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The Paranoid Style in American Politics Revisited: An Ideological Asymmetry in Conspiratorial Thinking

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It is often claimed that conspiracy theories are endorsed with the same level of intensity across the left-right ideological spectrum. But do liberals and conservatives in the United States embrace conspiratorial thinking to an equivalent degree? There are important historical, philosophical, and scientific reasons dating back to Richard Hofstadter's book The Paranoid Style in American Politics to doubt this claim. In four large studies of U.S. adults (total N = 5049)—including national samples—we investigated the relationship between political ideology, measured in both symbolic and operational terms, and conspiratorial thinking in general. Results reveal that conservatives in the United States were not only more likely than liberals to endorse specific conspiracy theories, but they were also more likely to espouse conspiratorial worldviews in general (r = .27, 95% CI: .24, .30). Importantly, extreme conservatives were significantly more likely to engage in conspiratorial thinking than extreme liberals (Hedges' g = .77, SE = .07, p < .001). The relationship between ideology and conspiratorial thinking was mediated by a strong distrust of officialdom and paranoid ideation, both of which were higher among conservatives, consistent with Hofstadter's account of the paranoid style in American politics.

KEY WORDS: conspiracy theories, paranoid ideation, political ideology, conservatism

> "Let us now abstract the basic elements in the paranoid style. The central image is that of a vast and sinister conspiracy, a gigantic and yet subtle machinery of influence set in motion to undermine and destroy a way of life." (Richard Hofstadter, 1964, p. 29)

A conspiratorial mindset is characterized by a persistent belief that one or more individuals, groups, or organizations are plotting to accomplish menacing objectives (van der Linden, 2013;

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Moscovici, 1987). In the present era, in which fake news and misinformation are spread quickly and easily through social media platforms, belief in conspiracy theories is widespread; it is estimated that more than 50% of Americans endorse at least one conspiracy theory (Oliver & Wood, 2014). For society, there are many troubling consequences of conspiratorial thinking, including antisocial behavior, hostility against outgroups, rejection of science, decreased trust in government, and a lack of civic engagement (Einstein & Glick, 2015; Flynn, Nyhan, & Reifler, 2017; Jolley & Douglas, 2014; Lewandowsky & Oberauer, 2016; van der Linden, 2015; Swami, 2012; Uscinski & Parent, 2014).

For all of these reasons, it is important to understand the sociocognitive factors that shape public belief in conspiracy theories. A number of studies suggest that conspiratorial thinking is associated with paranoia, narcissism, interpersonal distrust, feelings of powerlessness, lack of agency and control, uncertainty, low levels of education and intelligence, as well as "magical thinking," defined as the superstitious tendency to draw false inferences about causal relationships (Abalakina-Paap, Stephan, Craig, & Gregory, 1999; Barron, Morgan, Towell, Altemeyer, & Swami, 2014; Brotherton, French, & Pickering, 2013; Cichocka, Marchlewska, & de Zavala, 2016; Darwin, Neave, & Holmes, 2011; Lobato, Mendoza, Sims, & Chin, 2014; van Prooijen, 2017; van Prooijen & Jostmann, 2013; Swami, 2012; Swami, Voracek, Stieger, Tran, & Furnham, 2014). Increasingly, researchers are coming to appreciate the role of political ideology—defined as the beliefs, opinions, and values about the way society is and how it should be (Jost, 2006)—in fostering conspiratorial thinking (Imhoff, 2015; Miller, Saunders, & Farhart, 2015; Oliver & Wood, 2014; Pasek, Stark, Krosnick, & Tompson, 2015; van Prooijen, Krouwel, & Pollet, 2015). Zeroing in on the effects of political ideology is appropriate and necessary because a high proportion of conspiracy theories are political in nature (Sunstein & Vermeule, 2009). This is why recent formulations have conceptualized conspiratorial thinking as a generalized political attitude (Imhoff & Bruder, 2014; Sutton & Douglas, 2020) that is "intrinsically tied to the sociopolitical realm" (Imhoff & Lamberty, 2018, p. 911).

There are historical, philosophical, and psychological reasons to suppose that political ideology plays a prominent role in conspiratorial thinking (Bennett, 1995; Jost, Stern, Rule, & Sterling, 2017; Lipset & Raab, 1978; Robin, 2004). In a major contribution to social history, Richard Hofstadter (1964) documented a long history of "paranoid" thinking that contributed to right-wing political movements in the United States throughout the 19th and 20th centuries, including nativistic, anti-Masonic, anti-Catholic, and anti-Mormon organizations; opposition to the income tax amendment to the U.S. Constitution and Franklin D. Roosevelt's "New Deal"; the John Birch Society and the "Red Scare" that motivated Senator Joseph McCarthy's anti-Communist purges; and the presidential campaigns of Robert Taft, Barry Goldwater, and George Wallace. Hofstadter described several ways in which "heated exaggeration, suspiciousness, and conspiratorial fantasy" contributed to a wide range of right-wing movements that—following Adorno, Frenkel-Brunswik, Levinson, and Sanford (1950)—he characterized as "pseudo-conservative" because they "believe themselves to be conservatives and usually employ the rhetoric of conservatism" but "have little in common with the temperate and compromising spirit of true conservatism in the classical sense of the word" and "show signs of a serious and restless dissatisfaction with American life, traditions, and institutions" (Hofstadter, 1954/1955, p. 3).

In contemporary American politics, many citizens on the right believe that evidence of anthropogenic climate change is merely the product of a vast conspiracy involving scientists, liberal politicians, and foreign governments (Public Policy Polling, 2013). By the middle of 2017, Donald Trump had sent over 100 Twitter messages claiming that global warming is a hoax (Matthews, 2017). President Trump has also promulgated many other conspiracy theories over the years (Shear et al., 2019), including claims that Barack Obama is a Muslim who was born outside of the United States and that Supreme Court Justice Antonin Scalia was murdered (Haberman, 2016). Trump supporters routinely push conspiracy theories about liberals

and Democrats to deflect criticism over Russian involvement in the 2016 Presidential election, the impeachment case against Trump, and his administration's mishandling of the coronavirus pandemic in 2020 (Levin, 2020).

