

# Anger and Declining Trust in Government in the American Electorate

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## Abstract

Partisanship in the United States in the contemporary era is largely characterized by feelings of anger and negativity. While the behavioral consequences of this new style of partisanship have been explored at some length, less is known about how the anger that is at the root of this growing partisan antipathy affects Americans' views of the national government. In this paper, I utilize data from the 2012 American National Election Studies (ANES) to show that higher levels of anger are associated with a greater level of distrust in government across a variety of metrics. I then present evidence from a survey experiment on a national sample of registered voters to show that anger has a causal effect in reducing citizens' trust in government. Importantly, I find that anger is able to affect an individual's views of the national government even when it is aroused through apolitical means. I also find that merely prompting individuals to think about politics is sufficient to arouse angry emotions. In total, the results suggest that anger and politics are closely intertwined, and that anger plays a broad and powerful role in shaping how Americans view their governing institutions.

**Key words:** anger, trust, partisanship

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At both the elite- and mass-level, American politics is becoming increasingly polarized (Abramowitz, 2010; Abramowitz & Saunders, 2008; Hetherington, 2001; McCarty, Poole, & Rosenthal, 2016; Theriault, 2008). This polarization has led to a more biased, hostile, confrontational, and angry style of politics. This new anger-fueled partisanship has caused a rise in antipathy and hostility toward the out-party (Iyengar, Sood, & Lelkes, 2012; Mason, 2013, 2015; Sood & Iyengar, 2015), an increase in straight-ticket voting (Jacobson, 2015) with an associated “nationalization” of election outcomes (Abramowitz & Webster, 2016), and heightened levels of political participation through the mechanism of increased in-group threat and anger toward the out-party (Huddy, Mason, & Aarøe, 2015).

Yet, outside of such behavioral outcomes, little is known about how anger within the electorate shapes individuals’ views of the political system and governmental processes. Indeed, while the anger that is so prevalent within contemporary American politics may bring positive benefits (e.g., increased participation and clarified choices at the ballot box), it is likely that this anger-fueled partisan antipathy has the negative consequence of diminishing individuals’ evaluations of American government.

In this paper, I seek to fill this gap in our understanding by showing how anger lowers Americans’ evaluations of the national government. I do this by first presenting evidence from the 2012 American National Election Studies (ANES) that shows that higher levels of anger are associated with a greater belief that people have no say about what the government does, that public officials do not care what people think, and that government is run by crooked individuals. I then present evidence from a survey experiment derived from a unique dataset on a national sample of registered voters, fielded nearly four years after the final wave of the 2012 ANES panel was completed, that shows that inducing higher levels of anger in individuals has a causal effect on

lowering Americans' views toward government.

Importantly, while these causal effects are obtained by directing individuals' anger toward the national government, they are robust to anger that is aroused through apolitical means. This suggests that being angry specifically about politics or political issues is not necessary to cause a diminution in individuals' evaluations of American government. On the contrary, merely provoking higher levels of incidental anger is sufficient to alter individuals' perceptions of political issues. In total, the observational and experimental results I present here suggest that anger has a broad and powerful role in shaping patterns of political behavior and public opinion within the American electorate, especially in regards to evaluations of the national government.

This paper proceeds as follows: first, I outline recent work on how anger affects political behavior, as well as research examining the factors that shape an individual's levels of political efficacy and evaluations of government. I then draw on psychological theories of Affective Intelligence (AI) and "mood-congruity" (see, e.g., Bower, 1991) to develop a theory as to how and why anger should cause individuals to lower their evaluations of the national government. I then present a series of results – both observational and causal – consistent with my expectations. Finally, I conclude by discussing the implications of these findings and discussing avenues for future research.

## **1 Anger, Behavior, and Political Efficacy**

Though canonical models of political behavior suggest that individuals are purely rational actors who are unaffected by emotions (see, e.g., Downs, 1957), recent work has cogently shown that anger can and does play an important role in shaping political behavior and public opinion across a wide range of issue areas. Banks and Valentino (2012), for instance, show that anger causes

a reduction in support for affirmative action policies and that this anger is at the root of symbolic racism and racial resentment. Relatedly, Banks (2014) shows that heightened levels of anger causes shifts in opinions on health care reform. Specifically, Banks's (2014) study shows that anger causes a reduction in support for health care reform among racial conservatives by triggering symbolic racism. Conversely, higher levels of anger serves to increase support for health care reform among those who are racially liberal. The mechanism through which these findings occur can largely be explained by MacKuen, Wolak, Keele, and Marcus's (2010) argument that anger causes people to fall back on familiar information and pre-conceived ideas.

Additional studies have illustrated how anger serves to reduce levels of trust. For instance, Dunn and Schweitzer (2005) utilize an experimental design to show how higher levels of anger plays a causal role in reducing an individual's level of interpersonal trust. Importantly, this effect is found through arousing an individual's level of "incidental anger." This implies that experiencing anger in one situation can affect a person's reactions in an unrelated setting. Applying their model to business dealings, Dunn and Schweitzer (2005) show how experiencing anger in one meeting may cause a manager to also be angry "with a client in an unrelated setting."

Relatedly, Gino and Schweitzer (2008) find that angry individuals are less willing to accept advice from others. Similar to the mechanism found by Dunn and Schweitzer (2005), Gino and Schweitzer (2008) note that the reason that angry individuals are less willing to accept advice from others is because higher levels of anger lowers an individual's level of interpersonal trust. Much like the findings provided by Dunn and Schweitzer (2005), the results that Gino and Schweitzer (2008) present are also obtained by heightening levels of "incidental anger." Anger, then, has been shown to affect trust in broad and meaningful ways across multiple studies.

If these findings about anger and trust exist at the individual level, then it makes sense to

expect that we would see them at an institutional level as well. However, the existing body of scholarship is devoid of any studies examining the link between anger and trust in (or evaluations of) governing institutions. Indeed, recent work on political trust has suggested that an individual's partisan affiliation plays the largest role in determining how she views governmental performance. According to Hetherington and Rudolph (2015), the increasing polarization of partisans along an affective dimension has caused individuals whose party is *not* in power to have consistently lower levels of trust in government. This is problematic, say Hetherington and Rudolph (2015), because "trust can serve as a reservoir that policy makers draw on to cause those not ideologically predisposed to follow them to give their ideas a shot," and "[t]hat reservoir has run dry." In sum, Hetherington and Rudolph's (2015) argument is that polarization has diminished citizens' trust in the very institutions that are designed to both represent and provide for their needs.

Hetherington and Rudolph's (2015) study largely builds on the work of Citrin (1974), who found that whether an individual trusts the government is largely a function of whether her partisan affiliation matches that of the president. Thus, Democrats in the electorate trust the government more when the president is a Democrat; similarly, Republicans exhibit higher levels of trust in government when a Republican holds the office. It is likely that such trends are exacerbated in the contemporary era, given that the rise of partisan news outlets has allowed Americans to self-select into the TV stations and news websites that best fit their own partisan and ideological leanings (Mutz, 2006; Prior, 2007). Indeed, previous work has shown that the ways in which news outlets cover politics plays a large role in determining citizens' cynicism toward government (Cappella & Jamieson, 1997).

Though anger within the electorate is increasing as trust in government is declining, little has been done to integrate these two trends. While Hetherington and Rudolph (2015) lay a foundation

for such a research agenda, more work remains to be done. Indeed, it is important to understand how the growth in anger – as a trend related to, but distinct from polarization – affects trust in, and evaluations of, government. In the next section, I draw on two related theories from psychological literatures to develop a theory as to how and why anger should lower Americans’ evaluations of the national government.

## **2 Anger, Negativity, and Evaluations of Government**

While anger is a prominent emotional aspect of negative partisan affect in the American electorate, the existing body of scholarship within political science has been slow to examine the precise ways in which anger shapes patterns of political behavior and public opinion. More specifically, scholars have yet to determine whether anger must be targeted at political issues in order to affect individuals’ political views or if merely arousing generalized apolitical anger is sufficient to alter public opinion. Such a question is puzzling, as extant research suggests that both of these types of anger might be able to influence individuals’ evaluations of the national government.

