication to one’s prior attitudes, values, moral beliefs, and social identity (e.g., Hogg & Mullin, 1999; McGregor, 2006; Mc-

Gregor, Zanna, Holmes, & Spencer, 2001; Proulx & Heine, 2008; Proulx, Heine, & Vohs, 2010; Van Den Bos, Poortvliet, Maas, Miedema, & Van Den Ham, 2005). Although much of the work demonstrating negative outcomes from uncertainty has examined uncertainty in the context of threat, other research in social psychology has shown that uncertainty can function differently when attached to positive versus negative emotions. For example, Wilson and colleagues have shown that uncertainty enhances both positive and negative emotions (Bar-Anan, Wilson, & Gilbert, 2009).

The purpose of the present research was to investigate the impact of uncertainty and threat on support for political compromise, specifically. Past work has established a link between threat and decreased willingness to compromise (Halperin, Porat, & Wohl, 2013; Maoz & McCauley, 2009), but the effect of uncertainty on compromise remains unclear. Whereas threat represents the potential for harm and is clearly negative in valence, uncertainty signals a lack of information or confidence and must be interpreted in light of the surrounding context (Haas, 2012; Haas & Cunningham, 2014). Uncertainty can be attached to either negative (e.g., threatening) or positive (e.g., hopeful) affective states. From this perspective, the effect of uncertainty on compromise is likely to differ based on the valence (positive or negative) attached to that uncertainty. If uncertainty is associated with threat, it should be more likely to *decrease* support for compromise, but if uncertainty is associated with positive affect or emotion, it may actually be more likely to *increase* support for compromise. Indeed, work has shown that positive emotions with an element of uncertainty, such as hope, do have a positive effect on intergroup relations—increasing support for compromise in the context of diplomatic relations (Cohen-Chen, Halperin, Crisp, & Gross, 2013). When uncertainty is not associated with threat, it may be more likely that people consider new sources of information as a way to reduce uncertainty. If that is the case, uncertainty might also lead people to be willing to accept alternate viewpoints—potentially leading to compromise.

To examine when uncertainty is more likely to lead to open- versus closed-mindedness, some of our prior work has independently manipulated both uncertainty (certain vs. uncertain) and threat (low vs. high) and measured the impact of these affective states on political tolerance (Haas & Cunningham, 2014). Results showed that threat moderated the impact of uncertainty on tolerance. When participants felt uncertain in a safe or neutral context, uncertainty *increased* political tolerance. However, when participants felt uncertain and threatened, uncertainty *decreased* political tolerance. The goal of the present research was to extend these findings and

attempt to offer insights as to why compromise about the ACA and the budget was so difficult to achieve in the fall of 2013.

### Uncertainty, threat, and political ideology

Recent work in social and political psychology has suggested that political ideology may influence how people respond to uncertainty and threat. Much of this work has been consistent in arguing that political conservatives are more responsive to both uncertainty and threat (Jost, Glaser, Kruglanski, & Sulloway, 2003) and show a general negativity bias (Hibbing, Smith, & Alford, 2014; Shook & Fazio, 2009). For example, Jost et al. (2007) examined the independent influence of both uncertainty and threat in a correlational design, showing that both predicted conservative political views. Hibbing and colleagues have presented individuals with a variety of negatively valenced emotional stimuli, finding support for the idea that conservatives show greater physiological reactivity to a variety of negative stimuli (Oxley et al., 2008; Smith, Oxley, Hibbing, Alford, & Hibbing, 2011). Some alternative perspectives have been introduced, such as the idea that conservatives may be sensitive to emotionally arousing stimuli, regardless of valence. In a recent set of studies, researchers found that both positive and negative video clips that were highly arousing led to endorsement of conservative political views (Tritt, Inzlicht, & Peterson, 2013). Although a growing body of work suggests that conservatives and liberals may respond differently to emotional or affectively laden stimuli, there is ongoing debate about the exact nature of these differences.

Based on prior work, there is reason to expect that conservatives will be responsive to both uncertainty and threat. It remains unclear, however, whether conservatives are likely to be more responsive to uncertainty regardless of context, or uncertainty mainly in the context of threat. In other words, if we assume that uncertainty and threat can be viewed as distinct psychological constructs, it is important to understand not just how political ideology influences responses to each, but how ideology may influence responses to their interaction. Based on work by Jost and colleagues (Jost et al., 2003; Jost et al., 2007), we should expect to see conservatives responding more to both uncertainty and threat independently. If conservatives show a general negativity bias (Hibbing et al., 2014), we might expect conservatives to respond primarily to threat given that threat is more likely than uncertainty to be clearly negative in valence. The arousal hypothesis (Tritt et al., 2013) might suggest that conservatives would respond to uncertainty regardless of context (in both positive and negative situations), but it is worth noting that arousal and uncertainty are not necessarily the

same thing. Uncertainty could be associated with arousal in some contexts, but uncertainty about mundane issues or in neutral contexts is less likely to lead to physiological arousal. Each of these theories makes different predictions about how political ideology influences responses to uncertainty, threat, and the combination of the two. But none of these approaches makes a clear prediction about how ideology should influence responses to uncertainty in different contexts.

If responses to uncertainty are context dependent, as we have suggested in prior work (Haas & Cunningham, 2014), it may be the case that the combination of uncertainty with threat is more likely to influence conservatives than uncertainty or threat alone. We have suggested that this combination feels especially bad, as it may signal some threat in the environment but also a lack of information about that threat or how to cope with it. From this perspective, one might expect conservatives to be negatively impacted by uncertain threats, specifically. Conservatives may also respond to uncertainty in the absence of threat, but given that much of the existing literature has looked at uncertainty mainly in the context of threat, this is still an open question.

## Overview of current work

The primary goal of the current work was to investigate the impact of uncertainty on support for compromise and examine whether threat moderates this effect. A second goal was to examine whether these responses to uncertainty and threat differ as a function of political ideology—liberal versus conservative. Study 1 uses a correlational design to investigate these processes in the context of a real-world political event: the partial U.S. government shutdown in October 2013. Studies 2 and 3 use an experimental approach to examine the causal impact of uncertainty on support for compromise as a function of threat, political ideology, and ideological extremity.

## Study 1

In the first study, participants responded to a survey measuring uncertainty about the ACA, perceived threat related to the ACA, and support for compromise among elected officials in Congress. It was expected that uncertainty would increase support for compromise when people felt relatively more neutral or positive toward the ACA but uncertainty would decrease support for compromise for people who felt threatened by the ACA. In this context, it is likely the case that partisan identity also played a role, so identity is measured and controlled for in the analyses.

## Method

### Participants

The sample included 106 undergraduate students from a large midwestern university in a conservative state. Data collection began October 10, 2013, and stopped when the government shutdown ended on October 16, 2013; there was no predetermined sample size. Six cases were removed due to incomplete data,<sup>1</sup> leaving 100 participants for analysis (43 male, 56 female, one chose not to report gender). Participants ranged in age from 18 to 37 ( $M = 20$ ,  $SD = 2.96$ ). A majority of participants self-identified as politically conservative ( $n = 39$ ) or moderate ( $n = 44$ ), with 15 identifying as liberal and one selecting the “don’t know” option. Participants received partial course credit for participation.

### Procedure

Data were collected using web-based survey software (i.e., Qualtrics). Participants gave informed consent and then completed a survey designed to measure (a) how uncertain they felt about the ACA, (b) how threatened they felt by the ACA, and (c) support for compromise among elected officials.<sup>2</sup> Measurement order for uncertainty and threat was counterbalanced to help control for possible order effects. It is important to note that uncertainty and threat were measured *independently* so that it would be possible to examine both the main effects of uncertainty and threat and their interaction. Additional questions were included to measure attention to the news and objective political knowledge (in that order). Participants also provided ideological identification, party identification, and demographic information. At the end of the survey, participants were debriefed and awarded course credit for participation.

### Measures

Participants were instructed that they would be answering questions about the new healthcare law and were told that this legislation is called the Affordable Care Act and has also been referred to as “Obamacare.” These instructions were explicit to minimize potential differences due to knowledge of the law. Public opinion data at the time showed that Americans expressed stronger attitudes (in both directions) when asked about Obamacare instead of the ACA (Goldberg, 2013).

**Uncertainty.** Uncertainty was measured with a series of questions focused on how certain or uncertain people felt about the contents and potential consequences of the ACA. These questions were adapted from questions the Pew Research Center (2013a) had used in the weeks leading up to the government shutdown. Par-



ticipants were asked, "How certain or uncertain do you feel about the following aspects of the new healthcare law?" in relation to the following items: "the rules and regulations it contains," "how it will affect you personally," "how it will affect the economy," and "how well it will affect the American people," rated on a scale from 1 (*very certain*) to 6 (*very uncertain*). Participants also responded to questions asking how well they understood how the law would affect them and their family, ranging 1 (*very well*), 2 (*somewhat well*), 3 (*not too well*), 4 (*not at all well*), and 5 (*don't know*), and how much information they had about the law, ranging 1 (*none*), 2 (*little*), 3 (*some*), and 4 (*a lot*).