Yet, conspiratorial thinking is by no means confined to President Trump's inner circle. According to a YouGov poll, 70% of Republicans in 2019 believed that a secret "deep state" network was attempting to overthrow President Trump (Frankovic, 2019). In addition, paranoid reactions to gun control legislation that Hofstadter (1964, p. 5) described more than 50 years ago are eerily similar to sentiments expressed by supporters of the National Rifle Association (NRA) in recent years. Many self-identified conservatives are deeply distrusting not only of scientists but also of government officials and media journalists, all of whom they routinely accuse of "liberal bias" (Gauchat, 2012; Jones, 2004; Kraft, Lodge, & Taber, 2014; Lee, 2005; Pew Research Center, 2017; van der Linden, Panagopoulos, & Roozenbeek, 2020).

Still, commentators are quick to point out that "conspiracy theories aren't just for conservatives" (Moore, Parent, & Uscinksi, 2014). Some conspiracy theories are assumed to be more popular on the left. In the United States, these include the claims that President George W. Bush possessed advance knowledge of the terrorist attacks of 9/11 and chose not to intervene; that agricultural businesses are suppressing evidence of the harmful effects of genetically modified organisms (or GMOs); and that childhood vaccinations pushed by "Big Pharmaceutical Companies" cause autism and other serious health problems (Sunstein & Vermeule, 2009). With respect to antivaccination sentiment, research by Rabinowitz, Latella, Stern, and Jost (2016) found that—contrary to many political stereotypes—U.S. liberals were significantly more likely than conservatives to endorse provaccination statements and to regard them as facts rather than beliefs. The finding that opposition to vaccines is actually more prominent on the right than the left has been reported in several other studies as well (e.g., see Lewandowsky, Gignac, & Oberauer, 2013; Lewandowsky, Woike, & Oberauer, 2020).

Nonetheless, there is some reason to suspect that ideological extremism—on both the left and right—is associated with conspiracist ideation (Bartlett & Miller, 2010; Imhoff, 2015; McClosky & Chong, 1985; van Prooijen et al., 2015). However, it does not follow from these or other research programs that those on the left and right are *equally* susceptible to conspiracy theorizing. For example, close inspection of results reported by Miller et al. (2015, p. 830) indicate that right-wing extremists in the United States were more likely than left-wing extremists to endorse ideologically congenial conspiracy theories. Moreover, even in studies that appear to provide evidence of ideological symmetry in general, there are often notable asymmetries, suggesting that conservative rightists are more conspiratorially minded than liberal leftists (e.g., see van Prooijen et al., 2015, pp. 573–575, Figures 1 and 3, and Oliver & Wood, 2014, p. 958, Figure 1). These asymmetries are consistent with an observation about cognitive-motivational style made by Jost, Glaser, Kruglanski, and Sulloway (2003b), namely that: "In all cases graphically summarized by McClosky and Chong (1985, p. 350),… the percentage of high scorers from the far right group (63% and 81% for intolerance of ambiguity in 1958 and 1976—1977, respectively, and 39% for rigidity) exceeds the percentage of high scorers from the far left (49%, 75%, and 33%, respectively)" (p. 388).

In an effort to integrate more than 50 years of theory and research on the social, cognitive, and motivational bases of left-right (or, in the U.S. context, liberal-conservative) differences, Jost, Glaser, Kruglanski, and Sulloway (2003a, 2003b) emphasized individual differences and contextual variability in epistemic needs to attain order, certainty, structure, and closure and existential needs to attain safety, security, and a sense of reassurance. The idea was that these needs would contribute to an ideological preparedness for resistance to social change and the legitimation of social, economic, and political inequality. Consistent with this perspective, a meta-analytic review of 88 studies conducted in 12 countries over a 44-year period involving over 22,000 participants confirmed that intolerance of ambiguity, dogmatism, avoidance of uncertainty, cognitive simplicity, and personal needs for order, structure, and closure, as well as death anxiety and system-level threats, were positively related to the endorsement of a conservative, right-wing ideology.

In an extension of this theoretical program, we posit that there may well be an important and underappreciated ideological asymmetry when it comes to conspiratorial thinking in general, at least in the context of the United States. Such an asymmetry would be consistent with mounting evidence that, in comparison with liberals, conservatives in the United States and other Western countries score higher on measures of dogmatism, cognitive rigidity, intolerance of ambiguity and uncertainty, self-deception, and threat sensitivity—and lower on measures of need for cognition, integrative complexity, cognitive reflection, intelligence, and analytical reasoning (see Jost, 2017). Conservatives are also more likely to adopt an "intuitive" cognitive style (Deppe et al., 2015; Talhelm et al., 2015), which tends to be associated with conspiratorial thinking (Lobato et al., 2014; Swami et al., 2014).

American conservatives are also less interested in scientific forms of knowledge (Blank & Shaw, 2015; Carl, Cofnas, & Woodley of Menie, 2016; Lewandowsky & Oberauer, 2016; Tullett, Hart, Feinberg, Fetterman, & Gottlieb, 2016) and more likely to mistake political opinions for facts (Landreville & Niles, 2019). They appear to be more receptive to "fake news" (Basol, Roozenbeek, & van der Linden, 2020; Roozenbeek & van der Linden, 2019) and pseudo-profound "bullshit" (Nilsson, Erlandsson, & Västfjäll, 2019; Pfattheicher & Schindler, 2016; Sterling, Jost, & Pennycook, 2016). Consistent with all of these psychological differences, research suggests that in the United States, at least, rumors, misinformation, and conspiracy theories spread more rapidly and extensively in the social networks of conservatives, as compared with liberals (Benkler, Faris, Roberts, & Zuckerman, 2017; Guess, Nagler, & Tucker, 2019; Guess, Nyhan, & Reifler, 2020; Jost, van der Linden, Panagopoulos, & Hardin, 2018). This was observed, for instance, in the early days of the SARS-2/COVID-19 pandemic: Right-wing news outlets such as Fox News and Breitbart were much more likely than mainstream news outlets to spread misinformation, including conspiracy theories about the virus, and citizens who consumed more right-wing news held more false beliefs about the pandemic (Motta, Stecula, & Farhart, 2020).Thus, although many perspectives in social science would suggest that motivated reasoning, biased information processing, and conspiratorial thinking should be *equally* prevalent among leftists and rightists (Ditto et al., 2019; Kahan, 2016; McClosky & Chong, 1985; Moore et al., 2014; Oliver & Wood, 2014; van Prooijen et al., 2015; Sunstein & Vermeule, 2009; Uscinski, Klofstad, & Atkinson, 2016), there are ample empirical reasons to question this assumption (see also Baron & Jost, 2019). The fact that "conspiracy theories are not just for conservatives" (Moore et al., 2014) does not mean that conspiracies are endorsed at the same scale or level of intensity by liberals and conservatives nor that conspiracy theories on the left and right are equally harmful, fallacious, or driven by paranoid ideation.