### **2.1 Targeted Political Anger and Trust in Government**

That targeted political anger might be able to affect evaluations of the national government has a considerable amount of support from studies within political behavior and political psychology. In addition to being associated with higher levels of both “cheap” and “costly” forms of participation (see, e.g., Valentino, Brader, Groenendyk, Gregorowicz, & Hutchings, 2011), anger about politics has also been linked to internal political efficacy (Valentino, Gregorowicz, & Groenendyk, 2009). As Valentino et al. (2009) argue, policy threats – for instance, what a liberal voter might experience

when a more conservative politician proposes privatizing Social Security – prompt individuals to become angry. Among those individuals who have high levels of internal political efficacy, this anger serves as a catalyst for engagement and participation in future elections.

Though these studies link anger to political participation and engagement, the mechanism they uncover is important for understanding how anger might affect attitudes toward the national government. In each case, anger is seen as a biological response to some upsetting, or otherwise unwanted, political stimuli. The result of this anger is some set of actions or thought processes against the source of the stimulus. Importantly, because “anger . . . has an unusually strong ability to capture attention” and influence “perceptions, beliefs, ideas, reasoning, and ultimately choices,” (Lerner & Tiedens, 2006) the responses elicited from anger are oftentimes predictable. Crucially, anger typically elicits negative appraisals from individuals toward that which induced the anger – such as television reports (Kim & Cameron, 2011), terrorists (Lerner, Gonzalez, Small, & Fischhoff, 2003), art (Silvia, 2009), or companies (Bennett, 1997).

Following this logic, individuals who are angry about politics or political affairs should have lower evaluations of the national government. As perhaps the most visible representation of politics and political affairs, the national government is a likely target for the negative appraisals that targeted political anger should elicit. Indeed, such a relationship between anger and lower levels of trust in government is especially likely to exist in the contemporary era. Because negative partisan affect in the electorate has grown considerably over the past few decades (Abramowitz & Webster, 2016; Iyengar & Westwood, 2015; Mason, 2013, 2015), Americans are increasingly exposed to stimuli seeking to induce anger toward the opposing political party, its governing elite, and its supporters in the electorate. Whether these stimuli come from elite rhetoric (Layman & Carsey, 2002), fellow partisans (Klar, 2014), or partisan-friendly media outlets (Prior, 2007), po-

litical discourse in the contemporary era is decisively negative in tone. Moreover, because these anger-inducing stimuli often encourage individuals to gauge the governmental performance of a particular party (see, e.g., Citrin, 1974; Hetherington & Rudolph, 2015), targeted political anger should cause individuals to have lower evaluations of the national government.

## **2.2 Generalized Apolitical Anger and Trust in Government**

In addition to this targeted form of political anger described above, it is also possible for a more generalized type of anger that is aroused through apolitical means to affect an individual's evaluations of the national government. That generalized apolitical anger might be able to shape individuals' evaluations of the national government is due, in part, to the process of Affective Intelligence (AI). Pioneered by Marcus, Neuman, and MacKuen (2000), AI "conceptualize[s] affect and reason not as oppositional but as complementary, as two functional mental faculties in a delicate, interactive, highly functional dynamic balance." The complementary and interactive nature of emotion and reason operates such that one's emotional reaction to a particular stimulus shapes whether an individual will react to that stimulus by relying on old habits or by seeking new information. Moreover, AI claims that "affect also influences when and how we *think* about . . . things" (Marcus et al., 2000, emphasis in original).

Schwarz and Clore (1983) put forth a similar argument, claiming that emotion and reason are interconnected processes. Specifically, their argument is that affect plays a large role in how individuals process and comprehend information. In their seminal study, Schwarz and Clore (1983) experimentally induced either happy or sad emotions in subjects and then asked individuals to give subjective evaluations about their quality of life. The results they found suggest that happy individuals and sad individuals tend to have positive and negative evaluations about their quality

of life, respectively. Much like Marcus et al.'s (2000) theory of AI, this implies that emotions and reason are intertwined in a manner where the former play a large role in influencing the latter. In other words, "one cannot think without feeling" (Marcus, 2002).

How, then, should generalized apolitical anger be expected to lower individuals' views of the national government? Insights from AI and the psychological theory of "mood-congruity" (Bower, 1991) suggest that an individual's felt emotion shapes the way in which she renders a judgment on any given thing. Extant research also suggests that anger is an emotion with a negative valence (Lerner & Keltner, 2001; Moons, Eisenberger, & Taylor, 2010). Accordingly, individuals who are primed to exhibit higher levels of anger – either at a specific target, or incidentally – will view the target of their anger in a negative light. Put more succinctly, because anger is an emotion with a negative valence, the judgment that an angry individual makes toward another person, situation, or institution will also be negative. By eliciting generalized apolitical anger and then immediately asking individuals how they feel about the national government, the negative valence attached to the emotional outburst of anger is likely to "spill over" and shape individuals' evaluations of the government. Thus, although the mode through which the anger was elicited was apolitical, it is possible to subsequently channel that anger toward a political target and, via the mechanism of mood-congruity, lower evaluations of that same object.

This expectation was cogently illustrated by Forgas and Moylan (1987), who surveyed moviegoers about various items (e.g., political judgments, expectations about the future) after they had seen a movie with a particular overall valence. They found that individuals who saw a movie that, overall, had a happy valence, tended to give optimistic judgments on survey batteries. By contrast, those individuals who saw movies that had an aggregate sad or aggressive valence were

more pessimistic in their judgments.<sup>1</sup> In terms of political affairs, for instance, Forgas and Moylan (1987) found that individuals gave lower evaluations of national and local Australian politicians after seeing a sad or aggressive film. Additionally, movie goers who saw a sad or aggressive film were less likely to believe that a nuclear war could be avoided, and were more likely to believe that the state of the economy was poor. These findings lend credence to the theory of mood-congruity, and suggest that anger should “be expected to activate negative concepts, and . . . negative judgments” (Bodenhausen, Sheppard, & Kramer, 1994) across a wide range of possible issues.

Though both targeted political anger and generalized apolitical anger should affect individuals’ evaluations of the national government, the effect sizes should not be equal. Instead, the magnitude of the targeted political anger effect should be larger than that of the effect for generalized apolitical anger. This is because, while the anger derived via apolitical means must “spill over” to political targets in order to have an effect, the targeted political anger is more direct. Because targeted political anger, by definition, directly elicits anger about politics and political affairs, the degree to which individuals negatively view the object that elicited the anger should be stronger.

### **3 Design & Results**

In order to illustrate how anger – both targeted at politics and more broadly elicited – shapes individuals’ views of the national government, I first utilize data from the 2012 American National Election Studies (ANES) panel survey. Using the ANES data for this analysis is beneficial for a variety of reasons. First, the ANES has been fielded for over 60 years and is widely used within the

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<sup>1</sup>Forgas and Moylan’s (1987) movies with a happy valence were *Beverly Hills Cop*, *Police Academy 2*, *Back to the Future*, and *Brewster’s Millions*. Their movies with a sad valence were *Dance with a Stranger*, *Mask*, *Birdy*, and *Killing Fields*. Their movies with an aggressive valence were *First Blood*, *Rambo*, *Mad Max 2*, and *Mad Max 3*.

field of political behavior. More importantly, the 2012 installment of the ANES included questions about individuals' emotional responses to the two major parties' presidential candidates. This allows for a relatively straightforward examination of the relationship between anger and trust in government.

Summary statistics on partisanship and demographics are presented in the Appendix. Here, I have dichotomized an individual's gender and racial affiliation. I have also created a three-item measure of education: a value of one indicates that an individual possesses a high school education or less, a value of two indicates that an individual possesses up to a Bachelors degree, and a value of three indicates that a respondent has a graduate or professional degree.