The information item was reverse scored, such that higher values indicated lower levels of information (greater uncertainty). "Don't know" responses were replaced with missing data. Then, all six uncertainty items were standardized (*z* scored) and combined into a mean score for uncertainty ( $M = 0$ ,  $SD = .79$ ). These six items showed good reliability so the composite score was used for analysis (Cronbach's  $\alpha = .88$ ).

**Threat.** Threat was measured with questions that focused on attitudes and expectations regarding the ACA. Although the uncertainty questions did not measure valence, threat measurement focused specifically on positive versus negative affect. However, it is worth noting that the operationalization of threat was more than just negative valence; these questions focused on whether people thought the law would have negative consequences for them or be likely to lead to harm. These questions were also adapted from questions used by the Pew Research Center (2013a) prior to the shutdown. Specifically, participants were asked whether they thought the consequences of the ACA would be positive or negative for them, their families, and the country as a whole (responses ranged from 1 [*very positive*], 4 [*not much of an effect*], 7 [*very negative*]), whether they thought they would pay more or less for health insurance in the future (1 [*a lot more*], 4 [*about the same*], 7 [*a lot less*]), if the quality of care and insurance would become better or worse (1 [*much better*], 4 [*about the same*], 7 [*much worse*]), whether the law would be good or bad for the economy and the American people (1 [*very good*], 6 [*very bad*]), and whether they approved or disapproved of the law overall (1 [*strongly approve*], 6 [*strongly disapprove*]).

One question (regarding the cost of health insurance) was reverse scored such that higher values indicated an expectation of increased cost (greater threat), and responses to these 10 questions were standardized (*z* scored) and combined into a mean score for threat ( $M = 0$ ,  $SD = .82$ ). These 10 items showed good reliability so

the composite score was used for analysis (Cronbach's  $\alpha = .95$ ).

**Support for compromise.** To measure support for compromise, the following question was borrowed from the Pew Research Center (2013b): "Due to a failure to reach a budget agreement by the end of September, the federal government has currently had to shut down many of its operations until a budget is passed. What would you like lawmakers who share your views on this issue to do?" (1 = "Stand by their principles, even if that means the government shutdown continues"; 2 = "Be more willing to compromise, even if that means they pass a budget you disagree with"; 3 = "Don't know"). "Don't know" responses ( $n = 12$ ) were omitted for analysis, leaving participants who selected "Stand by principles" ( $n = 22$ ) or "Willing to compromise" ( $n = 66$ ).

**Attention.** One item was included to assess how closely participants had been following the news related to the budget agreement and the government shutdown: 1 (*very closely*) to 4 (*not at all closely*); 5 (*don't know*). "Don't know" responses were omitted for analysis.

**Knowledge.** Four questions were used to assess how much objective or factual knowledge participants had about the ACA. First, they were asked what the name of the health-care law was (1 = Obamacare, 2 = Affordable Care Act, 3 = Both, 4 = Neither, 5 = Don't know). This was coded leniently; participants received credit if they selected answer choices 1, 2, or 3. The next three questions were borrowed from Pew Research Center (2013a) and focused on whether health care exchanges would be available to people in that state, if low-income individuals would be eligible for federal subsidies, and if the law required uninsured individuals to obtain health insurance. These were, again, coded for correctness (the correct answer being yes for all three). Each question was coded 0 (*incorrect*) and 1 (*correct*), and these four questions were summed to create a composite score for knowledge (scores ranged 0–4;  $M = 2.19$ ,  $SD = 1.00$ ).

**Political identification.** Participants self-identified in response to the following item: "In politics today, do you consider yourself a Republican, Democrat, or Independent?" (*Republican, Democrat, Independent, No preference, Other party, Don't know*). If participants selected any option other than Republican or Democrat, they were directed to a second question that asked them to choose which party they identified with more strongly, the Republican Party or the Democratic Party. These two items were combined into a dichotomous party identification item that included both strong identifiers and "leaners"

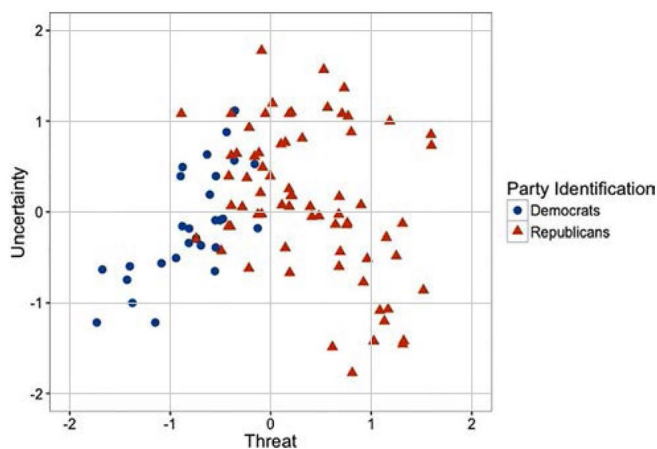
(coded as 0 [Democrats], 1 [Republicans]). Political ideology was measured in a similar fashion (coded as 0 [Liberal], 1 [Conservative]).

## Results

### Uncertainty, threat, and political identification

Unsurprisingly, Republicans expressed higher levels of threat ( $M = .38$ ,  $SD = .61$ ) from the ACA than Democrats ( $M = -.88$ ,  $SD = .52$ ,  $\eta^2 = .50$ ), as well as higher levels of uncertainty (Republicans:  $M = .12$ ,  $SD = .80$ , Democrats:  $M = -.26$ ,  $SD = .72$ ,  $\eta^2 = .05$ ).<sup>3</sup> However, threat was weakly related to uncertainty ( $r = .11$ ). As shown in Figure 1, participants who felt extremely positive or negative about the legislation showed lower levels of uncertainty, overall, than those who were more ambivalent or neutral in their attitudes. Indeed, an examination of the curvilinear relationship between uncertainty and threat shows a much stronger relationship ( $r = -.52$ ), suggesting that uncertainty was inversely related to attitude strength.

Although uncertainty was related to party identification, these data suggest that the two are not synonymous. To determine whether the amount of informational uncertainty participants expressed was related to attention and knowledge about the law, the relationships among these variables were examined. Consistent with the idea that this measurement of uncertainty did serve as a relatively objective measure of informational uncertainty about ACA, participants who said they had been following the news related to budget negotiations expressed less uncertainty about the ACA ( $r = -.47$ ). People who said they were paying attention also showed more accurate knowledge about the ACA ( $r = .39$ ), and greater knowledge was related to lower levels of uncertainty ( $r = -.34$ ). Of importance, both attention and knowledge



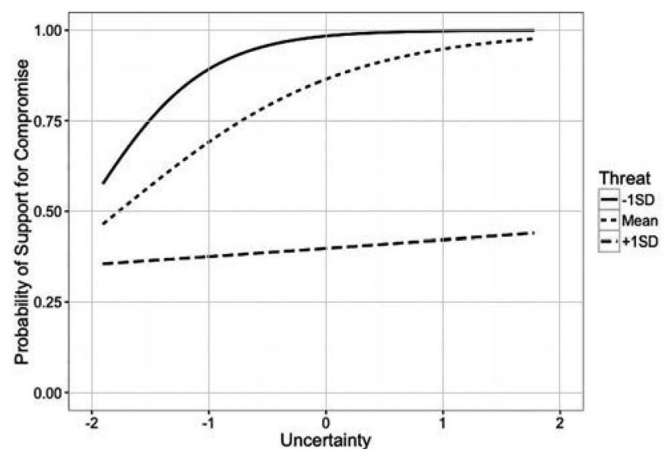
**Figure 1.** Uncertainty and attitudes about the Affordable Care Act as a function of political party identification.

were weakly related to threat, suggesting that attention and knowledge were not making people feel more positive or negative overall (both  $r$ s  $< .10$ ). So, although party was related to both uncertainty and threat, it seems clear that uncertainty and threat are conceptually distinct. The influence of uncertainty and threat on support for compromise are examined next. Because threat and uncertainty are related to party, party is controlled for in a subsequent model.

### Support for compromise

The primary hypothesis of interest was that uncertainty should increase support for compromise, unless people also felt threatened by the ACA. Using the MODPROBE Macro in SPSS (Hayes & Matthes, 2009), a logistic regression model was used to examine the conditional effects of uncertainty on support for compromise as a function of threat. Overall, uncertainty *increased* support for compromise ( $b = 1.09$ ,  $SE = .44$ ), and threat *decreased* support for compromise ( $b = -2.71$ ,  $SE = .66$ ). These main effects were qualified by the predicted interaction, such that threat moderated the impact of uncertainty on support for compromise ( $b = -1.16$ ,  $SE = .52$ ).<sup>4</sup> The full model had a McFadden pseudo  $R^2$  value of .38. As shown in Figure 2, at relatively low or moderate levels of threat (operationalized as more positive or neutral attitudes about the ACA), uncertainty *increased* support for compromise. However, at relatively high levels of threat, uncertainty was only weakly related to support for compromise.

