Conspiracy Endorsement as Motivated Reasoning: The Moderating Roles of Political Knowledge and Trust

Joanne M. MillerUniversity of MinnesotaKyle L. SaundersColorado State UniversityChristina E. FarhartUniversity of Minnesota

Abstract: Given the potential political and social significance of conspiracy beliefs, a substantial and growing body of work examines the individual-level correlates of belief in conspiracy theories and general conspiratorial predispositions. However, although we know much about the psychological antecedents of conspiracy endorsement, we know less about the individual-level political causes of these prevalent and consequential beliefs. Our work draws from the extant literature to posit that endorsement of conspiracy theories is a motivated process that serves both ideological and psychological needs. In doing so, we develop a theory that identifies a particular type of person—one who is both highly knowledgeable about politics and lacking in trust—who is most susceptible to ideologically motivated conspiracy endorsement. Further, we demonstrate that the moderators of belief in conspiracy theories are strikingly different for conservatives and liberals.

Replication Materials: The data, code, and any additional materials required to replicate all analyses in this article are available on the *American Journal of Political Science* Dataverse within the Harvard Dataverse Network, at: http://dx.doi.org/10.7910/DVN/O3A06T.

P resident Obama was not born in the United States. Sandy Hook was a hoax. The Bush Administration knew about the 9/11 plot before it happened. John F. Kennedy was assassinated by the CIA. Contrary to the popular conception that conspiracy theorists are a small group of tinfoil hat–wearing men who spend most of their time in bunkers, conspiracy theories (CTs) are not solely the domain of extremists and paranoids. They cut across demographics and political attitudes (e.g., Goertzel 1994) and are common in countries across the globe (e.g., Byford and Billig 2001; Zonis and Joseph 1994). They are also pervasive: Oliver and Wood (2014, 953) report that across recent nationally representative surveys, "over half of the American population consistently endorse some kind of conspiratorial narrative about a current political event or phenomenon."

Not only are such beliefs prevalent, but given the advances in information technology and social media, as well as individuals' tendencies to sort themselves into attitude-consistent silos, even ideas with little basis in fact have the potential to quickly spread unchecked. Moreover, given the nature of CTs, they are just as likely to be generated and spread horizontally as they are to be transmitted from elites to the masses. Any individual can theorize about the causes of an event (or whether the event even happened) and then throw his or her theory

American Journal of Political Science, Vol. 00, No. 0, xxxx 2015, Pp. 1-21

©2015, Midwest Political Science Association

Joanne M. Miller is Associate Professor of Political Science, Department of Political Science, University of Minnesota, 267 19th Avenue South, 1414 Social Sciences Building, Minneapolis, MN 55455 (jomiller@umn.edu). Kyle L. Saunders is Associate Professor of Political Science, Department of Political Science, Clark Building C346, Colorado State University, Campus Delivery 1782, Fort Collins, CO 80523-1782 (kyle.saunders@colostate.edu). Christina E. Farhart is Ph.D. Candidate, Department of Political Science, University of Minnesota, 267 19th Avenue South, 1414 Social Sciences Building, Minneapolis, MN 55455 (farh0013@umn.edu).

We would like to thank the anonymous reviewers and Editor William Jacoby for a helpful review process. We would also like to acknowledge Adam Berinsky, Bud Duvall, Christopher Federico, Paul Goren, Jennifer Jerit, Howie Lavine, Brendan Nyhan, members of the University of Minnesota's Political Psychology Proseminar, and Joe Uscinski, Casey Klofstad, and the participants at the Conspiracy Theory Conference held at the University of Miami in March 2015 for their advice and early-stage feedback. Any errors are solely the responsibility of the authors. An earlier version of this article received the Paul Lazarsfeld Award, which recognizes the best paper on political communication presented at the previous year's (2014) Annual Meeting of the American Political Science Association.

against the proverbial Internet wall and see if it sticks. Alternatively, attentive citizens can pick up on and spread CTs espoused by political elites.

Although CTs are not solely the domain of extremists, the beliefs themselves are, undoubtedly, extreme. To an outside observer a particular CT may seem irrational, but that does not preclude its potential to be socially or politically consequential. For example, parents' decisions to forego vaccinating a child, arising from the belief that they are being misled about the safety of vaccines, can have significant negative consequences for public health. And the more people who believe that tragic events such as the Sandy Hook massacre are hoaxes, the less of an outcry there will be for legislation to prevent similar tragedies in the future. Conspiracy beliefs can also distract political elites from attending to more pressing public policy concerns. Consistent with this view, Politico (Bresnahan, French, and Sherman 2014) reported that, as of May 2014, there had been "13 hearings, 25,000 pages of documents and 50 briefings" on the 2012 Benghazi attack. Uscinski and Parent (2014, 5) further elaborate on this notion:

To address the widespread belief that he was born abroad, Barack Obama had to put aside the faltering economy, two wars, and the national debt to hold a press conference for the sole purpose of releasing his long-form birth certificate. During the George W. Bush Administration, the 9/11 Commission was designed partly as a response to conspiracy theories accusing Bush and Dick Cheney of staging the attacks on the Twin Towers and Pentagon.

Given the potential political and social significance of conspiracy beliefs, a growing body of work examines the individual-level correlates of belief in CTs and general conspiratorial predispositions. However, as we discuss below, although we know much about the *psychological* antecedents of conspiracy endorsement, we know less about the individual-level *political* causes of these prevalent and consequential beliefs.

Our work draws from the extant literature to posit that endorsement of CTs is a motivated process that serves both ideological and psychological needs. Specifically, we develop a theory that argues that the tendency to endorse a CT is highest among people who 1) have a particular ideological worldview to which the CT can be linked, 2) have the motivation to protect that worldview and the ability to see how endorsing the conspiracy would serve that purpose (i.e., political sophisticates), and 3) believe that the world is the type of place in which secretive, malevolent actions are not only possible, but also probable (i.e., people low in trust). In other words, our theory identifies a particular type of person—one who is both highly knowledgeable about politics and lacking in trust—as being most susceptible to ideologically-motivated conspiracy endorsement. Further, we demonstrate that the moderators of belief in CTs are strikingly different for conservatives and liberals.

Conspiracy Theories and the Impact of Anxiety and Needs for Certainty and Control

Conspiracy theories are a species of a broader genus of political misinformation that have been the focus of recent political science research (e.g., Kahan 2013; Nyhan and Reifler 2010; Oliver and Wood 2014; Uscinski and Parent 2014). Sunstein and Vermeule (2009, 205) define a CT as "an effort to explain some event or practice by reference to the machinations of powerful people, who attempt to conceal their role." Similarly, Uscinski and Parent (2014, 31) define a conspiracy as a "secret arrangement between two or more actors to usurp political or economic power, violate established rights, hoard vital secrets, or unlawfully alter government institutions ... A key point is that conspiracies speak to actual events that have occurred or are occurring." What most definitions have in common is the notion that conspiracies compose the belief that actors, usually more powerful than the average citizen, are engaging in wide-ranging, "black-boxed" activities to which individuals can attribute an insidious explanation to a confusing event.

Harkening back to Hofstadter (1965), scholars have argued that believing in CTs satisfies the epistemic needs for order, certainty, and control (Sunstein 2014; Swami and Coles 2010). That is, dispositional or situational factors may induce people to seek a coherent, connective thread between a series of complicated or seemingly random events, which often leads to the positing of a conspiracy. However far-fetched the theory might be, tying up confusing events with a simple, neat conspiratorial bow fulfills the individual's need for order and reduces concomitant anxiety. Consistent with this reasoning, endorsement is correlated with authoritarianism, feelings of alienation, and the needs for order, cognitive closure, and control (e.g., Abalakina-Paap et al. 1999; Swami 2012).

The Impact of Motivated Reasoning

Despite the consistent evidence regarding the psychological needs that conspiracy endorsement satisfies, as Uscinski and Parent (2014, 11) rightly note, this explanation is incomplete: "Lots of stimuli stress people; not all of them increase conspiracy theorizing. Conspiratorial beliefs are common and consistent; major disasters are not. ... People primed to see conspiracy theories could see an infinite number of them but do not." As such, a parallel strand of thought argues that conspiracy endorsement is a form of motivated reasoning (or "directional reasoning"; Kunda 1990), which is the notion that people are motivated to engage in reasoning processes aimed at maintaining or bolstering their attitudes in the face of attitudechallenging information (e.g., Kunda 1990; Lodge and Taber 2013).