Given these coding decisions, 52% of the 2012 ANES sample is female and 40.6% are non-white. The mean level of education is 1.78, a number that indicates that the average level of education in the sample is just below a Bachelors degree. Moreover, nearly 53% of the sample identifies as a Democrat, approximately 34% identify as a Republican, and the remaining 13% identify as an independent.<sup>2</sup> These demographics are close to the percentages from the U.S. Census Bureau, which found that the U.S. population was 50.8% female and 25% non-white.<sup>3</sup>

Key for the analysis here are questions that asked about individuals' emotional feelings toward the Democratic and Republican presidential candidates, and a series of questions designed to measure individuals' level of trust in government. In order to construct the main independent variables of targeted political anger used in these analyses, I relied on individuals' responses to questions asking how often they felt angry at the Democratic presidential candidate and the Republican presidential candidate. These questions have five possible responses, ranging from "never" to "al-

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<sup>2</sup>In these calculations, respondents identifying as an independent who lean toward one of the two major parties were classified as a partisan.

<sup>3</sup>See <https://www.census.gov/2010census/data/> for more demographic information from the 2010 U.S. Census.

ways."<sup>4</sup> I used these variables to create a measure of anger toward the opposing party's presidential candidate, where Republican respondents' values are those reported on the measure tapping anger toward the Democratic presidential candidate, and Democratic respondents' values are those reported on the measure of anger toward the Republican presidential candidate. This measure is scored such that higher values indicate more frequently feeling angry about the opposing party's presidential candidate.<sup>5</sup>

There are three dependent variables in this analysis, each of which taps a different measure of citizens' trust in government. The first question asks individuals how many people in government they believe to be crooked. There are three possible responses to this question: "hardly any," "not very many," and "quite a few." The variable is coded to range from 1-3. The second question asks respondents to indicate whether they agree with the notion that public officials do not care what people think. Potential responses for this question range from "disagree strongly" to "agree strongly." The last dependent variable measures how much individuals believe that they have no say in what government does. Responses to this question range from "not at all" to "a great deal." For both of these variables, potential responses are coded to range from 1-5. In each case, higher values on these variables indicate lower levels of trust in government.

In order to minimize any confounding effects in my model estimates, I include in each model controls for partisanship, self-reported ideology (along a seven-point scale), gender, race, education, and a scale measuring an individual's level of activism. The education control is the tri-

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<sup>4</sup>The full range of possible responses are "never," "some of the time," "about half the time," "most of the time," and "always."

<sup>5</sup>It is important to note that the questions used to create these measures are the second part of a branching item in the 2012 ANES. The first question in the two-item series asks individuals whether they ever reported feeling angry at the Democratic or Republican presidential candidate. Only those individuals who answered "yes" are branched into this second question that reports the frequency of anger. As a robustness check, I also analyzed the models with the first question of the branch as the key independent variable. This question simply asks whether the respondent ever reported feeling angry at the Democratic (or Republican) presidential candidate. The results are robust to this change.

chotomous measure discussed above, while the activism scale measures how many of 11 different participatory acts an individual engaged in. These acts are attending a rally, talking to others about politics, displaying a yard sign or a bumper sticker, working for a political party, donating money to a candidate, donating money to a party, donating to a third-party political organization, attending a march or rally, attending a school board meeting, signing a political petition, or contacting a Member of Congress about an issue. Additionally, in order to address concerns about answers to the post-election dependent variables measuring trust in government being affected by the outcome of the election, I also include a pre-election measure of how much individuals trust the government as a control variable in each model. This allows for a de-facto “baseline” level of trust in government to be built into the model estimates.

To facilitate an easier interpretation of the relationship between the independent variables and the various metrics tapping into trust in government, all of the independent variables are normalized to range from 0-1. Estimation is via ordinary-least squares (OLS) regression. However, because each of the dependent variables has just a few possible categorical responses, I also estimated these models via a series of ordered logistic regressions. In each case, the findings are robust to the use of an ordered logit. Accordingly, I present OLS results here for ease of interpretation. Results of the models calculated using ordered logit are available in the Appendix.

Across each of the three measures of trust in government, the results of Table 1 suggest that higher levels of targeted political anger is associated with a lower level of trust in government. The predictive power of anger toward the opposing party’s presidential candidate is quite impressive. Indeed, in all three model specifications, the coefficient estimate of anger toward the opposing party’s presidential candidate is larger, in terms of absolute value, than the dummy variables for gender and race. The coefficient estimate for the anger variable is larger than that of the activism

	Govt. Crooked	Govt. Cares	Have Say in Govt.
Anger	0.141*** (0.053)	0.510*** (0.115)	0.450*** (0.131)
Democrat	-0.126*** (0.031)	-0.297*** (0.064)	-0.395*** (0.074)
Ideology	0.037 (0.077)	-0.376** (0.175)	-0.707*** (0.200)
Female	0.053* (0.028)	0.022 (0.059)	0.076 (0.068)
Non-White	0.091*** (0.032)	0.094 (0.069)	-0.066 (0.080)
Education	-0.222*** (0.043)	-0.276*** (0.090)	-0.359*** (0.103)
Activism	-0.070 (0.073)	-0.433*** (0.154)	-0.956*** (0.176)
Pre-election trust	-0.682*** (0.092)	-1.312*** (0.214)	-1.029*** (0.245)
Constant	2.899*** (0.074)	4.556*** (0.169)	4.447*** (0.193)
N	1,577	1,162	1,162
R <sup>2</sup>	0.073	0.091	0.112

\*p < .1; \*\*p < .05; \*\*\*p < .01

Table 1: *Regression Estimates of Trust in Government.* This table shows how higher levels of anger increases citizens' distrust of government. Being angry toward the opposing party's presidential candidate is associated with a higher belief that the government is crooked, that the government does not care about ordinary people, and that individuals have no say in what the government does. Note that all independent variables are scaled to range from 0-1.

variable in two of the three model specifications and is consistently on par with an individual's level of education in terms of its predictive ability.

Because the majority of the literature on political efficacy and trust in government focuses on the role of partisanship, comparing the standardized coefficient estimates between the anger variable and the partisan dummy is particularly important.<sup>6</sup> Outside of the measure of an individual's baseline level of pre-election trust in government, no variable plays a larger role in predicting how much an individual trusts the national government than partisanship. However, a simple comparison shows that anger is also a strong predictor of trust in government. Indeed, the coefficient estimate for the anger variable ranges from 61% to 93% of the size of the partisanship coefficient.<sup>7</sup> This suggests that, while partisanship continues to powerfully shape the ways in which Americans view the political world, having higher levels of anger can also play a substantively important role in altering levels of trust in government.

One potential concern about these results is that they might be driven by modeling choices. That is, the relationship between anger and trust that is shown in Table 1 might be driven by some variable that is not accounted for in the current model specification. As a check on the robustness of these results, I reanalyzed the models with a dummy variable for "strong partisans" included.<sup>8</sup> With this variable included, the relationship between anger and trust in government remains highly statistically significant across each of the three models. These results are shown in Table 2.

To facilitate a more direct comparison between the anger coefficient and the coefficient on the dummy variable for strong partisans, I recalculated the models displayed in Table 2 but stan-

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<sup>6</sup>The models with standardized coefficients are available upon request.

<sup>7</sup>In column one, the standardized anger coefficient is 61% of the size of the standardized partisanship coefficient; in the second column, it is 93% of the size; in the third, it is 62%.