Several previous studies suggest that the tendency to endorse conspiracy theories is positively and linearly associated with authoritarianism and right-wing extremism (Abalakina-Paap et al., 1999; Bruder, Haffke, Neave, Nouripanah, & Imhoff, 2013; Grzesiak-Feldman & Irzycka, 2009; Swami, 2012). Historically, it is conspicuous that conspiracy theories have so often been used against popular targets of right-wing prejudice, such as Jews, Blacks, leftists, feminists, and sexual minorities (Altemeyer, 1996; Grzesiak-Feldman, 2015; Krekó, 2015; Pasek et al., 2015; Swami, 2012). The question of whether an ideological asymmetry exists is therefore important, not only for research in political psychology, but also for a practical understanding of how, why, and when conspiratorial thinking may shape public consciousness—and how interventions might be designed to root it out.

Overview of the Present Research Program

In the present research program, we sought to provide a comprehensive assessment of the role of political ideology in conspiratorial thinking in the context of American politics. In four studies making use of large, national samples, we administered a variety of ideological measures, including (symbolic) self-placement items as well as (operational) issue-based and value-based scales. Because there are clearly content-specific reasons why leftists or rightists would be more motivated to embrace specific conspiracy theories, we elected not to follow the common methodological procedure of merely asking participants which individual conspiracy theories they subscribed to and

drawing conclusions based on the total number of conspiracy theories they endorsed (see Brotherton et al., 2013; Bruder et al., 2013). Instead, we included measures that directly tap into an individual's underlying tendency to engage in paranoid thinking and to adopt a conspiratorial mindset in general. We hypothesized that, after adjusting for the symmetrical effect of ideological extremity, conservatives in the United States would be more likely than liberals to exhibit a conspiratorial mindset.

According to Hofstadter (1964), high levels of distrust in scientific, governmental, and journalistic authorities is a hallmark of "the paranoid style of American politics." Thus, across studies we investigated the extent to which: (1) Left-right (or liberal-conservative) political ideology would be associated with the adoption of a conspiratorial worldview in general, and (2) if so, whether this effect would be mediated by two of the most well-known correlates of conspiracy beliefs, namely "paranoid ideation" and "distrust of officialdom" (Abalakina-Paap et al., 1999; Goertzel, 1994; Jolley & Douglas, 2014; Miller et al., 2015; Sunstein & Vermeule, 2009). Because of its timely and, some would say, urgent significance for society, we also gauged endorsement of a well-established conspiracy theory that is currently popular on the right, namely the belief that "global warming is a hoax" (Lewandowsky, Oberauer, & Gignac, 2013; McCright & Dunlap, 2011; van der Linden, 2015; Uscinski et al., 2016). This enabled us to directly compare the effects of political ideology when it comes to measures of conspiratorial thinking in *general* and with respect to a specific conspiracy theory.

STUDY 1

In Study 1, we examined the relationship between political ideology and conspiratorial thinking in a large, nationally representative sample of American adults. In addition to investigating linear and quadratic effects of ideology—to probe asymmetrical and symmetrical effects, respectively—we explored one potentially important mediator of conspiratorial thinking, namely distrust of officialdom.

Method

Participants and Procedure

For Study 1, we obtained a nationally representative quota sample (N = 1000) of American adults (18–91, 47% male, 53% female, 28% liberal, 35% moderate, 37% conservative, 39% college degree). The survey was fielded by YouGov using an online panel from February 21 to 23, 2018 with standard national quotas on gender, age, race, education, and region.

Political Ideology

Participants in this study completed a single measure of ideological self-placement: "In general, I think of myself as (1 = very liberal, 2 = somewhat liberal, 3 = moderate, 4 = somewhat conservative, 5 = very conservative," M = 3.12, SD = 1.21).

Conspiratorial Thinking

We adopted Bruder et al.'s (2013) generalized "conspiracy mentality" (CMS) scale. This scale, which has been validated cross-culturally, measures an individual's general tendency to engage in conspiratorial thinking without mentioning any specific conspiracies.[1] The measure consists of five items (e.g., "I think that events which superficially seem to lack a connection are often the result of

[1]We selected this scale over other available measures of conspiratorial mindsets—such as the scale by Brotherton et al. (2013)—because the latter is substantially longer and mentions specific, content-laden conspiracies about the government concealing information about UFOs and aliens.

secret activities"; 0 = definitely not true, 100 = definitely true). The CMS exhibited good reliability in our sample (M = 67.72, SD = 17.41, α = .79).

Belief in a Global-Warming Conspiracy

A single item was used to assess climate-change conspiracy beliefs ("Climate change is a hoax"; definitely not true = 0, definitely true = 100, M = 39.57, SD = 46.56).

Distrust of Officialdom

Participants were asked to rate the trustworthiness of six sources of information (e.g., scientists, government, NGO's, the United Nations, and the mainstream news and media) on a 7-point scale (1 = *extremely trustworthy*, 7 = *extremely untrustworthy* M = 3.98, SD = 1.23, α = .85).

Results and Discussion

Consistent with previous research, we observed a strong positive correlation between self-reported political conservatism and belief in global-warming conspiracies (r = .52, 95% CI: .48, .57,