Given the political nature of many CTs, endorsing ones that attribute nefarious intent to political opponents can serve an ideological worldview-confirming function by reinforcing one's political views through impugning opposing viewpoints (Kahan, Jenkins-Smith, and Braman 2011). Once a CT is endorsed, confirmation bias often kicks in, leading individuals to seek out and perceive consistent information, thus solidifying the belief. Conspiracy beliefs are therefore much like any other political attitude: "a marriage of predispositions and information" (Zaller 1992, 6, as quoted in Uscinski and Parent 2014).¹

Not surprisingly, therefore, one set of predispositions that consistently predict *which* conspiracies individuals will endorse is political ideology (Nisbet, Cooper, and Garrett 2015; Nyhan 2009; Oliver and Wood 2014; Uscinski and Parent 2014). As Jost, Federico, and Napier (2013, 242) posit, "ideology is not merely an 'organizing device' or a shortcut for making heuristic judgments about politics; it is also a motivational device for justifying or rationalizing the way things are or, alternatively, how things should be different than they are." Party identification is also correlated with endorsement of conspiracy theories that make the rival party look bad (e.g.,

Berinsky 2012). However, extant literature demonstrates that party identification is a social identity (Greene 2004) that reflects solidarity with one's electoral "team" (e.g., Green et al. 2002). This is in contrast to ideology, which is an organizing device for one's political worldview (e.g., Lane 1962). Given that we are testing hypotheses derived from the notion that conspiracy endorsement is the result of the desire to protect or bolster one's political worldview, ideology is the more theoretically on-point political antecedent (we replicate our analyses with party identification; see Footnote 12). Whereas Hofstadter (1965) argued that conspiratorial narratives originate with the political right, Oliver and Wood (2014) demonstrate that conspiracism is not limited to just one side of the ideological spectrum. We therefore expect both liberals and conservatives to engage in motivated reasoning by endorsing ideologically consistent CTs.

However, the political context may differentially affect the strength of conservatives' versus liberals' motivation to engage in this type of worldview-confirming reasoning. Specifically, Uscinski and Parent (2014) show that the villains of CTs proffered in letters to the editor of the New York Times between 1890 and 2010 were much more likely to be affiliated with the party in power. According to the authors, "Sharing conspiracy theories provides a way for groups falling in the pecking order to revamp and recoup from losses. . . . The tendency of conspiracy theorists to scapegoat, however reprehensible, channels anger, avoids internecine recriminations, and aims at redemption" (132). The individual-level explanation for their macroevel finding is consistent with the motivated reasoning argument posited above. That is, "conspiracy theories are for [ideologically motivated] losers" (130). Therefore, in addition to the expectation that conservatives are more likely to endorse conspiracies that impugn liberals and vice versa, given that our data were collected during the Obama Administration, we hypothesize that conservatives will engage in ideologically motivated conspiracy endorsement to a greater extent than will liberals.

Although research has provided support for the notion that liberals and conservatives endorse different conspiracies, this, too, cannot be the whole story. Not all conservatives endorse CTs that implicate liberals, and not all liberals endorse CTs that implicate conservatives. To date, there has been a dearth of theorizing about the moderators of ideologically motivated conspiracy endorsement; we develop and test a theory that focuses on political knowledge (hereafter "knowledge"), trust, and the interaction between the two as potential moderators.

¹One might wonder if conspiracy endorsement is a reflection of a true belief, or whether it is merely a symbolic expression of broader political attitudes or affiliations. From a motivated reasoning perspective, the "true belief" versus "expressive" distinction seems to us to be less of a concern, as we would consider either as being driven, at least in part, by directional goals. However, this distinction has implications for the downstream political/social consequences of endorsement. Two strains of evidence support the proposition that conspiracy endorsement is more likely than not an expression of true beliefs (ergo, we use the words endorsement and *belief* interchangeably). First, if endorsement was more like a "badge of membership," we might expect beliefs to be less "sticky." In contrast, research has shown that conspiracy beliefs and misinformation are highly resistant to change (Berinsky 2015a; Nyhan and Reifler 2010). Second, studies aimed at reducing expressive responding to questions such as "Is Obama a Muslim?" conclude that responses to this question are more likely than not sincere beliefs (Berinsky 2015b); in the absence of evidence to the contrary, we suspect that these findings would generalize to CTs.

Knowledge as a Moderator of Motivated Conspiracy Endorsement

Many CTs are political in nature, involving government plots, nefarious acts, and/or cover-ups; therefore, we would expect political variables such as sophistication/knowledge to be correlated with endorsement. However, since much of the empirical research on the antecedents of conspiracy beliefs has been conducted by psychologists, knowledge has rarely been examined as a possible correlate. The one exception is Berinsky (2012), who finds that people higher in knowledge are less likely to endorse political rumors and conspiracies than their low-knowledge counterparts (see also Bolsen, Druckman, and Cook 2015). So, given that less knowledgeable people are more likely to endorse CTs in general, we might expect that less knowledgeable conservatives and liberals will be more likely to endorse worldview-confirming CTs than their more knowledgeable counterparts.

In contrast to this intuitive hypothesis, a wealth of research finds that knowledge is not the panacea that normative democratic theorists hold it up to be. Knowledge exacerbates all sorts of instantiations of motivated reasoning and heuristic processing more generally (Bartels 2008; Lau and Redlawsk 2001; Lodge and Taber 2013). For example, Taber and Lodge's (2006) experiment demonstrated that when given the same number of pro and con arguments about an issue, nonsophisticates chose to look at a balanced number of pro and con arguments, whereas sophisticates chose to look at a higher proportion of attitude-*consistent* than attitude-*inconsistent* arguments. As a result of their biased exposure, political sophisticates' attitudes polarized in the direction of their predispositions.

The mechanism behind this effect is likely twofold. First, people higher in political sophistication have the ability to make connections between abstract principles and more concrete attitudes and are therefore more fully able to notice the implications of specific attitudes for their worldviews. Second, because politically knowledgeable people care more about politics and hold stronger political attitudes, they are especially likely to want to protect those attitudes. The combination of greater ability and greater motivation is a perfect storm for worldviewconfirming motivated reasoning. Therefore, contrary to conventional wisdom, we hypothesize that knowledge will have a similar exacerbating effect on ideologically motivated endorsement-high-knowledge conservatives and liberals will be more likely to endorse conspiracies that impugn their political rivals than their low-knowledge counterparts. Furthermore, given the logic of the "conspiracy theories are for ideologically-motivated losers"

argument described above, we also expect that knowledge will have a greater positive effect on endorsement of ideologically-consistent CTs among conservatives than among liberals.

Is Motivated Conspiracy Endorsement Ubiquitous? The Role of Trust

According to Lodge and Taber (2013), motivated reasoning is pervasive. Specifically, they argue that "citizens are rarely, *we believe never*, dispassionate when thinking about politics.... Citizens are inclined to think what they feel, and defend these feelings through motivated reasoning processes" (149, emphasis added). However, contrary to the assertion that motivated reasoning is ubiquitous, Kunda argues that there are boundary conditions to directional reasoning:

People do not seem to be at liberty to conclude whatever they want to conclude merely because they want to. Rather, I propose that people motivated to arrive at a particular conclusion attempt to be rational and construct a justification of their desired conclusion that would persuade a dispassionate observer. They draw the desired conclusion only if they can muster up the evidence necessary to support it. In other words, they maintain an "illusion of objectivity." (1990, 482–83)

Consistent with Kunda, a variety of individual-level and contextual factors have been shown to mitigate motivated reasoning, such as inducing an accuracy motive (Bolsen, Druckman, and Cook 2014; Prior, Sood, and Khanna 2013) and exposing people to competing viewpoints (Chong and Druckman 2007). Individuals who are both high in need for cognition and low in need to evaluate are less likely to engage in motivated reasoning (Nir 2011), as are ambivalent individuals (Lavine, Johnston, and Steenbergen 2012). Redlawsk, Civettini, and Emmerson (2010) provide experimental evidence showing that, in the face of increasing information that disconfirms a preexisting attitude, individuals eventually reach an "affective tipping point" when motivated reasoning ceases and an accuracy motive kicks in.

In light of this evidence that there are, in fact, individual- and contextual-level factors that mitigate motivated reasoning in general, we theorize that one factor that will mitigate ideologically driven endorsement of CTs is trust. Conspiracy theory endorsement is a unique and extreme form of motivated reasoning. In order to believe, for example, that President Obama was not born in the United States, one must believe in a vast conspiracy of people working to hide the President's true birth records, and that those people are willing to keep those lies and behaviors to themselves over a long period of time. It is therefore not surprising that trust is negatively correlated with belief in CTs in general (Abalakina-Paap et al. 1999; Swami, Chamorro-Premuzic, and Furnham 2010). We argue, similar to Kunda (1990, 483), that liberals and conservatives (who are highly motivated and/or able to do so) might not be able to "muster up the evidence necessary" to bring themselves to endorse worldview-confirming CTs if they also believe that people and political institutions are trustworthy; trust, we hypothesize, will "turn off" (or at least mitigate) the motivated endorsement of conspiracies.

Putting our theory about the moderating roles of knowledge and trust together, we hypothesize that trust will mitigate the positive effect of knowledge on endorsement of ideologically congruent CTs. We suggest that the positive effect of knowledge will appear among low-trust respondents but will be attenuated among high-trust respondents. Again, consistent with the "conspiracy theories are for ideologically motivated losers" argument, we expect that the three-way interaction will be larger for conservative CTs (i.e., CTs that impugn liberals) than for liberal CTs (i.e., CTs that impugn conservatives).