<sup>8</sup>Individuals who identify as either a "strong Democrat" or a "strong Republican" are classified as strong partisans.

standardized each of the independent variables. In this standardized model, the coefficient for anger is larger (in terms of absolute value) than the coefficient for the strong partisan dummy variable across all three model specifications. In the first model, the anger coefficient is 1.07 times the size of the strong partisan dummy coefficient; in the second model, the anger coefficient is 2 times the size of the strong partisan dummy coefficient; and, finally, the anger coefficient is 1.88 times the size of the strong partisan dummy coefficient in the third model. This suggests that, in terms of predicting individuals' evaluations of the national government, targeted political anger plays a larger role than being a strong partisan.<sup>9</sup>

To test whether generalized apolitical anger plays a similar role in lowering individuals' level of trust in government, I re-ran the models presented in Table 1 but changed the operationalization of anger from being measured by respondents' frequency of anger at the opposing party's presidential candidate to the frequency with which they felt angry at *either* of the candidates from the two major parties. Though not a perfect operationalization of generalized anger, this measure has been previously used within the literature on emotions and politics (see, e.g., Valentino et al., 2011). Therefore, it is a suitable proxy for generalized anger. The results of these models, also shown in Table 2, are consistent with my original specification. This suggests that generalized apolitical anger, as well as targeted political anger, are both related to lower levels of trust in government.

One final potential concern about these design choices and results is that they omit variables measuring trust in government that could be used as dependent variables. Among other items, these potential dependent variables include questions about how often respondents trust the government to do what is right, and whether the government wastes taxpayers' money. However, these trust in government questions were asked *only* in the pre-election wave of the 2012 ANES. Because the

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<sup>9</sup>These models can be found in the Appendix.

	Govt. Crooked		Govt. Cares		Have Say in Govt.	
Anger	0.166*** (0.053)	0.361** (0.170)	0.553*** (0.116)	1.478*** (0.367)	0.492*** (0.133)	1.429*** (0.419)
Democrat	-0.120*** (0.031)	-0.030 (0.057)	-0.288*** (0.064)	-0.278** (0.123)	-0.386*** (0.074)	-0.235* (0.140)
Ideology	0.083 (0.079)	-0.004 (0.136)	-0.272 (0.179)	-0.356 (0.301)	-0.608*** (0.205)	-0.354 (0.344)
Female	0.059** (0.028)	0.035 (0.054)	0.031 (0.059)	0.222* (0.119)	0.085 (0.068)	0.311** (0.136)
Non-White	0.099*** (0.032)	-0.016 (0.057)	0.108 (0.070)	0.067 (0.125)	-0.053 (0.080)	-0.003 (0.142)
Education	-0.233*** (0.044)	-0.269*** (0.084)	-0.292*** (0.090)	-0.095 (0.179)	-0.374*** (0.104)	-0.100 (0.204)
Activism	-0.044 (0.074)	-0.006 (0.137)	-0.397** (0.154)	-0.235 (0.290)	-0.922*** (0.177)	-1.073*** (0.331)
Pre-election trust	-0.653*** (0.092)	-0.149 (0.201)	-1.237*** (0.216)	-0.877* (0.489)	-0.959*** (0.247)	-1.061* (0.558)
Strong Partisan	-0.087*** (0.029)	-0.157** (0.063)	-0.154** (0.063)	-0.347** (0.142)	-0.147** (0.072)	-0.427*** (0.162)
Constant	2.875*** (0.075)	2.745*** (0.144)	4.487*** (0.171)	4.002*** (0.332)	4.382*** (0.196)	3.663*** (0.379)
Anger Type:	Targeted	Generalized	Targeted	Generalized	Targeted	Generalized
N	1,577	429	1,162	324	1,162	324
R <sup>2</sup>	0.078	0.058	0.096	0.122	0.116	0.149

\*p < .1; \*\*p < .05; \*\*\*p < .01

Table 2: *Robustness Checks on Regression Estimates of Trust in Government.* This table shows that the relationship between anger and trust in government is robust to the inclusion of a dummy variable for strong partisans and the use of a different measure of anger. Note that all independent variables are scaled to range from 0-1.

current empirical specification of the models contain dependent variables that were measured in the post-election wave and independent variables that were measured in the pre-election wave, utilizing these additional questions that measure individuals' trust in government would not produce directly comparable results. Additionally, estimating empirical models with contemporaneously measured independent and dependent variables is sure to introduce endogeneity problems. Nevertheless, regressing these additional trust in government questions on either the measure of targeted political anger or generalized apolitical anger, as well as the series of control variables described above, produces results consistent with the theoretical expectations. Results of these regressions are available in the Appendix.

### **3.1 Anger, Evaluations of Government, and Causality**

While the proceeding analyses have shown that both targeted political anger and generalized apolitical anger are predictive of negative evaluations of the national government across different metrics, it is important to note that these results should be viewed with a degree of caution. Indeed, though the variables measuring anger came in the pre-election wave of the ANES survey and the dependent variables were measured in the post-election wave, it is still not possible to conclude that anger *causes* a reduction in Americans' evaluations of the national government. In general, correlational analyses based off of large scale datasets, such as the ANES or the Cooperative Congressional Election Study (CCES), cannot definitively say whether higher levels of anger leads to a diminished level of trust in government, or if having low levels of trust in government leads one to adopt a more angry persona.

Moreover, longer-running panel datasets are also inadequate to study the causal relationship

between anger and citizens' trust in government. If negative partisan affect is driven by anger and anger is higher when the opposing party controls the levers of government, then panel data is unable to adjudicate the degree to which changes in trust in government are due to anger or a change in the relationship between one's own party identification and the party that controls the government. Indeed, when the out-party gains control of the government after an election, both of the purported mechanisms that reduce trust in government – anger and the partisan relationship between an individual and the governing party (Citrin, 1974; Hetherington & Rudolph, 2015) – change simultaneously. These simultaneous changes preclude the use of panel data to test whether anger has a causal effect in reducing individuals' levels of trust in government. Therefore, in order to sidestep these issues and supplement the findings derived from the 2012 ANES data, I employ an experimental design to exogenously vary individuals' level of anger before measuring levels of trust in government.

The data for this experiment come from a survey fielded in Fall 2016 via Survey Sampling International (SSI). The survey is a national – though not representative – sample of registered voters with a total sample size of 3,262 respondents. Approximately 57% of the respondents are female, 82% are white, and 85.4% have at least some college education. More complete summary statistics are shown in Table 7 in the Appendix. For interested readers, the full questionnaire used on this survey battery can also be found in the Appendix.

In order to alter individuals' levels of anger, I utilize a technique known as emotional recall.<sup>10</sup> This technique, which has been used widely in psychology (see, e.g., Lerner et al., 2003; Lerner & Keltner, 2001), asks individuals to write a short paragraph about a time they felt a particular

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<sup>10</sup>Such an approach is not the only way to alter individuals' emotional states. Lab experiments facilitate a wider range of experimental manipulations – such as games or human interactions – but are impractical within the context of a survey experiment. For an excellent overview of “how to push someone's buttons,” see Lobbestael, Arntz, and Wiers (2008).

emotion. The idea of such a technique is that by recalling a specific time that they felt a given emotion, that individual will temporarily experience a heightened sense of that same emotion. For the purposes of this study, individuals were asked to recall a time that they felt “very angry about politics.” They were then instructed to describe as precisely as possible how this experience made them feel. Individuals in the control group were asked to recall what they had for breakfast in the morning. This question provides a useful control group because it is benign in nature and is tangential to any emotional state.

One important aspect of this design is that it, like others, asks individuals to write about a time they felt a given emotion (here, anger) *about politics*. Because such a design pairs an emotional stimulus with a prompt that causes an individual to think *specifically* about politics or political events, it is difficult to disentangle whether anger is causing a shift in attitudes toward the national government or if merely thinking about politics alters individuals’ evaluations of governmental performance. Therefore, as a robustness check on the traditional emotional recall design, I also randomized individuals into two additional treatment groups. One treatment group asked participants to “write about a time they were very angry.” The other treatment group asked individuals to “write about a time they thought about politics.” By separating the emotion (anger) from the target (politics) in this way, I am able to more precisely adjudicate the causal mechanism being manipulated. This also allows for a straightforward examination as to the role of targeted political anger and generalized apolitical anger in shaping citizens’ views of the national government.