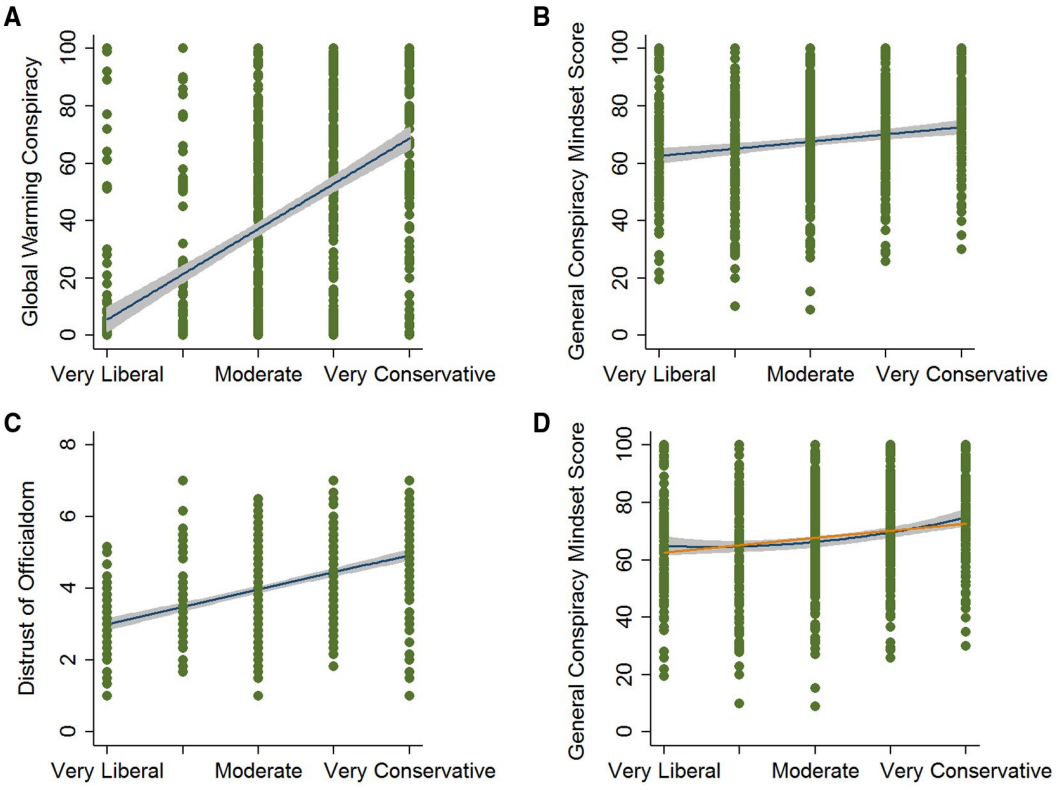

Figure 1. Bivariate linear associations (Study 1) between political conservatism and belief in global-warming conspiracies (A), general conspiratorial thinking (B), distrust of officialdom (C), and a nonsignificant quadratic trend between ideological extremity and conspiratorial thinking (D). Bands represent 95% confidence intervals.

Figure 1, panel A). Importantly, we also observed a positive and significant correlation between conservatism and the adoption of a conspiratorial mindset in general (r = .185, 95% CI: .12, .25, Figure 1, panel B). To investigate the possibility of a curvilinear relationship, we also estimated a quadratic trend (Figure 1, panel D). Although a slight U-curve can be fitted to the data, the trend was not statistically significant (p = .16), and the linear association is included in the confidence interval around the quadratic effect (panel D).

A one-way ANOVA revealed that the linear effect was driven primarily by extreme conservatives (F [4, 829] = 8.81, $p < .001$, $\eta_p^2 = .04$), who differed significantly from all other groups when it came to conspiratorial thinking ($p < .01$). Comparing the raw scores of extreme liberals and extreme conservatives reveals a sizeable asymmetry of nearly 10 percentage points (M = 65.37, SE = 1.81, *vs.* M = 75.27, SE = 1.36, t [232] = 4.45, $p < .001$, Cohen's d = .58, 95% CI: .32, .85).

Conservatives were also significantly more distrustful of officialdom, in comparison with liberals (r = .47, 95% CI: .42, .52, Figure 1, panel C). We observed that the relationship between conservatism and conspiratorial thinking was partially (45%) mediated by distrust of officialdom (with the direct effect dropping from β = .18 to β = .10, $p < .01$, see Figure 2). Therefore, in our first study, we obtained unambiguous evidence that, in comparison with political liberals, conservatives were: (1) more likely to endorse a conspiracy theory about climate change; (2) more likely to adopt a conspiratorial mindset in general; and (3) less trusting of scientists, government, NGOs, and the mainstream media. Furthermore, the relationship between conservatism and conspiratorial thinking was statistically mediated by distrust of these official sources.

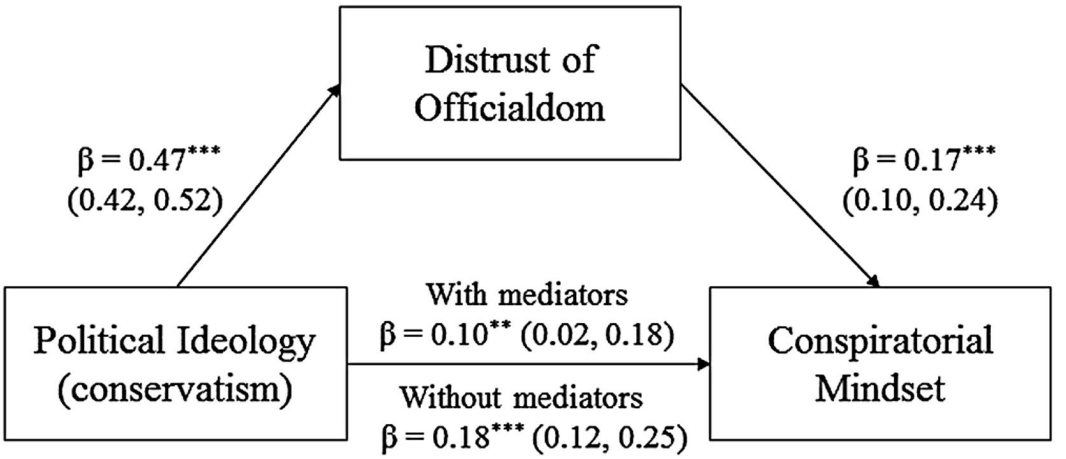

Figure 2. Multiple mediation model (Study 1). Path coefficients are standardized and estimated using Full Information Maximum Likelihood (FIML). YouGov survey weights were applied, and 95% confidence intervals are provided in parentheses using robust standard errors. *$p < .05$, **$p < .01$, ***$p < .001$. N = 1000.