To summarize, after confirming that conservatives are more likely to endorse liberal-impugning CTs and vice versa, we test the following hypotheses:

H1: Larger Main Effect of Ideology on Conservative CTs: We expect that conservatives will evidence greater motivated conspiracy endorsement than liberals, as indicated by a larger ideology coefficient for conservative CTs than for liberal CTs. This would be consistent with the "conspiracy theories are for ideologically motivated losers" argument.

H2: Two-Way Interaction between Ideology and Knowledge: Knowledge will moderate the effect of ideology on conspiracy endorsement, such that the more knowledgeable conservatives/liberals are, the *more* likely they will be to endorse ideologically consistent CTs.

H2.1: Larger Two-Way Ideology and Knowledge Interaction for Conservative CTs: Consistent with the "conspiracy theories are for ideologically motivated losers" argument, we expect that the two-way interaction between ideology and knowledge will be larger for conservative CTs than for liberal CTs.

H3: Three-Way Interaction among Ideology, Knowledge, and Trust: Knowledge and trust will interact with ideology to moderate conspiracy endorsement, such that knowledge will have a *positive* effect on endorsement of ideologically consistent CTs among low-trust conservatives/liberals, but a *negative* effect on endorsement of ideologically consistent CTs among high-trust conservatives/liberals (or that knowledge will not moderate ideologically motivated endorsement among high-trust conservatives/liberals). That is, trust will "turn off" the positive effect of knowledge on conspiracy beliefs.

H3.1: Larger Three-Way Interaction for Conservative CTs: Consistent with the "conspiracy theories are for ideologically motivated losers" argument, we expect that the three-way interaction among ideology, knowledge, and trust will be larger for conservative CTs than for liberal CTs.

Description of Studies and Measures

To test these hypotheses, we analyzed two sets of data an original online survey administered via Amazon.com's Mechanical Turk (MTurk) and the 2012 American National Election Study (ANES) Time Series survey.

MTurk Study

We recruited approximately 3,000 U.S. adults from MTurk (our analyses focus on the 2,203 self-identified conservatives and liberals). The survey was in the field from November 21 to December 13, 2013. The use of MTurk in social science research is growing in popularity, as it provides access to more demographically diverse samples of the U.S. voting-age population than student-convenience and non-probability Internet samples (see Berinsky, Huber, and Lenz 2012; Buhrmester, Kwang, and Gosling 2011).

Dependent Variables. To assess conspiracy endorsement, we selected eight questions that met the following criteria: (1) they fit the definition of a CT outlined above, (2) they are relatively familiar to our respondents, and (3) they are political and ideological in nature.

We began with the four conspiracy beliefs that were assessed in the 2012 ANES (for replication purposes). Two were items that we suspected conservatives would be more likely to endorse: Obama was not born in the United States, and the 2010 Affordable Care Act included death panels. The other two were items that we suspected liberals would be more likely to endorse: The government intentionally breached flood levees during Hurricane Katrina to protect middle-class homes, and the Bush Administration knew about 9/11 before it happened.

We also included four additional questions—two we suspected conservatives would be more likely to endorse (global warming is a hoax, and Saddam Hussein was involved in the 9/11 attacks) and two we suspected liberals would be more likely to endorse (Republicans stole the 2004 election via voter fraud in Ohio, and the Bush Administration misled the public about the presence of weapons of mass destruction in Iraq). See Appendix A for question wordings.

Although all eight of the conspiracy questions fit the criteria outlined above, the fact that we are assessing endorsement in conspiracies that arose organically and involve real-world political actors and controversies means that the conspiracies naturally vary on a number of dimensions besides the ideology of the perpetrator(s). One of the consequences of our design, then, is that we gain realism at the expense of absolute parallelism (the differences between the conservative and liberal items may provide an alternative explanation for our results, a point to which we return in the discussion).

The eight conspiracy questions each had four response options, which were coded to range from 0 to 1, with higher numbers representing greater endorsement. We then averaged the four conspiracies that we suspected would be more attractive to conservatives to create a *conservative index*, and did the same for the four conspiracies that we suspected would be more attractive to liberals, to create a *liberal index*.²

Explanatory Variables. Our primary explanatory variables are ideology, knowledge, and trust. For political ideology, we recoded the standard 7-point ideology measure into a conservative dummy variable. Respondents who said they were "extremely conservative," "conservative," or "slightly conservative" were coded as 1, and those who said they were "extremely liberal," "liberal," or "slightly liberal" were coded as 0.

Our knowledge index is an average of the responses to 14 multiple-choice questions about politics. Each answer was coded 1 for correct and 0 for incorrect or skipped; the scale ranges from 0 to 1 with an alpha of .85.

Our trust index is an average of responses to four questions (each had four response options, which were coded to range from 0 to 1 such that higher numbers equal greater trust) that assessed how much of the time respondents thought that (1) the federal government, (2)

law enforcement, (3) the media, and (4) people in general can be trusted to do what is right ($\alpha = .58$).

We control for the following (all coded to range from 0 to 1): authoritarianism, the Big Five personality constructs, need for cognition, need to evaluate, ideological extremity, external political efficacy, attitudes toward the federal government, religiosity, education, income, gender, age, ethnicity, and race.

2012 ANES Study

Given that the MTurk study is an Internet survey with a convenience sample, we also tested our hypotheses using the Internet mode of the 2012 ANES Time Series Study (to eliminate survey mode as a potential confound). So, for the purpose of our replication, we focused on the 2,485 conservatives and liberals in the ANES Internet sample.³

Dependent Variables. As with the MTurk study, we created two conspiracy theory indices. The *conservative index* was an average of the following two items that we suspected would be more attractive to conservatives: Obama was not born in the United States, and the 2010 health care reform act includes death panels. The *liberal index* is an average of the following two items that we suspected would be more attractive to liberals: The government intentionally breached flood levees during Hurricane Katrina, and the Bush Administration knew about 9/11 before it happened. The response options were the same as in the MTurk study and were coded to range from 0 to 1, with higher numbers representing greater endorsement.⁴ See Appendix A for the ANES variable names that correspond to all of the MTurk questions.

Explanatory Variables. Political ideology was measured and coded exactly as in the MTurk study. To measure knowledge, we averaged the responses to 10 multiple-choice and open-ended questions about politics (coded 1 for correct and 0 for incorrect, "don't know," or missing; $\alpha = .72$).

The 2012 ANES assessed trust in the federal government and trust in people in general (but not trust in the media or the police). The trust in people question was measured on a 5-point scale. The trust in government question was part of a question wording experiment. Half of the respondents were given three response options, and

²An iterated principal components analysis confirmed that the items compose two factors, with the four "conservative" items loading on the first factor and the four "liberal" items loading on the second factor.

³Analyses combining the face-to-face and Internet modes yield similar results.

⁴An iterated principal components analysis confirmed that the items compose two factors, as with the MTurk study.

the other half were given five. Therefore, we standardized the responses to the trust in government question and collapsed the standardized responses across the two groups. We then averaged the standardized trust in government and standardized trust in people questions to create an index of generalized trust that has a mean of zero. Given the need for standardization, the ANES trust measure is the only variable in any of our analyses that does not range from 0 to 1.5

Results

Recognizing that one of our studies is conducted with a convenience sample, we begin by comparing the distributions of the MTurk and ANES samples on demographics and our main variables. We then move on to testing our hypotheses. To foreshadow—not only are the samples remarkably similar on our variables of interest, but so are the results of our hypothesis tests; our findings are robust across two very different samples using different measures.

A Snapshot of the Two Data Sets: More Similarities Than Differences

We first compared the demographic characteristics of the ANES Internet (weighted) sample to the MTurk sample. As Appendix B shows, consistent with past findings (e.g., Berinsky, Huber, and Lenz 2012, although their comparison is to unweighted ANES data), MTurk respondents are considerably younger and slightly more educated than ANES respondents. The MTurk sample is also composed of more women and more Caucasians than the ANES sample. In addition to the demographic differences, the percentages of liberals and conservatives in the samples (after the pure moderates were removed) are quite different from one another.⁶

Aside from the differences in the ideology percentages, it is possible that the conservatives (or liberals) who agree to participate in an MTurk study are different from those in the ANES on our variables of interest. This turns out not to be the case. The knowledge means and standard deviations for conservatives and liberals are very similar to one another both within and between surveys (.65/.24 and .66/.22 for the MTurk and .61/.23 and .62/.25 for the ANES conservatives and liberals, respectively).

To conduct the same comparison with trust, we standardized the MTurk trust variable so that it is comparable to the ANES measure. The means and standard deviations for conservatives and liberals are relatively similar on the standardized measures within each survey (-.04/.64 and .06/.66 for the MTurk and -.05/.67 and .07/.71 for the ANES conservatives and liberals, respectively).⁷

Next, we compared the means on the dependent variables—the individual conspiracy questions and the indices—for conservatives and liberals across the two data sources. As Table 1 shows, consistent with expectations, conservatives score higher (indicating greater endorsement) on both the conservative items and the conservative index, and liberals score higher on both the liberal items and the liberal index. All but one of the differences are statistically significant.