Finally, after survey participants were randomized into one of the treatment groups described above, they were asked to rate their level of agreement with the following statement: “The national government is unresponsive to the concerns and interests of the public.” Agreement with this statement was measured on a zero to ten scale, where zero indicates that an individual “completely

disagrees" with the statement and ten indicates that an individual "completely agrees" with the statement.

Recall that the expectation is that higher levels of anger should cause individuals to view the national government as unresponsive to the concerns and interest of the public. Comparing the mean scores on this metric by treatment status provides suggestive evidence that such a relationship exists. The mean rating on this scale for individuals who were randomized into the "write about a time you were very angry" treatment condition is 7.0; the mean score for those randomized into the "write about a time you were very angry about politics" treatment condition is 6.91; the mean score for those who were randomized into the "write about a time you thought about politics" treatment condition is a similar 6.90; finally, the mean score on this metric for those in the control group is 6.72.

In order to more definitively test whether anger has a causal effect in reducing trust in government, I simply regress the measure of trust in government described above on indicators for treatment status. The expectation is that the coefficients for the anger treatment conditions should be positively signed. The results of the experimental manipulations are shown in Table 3.

The first column of Table 3 presents the experimental results without any control variables included. Those who were randomized into both the generalized apolitical anger ( $p < .05$ ) and the anger-about-politics ( $p < .1$ ) treatment groups were more likely to agree that the national government is unresponsive to the concerns and interests of the public. Merely thinking about politics had no effect on belief in government responsiveness. The second column adds a series of control variables – ideology, partisanship, level of education, income, and dummy variables for non-whites and females – to the original model specification.<sup>11</sup> With these control variables

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<sup>11</sup>Adding a series of control variables to a model that is estimated on experimental data accomplishes two things:

	Govt. Unresponsiveness	
Anger	0.277** (0.122)	0.256** (0.119)
Anger about politics	0.195* (0.118)	0.204* (0.116)
Think about politics	0.182 (0.120)	0.193 (0.117)
Controls:	No	Yes
N	3,188	3,141
R <sup>2</sup>	0.002	0.057

\*p < .1; \*\*p < .05; \*\*\*p < .01

**Table 3: *Effect of Anger on Political Efficacy.*** These experimental results show that inducing higher levels of anger causes individuals to have lower levels of political efficacy. Specifically, priming individuals to become angrier makes them more likely to believe that the national government is unresponsive to the concerns and interests of the public.

included, the coefficients remain quite similar to those in the unconditional regression: those who were randomized into the anger condition and those were randomized into the anger-about-politics condition both exhibited a greater belief that the national government is unresponsive to the concerns and interests of the public. Thus, regardless of the exact wording of the experimental prime, heightened levels of anger causes individuals to have lower evaluations of American government.<sup>12</sup>

In addition to the fact that generalized apolitical anger had the strongest effect on lowering respondents' evaluations of the national government, one particularly noteworthy result from the experimental manipulation is that the causal effect for those individuals who were randomized into the treatment group that asked them to write about a time they thought about politics is almost

first, given that the coefficients change very little between the unconditional and the conditional models, we can have a high degree of confidence that the randomization process worked as intended; and, second, it helps alleviate any infelicities that might have occurred during randomization.

<sup>12</sup>While different treatment wordings were both able to successfully induce anger in survey participants, there is no statistically significant difference between the "anger" coefficient and the "anger about politics" coefficient.

identical to the effect for those who were randomized into the treatment group that sought to prime anger specifically about politics. Given that anger – and not an increase in the salience of politics or political issues – is the theorized causal mechanism through which the reduction in trust in government occurs, the fact that these two causal effects are so similar is puzzling.

Therefore, in order to more precisely determine the ways in which the causal manipulations affected survey respondents, I conducted a sentiment analysis on the text written by individuals during the emotional recall design. To this end, I utilized the Linguistic Inquiry and Word Count (LIWC) dictionary as my classification system. Developed by psychologists and linguists, LIWC analyzes both the grammatical (e.g., number of pronouns or adverbs) and psychological structure (e.g., degree of negatively- or positively-valenced words) of a segment of text. Because “[I]anguage is the most common and reliable way for people to translate their internal thoughts and emotions into a form that others can understand,” and because “words . . . are the very stuff of psychology and communication” (Tausczik & Pennebaker, 2010), understanding the types of words and phrases that individuals used in their emotional recall response will shed light on the specific emotions that they were experiencing during the experimental manipulation.<sup>13</sup>

Of particular interest is the degree to which individuals used words that are indicative of being angry or upset. Among others, such words include “anger,” “rage,” “hate,” or “outrage.” Of additional interest is the amount of “negative emotional” or “positive emotional” words. The former metric is an aggregate measure of negatively-valenced emotional words, such as those dealing with anger, sadness, frustration, or anxiety; this is in contrast to the latter measure, which is an aggregation of positively-valenced emotional words, such as happiness, joy, or anticipation.

If the experimental manipulations worked as intended, individuals who were randomized into

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<sup>13</sup>For more information on how words are indicative of personality and emotional states, see Allport and Odbert’s (1936) discussion of the “lexical hypothesis.”

	Randomization Groups			
	Anger	Anger about politics	Think about politics	Control
Angry words	3.49	2.75	1.02	0.08
Negative emotional words	5.40	4.65	2.90	0.94
Positive emotional words	4.23	5.20	6.48	7.60

Table 4: *Mean Number of Emotional Words*. This table shows the mean number of angry, negative emotional, and positive emotional words used by individuals in each randomization group.

the “write about a time you were very angry” and “write about a time you were angry about politics” conditions should use language that is indicative of expressions of anger. These individuals should also write responses that are higher in negative emotional words and lower in positive emotional words. Relative to the control group, individuals who were randomized into the “write about a time you thought about politics” condition should not be more likely to use words that indicate being in a heightened state of anger. They should also not be more likely to use negative emotional words. Table 4 shows the mean number of angry, negative emotional, and positive emotional words used by respondents in each treatment status.

As shown in Table 4, individuals who were randomized into the “write about a time you were very angry” treatment group used more angry and negative emotional words than those individuals who were randomized into the other treatment conditions. Those who were randomized into the “write about a time you thought about politics” condition used the second most angry and negative emotional words. This provides suggestive evidence that the treatment groups manipulated the intended mechanisms.<sup>14</sup>

However, to more definitively ascertain the emotions that were manipulated by the experimen-

<sup>14</sup>A density plot of angry words and negative emotional words by treatment status can be found in the Appendix.

tal design, I regressed a series of LIWC word classification variables on treatment status. Specifically, I regressed the percentage of angry words, the percentage of negative emotional words, and the percentage of positive emotional words that an individual used in her emotional recall text on indicator variables for treatment group assignment. If the causal manipulations worked according to the theoretical expectations, then individuals who were randomized into the anger-only and the anger-about-politics treatment groups should have a comparatively higher percentage of angry and negative emotional words in their emotional recall text. Individuals in these two groups should also have comparatively fewer positive emotional words in their text. Conversely, there is no firm theoretical reason to assume that individuals who were randomized into the “write about a time you thought about politics” treatment group should have either higher or lower percentages of angry, negative emotional, or positive emotional words in their emotional recall text.<sup>15</sup>

The results in Table 5 suggests that the experimental manipulation largely worked as intended. Relative to the control group, those individuals who were randomized into the treatment group that asked them to write about a time they were very angry wrote emotional recall responses with 3.4% more angry words, 4.5% more negative emotional words, and 3.8% fewer positive emotional words. Individuals who were randomized into the treatment group that sought to prime anger specifically about politics wrote responses with 2.6% more angry words, 3.7% more negative emotional words, and 2.4% fewer positive emotional words. In all cases, the treatment condition that sought to prime anger about apolitical issues was the most effective in actually heightening individuals’ level of anger. These findings help to explain why this treatment condition (contrary to theoretical expectations) had the strongest causal effect in reducing individuals’ trust in

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<sup>15</sup>Indeed, it is possible to imagine that individuals could either become inspired by thinking about politics (and so write from a positive emotional standpoint) or become upset or outraged by thinking about politics (and so write from a negative emotional standpoint).