Results from the MODPROBE analysis showed that the effect of uncertainty on support for compromise was strong at mean threat ( $Z_{threat} = 0$ ,  $b = 1.09$ ,  $SE = .44$ ) and when threat was 1 standard deviation below the mean ( $Z_{threat} = -.84$ ,  $b = 2.06$ ,  $SE = .75$ ), indicating more positive



**Figure 2.** Threat moderates the impact of uncertainty on support for political compromise. *Note.* Y axis values are predicted probabilities from the logistic regression model. Values for uncertainty and threat are standardized (z scores) and based on observed range of data. Data are plotted at mean threat and  $\pm 1$  SD for threat.

attitudes toward the ACA. However, at 1 standard deviation above the mean value for threat, the effect of uncertainty on support for compromise was much weaker ( $Z_{threat} = .84$ ,  $b = .12$ ,  $SE = .45$ ).

These effects hold when controlling for party identification, suggesting that the effects of uncertainty and threat cannot be explained through party identification alone. The main effects of uncertainty ( $b = 1.16$ ,  $SE = .47$ ) and threat ( $b = -2.49$ ,  $SE = .77$ ) on support for compromise remained relatively strong, as did the interaction ( $b = -1.19$ ,  $SE = .53$ ). The effect of party identification on support for compromise was much weaker ( $b = -.84$ ,  $SE = 1.74$ ).<sup>5</sup>

## Discussion

Uncertainty, threat, and support for compromise were measured during the 2013 government shutdown. Results showed that uncertainty *increased* support for compromise, unless threat was high, in which case uncertainty had no impact on support for compromise. Negative attitudes about the ACA predicted lower support for compromise, overall. It is important that these effects held when controlling for party identification. So, even though both uncertainty and threat were related to party identification, it seems that party identification alone cannot explain these differences in support for compromise.

Whereas Study 1 allowed for an examination of the relationship between uncertainty and support for compromise in the context of an ongoing political event, there are some limitations with this type of correlational data. Uncertainty and threat were not truly independent here, given that uncertainty was related to how strongly positive or negative attitudes about the ACA were. In contrast to many student samples, this sample was largely politically conservative, making it difficult to examine possible ideological differences here. I sought to address these concerns in Studies 2 and 3, where uncertainty and threat were orthogonally manipulated in an experimental design. These studies also utilized more diverse samples so that it would be possible to examine ideological differences in responses to uncertainty and threat.

## Study 2

In Study 2, uncertainty and threat were manipulated orthogonally to examine the impact of these affective states on a more general measure of support for compromise. These manipulations were not explicitly political in nature, allowing for examination of the role of incidental af-

fect in determining support for political compromise. As in the first study, it was expected that uncertainty would be more likely to increase support for compromise when people were not also feeling threatened. In the threat conditions, it was expected that uncertainty would be more likely to reduce support for compromise. In addition, this experiment allowed for further examination of the impact of political ideology on responses to uncertainty and threat. Given past research, it was expected that political conservatives would be more responsive to both uncertainty and threat, and perhaps especially responsive to the combination of the two.

## Method

### Participants

The sample included 152 workers recruited through Amazon's Mechanical Turk (MTurk) website and 58 undergraduate students from a large midwestern university. As MTurk samples tend to be more liberal (see, e.g., Berinsky, Huber, & Lenz, 2012), I also collected data from undergraduate students in a conservative state. Data were collected during April 2015. The full sample included 210 participants (120 male, 89 female, one did not report gender). Participants ranged in age from 18 to 68 ( $M = 31.7$ ,  $SD = 13.1$ ). A majority of participants self-identified as politically liberal ( $n = 105$ ), with 44 identifying as moderate and 61 identifying as conservative. On a 7-point scale, mean ideology was close to the midpoint ( $M = 3.50$ ,  $SD = 1.67$ ). Participants recruited through MTurk were compensated \$1.00, and student participants received partial course credit.

### Procedure

Participants were randomly assigned to one of four conditions in a 2 (threat vs. control)  $\times$  2 (uncertain vs. certain) between-subjects design. They first completed the manipulation, which asked them to read about and imagine a situation designed to elicit the corresponding affective state and write about how that situation would make them feel. Next, participants completed the extended version of the Positive and Negative Affect Scale (PANAS-X; Watson, Clark, & Tellegen, 1988) to serve as a delay before the dependent measure (see Haas & Cunningham, 2014). Following completion of the PANAS, participants responded to a series of questions designed to measure support for political compromise. Finally, they provided demographic information, were debriefed and thanked for participating.

## Materials

**Manipulation.** To manipulate uncertainty and threat, participants were asked to imagine and write about a scenario. These scenarios were borrowed from prior research, in which they were used for the same purpose (Haas & Cunningham, 2014). In the threatening conditions, participants were asked to imagine a home invasion scenario in which the culprit is either inside the house (certain) or trying to get in (uncertain). In the control conditions, participants were asked to imagine someone arriving at their home during the day and ringing the doorbell. They are told they either know the person (certain) or are unsure about who it is (uncertain). Participants read the scenario and then provided a written response to the prompt “How would this situation make you feel?”

**Support for compromise.** Participants responded to three questions designed to measure support for political compromise (each on an 11-point scale). These questions were adapted from questions previously used by the Pew Research Center (2014). The following items show the exact question wording:

1. When Barack Obama and Republican leaders differ over the most important issues facing the country, where should things end up? [1 = *Obama gets everything he wants*; 6 = 50/50; 11 = *Republicans get everything they want*]
2. When Democratic and Republican leaders differ over the most important issues facing the country, where should things end up? [1 = *Democrats get everything they want*; 6 = 50/50; 11 = *Republicans get everything they want*]
3. Thinking about elected officials in Washington who share your positions on the most important issues facing the nation, how do you think they should do their jobs? [1 = *They should work with elected officials they disagree with*; 11 = *They should stand up for their positions no matter what*]

For Items 1 and 2, the theoretical point at which support for compromise is highest is when participants select the midpoint (50/50). Responses to these questions were recoded as the absolute value of the difference between the response and the midpoint, so the midpoint became zero and values higher than zero represented the distance from that point. For the third question, lower values represent greater support for compromise, whereas higher values represent reduced support for compromise. The reliability for all three items was relatively low (Cronbach's  $\alpha = .52$ ), mainly because responses to question three were not strongly related to responses on Questions 1 and 2. So, for analysis, I created a composite measure from the first two questions (Cronbach's  $\alpha = .83$ ).

**Political identification.** Political identification was measured using a one-item measure asking participants to specify their political ideology using the following scale: 1 (*strongly liberal*), 2 (*liberal*), 3 (*somewhat liberal*), 4 (*neither liberal nor conservative*), 5 (*somewhat conservative*), 6 (*conservative*), 7 (*strongly conservative*). For analysis, this item was centered on the theoretical midpoint (4). This variable was also squared to create a measure of ideological extremity.

## Results

As in Study 1, it was expected that uncertainty would be more likely to increase support for compromise in the control condition than in the threat condition. Given the design of Study 2, support for compromise is also likely to be related to political ideology and ideological extremity. To examine these relationships, I ran a series of multiple linear regression models (see Table 1). Model 1 included political ideology and ideological extremity, Model 2 added uncertainty, and Model 3 added threat. All possible interaction terms were included in each model.

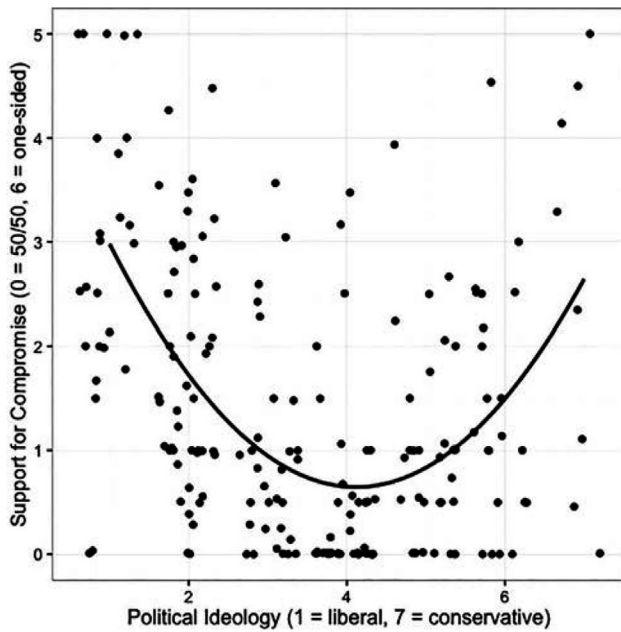
First, I examined the impact of political ideology and ideological extremity on support for compromise (see Figure 3). As expected, ideological extremity predicted support for compromise, such that individuals higher in ideological extremity indicated reduced willingness to compromise ( $b = .240$ ,  $SE = .029$ ). In this sample, overall support for compromise was only weakly related to political ideology (liberal vs. conservative;  $b = -.054$ ,  $SE = .104$ ), and there was not much evidence for an interaction between ideology and extremity ( $b = .000$ ,  $SE = .016$ ).