The means and mean differences between the two samples are remarkably consistent. Among the items that were worded exactly the same across the two surveys and the overall indices, the means are *almost identical*. For example, the means for conservatives and liberals on the "Obama not born in the United States" question were .40 and .09, respectively, for MTurk and .38 and .11 for ANES. Similarly, the means for conservatives and liberals on the "Katrina" question were .21 and .25 for MTurk, respectively, and .19 and .27 for ANES. The striking similarity between the convenience and representative samples foreshadows the consistency of the results of our hypothesis tests described below and should engender confidence that the findings are not an artifact of the MTurk nonprobability sample.

H1: Conservatives Endorse Ideologically Consistent Conspiracies More Than Liberals

The pattern of means displayed in Table 1 are consistent with the hypothesis that ideologically motivated conspiracy endorsement will be stronger for people whose ideology aligns with the party out of power. For example, the mean differences for the conservative index are larger than the mean differences for the liberal index (.26 and .26 for the ANES and MTurk conservative indices, respectively, versus –.06 and –.17 for the liberal indices).

To formally test Hypothesis 1 (that the ideology effect on the conservative index will be significantly larger

⁵The ANES analyses control for the same variables as in the MTurk study (except ANES did not include need for cognition); all control variables were recoded to range from 0 to 1. In the ANES, rather than the "federal power" measure used in our MTurk study, we rely on the federal government feeling thermometer.

⁶Without population benchmarks, it is impossible to determine which sample is more "off"; all we can say is that the percentages are different.

⁷See Appendix C for the cell counts of liberals and conservatives cross-tabbed with low and high knowledge and trust.

	Conservatives	Liberals	Difference	t-scores
Conservative Items				
Obama not born in United States (MTurk)	.40	.09	.31	22.97
Obama not born in United States (ANES)	.38	.11	.27	27.97
Death panels (MTurk)	.51	.24	.28	19.28
Death panels (ANES)	.51	.26	.24	20.98
Global warming is a hoax (MTurk)	.42	.09	.32	22.21
Hussein was involved in 9/11 (MTurk)	.46	.33	.13	9.12
Conservative Index (MTurk)	.45	.19	.26	29.46
Conservative Index (ANES)	.45	.19	.26	29.18
Liberal Items				
Intentional flood levee breach Katrina (MTurk)	.21	.25	03	2.90
Intentional flood levee breach Katrina (ANES)	.19	.27	07	7.67
Govt. knew about 9/11 (MTurk)	.42	.43	01	0.84
Govt. knew about 9/11 (ANES)	.37	.42	05	4.49
Republicans stole 2004 election (MTurk)	.25	.53	28	22.18
WMDs in Iraq (MTurk)	.46	.79	34	23.93
Liberal Index (MTurk)	.33	.50	17	16.92
Liberal Index (ANES)	.28	.34	06	7.11

TABLE 1 Means of Conspiracy Items and Indices Separately for Conservatives and Liberals

than the ideology effect on the liberal index), we first regressed the two indices (that range from 0 to 1) on the conservative dummy and controls (that also range from 0 to 1 save for trust in the ANES models).⁸ As columns 1–4 of Table 2 show, the findings are remarkably consistent across the two data sets (echoing the similarity of the mean differences reported in Table 1).⁹ In both studies, unsurprisingly, conservatives score significantly higher on the conservative index (b = .21 and b = .19) and significantly lower on the liberal index than liberals (b = -.18 and b = -.06). As expected, the effect of knowledge is negative and significant in all four models, and the effect of trust is negative in all four and significant in three.

To test whether the conservative dummy is a significantly larger predictor of the conservative index than the liberal index, we ran a seemingly unrelated regression on the two models within each data set reported in the first four columns of Table 2 (to compare the absolute value of the size of the conservative dummy coefficient predicting the conservative index versus the liberal index). The results confirm Hypothesis 1: The conservative dummy coefficient is statistically significantly larger for the conservative index than the liberal index, indicating that conservatives in our data sets are stronger motivated conspiracy endorsers than liberals (ANES: F(1, 2196) = 37.94, p < .001; MTurk: F(1, 1950) = 4.53, p < .05).

H2: The Moderating Role of Knowledge

To test whether knowledge exacerbates motivated reasoning, we added the interaction between the conservative dummy and knowledge to the main effect models. As columns 5 and 6 of Table 2 show, the interaction is positive and significant for the conservative index in both studies. The top panel of Figure 1 displays the shape of the interactions for the conservative index, as well as the coefficients and standard errors for the effect of knowledge among conservatives and liberals. As predicted, the knowledge effect is *positive* and significant among conservatives in both studies (b = .07 and .10 for MTurk and ANES, respectively). In contrast, the knowledge effect is *negative* and significant among liberals in both studies (b = -.30 and b = -.34 for MTurk and ANES, respectively).

A different interaction pattern emerges for the liberal index (see columns 7 and 8 of Table 2), but only among MTurk respondents. The bottom panel of Figure 1 displays the shapes of the statistically significant interaction for MTurk (left panel) and the nonsignificant interaction

⁸All ANES models use survey weights and robust standard errors. A replication using the *svy* suite of commands in STATA to adjust the standard errors to account for the stratified design yielded very similar results.

⁹For the full models, see Online Appendix Tables 1–3 in the supporting information.

Dredictors	lex	Ind	ral ex	Conser Ind	rvative lex	Libe Ind	ex ex	Conser Ind	rvative lex	Libo	eral lex
	ANES	MTurk	ANES	MTurk	ANES	MTurk	ANES	MTurk	ANES	MTurk	ANES
Model Number (1)	(2)	(3)	(4)	(5)	(9)	(2)	(8)	(6)	(10)	(11)	(12)
Conservative .21*	.19*	18*	06*	03	07*	02	06	09	07*	08	06
(.01)	(.01)	(.01)	(.01)	(.03)	(.03)	(.03)	(.03)	(20)	(.03)	(20.)	(.03)
Knowledge –.18*	09*	12*	21*	30*	34*	04	21*	26^{*}	35*	04	20^{*}
(.02)	(.03)	(.02)	(.03)	(.02)	(.04)	(.03)	(.04)	(90.)	(.04)	(90.)	(.04)
Trust –.08*	02*	30*	02	07*	03^{*}	31*	02	.07	03	31^{*}	.02
(.03)	(.01)	(.03)	(.01)	(.03)	(.01)	(.03)	(.01)	(60.)	(.03)	(.10)	(.04)
Conservative \times Knowledge				.36*	.44*	24^{*}	00	.59*	$.44^{*}$	15	01
				(.04)	(:05)	(.04)	(.05)	(.10)	(.05)	(.11)	(.05)
Conservative × Trust								.18	90.	.16	.01
								(.16)	(:05)	(.18)	(90.)
Knowledge $ imes$ Trust								10	.03	.01	07
								(.13)	(.05)	(.15)	(90.)
Conservative \times Knowledge \times Trust								63*	15*	25	.01
								(.23)	(.07)	(.26)	(.08)
Constant .20*	.32*	.72*	.68*	.29*	.45*	.66*	.68*	$.24^{*}$	$.46^{*}$.66*	.67*
(.03)	(.05)	(.03)	(.05)	(.03)	(.05)	(.04)	(.05)	(.05)	(.05)	(.05)	(0.05)
N 1951	2181	1951	2193	1951	2181	1951	2193	1951	2181	1951	2193
Adjusted R-squared .44	.35	.28	.19	.47	.39	.29	.19	.48	.39	.29	.19



FIGURE 1 Effect of Knowledge on Endorsement of Conservative Conspiracy Theories (Conservative Index) for Conservatives and Liberals and on Endorsement of Liberal Conspiracy Theories (Liberal Index) for Conservatives and Liberals

Notes: Values beside each simple slope represent respective unstandardized regression coefficients and standard error.

for ANES (right panel), as well as the coefficients and standard errors for the effect of knowledge among conservatives and among liberals. Among MTurk respondents, knowledge is not related to endorsement of the liberal CTs for liberals, but negatively related to endorsement for conservatives. Among ANES respondents, knowledge is negatively related to endorsement of the liberal conspiracies for both liberals and conservatives, but the slopes are not significantly different from one another.

In sum, our hypothesis that knowledge exacerbates ideologically motivated reasoning in the domain of conspiracy endorsement is confirmed, *but only for conservatives*. This pattern replicates across both the MTurk and ANES studies. The fact that the two-way interaction is significant (in the predicted direction) only on the conservative index confirms Hypothesis 2.1. To be clear, although we expected the interaction to be larger on the conservative index than the liberal index, we did, in fact, expect the interaction to be significant on the liberal index (a point to which we return in the discussion).

There is another way to interpret this pattern of results that is also consistent with a motivated reasoning story. Our second hypothesis was that high-knowledge respondents would be *more* likely to endorse CTs that impugned their rivals than would their low-knowledge counterparts. However, the theory of motivated reasoning would also predict that high-knowledge respondents would be *less* likely to endorse CTs that impugned their own group; knowledge should make it easier for respondents to counterargue ideologically incongruent conspiracies. This is exactly what we find (see Figure 1), save for the Ideology × Knowledge interaction for the ANES liberal index.