	Pct. Angry Words	Pct. Negative Emotions	Pct. Positive Emotions
Angry	3.410*** (0.191)	4.461*** (0.304)	-3.370*** (0.789)
Angry about politics	2.672*** (0.186)	3.705*** (0.296)	-2.406*** (0.768)
Think about politics	0.938*** (0.188)	1.962*** (0.300)	-1.119 (0.778)
Constant	0.080 (0.131)	0.942*** (0.209)	7.604*** (0.542)
R <sup>2</sup>	0.116	0.078	0.007

\*p < .1; \*\*p < .05; \*\*\*p < .01

Table 5: *Sentiment Analysis by Treatment Status*. This table shows the relationship between treatment status and the percentage of angry words, negative emotional words, and positive emotional words used by respondents in the emotional recall design experimental prompt.

government, as shown in Table 3.

Interestingly, the treatment group that asked individuals to write about a time they thought about politics also led to more angry and negatively-valenced emotional recall responses. Indeed, individuals who were randomized into this treatment group used nearly 1% more angry words and 2% more negative emotional words than those in the control group. However, individuals in this treatment condition were not likely to use any fewer positive emotional words in their responses than those in the control group. This suggests that merely asking individuals to think about politics is sufficient to induce anger. It appears, then, as if politics and negative emotions are not entirely separable. That this finding exists also helps to explain why the effects of the “write about a time you were angry about politics” and “write about a time you thought about politics” treatment groups are nearly identical: both trigger heightened levels of individual anger.

## 4 Conclusion & Discussion

Partisanship in the American electorate has changed in dramatic ways over the past few decades. While Americans used to feel indifferent toward the opposing political party, the contemporary era is defined by intense dislike of the out-party, its supporters, and its preferred policies. This new partisan orientation has caused Americans to be more biased against the opposing party (Mason, 2015; Sood & Iyengar, 2015), and, along with the decline of the incumbency advantage in favor of partisan identification (Jacobson, 2015), to vote increasingly straight-ticket (Abramowitz & Webster, 2016).

Yet, outside of these behavioral outcomes, little has been done to understand how and why this anger-fueled negative partisan affect shapes Americans' views of the national government. In this paper, I have helped to fill this gap by showing how anger – both targeted and generalized – is associated with lower levels of trust in government. Specifically, higher levels of anger is associated with the belief that people in government are crooked, that public officials do not care what people think, and that citizens have no say in what government does. I have also shown through a survey experiment on a national sample of registered voters that anger has a causal effect in reducing citizens' trust in government. This diminution in trust in the national government is due to the fact that people tend to evaluate objects in ways that are in line with their emotions: because anger is an emotion with a negative valence, and because this anger is directed at the government and those who run it, individuals who are angry have poor evaluations of the national government.

Moreover, this finding does not appear to be limited to one specific period of time. The correlational analyses presented in Section 3 utilized the 2012 ANES panel data. The data for the experimental analysis presented in Section 3.1 was collected in October 2016. Thus, the experimental results were obtained nearly four years after the final wave of the 2012 ANES panel was

completed. That these findings are produced in two different datasets, fielded almost four years apart from each other, suggests that anger has a robust role in altering citizens' level of trust in the national government.

Importantly, the experimental results I have shown here were obtained by arousing both targeted political anger and generalized apolitical anger. This suggests that the negative valence associated with apolitical anger can spill over to political targets. From the standpoint of campaign strategy, this implies that the ways in which members of the electorate view politics and political affairs can be shaped in subtle ways (see, e.g., Achen & Bartels, 2016). Indeed, rather than seeking to stir anger specifically about government or opposition candidates within the electorate, political parties and candidates merely need to incite generic anger in order to alter patterns of public opinion. Future work, then, should build on this finding to examine other ways in which incidental anger causes shifts in mass political behavior.

Moreover, the results of my analyses suggest that politics and anger are closely intertwined. Indeed, a sentiment analysis on the text of the emotional recall responses derived from the experimental manipulation indicates that merely asking individuals to think about politics prompts them to exhibit higher levels of anger and other negatively-valenced emotions. Accordingly, it appears as though politics and anger are, to a certain extent, inseparable.

Normatively, the results presented here have troubling implications. With the rise of negative partisan affect and a contentious style of governing, Americans are more frequently exposed to anger-inducing stimuli. With politics increasingly being defined by feelings of anger toward the opposing party and its governing elite, trust in government is bound to decline. Absent some exogenous shock to the political system that reverses this trend, it is possible that trust in government will decline to a level so low that the national government will lose its sense of legitimacy in the

eyes of those to whom it is accountable. If trust in governing institutions reaches such a level, the health of American democracy is threatened.

Future research, then, should examine how the harmful effects of anger in modern-day politics can be mitigated. Moreover, it is possible that certain types of anger-inducing stimuli are more damaging to citizens' trust in government and political institutions than others. If this is the case, then future research should explore what sorts of angry appeals are more or less pernicious in their ability to weaken the bonds of trust between Americans and their government. One potentially fruitful avenue for future research is to examine whether the source of the anger-inducing stimulus has an effect on exacerbating or attenuating anger's ability to reduce trust in government.

Relatedly, future work should examine how long the effects of anger on reducing trust in government persist. Is anger an emotion that brings negative evaluations of governmental institutions, but only temporarily? Or, do the effects of anger on reducing citizens' trust in government last long after anger has subsided? Understanding the duration of these effects will help to clarify our understanding about the linkage between the hostile nature of contemporary politics and Americans' trust in their own government. With trust in government continuing to decline (Pew Research Center, 2015; *The Economist*, 2017), understanding these processes is essential to strengthening American democracy.

**Ethical approval:** All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study.

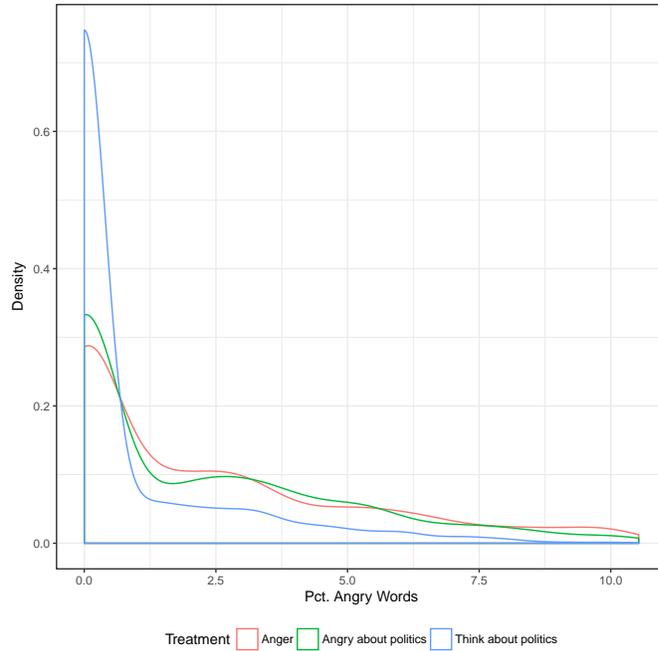
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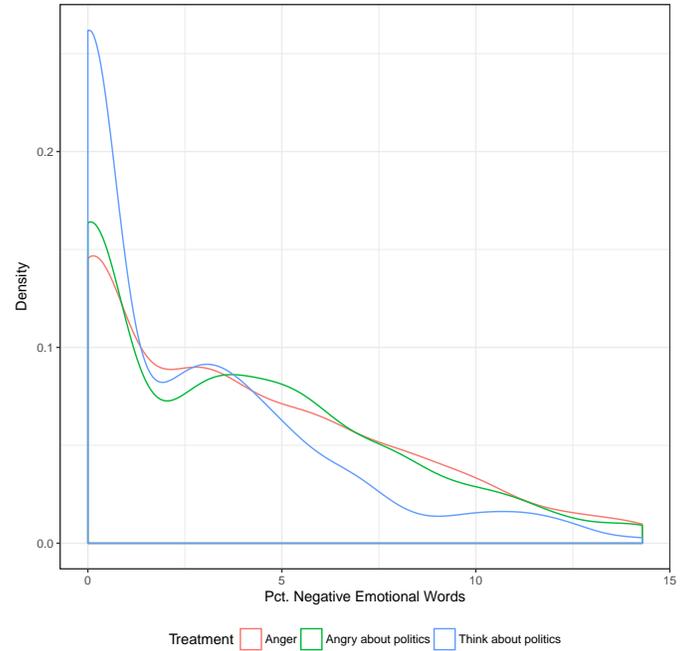
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# Appendix