**Table 1.** Summary of results from linear regression models in Study 2.

	Model 1	Model 2	Model 3
Intercept	.650 (.114)	.801 (.162)	.775 (.223)
Political ideology	-.054 (.104)	.040 (.149)	.098 (.220)
Ideological extremity	.240 (.029)	.195 (.039)	.217 (.053)
Ideology $\times$ Extremity	.000 (.016)	-.030 (.022)	-.033 (.032)
Uncertainty		-.351 (.226)	-.451 (.322)
Uncertainty $\times$ Ideology		-.247 (.208)	-.146 (.305)
Uncertainty $\times$ Extremity		.114 (.057)	.099 (.083)
Uncertainty $\times$ Ideology $\times$ Extremity		.072 (.032)	.044 (.049)
Threat			.034 (.332)
Threat $\times$ Ideology			-.157 (.310)
Threat $\times$ Extremity			-.061 (.081)
Threat $\times$ Uncertainty			.208 (.462)
Threat $\times$ Ideology $\times$ Extremity			.004 (.045)
Threat $\times$ Ideology $\times$ Uncertainty			-.117 (.429)
Threat $\times$ Extremity $\times$ Uncertainty			.045 (.118)
Threat $\times$ Ideology $\times$ Extremity $\times$ Uncertainty			.048 (.066)
$R^2$	.321	.351	.363
Adjusted $R^2$	.311	.328	.312

Values are unstandardized regression coefficients (standard errors in parentheses).



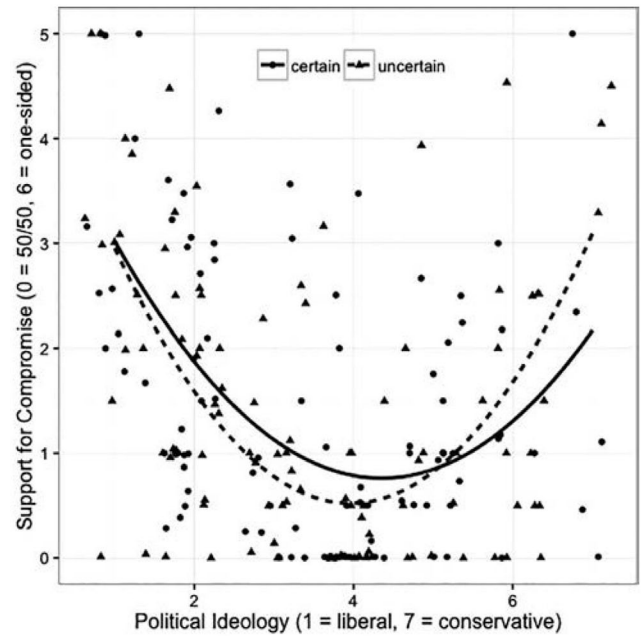


**Figure 3.** Support for compromise as a function of political ideology in Study 2. Plot represents raw data, but x-axis values have been jittered to avoid overplotting.

As shown in Figure 4, when uncertainty was added to the model it appears that uncertainty increased support for compromise among liberals and moderates but decreased support for compromise among conservatives. In the second regression model, the three-way interaction between political ideology, ideological extremity, and uncertainty was relatively strong ( $b = .072$ ,  $SE = .032$ ).

Parsing the data by threat condition shows that uncertainty was more likely to increase support for compromise in the control (no threat) condition (see Figure 5). Of interest, it appears that the effect where uncertainty *decreased* support for compromise (relative to certainty) among conservatives was more pronounced in the threat condition. In the regression model, the four-way interaction term was relatively weak ( $b = .048$ ,  $SE = .066$ ). However, if Model 2 is run separately in both the threat versus no threat conditions, the three-way interaction is stronger in the threat condition ( $b = .091$ ,  $SE = .045$ ) than in the control condition ( $b = .044$ ,  $SE = .048$ ).

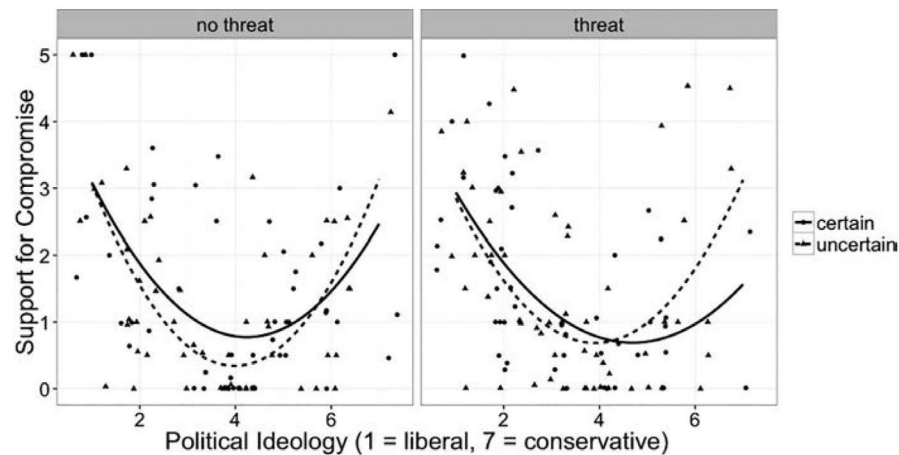
Examining mean support for compromise by condition shows that in the full sample, uncertainty *increased* support for compromise ( $M = 1.28$ ,  $SD = 1.32$ ) relative to certainty ( $M = 1.44$ ,  $SD = 1.40$ ) in the control condition. In the threat condition, this difference was smaller but still in the same direction: Uncertainty led to *greater* support for compromise ( $M = 1.46$ ,  $SD = 1.40$ ) than certainty ( $M = 1.53$ ,  $SD = 1.29$ ). This pattern in the control conditions was consistent with expectations, whereas the pattern in the threat conditions was not. However, it was expected



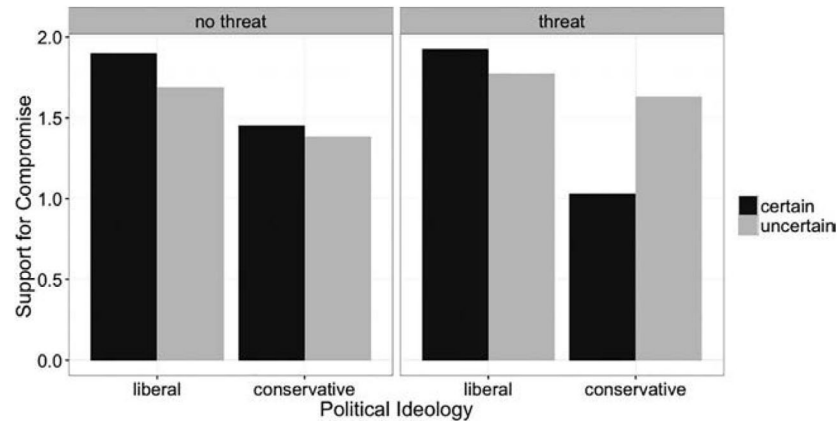
**Figure 4.** Support for compromise as a function of uncertainty and political ideology in Study 2. Plot represents raw data, but x-axis values have been jittered to avoid overplotting.

that these effects may differ as a function of political ideology, which is examined next.

Examining these means as a function of ideology showed that this general pattern held for liberal participants, but not for conservative participants (see Figure 6 and Table 2). These means are based on a sample split where liberals include anyone who selected 1, 2, or 3 on the scale, and conservatives include anyone who selected 5, 6, or 7 on the scale. Individuals who selected the scale midpoint (*neither liberal nor conservative*) are omitted here. For liberals, uncertainty *increased* support for compromise ( $M = 1.69$ ,  $SD = 1.41$ ) relative to certainty ( $M = 1.90$ ,  $SD = 1.60$ ) in the control condition. The pattern was similar in the threat condition although the difference was smaller—uncertainty *increased* support for compromise ( $M = 1.78$ ,  $SD = 1.29$ ) relative to certainty ( $M = 1.93$ ,  $SD = 1.35$ ). For conservatives, uncertainty *increased* support for compromise ( $M = 1.38$ ,  $SD = 1.45$ ) relative to certainty ( $M = 1.45$ ,  $SD = 1.15$ ) in the control condition, but not in the threat condition. For conservatives in the threat condition, uncertainty led to *decreased* support for compromise ( $M = 1.63$ ,  $SD = 1.75$ ) relative to certainty ( $M = 1.03$ ,  $SD = .98$ ). In other words, uncertainty did lead to decreased support for compromise, but only for conservatives in the threat condition. Comparing the means across threat conditions suggests that, for conservatives, the uncertain threat condition led to a *decrease* in support for compromise relative to uncertain control condition. However, the certain threat condition led to an *increase* in support for compromise relative to the certain control condition.