STUDY 2

In Study 2, we sought to build on the findings from our first study by conducting a replication and incorporating an additional mediating variable, namely paranoid ideation. Previous studies suggest that paranoia is associated with the attribution of harmful intent to outgroups (Saalfeld, Ramadan, Bell, & Raihani, 2018) and—like distrust of officialdom—is a key correlate of conspiratorial thinking

(Brotherton & Eser, 2015; Bruder et al., 2013; Darwin, Neave, & Holmes, 2011; Grzesiak-Feldman & Ejsmont, 2008; Imhoff & Lamberty, 2018). Wilson and Rose (2014) situated paranoid ideation in the context of Duckitt's (2001) dual-process model of ideology and prejudice and observed that increased paranoia was positively associated with ring-wing authoritarianism (RWA) and social dominance orientation (SDO). Thus, we investigated the hypothesis that there would an asymmetrical effect of political ideology on conspiratorial thinking and that the effect would be mediated by paranoid ideation as well as distrust of officialdom.

Method

Participants and Procedure

A diverse sample ($N = 430$) of American adults (18–65+, 45% male, 46% liberal) were recruited from Amazon Mechanical Turk (Mturk). The survey was administered online via Qualtrics and took approximately 10 minutes to complete. Participants were asked to participate in an online personality study and paid $0.50 for the task; their location was restricted to the United States. The study received ethical approval from the university's Institutional Review Board.

Political Ideology

Political ideology was assessed using the same item as in Study 1: "In general, I think of myself as (1 = *very liberal*, 2 = *somewhat liberal*, 3 = *moderate*, 4 = *somewhat conservative*, 5 = *very conservative*," $M = 3.28$, $SD = 1.22$).

Conspiracy Mentality

We administered the same "conspiracy mentality" scale (CMS) used in Study 1. The CMS again exhibited good reliability ($M = 64.06$, $SD = 22.39$, $\alpha = .85$).

Global-Warming Conspiracy (GWC) Scale

Rather than relying upon a single item, we administered 10 items tapping into popular global-warming conspiracy theories (sample item: "Global warming is a hoax invented by the United Nations as part of a secret plot to advance a new world government"; 1 = *completely disagree*, 7 = *completely agree*). The scale was highly reliable and unidimensional ($M = 28.61$, $SD = 16.69$, $\alpha = .96$, see the online supporting information for an exploratory factor analysis of the unidimensional scale).

Distrust of officialdom. Participants were again asked to rate the trustworthiness of six different sources of information (e.g., scientists, government, mainstream media) on the same 7-point scale used in Study 1 (1 = *extremely trustworthy*, 7 = *extremely untrustworthy*, $M = 4.04$, $SD = 1.30$, $\alpha = .96$).

Paranoid Ideation

We assessed paranoid ideation by administering Fenigstein and Vanable's (1992) 10-item Paranoia Scale (sample item; "I often feel that strangers are looking at me critically"; 1 = *not at all true*, 5 = *very true*, $M = 2.77$, $SD = .83$, $\alpha = .96$).

Results and Discussion

As in Study 1, we observed a strong positive correlation between political conservatism and belief in global-warming conspiracies (r = .46, 95% CI: .37, .54, Figure 3, panel A). Once again, we also observed a significant positive correlation between conservatism and conspiratorial thinking in general (r = .18, 95% CI: .07, .29, Figure 3, panel B). We explored the possibility of a curvilinear relationship, but the quadratic term was not significant (p = .86). Comparing the raw conspiracy scores of extreme liberals and extreme conservatives revealed the existence of a large asymmetry of nearly 15 points (M = 59.91, SE = 2.30, *vs.* M = 74.66, SE = 3.06, t [114] = 3.68, p < .001, Cohen's d = .73, 95% CI: .33, 1.14).

Conservatives were again significantly and substantially more distrustful of officialdom than liberals (r = .38, 95% CI: .29, .47, Figure 3, panel C). A relatively small but positive correlation was observed between the endorsement of conservative ideology and paranoid ideation (r = .11, 95% CI: .01, .21, Figure 3, panel D). As expected, paranoia (r = .44, 95% CI: .35, .53) and distrust of officialdom (r = .28, 95% CI: .18, .38) were both significantly correlated with conspiratorial thinking in general. The association between political conservatism and conspiratorial thinking was fully mediated by paranoid ideation and distrust of officialdom (see Figure 4).

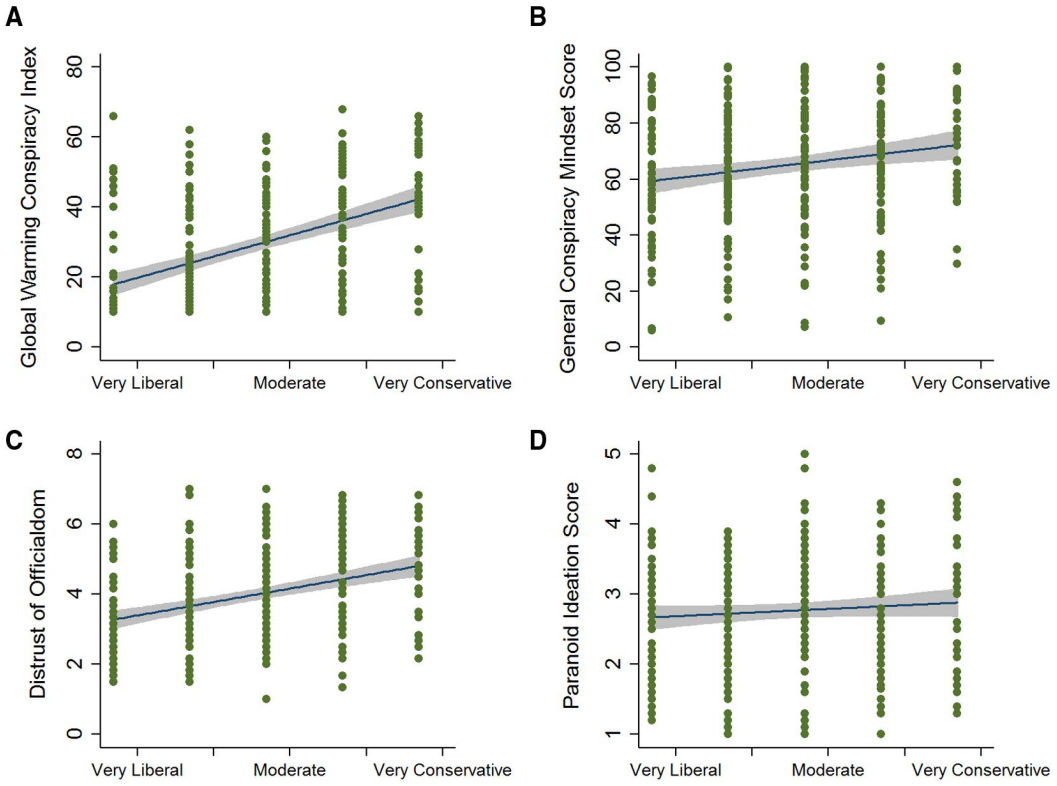

Figure 3. Linear associations (Study 2) between political conservatism and belief in global-warming conspiracies (A), a conspiratorial mindset in general (B), distrust of officialdom (C), and paranoid ideation (D). Bands represent 95% confidence intervals.