(a) Percent Angry Words in Text



(b) Percent Negative Emotional Words in Text

Figure 1: These figures show the distribution of angry words and negative emotional words that individuals used in their emotional recall responses, by treatment status. Note that, in order to facilitate a cleaner graphical presentation, the top 5% of responses in the right-hand tail of the distribution have been removed from each subfigure.

Table 6: Summary Statistics of 2012 ANES Data

Statistic	N	Mean	St. Dev.	Min	Max
Democrat	5,890	0.527	0.499	0	1
Republican	5,890	0.339	0.473	0	1
Independent	5,890	0.134	0.341	0	1
Female	5,914	0.519	0.500	0	1
Non-white	5,885	0.406	0.491	0	1
Education	5,906	1.780	0.656	1	3

Table 7: Summary Statistics of Experimental Data

Statistic	N	Mean	St. Dev.
White	3,252	0.820	0.384
Black	3,252	0.066	0.249
Asian	3,252	0.038	0.190
Native American	3,252	0.009	0.094
Hispanic	3,252	0.055	0.229
Other Race	3,252	0.012	0.110
High School Only	3,248	0.146	0.353
Some College	3,248	0.854	0.353
Male	3,255	0.428	0.495
Female	3,255	0.572	0.495
Democrat	3,247	0.521	0.500
Independent	3,247	0.108	0.310
Republican	3,247	0.371	0.483
Liberal	3,244	0.386	0.487
Conservative	3,244	0.331	0.471

	Govt. Crooked	Govt. Cares	Have Say in Govt.
Anger	0.605*** (0.209)	1.040*** (0.217)	0.761*** (0.214)
N	1,577	1,162	1,162

\*p < .1; \*\*p < .05; \*\*\*p < .01

Table 8: *Regression Estimates of Trust in Government (Ordered Logit)*. This table shows that the results derived from using models estimated via OLS are robust to using a series of ordered logits. Models are calculated with the same control variables used in the primary estimation (Table 1). Note that all independent variables are scaled to range from 0-1.

	Govt. Does What is Right	Govt. Wastes Money	Govt. Run by Big Interests
	OLS	OLS	Logit
Anger	0.347*** (0.077)	0.051 (0.033)	0.208 (0.185)
Democrat	-0.374*** (0.045)	-0.302*** (0.019)	-0.486*** (0.113)
Ideology	-0.135 (0.108)	-0.021 (0.047)	0.197 (0.260)
Female	-0.078* (0.041)	-0.032* (0.018)	-0.404*** (0.101)
Non-White	-0.126*** (0.047)	-0.051** (0.020)	-0.490*** (0.108)
Education	0.047 (0.064)	-0.148*** (0.027)	-0.033 (0.156)
Activism	-0.212* (0.110)	0.029 (0.047)	0.374 (0.271)
Pre-election trust	3.806*** (0.092)	2.938*** (0.040)	2.019*** (0.227)
N	1,529	3,114	3,083
R <sup>2</sup>	0.082	0.109	

\*p < .1; \*\*p < .05; \*\*\*p < .01

Table 9: *Regression Estimates of Trust in Government, Additional Dependent Variables*. This table shows the relationship between targeted political anger and trust in government across three additional metrics. Note that all independent variables are scaled to range from 0-1.

	Govt. Crooked	Govt. Cares	Have Say in Govt.
Anger	0.045*** (0.014)	0.151*** (0.032)	0.134*** (0.036)
Democrat	-0.060*** (0.015)	-0.144*** (0.032)	-0.193*** (0.037)
Ideology	0.017 (0.016)	-0.056 (0.037)	-0.125*** (0.042)
Female	0.029** (0.014)	0.015 (0.029)	0.043 (0.034)
Non-White	0.049*** (0.016)	0.053 (0.034)	-0.026 (0.039)
Education	-0.077*** (0.014)	-0.096*** (0.030)	-0.123*** (0.034)
Activism	-0.008 (0.013)	-0.072** (0.028)	-0.167*** (0.032)
Pre-election trust	-0.116*** (0.016)	-0.220*** (0.038)	-0.171*** (0.044)
Strong partisan	-0.042*** (0.014)	-0.075** (0.031)	-0.071** (0.035)
Constant	2.631*** (0.015)	3.802*** (0.033)	3.367*** (0.037)
N	1,577	1,162	1,162
R <sup>2</sup>	0.078	0.096	0.116

\*p < .1; \*\*p < .05; \*\*\*p < .01

Table 10: *Regression Estimates of Trust in Government, Accounting for Strength of Partisanship (Standardized)*. This table shows the standardized coefficients across each of the three model specifications. In each case, the coefficient on the anger variable is bigger – in terms of absolute value – than the coefficient on the dummy variable for strong partisans.

	Govt. Crooked	Govt. Cares	Have Say in Govt.
Anger	0.052 (0.074)	0.371** (0.164)	0.198 (0.184)
Ideology	-0.007 (0.106)	-0.300 (0.247)	-0.532* (0.277)
Female	0.038 (0.041)	0.008 (0.087)	0.103 (0.097)
Non-White	0.126*** (0.042)	0.081 (0.090)	0.039 (0.101)
Education	-0.222*** (0.064)	-0.258* (0.135)	-0.360** (0.151)
Activism	-0.188* (0.101)	-0.808*** (0.212)	-1.305*** (0.237)
Pre-election trust	-0.525*** (0.120)	-1.273*** (0.276)	-1.107*** (0.309)
Strong partisan	2.801*** (0.099)	4.357*** (0.220)	4.132*** (0.246)
N	844	590	590
R <sup>2</sup>	0.054	0.081	0.113

\*p < .1; \*\*p < .05; \*\*\*p < .01

Table 11: *Regression Estimates of Trust in Government Among Democrats.* This shows the relationship between anger and trust in government for those respondents who self-identify as Democrats. Though the relationship between anger and trust in government is weaker here than in the original specification found in the paper (Table 1), the results still suggest that anger shapes the ways in which citizens view the national government. Note that all independent variables are scaled to range from 0-1.

	Govt. Does What is Right	Govt. Wastes Money	Govt. Run by Big Interests
	OLS	OLS	Logit
Anger	0.925*** (0.253)	0.130 (0.111)	2.082*** (0.745)
Democrat	-0.140* (0.083)	-0.200*** (0.037)	-0.269 (0.234)
Ideology	-0.131 (0.210)	-0.133 (0.091)	-0.995* (0.581)
Female	-0.114 (0.078)	-0.019 (0.035)	-0.297 (0.214)
Non-White	-0.174** (0.086)	-0.004 (0.037)	-0.382* (0.222)
Education	-0.161 (0.116)	-0.186*** (0.053)	-0.445 (0.322)
Activism	-0.328 (0.211)	0.031 (0.091)	0.702 (0.579)
Strong partisan	-0.100 (0.091)	-0.029 (0.040)	-0.578** (0.234)
Constant	3.741*** (0.178)	2.938*** (0.078)	2.445*** (0.498)
N	419	849	843
R <sup>2</sup>	0.077	0.065	
Adjusted R <sup>2</sup>	0.059	0.056	
Log Likelihood			-309.898
Residual Std. Error	0.784 (df = 410)	0.498 (df = 840)	
F Statistic	4.276*** (df = 8; 410)	7.290*** (df = 8; 840)	
AIC			637.796

\*p < .1; \*\*p < .05; \*\*\*p < .01

Table 12: *Regression Estimates of Trust in Government, With Generalized Measures of Anger and Alternative Dependent Variables.* This table shows that generalized apolitical anger is still predictive of trust in government across different dependent variables, and while controlling for strength of partisanship. Note that all independent variables are scaled to range from 0-1.