Specifically, there is no difference between scores on the conservative and liberal indices among the lowestknowledge conservatives and liberals. However, moving from lowest to highest knowledge, the lines "fan out." For the conservative index (in both studies), the knowledge slope for conservatives is statistically significant and positive, but for liberals it is statistically significant and steeply negative-the more knowledgeable liberals are, the less likely they are to endorse ideologically incongruent conspiracies. For the liberal index (MTurk only), whereas the knowledge slope for liberals is flat, for conservatives it is steep and negative (and statistically significant)-the more knowledgeable conservatives are, the less likely they are to endorse ideologically incongruent conspiracies. Thus, knowledge prompts only conservatives to be more likely to endorse ideologically congruent conspiracies, but knowledge prompts both conservatives and liberals to be less likely to endorse ideologically incongruent conspiracies. Interestingly, the "fanning out"

effect is not symmetrical; the knowledge slopes are steeper for ideologically incongruent than for ideologically congruent conspiracies. We suspect that this is because it is easier to disbelieve CTs than it is to believe them.¹⁰

H3: The Joint Moderating Role of Knowledge and Trust

We test our third hypothesis that trust will "turn off" the positive effect of knowledge on endorsement of ideologically consistent CTs by adding the three-way interaction between the conservative dummy, knowledge, and trust (as well as the constituent two-way interactions). As columns 9–12 of Table 2 show, as predicted, this three-way interaction is positive and statistically significant for the conservative index, but, unexpectedly, it is not significant for the liberal index in either study. Both the pattern and shape of the interactions for the conservative index are strikingly similar across the two studies.

To display the shape of the interactions, we dichotomized trust via median splits and then reran the analysis reported in columns 9-12 of Table 2 separately for respondents low and high in trust. Figure 2 displays the shape of the effect of knowledge (on scores on the conservative index) among conservatives and liberals who are either low or high in trust, as well as the coefficients and standard errors for the knowledge simple slopes, for both the MTurk and ANES respondents. Among low-trust respondents, the effect of knowledge on the conservative index is significant and *positive* for conservatives (b = .12and b = .15 for MTurk and ANES, respectively) and significant and *negative* for liberals (b = -.29 and b = -.43for MTurk and ANES, respectively). In contrast, the effect of knowledge on the conservative index is essentially flat among high-trust conservatives in both studies (as predicted), and significant and negative among high-trust liberals in both studies (b = -.30 and b = -.27 in MTurk and ANES, respectively).¹¹

Figure 3 displays the shape of the nonsignificant three-way interactions on the liberal index, again for both

¹⁰There is some precedent in the literature for weaker effects of knowledge/engagement on endorsement of agreeable ideas compared to rejection of disagreeable ideas (e.g., Goren, Federico, and Kittilson 2009; see also Gilbert, Tafarodi, and Malone 1993).

¹¹Another way to display the shape of the three-way interaction on the conservative index is to examine the (continuous) Trust × (continuous) Knowledge two-way interaction separately for conservatives and liberals. We ran these models (with controls). Consistent with Hypothesis 3, the Trust × Knowledge interaction was significant among conservatives in both the MTurk and ANES surveys (b = -.62, SE = .21 and b = -.11, SE = .05, respectively) but not among liberals in either the MTurk or ANES surveys (b = -.10, SE = .11 and b = .01, SE = .05, respectively).





Notes: Values beside each simple slope represent respective unstandardized regression coefficients and standard errors.

Conservative -----

Political Knowledge

Political Knowledge

Liberal -





Notes: Values beside each simple slope represent respective unstandardized regression coefficients and standard errors.

MTurk and ANES. The fact that the predicted three-way interaction obtains for the conservative index but not the liberal index is consistent with Hypothesis 3.1. We did not anticipate that the three-way interaction would *not* be statistically significant for the liberal index (only that it would be smaller); we return to this point in the discussion.

In sum, the combination of high knowledge and low trust is the perfect storm for ideologically motivated conspiracy endorsement for conservatives, but not for liberals. Among liberals, knowledge and trust have independent, negative effects on the tendency to endorse ideologically consistent CTs-liberals who are more knowledgeable about politics or who are high in trust are less likely to engage in this type of motivated reasoning. In contrast, among conservatives, knowledge and trust have an interactive effect-highly knowledgeable conservatives are more likely to engage in ideologically motivated endorsement, especially if they believe that the world is an untrustworthy place. Knowledge has no effect on conservatives' tendency to engage in this type of motivated reasoning if they are also high in trust. In other words, high-knowledge conservatives, who have the motivation and/or ability to understand that endorsing CTs that impugn their political nemeses would be worldview-confirming, are not any more likely to do so than their low-knowledge counterparts if they also view the world as a trustworthy place.¹²

Discussion

Consistent with expectations, we find that conspiracy beliefs serve an ideological function—conservatives endorse conspiracies that put liberals in a bad light, and vice versa (even when controlling for traditionally examined psychological antecedents). We hypothesized that this motivated process would be moderated by knowledge and trust, but in quite different ways. Knowledge, by conferring the motivation and/or ability to see connections between CTs and political worldviews, should amplify ideologically driven conspiracy endorsement. In contrast, trust should mitigate it; trust in people and institutions makes it difficult for people to muster up the evidence necessary to substantiate conspiracies that put ideological rivals in a bad light while simultaneously maintaining an illusion of objectivity.

Interestingly (and unexpectedly), our results confirm our moderator hypotheses, *but only for the conservative* *index.* These findings are remarkably robust across the MTurk and ANES data sets.¹³ Knowledge exacerbates ideologically motivated endorsement among conservatives. Moreover, the combination of high knowledge and low trust yields the highest levels of endorsement in conservative CTs among conservatives. With regard to the liberal index, we find no such interactions; knowledge and trust are both independently negatively related to liberals' endorsement of liberal conspiracies. These findings emerge in the presence of a rigorous set of control variables and replicate in two data sets with different samples and different measures.

But what do we make of this asymmetry? On the one hand, our evidence is consistent with the notion that conspiracy endorsement, and science denial more generally, is a more attractive worldview-bolstering strategy for conservatives than liberals (Blank and Shaw 2015; Jost et al. 2003; Mooney 2012; Nisbet, Cooper, and Garrett 2015; but see Kahan 2013 and Kraft, Lodge, and Taber 2015 for an alternative view), *especially for high-knowledge and low-trust conservatives*. However, we cannot, at least with these data, rule out a few alternative interpretations.

One alternative explanation for the asymmetry in our findings stems from the fact that CTs arise organically and therefore vary on a number of dimensions-the conservative theories may just have been easier to believe than the liberal theories. As we discussed above, the conservative theories may have required a lesser suspension of disbelief than the liberal items (e.g., perhaps it is easier to believe that someone can fake his or her birth certificate than that a cabal of government officials knew about the 9/11 plot and willingly kept it a secret, allowing thousands of Americans to be killed). Another difference is that three of the four conservative items in MTurk and both in the ANES are highly salient and are linked to the current president and administration, whereas all of the liberal items are older and are linked to a past Republican Administration. Both the differences in believability and salience of naturally occurring CTs could have facilitated the asymmetry, making the finding an artifact of the conspiracies we assessed. Had there been liberal CTs in the public zeitgeist at the time of our study that involved current Republican officials, we certainly would have included them. Alternatively, we could have sacrificed external validity by writing questions about conspiracies that we made up, which would have enabled us to hold everything but the party and/or ideology of the perpetrator constant. If this alternative hypothesis has merit, we would expect that

¹²Results replacing ideology with party identification are consistent with, albeit a bit weaker than, the ideology findings (see Online Appendix Tables 4 and 5 in the supporting information).

¹³This is consistent with Berinsky, Huber, and Lenz's (2012) evidence that published experimental findings replicate using MTurk samples.

liberals and conservatives would endorse their respective parallel CTs equally.

A second alternative explanation is that the current political context made conservatives more motivated than liberals to want to bolster their political worldview by endorsing CTs that impugn liberals and Democrats. When there is a Democratic president, conservatives may be especially motivated to view their political rivals as underhanded and sneaky, as a way to feel better about their current "loser" status (Uscinski and Parent 2014). By this reasoning, under a Republican president the asymmetry should reverse: High-knowledge, low-trust liberals would be more motivated to endorse ideologically consistent CTs than their counterparts. If this alternative hypothesis has merit, then even if the CTs were exactly parallel on every dimension except the perpetrators' partisanship, we would still expect conservatives to be higher endorsers at the time our data were collected. Had the ANES surveys assessed conspiracy theories during the Bush Administration, we would have been able to empirically test this hypothesis. Unfortunately, they did not.

A third alternative explanation does not stem from motivated reasoning. Specifically, the knowledge asymmetry could be due to elite cue-taking (Bolsen, Druckman, and Cook 2014; Nisbet, Cooper, and Garrett 2015; Zaller 1992). In the current political climate, Republican elites may be more likely than their Democratic counterparts to float CTs that implicate their political nemeses. It could be the case that high-knowledge conservatives are picking up on these CTs that are being reported in the media, and endorse them as a result.

Conclusion

To summarize, our contribution is threefold. First, we develop and provide empirical support for a theory that predicts for whom ideologically motivated conspiracy endorsement will be strongest, and for whom this type of motivated reasoning will be less likely to occur. Specifically, we find that knowledge exacerbates and trust mitigates ideologically motivated conspiracy endorsement.