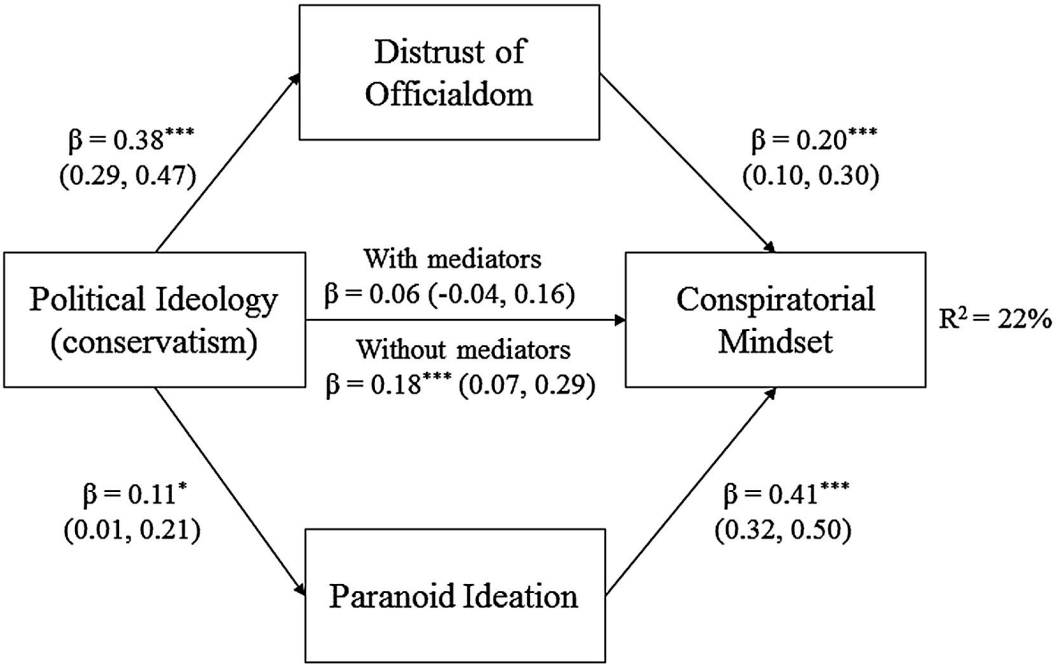

Figure 4. Multiple parallel mediation model (Study 2). Path coefficients are standardized and estimated with Full Information Maximum Likelihood (FIML). Bootstrapped (1000 samples) 95% confidence intervals are provided in parentheses. Model covariates include gender, age, and education. *$p < .05$, **$p < .01$, ***$p < .001$. $N = 430$.

STUDY 3

Although the Mturk platform generally provides quality data on psychological aspects of political ideology (Clifford, Jewell, & Waggoner, 2015), we sought to enhance the robustness of our findings by reproducing our analyses using larger and more diverse samples and considering a broader array of conceptually related but distinctive independent, dependent, and mediating variables. In Study 3, we administered to a large, nationally representative sample of American adults a wide range of measures gauging political ideology, including general, social, and economic forms of conservatism. We again measured participants' general tendencies to engage in conspiratorial thinking, their levels of distrust, paranoia, and endorsement of conspiracies pertaining to climate change as well as the 2016 U.S. presidential election.

Method

Participants and Procedure

We retained a professional survey company (SSI; Survey Sampling International) to recruit a nationally representative sample of 1500 Americans (18–65+, 51% female, 50% Republican) to complete the study during the American general election season (August 16 to September 9, 2016). The survey used interlocked quotas for gender, age, education, and income to reflect proportions of the 2014 U.S. Census.[2] The survey was administered online via Qualtrics in line with German ethical guidelines, which do not require separate IRB approval for anonymous data.

[2]Detailed information about the sample and sampling method is provided in the online supporting information.

In total, 2424 participants were directed to the survey, 1885 of whom finished the survey (attrition rate 22%). We followed recommendations to minimize the problem of careless responding in online studies (Meade & Craig, 2012). Specifically, the survey allowed us to employ 10 attention-check questions and time controls to ensure data quality. There were 385 participants who failed more than one attention check or finished the survey too quickly (under 22 minutes) and were therefore excluded from the final sample by the survey company. We only paid for data that included the 1500 participants who successfully finished the survey.

Measures

Participants responded to all survey items using 9-point Likert scales. The specific items used for each of the variables measured in Study 3 are listed in Table 1.

Political Ideology

Ideology was assessed using two types of measures: ideological self-placement (or symbolic ideology) and issue-based preferences (or operational ideology). In terms of ideological self-placements, participants located themselves on bipolar scales of political orientation in general, with

Table 1. Constructs and Wording of Individual Items

Construct	Item Number	Item Text
Conspiratorial thinking	1	Some political and social events are debated (for example, 09/11 attacks, the death of Lady Diana, the assassination of John F. Kennedy). It is suggested that the "official version" of these events could be an attempt to hide the truth to the public. This "official version" could mask the fact that these events have been planned and secretly prepared by a covert alliance of powerful individuals or organizations (for example, secret services or government). What do you think? I think that the official version of the events given by the authorities very often hides the truth.
	2	I think the 2016 US Presidential elections will be rigged.
	3	Media coverage of the 2016 US Presidential elections has been controlled by vested interests behind one side of the debate.
Ideological self-placement	1	Overall, where would you place yourself, on the following scale of liberalism-conservatism?
	2	How about in terms of social and cultural issues (e.g., abortion, separation of church and state, affirmative action)?
	3	How about in terms of economic issues (e.g., taxation, welfare, privatization of social security)?
Belief in climate-change conspiracies	1	Climate scientists and their political allies are deliberately misleading the public about global warming.
	2	Selfish interests are scheming to convince the public that global warming is a major threat.
Paranoid ideation	1	Every day, our society becomes more lawless and bestial, a person's chances of being robbed, assaulted and even murdered go up and up.
	2	Although it may appear that things are constantly getting more dangerous and chaotic, it really isn't so. Every era has its problems, and a person's chances of living a safe, untroubled life are better today than ever before (reverse coded).
Distrust of officialdom	1	I'd rather put my trust in the wisdom of ordinary people than the opinions of experts and intellectuals.
	2	When it comes to really important questions, scientific facts don't help very much.
	3	We believe too often in science, and not enough in faith and feelings.

respect to economic issues, and with respect to social/cultural issues. In all three cases, the response scales ranged from 1 (*strongly liberal*) to 9 (*strongly conservative*).