**Figure 5.** Support for compromise as a function of uncertainty, threat, and political ideology in Study 2. Plot represents raw data, but x-axis values have been jittered to avoid overplotting. Higher values on the y axis represent reduced support for compromise.



**Figure 6.** Support for compromise as a function of uncertainty, threat, and political ideology in Study 2. Plot represents mean support for compromise by condition. Higher values on the y axis represent reduced support for compromise. Political ideology was dichotomized for plotting (moderates removed).

Discussion

Consistent with the results of Study 1, uncertainty was more likely to increase support for compromise when participants were not also feeling threatened. This study also showed, unsurprisingly, that people who are politically moderate are more likely to compromise than those who hold extreme political views. Consistent with prior work showing that political conservatives may be more sensitive or responsive to uncertainty and threat (e.g., Hibbing et al., 2014; Jost et al., 2003), Study 2 also suggests that individuals high in political conservatism may show a decrease in willingness to compromise in response to the combination of uncertainty and threat. This pattern of results is consistent with the view that conservatives are not responding negatively to uncertainty regardless of context but that the combination of uncertainty and threat is more likely to lead to reduced support for compromise. In this study, uncertainty did seem to increase support for compromise for liberals and moderates in the control condi-

tion, but the control condition here focused on examining uncertainty in a relatively neutral context. Given that uncertainty in Study 1 was paired with either threat or positive attitudes, it is also important to look at the comparison between threat and positive emotion.

**Table 2.** Mean support for compromise by condition and ideology in Study 2.

	Control	Threat
Liberals		
Certain	1.90 (1.60)	1.93 (1.35)
Uncertain	1.69 (1.41)	1.78 (1.29)
Conservatives		
Certain	1.45 (1.14)	1.03 (0.98)
Uncertain	1.38 (1.17)	1.63 (1.75)

Higher values indicate reduced support for compromise. Standard deviations are in parentheses. These means are based on data from splitting the sample: Liberals here include any participants who selected 1, 2, or 3 on the scale, and conservatives include all individuals who selected 5, 6, or 7. Individuals who selected the midpoint (4) are excluded here.

### Study 3

The goals of Study 3 were to replicate the pattern of results observed in Study 2 and examine the impact of uncertainty in positive conditions, in addition to the neutral and threat conditions used in Study 2. It was expected that uncertainty would be more likely to increase support for compromise in the positive and neutral conditions but more likely to decrease support for compromise in the threat conditions. In addition, it was expected that conservatives would again be more responsive to the combination of uncertainty and threat, showing reduced support for compromise in that condition.

### Method

#### Participants

The sample included 100 workers recruited through Amazon's MTurk website<sup>6</sup> and 243 undergraduate students recruited through a participant pool at a large midwestern university in the United States. Data were collected between November 2015 and February 2016. The full sample included 343 participants (180 male, 158 female, five chose not to identify). Participants ranged in age from 17 to 67 ( $M = 23.7$ ,  $SD = 8.4$ ). A majority of participants self-identified as politically liberal ( $n = 155$ ), with 66 identifying as neither and 122 identifying as conservative. On a 7-point scale, mean ideology was close to the midpoint ( $M = 3.74$ ,  $SD = 1.74$ ). Participants recruited through MTurk were compensated \$1.00, and undergraduate student participants received partial course credit.

#### Procedure

Participants were randomly assigned to one of six conditions in a 3 (threat, neutral, positive)  $\times$  2 (uncertain, certain) between-subjects design. They first completed the manipulation, which asked them to read about and imagine a situation designed to elicit the corresponding affective state and write about how that situation would make them feel. These scenarios were modified from those used in Study 2 and are detailed next. Second, participants completed the PANAS-X (Watson et al., 1988) to serve as a delay before the dependent measure. Following completion of the PANAS, participants responded to a series of questions designed to measure support for political compromise.<sup>7</sup> Finally, they provided demographic information, were debriefed, and were thanked for participating.

### Materials

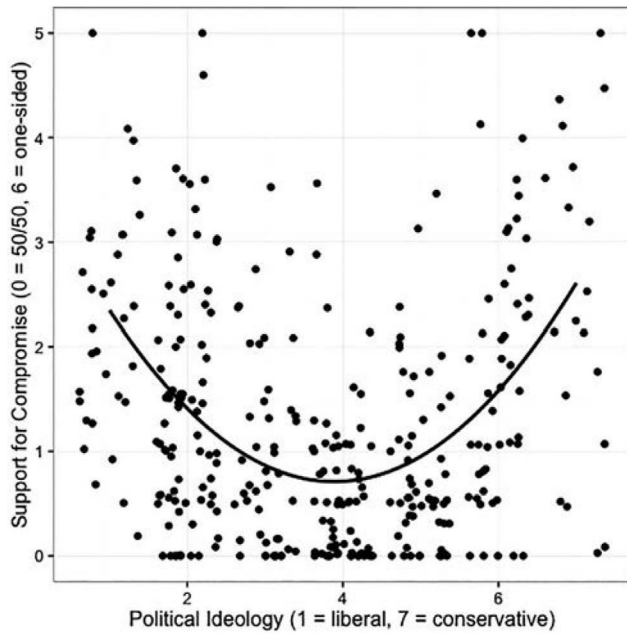
**Manipulation.** To manipulate uncertainty and threat, participants were asked to imagine and write about a scenario. These scenarios were adapted from those used in Study 2. In the threatening conditions, participants were asked to imagine a home invasion scenario in which the culprit is either inside the house (certain) or trying to get in (uncertain). In the control conditions, participants were asked to imagine someone arriving at their home during the day and ringing the doorbell. They were told they either know it is the mailman (certain) or are unsure about who it is (uncertain). The control conditions were modified in Study 3 to make the scenarios more clearly neutral, in contrast to the positive conditions that were added for comparison. In the positive conditions, participants are asked to imagine that it is their birthday and someone rings the doorbell. They were told to imagine either that it was their best friend arriving for the birthday party (certain) or that they are not sure who it is, but it could be a friend arriving for their birthday (uncertain). It is important to note that in the certain conditions there is always a clear expectation about what is currently happening, whereas in the uncertain conditions there is no clear expectancy. Participants read the scenario and then provided a written response to the prompt: "How would this situation make you feel?"

**Support for compromise.** Participants responded to two questions designed to measure support for political compromise (each on an 11-point scale). These questions were the same as the first two questions used in Study 2. The third question was omitted here because it did not correlate well with the other two questions in Study 2. As in Study 2, these two questions were combined to create a composite variable for analysis (Cronbach's  $\alpha = .81$ ). Higher values represent *reduced* support for compromise on this measure.

**Political identification.** Political identification was measured using a one-item measure asking participants to specify their political ideology using the following scale: 1 (*strongly liberal*), 2 (*liberal*), 3 (*somewhat liberal*), 4 (*neither liberal nor conservative*), 5 (*somewhat conservative*), 6 (*conservative*), and 7 (*strongly conservative*). For analysis, this item was centered on the theoretical midpoint (4). This variable was also squared to create a measure of ideological extremity.

### Results

As in Studies 1 and 2, it was expected that uncertainty would be more likely to increase support for compromise in the control condition than in the threat condition. In ad-

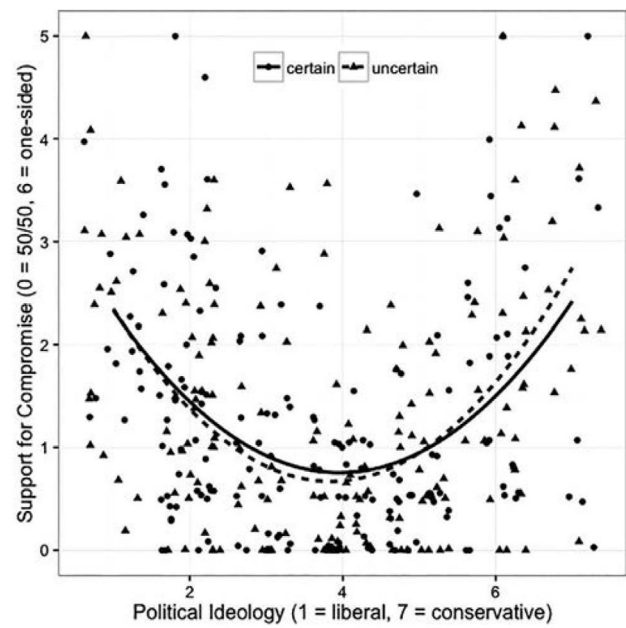


**Figure 7.** Support for compromise as a function of political ideology in Study 3. Note. Plot represents raw data, but x-axis values have been jittered to avoid overplotting.

dition, Study 3 allowed for comparison of threat with affectively positive conditions. In the positive conditions, it was expected that uncertainty would be more likely to increase support for compromise. As in Study 2, support for compromise is also likely to be related to political ideology and ideological extremity. To examine these relationships, I ran a series of multiple linear regression models (see Table 3). Model 1 included political ideology and ideological extremity, Model 2 added uncertainty, and Model 3 added threat. All possible interaction terms were included in each model.