These findings have broader implications for an increasingly polarized political discourse. As we well know, political sophisticates tend to be among the most active citizens in the United States (e.g., Verba, Schlozman, and Brady 1995); therefore, our findings highlight a normatively displeasing notion for those who wish to view democracy through even the most rose-colored of lenses. Why? Because it would seem that not only does elite polarization increase motivated reasoning within the mass public (Druckman, Peterson, and Slothuus 2013), but it is precisely this kind of motivated reasoning (endorsing ideologically consistent CTs) that would also exacerbate polarization and rancor among elites and active partisans (Abramowitz and Saunders 2008; Lee 2009; Saunders and Abramowitz 2004). In today's political environment, then, elites can cast outrageous aspersions against their nemeses-including espousing CTs-and feel confident that a polarized, participatory, and receptive audience will be more likely to take up the cause (Zaller 1992) and spread the theories to the less engaged among their social networks (e.g., Lazarsfeld, Berelson, and Gaudet 1948). In sum, our research shows that elites, however defined, can count on at least a segment of their knowledgeable, actively engaged (and less trusting) base to endorse (and possibly spread) what is essentially misinformation.

Our second contribution is that, in addition to identifying another domain in which knowledge exacerbates motivated reasoning (one in which knowledge really *should* give people a "sober second thought"), we have identified trust as a mitigating factor. Our take on the broader motivated reasoning literature is that all too often people are viewed as succumbing to patterns of thinking that are beyond their conscious control and/or dictated by affect: *We feel, therefore we think*. In identifying trust as a reality check on ideologically motivated conspiracy endorsement, we show that even when they want to protect their worldviews, people are bound by reality; if they believe the world is a trustworthy place, they are less able to convince themselves that political rivals are engaging in nefarious, secretive plots.

We suspect that trust (either in combination with knowledge or by itself) would have a similarly mitigating role for other forms of motivated reasoning. Harkening back to Kunda (1990, 483), people will engage in motivated reasoning "only if they can muster up enough evidence" to substantiate their predispositions. Whether or not people feel that they can trust the sources, the content, or the implications and conclusions drawn from information may signal that the evidence is insufficient to facilitate directional reasoning that would "persuade a dispassionate observer" (Kunda 1990, 482–83) Therefore, we look forward to future research that tests the generalizability of our theory to other instantiations of motivated reasoning.

Our third contribution is that we have identified an intriguing asymmetry between conservatives and liberals in how they go about navigating a confusing world. Knowledge exacerbates motivated conspiracy endorsement (and trust "turns off" the positive effect of knowledge) *among conservatives*. If this asymmetry is generalizable, it has additional implications for politics. Specifically, it means that conservative politicians and pundits can more readily rely on conspiracies as an effective means to activate their base than liberals. And to the extent that ideologically motivated endorsement is most evident among the least trusting of the knowledgeable conservatives, there is all the more incentive for conservative elites to stoke the fires of distrust.

Appendix A

Question Wording for MTurk Survey with Corresponding ANES Variable Names in Parentheses (*Response Options in Italics*)

For complete question wordings for the ANES variables, see http://www.electionstudies.org/studypages/anes_timeseries_2012/anes_timeseries_2012_userguide codebook.pdf.

Conspiracy Theory Questions

Was Barack Obama definitely born in the United States, probably born in the United States, probably born in another country, or definitely born in another country? [ANES: nonmain_born]

Does the health care law passed in 2010 definitely authorize government panels to make end of life decisions for people on Medicare, probably authorize government panels to make end of life decisions for people on Medicare, probably not authorize government panels to make end of life decisions for people on Medicare, or definitely not authorize government panels to make end of life decisions for people on Medicare? [ANES: nonmain_endlife]

Did senior federal government officials definitely know about the terrorist attacks on September 11, 2001 before they happened, probably know about the terrorist attacks on September 11, 2001 before they happened, probably not know about the terrorist attacks on September 11, 2001 before they happened, or definitely not know about the terrorist attacks on September 11, 2001 before they happened? [ANES: nonmain_govt911]

Some people say that when Hurricane Katrina hit the Gulf Coast in the summer of 2005, the federal government intentionally breached flood levees in New Orleans so that poor neighborhoods would be flooded and middle class neighborhoods would be spared. *Do you think the federal government definitely did this, probably did this, probably did not do this, or definitely did not do this?* [ANES: nonmain_hurric]

Some people believe that global warming [climate change, randomly assigned] is a hoax. Others do not believe this.

What do you think? *Global warming [climate change] is definitely a hoax, global warming [climate change] is probably a hoax, global warming [climate change] is probably not a hoax, or global warming [climate change] is definitely not a hoax.*

Note: The above question included a wording experiment; the results reported here are the same for both versions. Some people believe that the Bush Administration *did* mislead the public about the possibility of weapons of mass destruction in Iraq. Others believe that the administration *did not* mislead the public about the possibility of weapons of mass destruction in Iraq. What do you think? The Bush Administration definitely misled the public about the possibility of weapons of mass destruction in Iraq, probably misled the public about the possibility of weapons of mass destruction in Iraq, probably did not mislead the public about the possibility of weapons of mass destruction in Iraq, or definitely did not mislead the public about the possibility of weapons of mass destruction in Iraq.

Some people believe that Saddam Hussein was involved in the September 11th, 2001 attacks on America. Others do not believe this. What do you think? Was Saddam Hussein *definitely involved in the September 11th attacks, probably involved in the September 11th attacks, probably not involved in the September 11th attacks, or definitely not involved in the September 11th attacks?*

Some people think the Republicans stole the 2004 presidential election through voter fraud in Ohio. Others do not believe this. What do you think? *The Republicans definitely stole the 2004 election through voter fraud in Ohio, probably stole the 2004 election through voter fraud in Ohio, probably did not steal the 2004 election through voter fraud in Ohio, or definitely did not steal the 2004 election through voter fraud in Ohio.*

Political Ideology

[ANES: libcpre_self]

We hear a lot of talk these days about liberals and conservatives. Here is a seven-point scale on which the political views that people might hold are arranged from extremely liberal to extremely conservative. Where would you place yourself on this scale? *Extremely Liberal, Liberal, Slightly Liberal, Moderate, Middle of the Road, Slightly Conservative, Conservative, or Extremely Conservative*?

Political Knowledge

[ANES: preknow_medicare, preknow_leastsp, preknow_prestimes, preknow_senterm, ofcrec_speaker_ correct, ofcrec_vp_correct, ofcrec_pmuk_correct, ofcrec_cj_correct, knowl_housemaj, knowl_senmaj] Which party currently has the most members in the U.S. House of Representatives in Washington, D.C.? *Republican Party or Democratic Party*

Would you say that one of the parties is more conservative than the other at the national level? *Republican Party, Democratic Party, or Neither party is more conservative than the other*

What job or political office is now held by John Roberts? Chair of the Democratic National Committee, Senate Majority Leader, Chief Justice of the Supreme Court, or Chair of the Republican National Committee

Who is the current President of Russia? *Dmitry Medvedev*, *Vladimir Putin, Boris Yeltsin, or Viktor Zubkov*

Who is the current Speaker of the U.S. House of Representatives? *Nancy Pelosi, Harry Reid, Marco Rubio, or John Boehner*

What job or political office is now held by Joe Biden? House Minority Leader, Vice President of the United States, Secretary of Defense, or Secretary of State

What job or political office is now held by David Cameron? Prime Minister of the United Kingdom, CEO of Target Corp., Prime Minister of Australia, or Secretary of the Treasury

Whose responsibility is it to nominate judges to the U.S. Federal Courts? *The President, The U.S. Senate, The U.S. House of Representatives, or The Supreme Court*

How long is the term of office for a U.S. Senator? *2 years*, *4 years*, *6 years*, *or 8 years*

Whose responsibility is it to determine if a law is constitutional or not? *The President, The U.S. Senate, The U.S. House of Representatives, or The Supreme Court*

How much of a majority is required for the U.S. Senate and House of Representatives to override a presidential veto? *1/2*, *3/5*, *2/3*, or *3/4*

Who is the current U.S. Secretary of State? *Hillary Clinton, Janet Napolitano, John Kerry, or Tom Ridge*

Who is the current U.S. Secretary of Treasury? Ben Bernanke, Timothy Geithner, Larry Summers, or Jacob Lew Who is the current Prime Minister of Canada? John Major, Stephen Harper, François Mitterrand, or Paul Martin

General Trust

[ANES: trust_social, trustgov_trustgrev, trust-gov_trustgstd]

How much of the time do you think you can trust each of the following groups to do what is right? *Almost always, Most of the time, Some of the time, Almost never*:

The federal government in Washington, D.C. Law enforcement The media People in general

External Efficacy

[ANES: effic_carerev; effic_carestd]

How much do public officials care what people like you think? A great deal, A lot, A moderate amount, A little, Not at all

How much can people like you affect what the government does? *A great deal, A lot, A moderate amount, A little, Not at all*

Attitudes about the Federal Government [ANES: ftgr_fedgov]

Do you think the federal government today has *too much power, about the right amount of power, or has too little power*?