Issue-based ideological preferences were assessed using five different instruments: (1) the Core Domains of Social and Economic Conservatism Scale, which contains seven items measuring economic conservatism and three items measuring social conservatism (Feldman & Johnston, 2014); (2) the Pew Research Center's "Core Issues in American Politics" scale, which is comprised of 12-items (e.g., "The government needs to do more to make health care affordable and accessible"; Zell & Bernstein, 2014); (3) the Social and Economic Conservatism Scale, which includes five economic and seven socially conservative values (e.g., "Traditional values"; Everett, 2013); (4) the Political Issue Statements which is comprised of 10-items measuring political orientation on the left-right ideological space (e.g., "A woman should have the right to choose what to do with her body, even if that means getting an abortion"; Inbar, Pizarro, & Bloom, 2009); and (5) an adapted 16-item version of Henningham's (1996, 1997) Social and Economic Conservatism scales, which are contemporary versions of the "classic" Wilson and Patterson (1968) scale for measuring liberalism-conservatism (see the online supporting information for the full list of items).

Conspiratorial Thinking

We administered Lantian, Muller, Nurra, and Douglas's (2016) general measure of conspiracy belief and two additional items adapted from Uscinski and Parent (2014) to apply to the 2016 U.S. presidential election. A composite measure was created to estimate individual differences in the tendency to embrace conspiracy theories in general (e.g., "Some political and social events are debated, for example the 9/11 attacks, the death of Lady Diana, the assassination of John F. Kennedy. It is suggested that the 'official version' of these events could be an attempt to hide the truth to the public. What do you think? I think that the official version of the events given by the authorities very often hides the truth"). Participants responded to all items on a 9-point scale ranging from 1 (*definitely false*) to 9 (*definitely true*). Our composite measure of conspiratorial thinking exhibited good reliability ($M = 5.65$, $SD = 1.93$, $\alpha = .79$).

Belief in Conspiracies about Climate Change

Two items were used to measure beliefs in denialist climate-change conspiracies. One item accuses climate scientists ("Climate scientists and their political allies are deliberately misleading the public about global warming"), whereas the second refers to an unspecified target that is allegedly involved in fear mongering ("Selfish interests are scheming to convince the public that global warming is a major threat"). Responses to both items, which were strongly intercorrelated ($r\,[1498] = .87$, $p < .001$), were provided on 9-point response scales ranging from 1 (*strongly disagree*) to 9 (*strongly agree*).

Distrust of Officialdom

Three items were used to measure the lack of trustworthiness of traditional sources of information (e.g., "I'd rather put my trust in the wisdom of ordinary people than the opinions of experts and intellectuals"). The distrust of officialdom scale exhibited adequate reliability ($M = 4.97$, $SD = 1.89$, $\alpha = .69$).

Paranoid Ideation

Two items were used to measure paranoid ideation (e.g., "Every day, our society becomes more lawless and bestial, a person's chances of being robbed, assaulted and even murdered go up and up").

Responses to both items, which were intercorrelated (r [1498] = .45, $p < .001$), were provided on 9-point scales ranging from 1 (*strongly disagree*) to 9 (*strongly agree*).

Results and Discussion

In all cases—whether we measured political orientation in terms of ideological self-placement or issue-based preferences on social or economic dimensions—we observed that political conservatism was strongly and positively associated with belief in climate-change conspiracies (with correlations ranging from r = .53 to r = .67, see Figure 5, panel A and Tables 2 and 3) and with conspiratorial thinking in general (with correlations ranging from r = .20 to r = .35, see Figure 5, panel B and Tables 2 and 3). These associations, which were remarkably consistent and robust, were linear (Figure 5) and significant at the $p < .01$ level. We also investigated curvilinear (or quadratic) relationships in the context of a regression framework. Formal testing was performed for all eight measures of political orientation in relation to conspiratorial thinking and belief in climate-change conspiracies. Due to the large sample size, very small effect sizes were flagged as statistically significant. In general, however, we found that the quadratic coefficients were small in magnitude and directionally inconsistent. Thus, we consider the relationship between ideology and conspiratorial thinking to be linear in general.

We also observed that conspiratorial thinking in general was associated with belief in climate-change conspiracies (r = .49, 95% CI: .45, .53), providing further evidence that these two phenomena are linked. As in the preceding studies, there was a clear asymmetry in general conspiratorial thinking, such that extreme conservatives (M = 6.50, SD = 1.75) scored significantly higher than