First, I examined the impact of political ideology and ideological extremity on support for compromise (see Figure 7). As expected, ideological extremity predicted support for compromise, such that individuals higher in ideological extremity indicated reduced willingness to compromise ( $b = .197, SE = .020$ ). In this sample, support for compromise was strongly related neither to direction of ideological beliefs (liberal vs. conservative;  $b = .021, SE = .074$ ) nor to the interaction of ideology and extremity ( $b = .004, SE = .011$ ).

As shown in Figure 8, when uncertainty was added to the model we can see that uncertainty led to a slight increase support for compromise among liberals and moderates but a slight decrease support for compromise among conservatives. Although this pattern looks similar to that observed in Study 2, it was weaker in Study 3. In the second regression model, the three-way interaction between political ideology, ideological extremity, and uncertainty ( $b = .000, SE = .012$ ) was weaker than that observed in Study 2. There is more evidence for a two-way



**Figure 8.** Support for compromise as a function of uncertainty and political ideology in Study 3. Plot represents raw data, but x-axis values have been jittered to avoid overplotting.

interaction between uncertainty and ideological extremity, but again this effect appears to be weaker than in Study 2 ( $b = .014, SE = .020$ ).

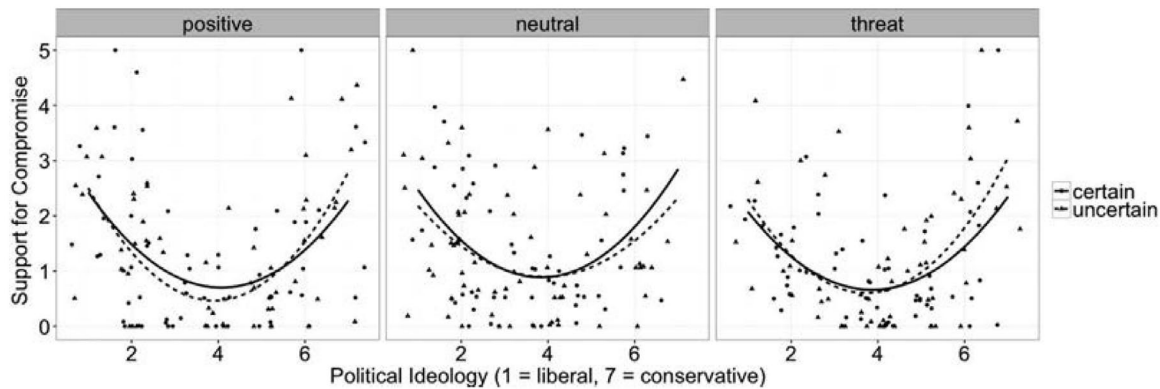
Parsing the data by threat condition shows that uncertainty was more likely to increase support for compromise in the positive condition relative to the threat condition (see Figure 9). As in Study 2, it appears that the effect where uncertainty *decreases* support for compromise (relative to certainty) among conservatives is more pronounced in the threat condition. In the regression

**Table 3.** Summary of results from linear regression models in Study 3.

	Model 1	Model 2	Model 3
Intercept	.711 (.083)	.713 (.084)	.711 (.085)
Political ideology	.021 (.074)	.025 (.075)	.026 (.076)
Ideological extremity	.197 (.020)	.194 (.020)	.195 (.021)
Ideology $\times$ Extremity	.004 (.011)	.003 (.012)	.003 (.012)
Uncertainty		-.039 (.084)	-.042 (.085)
Uncertainty $\times$ Ideology		.025 (.075)	.029 (.076)
Uncertainty $\times$ Extremity		.014 (.020)	.014 (.021)
Uncertainty $\times$ Ideology $\times$ Extremity		.000 (.012)	-.001 (.012)
Threat			.009 (.104)
Threat $\times$ Ideology			.056 (.094)
Threat $\times$ Extremity			-.002 (.024)
Threat $\times$ Uncertainty			.040 (.104)
Threat $\times$ Ideology $\times$ Extremity		-.003 (.014)	
Threat $\times$ Ideology $\times$ Uncertainty			.033 (.094)
Threat $\times$ Extremity $\times$ Uncertainty			-.001 (.024)
Threat $\times$ Ideology $\times$ Extremity $\times$ Uncertainty			-.005 (.014)
$R^2$	.227	.229	.232
Adjusted $R^2$	.220	.212	.197

Values are unstandardized regression coefficients (standard errors in parentheses).





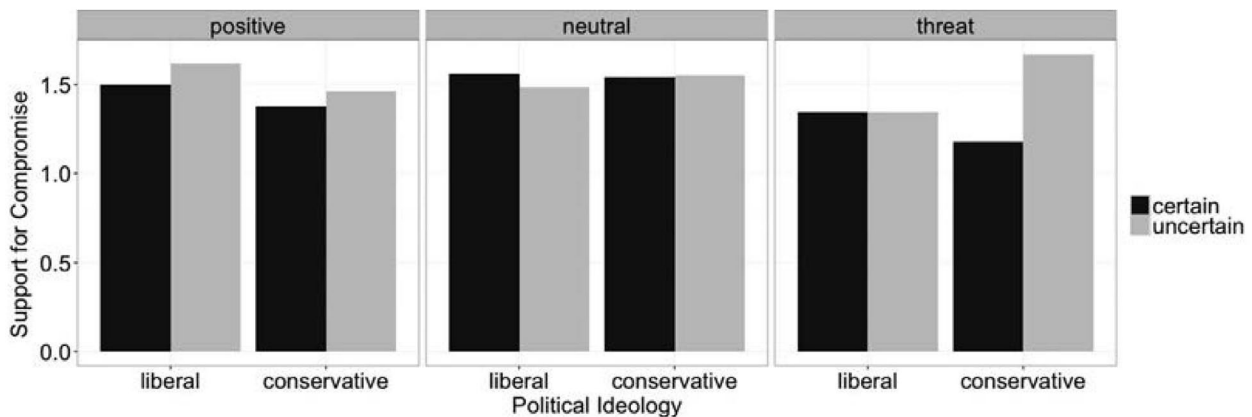
**Figure 9.** Support for compromise as a function of uncertainty, threat, and political ideology in Study 3. Plot represents raw data, but x-axis values have been jittered to avoid over plotting. Higher values on the y axis represent reduced support for compromise.

model, the four-way interaction term is relatively weak ( $b = -.005$ ,  $SE = .014$ ). However, if Model 2 is run separately in each of the threat conditions, the three-way interaction is stronger in the threat condition ( $b = -.019$ ,  $SE = .019$ ) than in the positive ( $b = -.007$ ,  $SE = .020$ ) or neutral ( $b = .019$ ,  $SE = .023$ ) conditions.

Examining mean support for compromise by condition shows that in the full sample, uncertainty did not have much impact on support for compromise ( $M = 1.39$ ,  $SD = .26$ ) relative to certainty ( $M = 1.34$ ,  $SD = 1.34$ ) in the positive conditions. In the neutral conditions, uncertainty ( $M = 1.38$ ,  $SD = 1.19$ ) led to a slight *increase* in support for compromise relative to certainty ( $M = 1.42$ ,  $SD = 1.15$ ). In the threat condition, uncertainty led to *reduced* support for compromise ( $M = 1.22$ ,  $SD = 1.24$ ) relative to certainty ( $M = 1.11$ ,  $SD = 1.01$ ). The pattern in the neutral and threat conditions is consistent with what was expected, but again, the means in the overall sample may be influenced by sample characteristics (i.e., political ideology), which I examine next.

Examining these means as a function of ideology shows that for liberals, uncertainty does not seem to have much

of an impact in any of the three threat conditions (see Figure 10 and Table 4). For conservatives, uncertainty did not have much impact in the positive or neutral conditions but did impact support for compromise in the threat conditions. Under threat, liberals showed no difference in support for compromise as a function of uncertainty ( $M = 1.34$ ,  $SD = 1.30$ ) versus certainty ( $M = 1.34$ ,  $SD = 0.74$ ). However, for conservatives, uncertain threat ( $M = 1.67$ ,  $SD = 1.30$ ) decreased support for compromise relative to certain threat ( $M = 1.18$ ,  $SD = 1.34$ ).<sup>8</sup> Conservatives showed *decreased* support for compromise in response to the uncertain threat condition relative to the uncertain positive or neutral conditions and *increased* support for compromise in the certain threat condition relative to the certain positive or certain neutral conditions. This pattern is consistent with what was observed for conservatives in Study 2 and suggests that conservatives may be uniquely responsive to uncertainty in the threat conditions, given that conservatives did not show changes in support for compromise in response to uncertainty versus certainty in the neutral or positive conditions.