TIPI (Big Five Personality Traits)

Here are a number of personality traits that may or may not apply to you. Please indicate the extent to which you agree or disagree with each statement. You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other. Agree strongly, Agree moderately, Agree a little, Neither agree nor disagree, Disagree a little, Disagree moderately, Disagree strongly.

I see myself as . . .

extraverted, enthusiastic [ANES: tipi_extra] critical, quarrelsome [ANES: tipi_crit] dependable, self-disciplined [ANES: tipi_dep] anxious, easily upset [ANES: tipi_anx] open to new experiences, complex [ANES: tipi_open] reserved, quiet [ANES: tipi_resv] sympathetic, warm [ANES: tipi_warm] disorganized, careless [ANES: tipi_disorg] calm, emotionally stable [ANES: tipi_calm] conventional, uncreative [ANES: tipi_conv]

Need for Cognition

Some people like to have responsibility for handling situations that require a lot of thinking, and other people don't like to have responsibility for situations like that. What about you? *Do you like having responsibility for* handling situations that require a lot of thinking, do you dislike it, or do you neither like nor dislike it? Do you like it a lot or just somewhat? Do you dislike it a lot or just somewhat?

Some people prefer to solve simple problems instead of complex ones, whereas other people prefer to solve more complex problems. Which type of problem do you prefer to solve: *simple or complex?*

Authoritarianism

Although there are a number of qualities that people feel that children should have, every person thinks that some are more important than others. Below are pairs of desirable qualities. For each pair, *please indicate which one you think is more important for a child to have*:

independence or respect for elders [anes: auth_ind] curiosity or good manners [anes: auth_cur] obedience or self-reliance [anes: auth_obed] being considerate or well behaved [anes: auth_consid]

Need to Evaluate

[ANES: cog_opin_x]

Some people have opinions about almost everything; other people have opinions about just some things; and still other people have very few opinions. What about you? *Would you say you have opinions about almost everything, about many things, about some things, or about very few things*?

Compared to the average person do you have fewer opinions about whether things are good or bad, about the same number of opinions, or more opinions? Would you say that you have a lot fewer opinions or just somewhat fewer opinions? Would you say that you have a lot more opinions or just somewhat more opinions?

Religiosity

[ANES: relig_import]

How would you classify your level of involvement with your religion or spirituality? *Very active, Moderately active, Neither active nor inactive, Moderately inactive, Very inactive*

Sex

[ANES: gender_respondent_x] Are you *male or female*? *Age* [ANES: dem_age_r_x] What age did you turn on your most recent birthday?

Education

[ANES: dem_edu, dem_edugroup_x]

What is the highest level of school you have completed or the highest degree you have received? Less than 1st grade, 1st, 2nd, 3rd, or 4th grade, 5th or 6th grade, 7th or 8th grade, 9th grade, 10th grade, 11th grade, 12th grade no diploma, High school graduate - high school diploma or equivalent (for example: GED), Some college but no degree, Associate degree (for example: Occupational/vocational program or Academic program), Bachelor's degree (for example: BA, AB, BS), Master's degree (for example: MA, MS, MEng, MEd, MSW, MBA), Professional School degree (for example: MD, DDS, DVM, LLB, JD), Doctorate degree (for example: PhD, EdD), Other, please specify

Income

[ANES: inc_incgroup_pre]

QINCOME1. The next question is about the total income of YOUR HOUSEHOLD for the PAST 12 MONTHS. Please include your income PLUS the income of all members living in your household (including cohabiting partners and armed forces members living at home). Please count income BEFORE TAXES, including income from all sources (such as wages, salaries, tips, net income from a business, interest, dividends, child support, alimony, and Social Security, public assistance, pensions, or retirement benefits).

What was your total HOUSEHOLD income in the past 12 months? Under \$5,000, \$5,000-9,999, \$10,000-12,499, \$12,500-14,999, \$15,000-17,499, \$17,500-19,999, \$20,000-22,499, \$22,500-24,999, \$25,000-27,499, \$27,500-29,999, \$30,000-34,999, \$35,000-39,999, \$40,000-44,999, \$45,000-49,999, \$50,000-54,999, \$55,000-59,999, \$60,000-64,999, \$65,000-69,999, \$70,000-74,999, \$75,000-79,999, \$80,000-89,999, \$90,000-99,999, \$100,000-109,999, \$110,000-124,999, \$125,000-149,999, \$150,000-174,999, \$175,000-249,999, \$250,000 or more

Latino

[ANES: dem_hisp]

Are you Spanish, Hispanic, or Latino?

Race

[ANES: dem_raceeth_x]

Below is a list of five race categories. Please choose one or more races that you consider yourself to be. Check all that apply: White, Black or African-American, American Indian or Alaska Native, Asian, Native Hawaiian or other Pacific Islander, Other, please specify.

Appendix B

Descriptive Statistics for Demographics: MTurk and ANES

		MTurk*		1	ANES*
		N	% of Sample	N	% of Sample
Age			Average:		Average:
-	(in years; range 18–81 in MTurk, 18–90 in ANES)	2132	34.58	2485	47.67
Sex/Gender					
	Male	882	41.51	1263.83	50.86
	Female	1243	58.49	1221.17	49.14
Race					
	White	1777	83.58	1845.77	74.52
	Nonwhite	349	16.42	631.23	25.48
Education					
	Up to and including high school credential	220	10.41	809.99	32.83
	Some post-high school, no bachelor's degree	846	40.02	767.60	31.11
	Bachelor's degree	738	34.91	565.19	22.91
	Graduate degree or postbachelor's degree	310	14.66	324.21	13.14
Income					
	Under \$15,000	288	13.51	354.89	14.74
	\$15,000 to \$24,999	336	15.77	166.80	6.93
	\$25,000 to \$49,999	620	29.09	542.68	22.55
	\$50,000 to \$99,999	646	30.31	850.95	35.35
	\$100,000 and above	241	11.31	491.69	20.43
Ethnicity					
•	Spanish, Hispanic, or Latino	191	9.05	245.98	9.92
	Not Spanish, Hispanic, or Latino	1920	90.95	2233.02	90.08

Note: *2012 ANES frequencies and percentages are weighted; both ANES and MTurk distributions reflect the descriptive statistics after moderates have been removed for analysis.

Appendix C

Cell Percentages and Counts for Ideology Cross-Tabbed with Low and High Knowledge and Trust: MTurk and ANES

Μ	MTURK LIBERALS			MTURK CONSERVATIVES				
Knowledge				Knowledge				
Trust	Low	High	Total	Trust	Low	High	Total	
Low	32%	33%	65%	Low	34%	37%	71%	
	(486)	(496)	(982)		(235)	(256)	(491)	
High	17%	19%	35%	High	15%	14%	28%	
	(251)	(281)	(532)		(102)	(96)	(198)	
Total	49%	51%	100%	Total	49%	51%	100%	
	(737)	(777)	(1514)		(337)	(351)	(689)	
	ANES L	IBERAI	LS	ANE	S CONS	SERVAT	IVES	

Knowledge				Knowledge				
Trust	Low	High	Total	Trust	Low	High	Total	
Low	22%	22%	44%	Low	26%	26%	52%	
	(224)	(221)	(446)		(387)	(378)	(765)	
High	20%	35%	56%	High	18%	30%	48%	
	(206)	(355)	(560)		(273)	(439)	(713)	
Total	43%	57%	100%	Total	45%	55%	100%	
	(430)	(576)	(1006)		(660)	(818)	(1478)	

Note: Numbers in parentheses are cell Ns. Cell percentages may not total to 100% due to rounding. Trust and knowledge are split into low and high at their medians.

ANES cell counts and percentages are weighted; Ns are rounded to the nearest integer.

References

- Abalakina-Paap, Marina, Walter G. Stephan, Traci Craig, and W. Larry Gregory. 1999. "Beliefs in Conspiracies." *Political Psychology* 20(3): 637–47.
- Abramowitz, Alan I., and Kyle L. Saunders. 2008. "Is Polarization Really a Myth?" *Journal of Politics* 70(2): 542–55.
- Bartels, Larry M. 2008. Unequal Democracy: The Political Economy of the New Gilded Age. Princeton, NJ: Princeton University Press.
- Berinsky, Adam J. 2012. "Rumors, Truths, and Reality: A Study of Political Misinformation." Unpublished manuscript, Massachusetts Institute of Technology. https://drive.google.

com/a/umn.edu/?tab=mo#folders/0B6tFsgslztWbR1pjNl VyQk84dEU.