## A Survey Questions

1. In what year were you born?
2. Are you male or female?
3. Which of the following race or ethnic groups do you most identify with?
  - White, non-Hispanic
  - Black, non-Hispanic
  - Asian, native Hawaiian, or other Pacific Islander
  - Native American
  - Hispanic
  - Other
4. What is your highest level of educational attainment?
  - High school graduate or G.E.D.
  - Some college but no degree
  - Associates degree
  - Bachelor's degree
  - Post-graduate degree
  - Professional degree
5. Where would you place yourself on the following party identification scale?
  - (a) Strong Democrat
  - (b) Weak Democrat
  - (c) Independent but lean Democrat
  - (d) Completely Independent
  - (e) Independent but lean Republican
  - (f) Weak Republican
  - (g) Strong Republican
6. Where would you rate yourself on the following political ideology scale?
  - (a) Very liberal
  - (b) Liberal
  - (c) Slightly liberal
  - (d) Moderate; middle of the road
  - (e) Slightly conservative

- (f) Conservative
- (g) Very conservative

7. Thinking back over the last year, what was your family's annual income?

- Less than \$10,000
- \$10,000 - \$19,999
- \$20,000 - \$29,999
- \$30,000 - \$39,999
- \$40,000 - \$49,999
- \$50,000 - \$59,999
- \$60,000 - \$69,999
- \$70,000 - \$79,999
- \$80,000 - \$89,999
- \$90,000 - \$99,999
- \$100,000 - \$124,999
- \$125,000 - \$149,999
- \$150,000 - \$174,999
- \$175,000 - \$199,999
- \$200,000 - \$249,999
- \$250,000+
- Prefer not to say

8. How important is religion in your life?

- Very important
- Somewhat important
- Not too important
- Not at all

9. Aside from weddings and funerals, how often do you attend religious services?

- More than once a week
- Once a week
- Once or twice a month
- A few times a year
- Seldom
- Never

10. What is your present religion, if any?
  - Protestant
  - Roman Catholic
  - Mormon
  - Jewish
  - Muslim
  - Buddhist
  - Hindu
  - Atheist
  - Agnostic
  - Something else
11. Did you vote in the 2016 presidential primary?
12. Even if you did not vote in a primary or caucus, which candidate did you support?
13. How many days per week do you talk to your neighbors or friends about politics?
14. Have you canvassed on behalf of a candidate during this election cycle?
15. Have you displayed a yard sign for a candidate during this election cycle?
16. Have you attempted to influence another person's vote choice during this election cycle?
17. Have you donated money to a candidate or political campaign during this election cycle?
18. If you have donated to a candidate or political campaign during this election cycle, approximately how much money did you donate?
19. Which of the following best represents your view on abortion?
  - By law, abortion should never be permitted.
  - The law should permit abortion only in case of rape, incest, or when the woman's life is in danger.
  - The law should permit abortion for reasons other than rape, incest, or danger to the woman's life, but only after the need for the abortion has been clearly established.
  - By law, a woman should always be able to obtain an abortion as a matter of personal choice.
20. At present, anyone born in the United States is a citizen. Should the United States government deny automatic citizenship to American-born children of illegal immigrants?
  - Yes
  - No

- I have no opinion on this issue
21. Do you favor or oppose allowing gays and lesbians to marry legally?
- Favor
  - Oppose
  - Oppose same-sex marriage but support civil unions
22. Affirmative action programs give preference to racial minorities in employment and college admissions in order to correct for past discrimination. Do you support or oppose affirmative action?
- Strongly support
  - Somewhat support
  - Undecided
  - Somewhat oppose
  - Strongly oppose
23. In general, do you feel that the laws covering the sale of firearms should be...
- More strict
  - Less strict
  - Kept as they are
24. From what you know about global climate change or global warming, which one of the following statements comes closest to your opinion?
- Global climate change has been established as a serious problem, and immediate action is necessary.
  - There is enough evidence that climate change is taking place and some action should be taken.
  - We don't know enough about global climate change, and more research is necessary before we take any actions.
  - Concern about global climate change is exaggerated. No action is necessary.
  - Global climate change is not occurring; this is not a real issue.

Please indicate, according to the following scale, how accurate each of these statements are as a description of yourself.

1 = Very Inaccurate; 2 = Moderately Inaccurate; 3 = Neither Inaccurate nor Accurate; 4 = Moderately Accurate; 5 = Very Accurate

I ...

- |   |                             |
|---|-----------------------------|
| 1. Worry about things.                                  | 11. Get angry easily.       |
| 2. Fear for the worst.                                  | 12. Get irritated easily.   |
| 3. Am afraid of many things.                            | 13. Get upset easily.       |
| 4. Get stressed out easily.                             | 14. Am often in a bad mood. |
| 5. Get caught up in my problems.                        | 15. Lose my temper.         |
| 6. Am not easily bothered by things.                    | 16. Rarely get irritated.   |
| 7. Am relaxed most of the time.                         | 17. Seldom get mad.         |
| 8. Am not easily disturbed by events.                   | 18. Am not easily annoyed.  |
| 9. Don't worry about things that have already happened. | 19. Keep my cool.           |
| 10. Adapt easily to new situations.                     | 20. Rarely complain.        |

Please indicate how well the following statements describe yourself on the following scale:

0 = disagree strongly; 1 = disagree moderately; 2 = disagree a little; 3 = neither agree nor disagree; 4 = agree a little; 5 = agree moderately; 6 = agree strongly

I see myself as:

1. Extraverted, enthusiastic.
2. Critical, quarrelsome.
3. Dependable, self-disciplined.
4. Anxious, easily upset.
5. Open to new experiences, complex.
6. Reserved, quiet.
7. Sympathetic, warm.
8. Disorganized, careless.
9. Calm, emotionally stable.
10. Conventional, uncreative.

## **B Experimental manipulation**

*Anger treatment:* Please write a short paragraph about a time you felt very angry. Be sure to describe precisely how this experience made you feel.

Anger + salience treatment: Please write a short paragraph about a time you felt very angry about politics. Be sure to describe precisely how this experience made you feel.

Salience treatment: Please write a short paragraph about a time you thought about politics. Be sure to describe precisely how this experience made you feel.

Control: Please write a short paragraph about what you ate for breakfast this morning. Be sure to describe precisely how this experience made you feel.

## **C Post-experiment survey**

1. How important is it that your party's nominee be willing to compromise versus maintain their convictions when dealing with members of the other party?
  - Not at all important
  - Not very important
  - Somewhat important
  - Important
  - Very important
2. How much do you think the political problems facing our country today can be blamed on the opposing political party?
  - Not at all
  - Not very much
  - A little bit
  - A lot
  - Completely
3. On a 0-10 scale, where zero indicates "not at all" and ten represents "completely agree," how much do you agree with the following statement: The national government is relatively corrupt and uncommitted to serving the public interest.
4. On a 0-10 scale, where zero indicates "not at all" and ten represents "completely agree," how much do you agree with the following statement: The national government is unresponsive to the concerns and interests of the public.
5. On a 0-10 scale, where zero indicates "not at all satisfied" and ten represents "completely satisfied," how much do you agree with the following statement: I am satisfied with the policies and actions of the national government.