**Figure 10.** Support for compromise as a function of uncertainty, threat, and political ideology in Study 3. Plot represents mean support for compromise by condition. Higher values on the y axis represent reduced support for compromise. Political ideology was dichotomized for plotting (moderates removed).

**Table 4.** Mean support for compromise by condition and ideology in Study 2.

	Positive	Neutral	Threat
Liberals			
Certain	1.50 (1.43)	1.56 (1.17)	1.34 (0.74)
Uncertain	1.62 (1.08)	1.49 (1.22)	1.34 (1.30)
Conservatives			
Certain	1.38 (1.35)	1.54 (1.29)	1.18 (1.34)
Uncertain	1.46 (1.38)	1.55 (1.15)	1.67 (1.30)

Higher values indicate reduced support for compromise. Standard deviations are in parentheses. These means are based on data from splitting the sample: Liberals here include any participants who selected 1, 2, or 3 on the scale, and conservatives include all individuals who selected 5, 6, or 7. Individuals who selected the midpoint (4) are excluded here.

### Support for compromise over time

Given that there were some differences in terms of how well the models explained support for compromise in Studies 2 and 3, I thought it might be interesting to compare mean levels of support for compromise across samples. Given that data for Study 3 were collected during presidential primary season (in the months leading up to the 2016 presidential election), I wondered whether support for compromise might just be lower overall. Interestingly, this was not the case. If anything, support for compromise was a bit higher in Study 3 than in Study 2. On the composite measure, participants expressed greater support for compromise in Study 3 ( $M = 1.31$ ,  $SD = 1.19$ ) than in Study 2 ( $M = 1.42$ ,  $SD = 1.35$ ). The same pattern was present for both questions within the composite measure. Participants in Study 3 ( $M = 1.43$ ,  $SD = 1.33$ ) expressed greater support for compromise between President Obama and Republicans than in Study 2 ( $M = 1.55$ ,  $SD = 1.53$ ). Participants in Study 3 ( $M = 1.19$ ,  $SD = 1.28$ ) also expressed greater support for compromise between Democrats and Republicans in Congress than in Study 2 ( $M = 1.32$ ,  $SD = 1.41$ ). Standard deviations for each measure were higher in Study 2 than in Study 3, suggesting more variance in support for compromise in the earlier study. The present work was not designed to address this question in detail, but this could be one explanation for why the observed effects were weaker in Study 3.

### Discussion

Study 3 showed similar effects to those observed in Study 2. Support for compromise was higher overall for political moderates relative to those higher in ideological extremity. Under uncertainty, liberals and moderates were more likely to show increased support for compromise, whereas conservatives were more likely to show a decrease in sup-

port for compromise. It is important to note that Study 3 showed the same pattern of results for conservatives as in Study 2: Uncertainty only decreased support for compromise when combined with threat. This pattern of results is consistent with the view that conservatives are not responding negatively to uncertainty regardless of context but that they are uniquely sensitive to uncertainty versus certainty when combined with threat.

### General discussion

In sum, in three studies uncertainty was more likely to increase support for compromise when people were not also feeling threatened. By contrast, uncertainty was more likely to decrease support for compromise when paired with threat. In the first study, uncertainty and threat were measured during the 2013 U.S. government shutdown. Uncertainty increased support for compromise among people with positive or neutral attitudes about Obamacare but was only weakly related to support for compromise among people with negative attitudes about Obamacare (those who viewed the legislation as a threat). In a second study, uncertainty and threat were orthogonally manipulated with inductions of incidental affect (unrelated to politics). Again, results were consistent with the view that uncertainty was more likely to increase support for compromise when people were not feeling threatened. Studies 2 and 3 also showed that political conservatives were more likely than liberals to show reduced support for compromise when exposed to uncertain threat relative to certain threat. However, conservatives were not more responsive to uncertainty in positive or neutral contexts.

The present work is consistent with the theoretical viewpoint that the effects of uncertainty on social and political behavior are context dependent (Haas, 2012; Haas & Cunningham, 2014). Prior work has shown this to be the case when examining the link between uncertainty and political tolerance (Haas & Cunningham, 2014), and the present work finds similar effects with respect to support for compromise. This work helps to clarify when uncertainty is likely to lead to normatively positive versus negative outcomes and helps to illustrate the importance of treating uncertainty and threat as conceptually distinct affective states.

The present work also contributes to our understanding of how individual differences in political ideology influence responses to uncertainty and threat. Consistent with prior work (Jost et al., 2003; Jost et al., 2007), conservatives were more responsive to uncertainty and threat, but this work provides some additional nuance—showing that conservatives were especially responsive to the *combination* of uncertainty with threat. An important note is

that conservatives did not appear to be more responsive to uncertainty in neutral or positive contexts, suggesting that they may not necessarily be more sensitive to uncertainty in every situation. The present work is also consistent with the idea that conservatives are more likely to show a negativity bias (Hibbing et al., 2014) but suggests that not all negativity is created equal. Conservatives may be more likely to respond negatively to threat when that threat is uncertain rather than certain. The previous work examining the negativity bias has not addressed the issue of uncertainty, so it is unclear to what extent these effects may be driven by uncertain threats, specifically, rather than threat alone. The present work did not examine arousal directly, but based on the arousal hypothesis (Tritt et al., 2013) one might expect conservatives to respond more strongly to uncertainty in any situation (assuming uncertainty leads to arousal, which may not always be the case). This is not consistent with the present work: Conservatives here were less likely than liberals to respond to uncertainty in neutral or positive contexts. Future work will also need to address the extent to which arousal and uncertainty are related and are likely to lead to similar or distinct behavioral outcomes. Although existing research has begun to examine the differences in affective processing that may underlie or contribute to political beliefs, the present work shows that we still have more work to do in terms of understanding how uncertainty influences political behavior in different contexts and in understanding how uncertainty influences responses to threat. In addition, much of the previous work has focused on differences in sensitivity to uncertainty or threat but has neglected to examine downstream behavioral consequences of that sensitivity. The present work shows that understanding ideological differences in how people respond to emotional or affective states can also help to improve our understanding of political behavior.

There is value to examining questions about how emotion influences politics in real-world contexts. The effects of uncertainty and threat observed in Study 1 were stronger than those observed in Studies 2 and 3. The correlational study captured emotion in relation to a real-world event, whereas the experimental designs used in Studies 2 and 3 relied on laboratory manipulations of incidental affect. One limitation of Study 1 is that threat level was somewhat confounded with party identification, given that Republicans held more negative attitudes toward the ACA. Using the experimental approach in Studies 2 and 3 allowed for examination of ideological differences in an experimental context where uncertainty was more clearly separated from threat, but future work should also examine whether there are real-world situations in which liberals feel more threatened by policy decisions and show equally low support for compromise. It is worth examining

how liberals respond to uncertainty when placed in situations where they feel directly threatened by policy decisions. Regardless, the present work shows that although ideology certainly has an impact, support for compromise is not driven entirely by party allegiance—uncertainty and emotion play a crucial role.

This has implications for how we think about political debates and conflict. It may not be the case that any amount of uncertainty is problematic for political discourse. In fact, moderate levels of uncertainty may actually encourage people to seek out additional information or be willing to engage in deliberation with the opposing side. To encourage compromise, cooperation, and other normatively desirable outcomes, it may be most important to minimize the perception of threat.

## Notes

1. In 100% of these cases, participants started the survey multiple times but completed the survey only once, so removal of incomplete data does not indicate attrition (all participants remain in the data set).
2. These were the primary independent and dependent variables of interest. Additional items were included to gauge blame, personal relevance, and perceptions of polarization, but these variables are outside the primary scope of this article and are not discussed here.
3. If political ideology is substituted for political party identification here, there is still a sizeable difference on threat (Conservative:  $M = .37$ ,  $SD = .62$ ; Liberal:  $M = -.63$ ,  $SD = .70$ ,  $\eta^2 = .35$ ), but no difference for uncertainty (Conservative:  $M = .00$ ,  $SD = .79$ ; Liberal:  $M = .02$ ,  $SD = .81$ ,  $\eta^2 = .00$ ).
4. Although uncertainty is related to knowledge, the effects of uncertainty on support for compromise cannot be explained by substituting knowledge for uncertainty in the model. In an alternate model where knowledge and the Knowledge  $\times$  Threat interaction were included, knowledge had no real effect on support for compromise ( $b = .27$ ,  $SE = .45$ ) and there was no interaction of Knowledge  $\times$  Threat on support for compromise ( $b = .40$ ,  $SE = .55$ ).
5. When party identification is recoded as a continuous variable (1 = Democrat, 2 = Lean Democrat, 3 = Lean Republican, 4 = Republican) and included as a covariate, the effects are similar and the interaction is still strong ( $b = -1.54$ ,  $SE = .62$ ). The results are similar when political ideology is substituted for political party identification. The main effects of uncertainty ( $b = 1.05$ ,  $SE = .43$ ) and threat ( $b = -2.68$ ,  $SE = .74$ ) on support for compromise remain relatively strong, as does the interaction ( $b = -1.16$ ,  $SE = .52$ ). The effect of political ideology on support for compromise is much weaker ( $b = -.26$ ,  $SE = 1.09$ ).
6. One participant was excluded from the MTurk sample for failing to complete the manipulation (typed random characters rather than full sentences).