- Berinsky, Adam J. 2015a. "Rumors and Health Care Reform: Experiments in Political Misinformation." *British Journal of Political Science*. doi:10.1017/S0007123415000186.
- Berinsky, Adam J. 2015b. "Telling the Truth about Believing the Lies?" Paper presented at the Miami Conference on Conspiracy Theories, University of Miami.
- Berinsky, Adam J., Gregory A. Huber, and Gabriel S. Lenz. 2012. "Evaluating Online Labor Markets for Experimental Research: Amazon.com's Mechanical Turk." *Political Analy*sis 20: 351–68.
- Blank, Joshua M., and Daron Shaw. 2015. "Does Partisanship Shape Attitudes toward Science and Public Policy? The Case for Ideology and Religion." Annals of the American Academy of Political and Social Science 658(1): 18–35.
- Bolsen, Toby, James N. Druckman, and Fay Lomax Cook. 2014. "The Influence of Partisan Motivated Reasoning on Public Opinion." *Political Behavior* 36(2): 235–62.
- Bolsen, Toby, James N. Druckman, and Fay Lomax Cook. 2015. "Citizens', Scientists', and Policy Advisors' Beliefs about Global Warming." Annals of the American Academy of Political and Social Science 658(1): 271–95.
- Bresnahan, John, Lauren French, and Jake Sherman. 2014. "Mission Improbable: Trey Gowdy Gets into Benghazi." *Politico*, May 5. http://www.politico.com/story/2014/05/mission-improbable-trey-gowdy-gets-into-benghazi-106326.html.
- Buhrmester, Michael, Tracy Kwang, and Samuel D. Gosling. 2011. "Amazon's Mechanical Turk: A New Source of Inexpensive, Yet High-Quality, Data?" *Perspectives on Psychological Science* 6(1): 3–5.
- Byford, Jovan, and Michael Billig. 2001. "The Emergence of Antisemitic Conspiracy Theories in Yugoslavia during the War with NATO." *Patterns of Prejudice* 35(4): 50–63.
- Chong, Dennis, and James N. Druckman. 2007. "Framing Public Opinion in Competitive Democracies." American Political Science Review 101(4): 637–55.
- Druckman, James N., Erik Peterson, and Rune Slothuus. 2013. "How Elite Partisan Polarization Affects Public Opinion Formation." American Political Science Review 107(1): 57–79.
- Gilbert, Daniel T., Romin W. Tafarodi, and Patrick S. Malone. 1993. "You Can't Not Believe Everything You Read." *Journal* of Personality and Social Psychology 65(2): 221–33.
- Goertzel, Ted. 1994. "Belief in Conspiracy Theories." *Political Psychology* 15(4): 731–42.
- Goren, Paul, Christopher M. Federico, and Miki Caul Kittilson. 2009. "Source Cues, Partisan Identities, and Political Value Expression." *American Journal of Political Science* 53(4): 805– 20.
- Green, Donald and Palmquist, Bradley and Schickler, Eric. 2002. *Partisan Hearts and Minds*. New Haven, CT: Yale University Press.
- Greene, Steven H. 2004. "Social Identity Theory and Party Identification." *Social Science Quarterly* 85(1):136–53.
- Hofstadter, Richard. 1965. The Paranoid Style in American Politics and Other Essays. New York: Knopf.
- Jost, John T., Christopher M. Federico, and Jamie L. Napier. 2013. "Political Ideologies and Their Social Psychological Functions." In Oxford Handbook of Political Ideologies, ed.

Michael Freeden, Lyman Tower Sargent, and Marc Stears. New York: Oxford University Press, 232–50.

- Jost, John T., Jack Glaser, Arie W. Kruglanski, and Frank J. Sulloway. 2003. "Political Conservatism as Motivated Social Cognition." *Psychological Bulletin* 129(3): 339–75.
- Kahan, Dan. 2013. "Ideology, Motivated Reasoning, and Cognitive Reflection." Judgment and Decision Making 8(4): 407– 24.
- Kahan, Dan M., Hank Jenkins-Smith, and Donald Braman. 2011. "Cultural Cognition of Scientific Consensus." *Journal of Risk Research* 14(2): 147–174.
- Kraft, Patrick W., Milton Lodge, and Charles S. Taber. 2015. "Why People 'Don't Trust the Evidence': Motivated Reasoning and Scientific Beliefs." *Annals of the American Academy of Political and Social Science* 658(1): 121–33.
- Kunda, Ziva. 1990. "The Case for Motivated Reasoning." Psychological Bulletin 108(3): 480–98.
- Lane, Robert E. 1962. Political Ideology. Oxford: Free Press.
- Lau, Richard R., and David P. Redlawsk. 2001. "Advantages and Disadvantages of Cognitive Heuristics in Political Decision Making." *American Journal of Political Science* 45(4): 951– 97.
- Lavine, Howard, Christopher Johnston, and Marco Steenbergen. 2012. *The Ambivalent Partisan: How Critical Loyalty Promotes Democracy.* New York: Oxford University Press.
- Lazarsfeld, Paul F., Bernard Berelson, and Hazel Gaudet. 1948. *The People's Choice*. New York: Columbia University Press.
- Lee, Frances. 2009. *Beyond Ideology: Politics, Principles, and Partisanship in the U.S. Senate.* Chicago: University of Chicago Press.
- Lodge, Milton, and Charles S. Taber. 2013. *The Rationalizing Voter*. New York: Cambridge University Press.
- Mooney, Chris. 2012. The Republican Brain: The Science of Why They Deny Science and Reality. Hoboken, NJ: Wiley.
- Nir, Lilach. 2011. "Motivated Reasoning and Public Opinion Perception." *Public Opinion Quarterly* 75(3): 504–32.
- Nisbet, Erik C., Kathryn E. Cooper, and R. Kelly Garrett. 2015. "The Partisan Brain: How Dissonant Science Messages Lead Conservatives and Liberals to (Dis)Trust Science." *Annals of the American Academy of Political and Social Science* 658(1): 36–66.
- Nyhan, Brendan. 2009. "9/11 and Birther Misperceptions Compared." August 10. http://www.brendan-nyhan.com/ blog/2009/08/911-and-birther-misperceptionscompared.html.
- Nyhan, Brendan, and Jason Reifler. 2010. "When Corrections Fail: The Persistence of Political Misperceptions." *Political Behavior* 32(2): 303–30.
- Oliver, J. Eric, and Thomas J. Wood. 2014. "Conspiracy Theories and the Paranoid Style(s) of Mass Opinion." *American Journal of Political Science* 58(4): 952–66.
- Prior, Markus, Gaurav Sood, and Kabir Khanna. 2013. "You Cannot Be Serious: Do Partisans Believe What They Say?" Unpublished manuscript, Princeton University. http://www.vanderbilt.edu/csdi/events/MPrior.pdf.

- Redlawsk, David P., Andrew J. W. Civettini, and Karen M. Emmerson. 2010. "The Affective Tipping Point: Do Motivated Reasoners Ever 'Get It'?" *Political Psychology* 31(4): 563–93.
- Saunders, Kyle L., and Alan I. Abramowitz. 2004. "Ideological Realignment and Active Partisans in the American Electorate." American Politics Research 32(3): 285–309.
- Sunstein, Cass R. 2014. *Conspiracy Theories and Other Dangerous Ideas*. New York: Simon and Schuster.
- Sunstein, Cass R., and Adrian Vermeule. 2009. "Conspiracy Theories: Causes and Cures." *Journal of Political Philosophy* 17(2): 202–27.
- Swami, Viren. 2012. "Social Psychological Origins of Conspiracy Theories: The Case of the Jewish Conspiracy Theory in Malaysia." *Frontiers in Psychology*, 3: 280. doi: 10.3389/ fpsyg.2012.00280.
- Swami, Viren, Tomas Chamorro-Premuzic, and Adrian Furnham. 2010. "Unanswered Questions: A Preliminary Investigation of Personality and Individual Difference Predictors of 9/11 Conspiracist Beliefs." *Applied Cognitive Psychology* 24(6): 749–61.
- Swami, Viren, and Rebecca Coles. 2010. "The Truth Is Out There: Belief in Conspiracy Theories." *The Psychologist* 23(7): 560–63.
- Taber, Charles S., and Milton Lodge. 2006. "Motivated Skepticism in the Evaluation of Political Beliefs." *American Journal of Political Science* 50(3): 755–69.
- Uscinski, Joseph E., and Joseph M. Parent. 2014. American Conspiracy Theories. Oxford: Oxford University Press.
- Verba, Sidney, Kay L. Schlozman, and Henry E. Brady. 1995. Voice and Equality: Civic Voluntarism in American Politics. Cambridge, MA: Harvard University Press.
- Zaller, John. 1992. *The Nature and Origins of Mass Opinion*. New York: Cambridge University Press.
- Zonis, Marvin, and Craig M. Joseph. 1994. "Conspiracy Thinking in the Middle East." *Political Psychology* 15(3): 443–45.

Supporting Information

Additional Supporting Information may be found in the online version of this article at the publisher's website:

- Online Appendix Table 1. Effect of Ideology on Conspiracy Endorsement
- Online Appendix Table 2. Knowledge x Ideology Predicting Conspiracy Endorsement
- Online Appendix Table 3. Knowledge x Trust x Ideology Predicting Conspiracy Endorsement
- Online Appendix Table 4. Effect of Party Identification, Knowledge, and Trust on Conspiracy Endorsement
- Online Appendix Table 5. Simple Slopes for Political Knowledge Predicting Conspiracy Endorsement across Levels of Party Identification and Trust