7. Participants also completed two measures of political tolerance after the compromise measure, but these are beyond the scope of this article and are not discussed here.
8. As in Study 2, these means are based on a sample split where liberals include anyone who selected 1, 2, or 3 on the scale and conservatives include anyone who selected 5, 6, or 7 on the scale. Individuals who selected the scale midpoint (*neither liberal nor conservative*) are omitted here.

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## References

- Bar-Anan, Y., Wilson, T. D., & Gilbert, D. T. (2009). The feeling of uncertainty intensifies affective reactions. *Emotion*, 9, 123–127. doi 10.1037/a0014607
- Berinsky, A. J., Huber, G. A., & Lenz, G. S. (2012). Evaluating online labor markets for experimental research: Amazon.com's mechanical Turk. *Political Analysis*, 20(3), 351–368. doi 10.1093/pan/mpr057
- Blumenthal, M. (2013, September 30). Obamacare polls: Little support for defunding but much uncertainty, doubt. *The Huffington Post*. Retrieved from [http://www.huffingtonpost.com/2013/09/30/obamacare-polls\\_n\\_4018888.html](http://www.huffingtonpost.com/2013/09/30/obamacare-polls_n_4018888.html)
- Cohen-Chen, S., Halperin, E., Crisp, R. J., & Gross, J. J. (2013). Hope in the Middle East: Malleability beliefs, hope, and the willingness to compromise for peace. *Social Psychological and Personality Science*, 5(1), 67–75. doi 10.1177/1948550613484499
- Connor, T. (2013, September 30). "Really confused": Kaiser/NBC poll finds Americans worried by health care law. *NBC News*. Retrieved from <http://www.nbcnews.com/health/really-confused-kaiser-nbc-poll-finds-americans-angsting-over-health-8C11278564>
- Goldberg, J. (2013, September 29). Jonah Goldberg: ObamaCare vs. Affordable Care Act. *USA Today*. Retrieved from <http://www.usatoday.com/story/opinion/2013/09/29/obamacare-affordable-care-act-obama-column/2892183/>
- Haas, I. (2012). The context-dependent nature of uncertainty: Responses to uncertainty are moderated by the presence or absence of threat (PhD dissertation, The Ohio State University). [https://etd.ohiolink.edu/pg\\_10?0::NO:10:P10\\_ETD\\_SUBID:76977](https://etd.ohiolink.edu/pg_10?0::NO:10:P10_ETD_SUBID:76977)
- Haas, I. J., & Cunningham, W. A. (2014). The uncertainty paradox: Perceived threat moderates the effect of uncertainty on political tolerance. *Political Psychology*, 35(2), 291–302. doi 10.1111/pops.12035
- Halperin, E., Porat, R., & Wohl, M. J. A. (2013). Extinction threat and reciprocal threat reduction: Collective angst predicts willingness to compromise in intractable intergroup conflicts. *Group Processes & Intergroup Relations*, 16(6), 797–813. doi 10.1177/1368430213485994
- Hayes, A. F., & Matthes, J. (2009). Computational procedures for probing interactions in OLS and logistic regression: SPSS and SAS implementations. *Behavior Research Methods*, 41(3), 924–936. doi 10.3758/brm.41.3.924
- Hibbing, J. R., Smith, K. B., & Alford, J. R. (2014). Differences in negativity bias underlie variations in political ideology. *Behavioral and Brain Sciences*, 37(3), 297–307. doi 10.1017/S0140525X13001192
- Hogg, M. A., & Mullin, B.-A. (1999). Joining groups to reduce uncertainty: Subjective uncertainty reduction and group identification. In D. Abrams & M. A. Hogg (eds.), *Social identity and social cognition* (pp. 249–279). Oxford, UK: Blackwell.
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin*, 129, 339–375. doi 10.1037/0033-2909.129.3.339
- Jost, J. T., Napier, J. L., Thorisdottir, H., Gosling, S. D., Palfai, T. P., & Ostafin, B. (2007). Are needs to manage uncertainty and threat associated with political conservatism or ideological extremity? *Personality and Social Psychology Bulletin*, 33, 989–1007. doi 10.1177/0146167207301028
- MacKuen, M., Wolak, J., Keele, L., & Marcus, G. E. (2010). Civic engagements: Resolute partisanship or reflective deliberation. *American Journal of Political Science*, 54, 440–458. doi 10.1111/j.1540-5907.2010.00440.x
- Maoz, I., & McCauley, C. (2009). Threat perceptions and feelings as predictors of Jewish-Israeli support for compromise with Palestinians. *Journal of Peace Research*, 46(4), 525–539. doi 10.1177/0022343309334613
- Marcus, G. E., Neuman, W. R., & MacKuen, M. (2000). *Affective intelligence and political judgment*. Chicago, IL: University of Chicago Press.
- McGregor, I. (2006). Zeal appeal: The allure of moral extremes. *Basic and Applied Social Psychology*, 28, 343–348. doi 10.1207/s15324834basps2804\_7
- McGregor, I., Zanna, M. P., Holmes, J. G., & Spencer, S. J. (2001). Compensatory conviction in the face of personal uncertainty: Going to extremes and being oneself. *Journal of Personality and Social Psychology*, 80, 472–488. doi 10.1037/0022-3514.80.3.472
- Oxley, D. R., Smith, K. B., Alford, J. R., Hibbing, M. V., Miller, J. L., Scalora, M., ... Hibbing, J. R. (2008). Political attitudes vary with physiological traits. *Science*, 321, 1667–1670. doi 10.1126/science.1157627
- Pew Research Center. (2013a, September 16). As health care law proceeds, opposition and uncertainty persist. <http://www.people-press.org/files/legacy-pdf/9-16-13%20Health%20Care%20Release.pdf>
- Pew Research Center. (2013b, September 23). Blame for both sides as possible government shutdown approaches. <http://www.people-press.org/files/legacy-pdf/9-23-13%20Shutdown%20Threat%20Release.pdf>
- Pew Research Center. (2014, June 12). Political polarization in the American public. <http://www.peoplepress.org/files/2014/06/6-12-2014-Political-Polarization-Release.pdf>



- Proulx, T., & Heine, S. J. (2008). The case of the transmogrifying experimenter: Affirmation of a moral schema following implicit change detection. *Psychological Science*, 19, 1294–1300. doi 10.1111/j.1467-9280.2008.02238.x
- Proulx, T., Heine, S. J., & Vohs, K. D. (2010). When is the unfamiliar the uncanny? Meaning affirmation after exposure to absurdist literature, humor, and art. *Personality and Social Psychology Bulletin*, 36, 817–829. doi 10.1177/0146167210369896
- Sen. Ted Cruz's marathon speech against Obamacare on Sept. 24. (2013, September 25). *The Washington Post*. <http://www.washingtonpost.com/sf/national/2013/09/25/transcript-sen-ted-cruzs-filibuster-against-obamacare/>
- Shook, N. J., & Fazio, R. H. (2009). Political ideology, exploration of novel stimuli, and attitude formation. *Journal of Experimental Social Psychology*, 45(4), 995–998. doi 10.1016/j.jesp.2009.04.003
- Smith, K. B., Oxley, D., Hibbing, M. V., Alford, J. R., & Hibbing, J. R. (2011). Disgust sensitivity and the neurophysiology of left-right political orientations. *PLoS ONE*, 6(10), e25552. doi 10.1371/journal.pone.0025552
- Tritt, S. M., Inzlicht, M., & Peterson, J. B. (2013). Preliminary support for a generalized arousal model of political conservatism. *PLoS ONE*, 8(12), e83333. doi 10.1371/journal.pone.0083333
- Van Den Bos, K., Poortvliet, P. M., Maas, M., Miedema, J., & Van Den Ham, E.-J. (2005). An enquiry concerning the principles of cultural norms and values: The impact of uncertainty and mortality salience on reactions to violations and bolstering of cultural worldviews. *Journal of Experimental Social Psychology*, 41, 91–113. doi 10.1016/j.jesp.2004.06.001
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070. doi 10.1037/0022-3514.54.6.1063