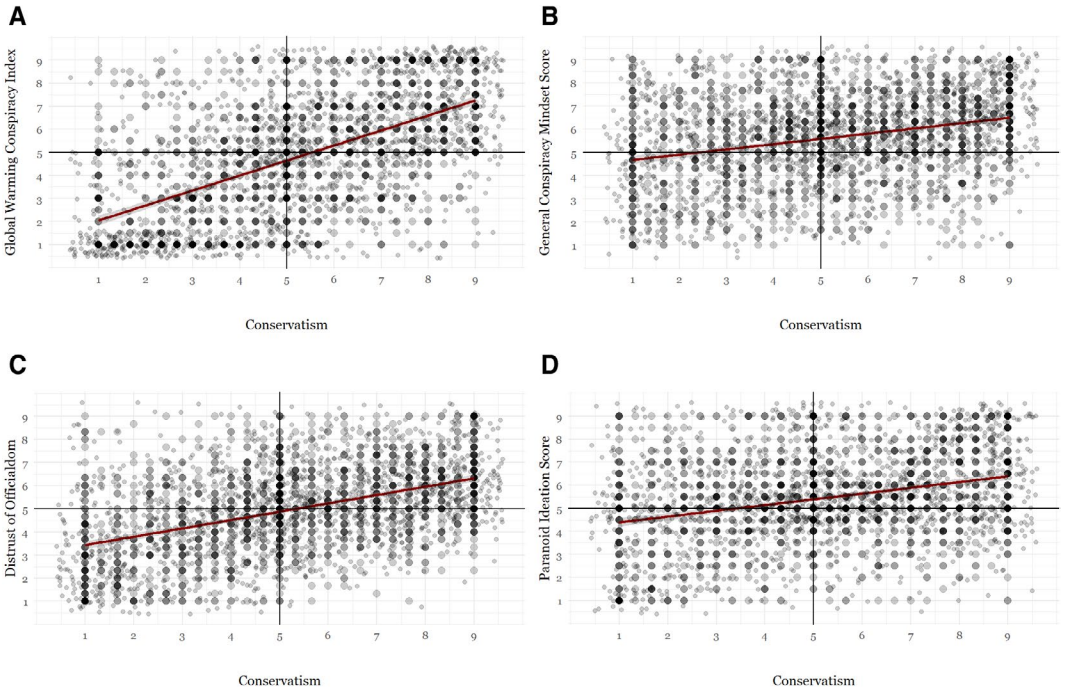

Figure 5. Bivariate linear associations (Study 3) between political conservatism (average ideological self-placement score) and Global Warming Conspiracy Index (A), General Conspiratorial Mindset Score (B), Distrust of Officialdom (C), and Paranoid Ideation Score (D).

Table 2. Means, Standard Deviations, and Correlations with Confidence Intervals

Variable	*M*	*SD*	1	2	3	4	5	6
1. Conspiratorial thinking	5.65	1.93						
2. Belief in climate-change conspiracies	4.81	2.59	.49** [.45, .53]					
3. Paranoid ideation	5.45	1.96	.38** [.33, .42]	.35** [.30, .39]				
4. Distrust of officialdom	4.97	1.89	.52** [.48, .56]	.57** [.54, .61]	.42** [.38, .46]			
5. General conservatism	5.31	2.45	.28** [.24, .33]	.59** [.55, .62]	.32** [.27, .36]	.46** [.42, .50]		
6. Economic conservatism	5.48	2.63	.21** [.16, .25]	.54** [.51, .58]	.22** [.18, .27]	.35** [.31, .40]	.82** [.80, .83]	
7. Social conservatism	4.93	2.76	.30** [.26, .35]	.56** [.53, .60]	.32** [.27, .36]	.47** [.43, .51]	.84** [.82, .85]	.72** [.69, .74]

Note. M and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation.
**$p < .01$.

extreme liberals ($M = 4.75$, $SD = 2.13$, t [386] = 9.63, $p < .001$, Cohen's $d = .90$) on our measure of general conspiratorial thinking.

Conservatives were once again significantly more distrusting of official sources ($r = .36$, 95% CI: .33, .40, Figure 5, panel C) and more likely to engage in paranoid ideation ($r = .25$, 95% CI: .21, .29, Figure 5, panel D), in comparison with liberals. Distrust of officialdom ($r = .44$, 95% CI: .39, .49) and paranoid ideation ($r = .19$, 95% CI: .14, .23) were both significantly associated with conspiratorial thinking in general. Replicating the results of Study 2, the association between conservatism and conspiratorial thinking, was fully mediated by distrust of officialdom and paranoid ideation (see Figure 6).

Even if some of the associations were fairly modest in terms of the magnitude of effect sizes, we see that there was a meaningful ideological asymmetry that was remarkably stable across our first three studies. The pattern is similar for belief in climate-change conspiracies and conspiratorial thinking in general, and it holds for three measures of ideological self-placement as well as five issue-based measures and one value-based measure of political conservatism, in the context of a national representative sample of American adults.[3] When we compare the average magnitude of effect sizes between conservatism and belief in conspiracies about climate change to that between conservatism and conspiratorial thinking in general, we find that the former relationship is consistently stronger. This finding suggests that the association between conservatism and conspiratorial thinking is present in general, but it is magnified when the conspiracy theory in question is ideologically congenial.

STUDY 4

In a fourth and final study, we sought to replicate the multiplicity of effects observed in Study 3 in another large and diverse sample of U.S. adults ($N = 2119$). Thus, we administered the very same measures used in Study 3, including ideological self-placement for (symbolic) general, social,

[3]As reported in the online supporting information, we also investigated the role of party identification, prospective voting intentions, and perceptions of candidate likeability (see Table S4). Results confirm that stronger partisan attachment among Republicans, intentions to vote for Donald Trump, and greater liking of Donald Trump and disliking of Hilary Clinton were all positively associated with belief in climate-change conspiracies and conspiratorial thinking in general.

Table 3. Means, Standard Deviations, and Correlations with Confidence Intervals

Variable	*M*	*SD*	1	2	3	4	5	6	7	8
1. Conspiratorial thinking	5.7	1.9								
2. Belief in climate-change conspiracies	4.8	2.6	.49** [.45, .53]							
3. Paranoid ideation	5.5	2.0	.38** [.33, .42]	.35** [.30, .39]						
4. Distrust of officialdom	5.0	1.9	.52** [.48, .56]	.57** [.54, .61]	.42** [.38, .46]					
5. Core issues	4.7	1.6	.27** [.22, .32]	.66** [.63, .69]	.34** [.29, .38]	.48** [.44, .52]				
6. Political issue statements	4.9	1.5	.35** [.30, .39]	.67** [.64, .70]	.41** [.37, .45]	.56** [.52, .59]	.85** [.83, .86]			
7. Social and economic conservatism	4.7	1.5	.32** [.27, .36]	.63** [.60, .66]	.40** [.36, .44]	.54** [.50, .57]	.86** [.85, .87]	.85** [.83, .86]		
8. Core domains	4.2	1.7	.25** [.20, .29]	.58** [.55, .62]	.27** [.23, .32]	.44** [.40, .48]	.85** [.83, .86]	.79** [.77, .81]	.81** [.79, .83]	
9. SECS	6.4	1.5	.20** [.15, .25]	.53** [.49, .57]	.32** [.27, .36]	.41** [.37, .45]	.72** [.70, .75]	.72** [.70, .74]	.71** [.68, .73]	.65** [.62, .68]

Note. *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation.
**$p < .01$.

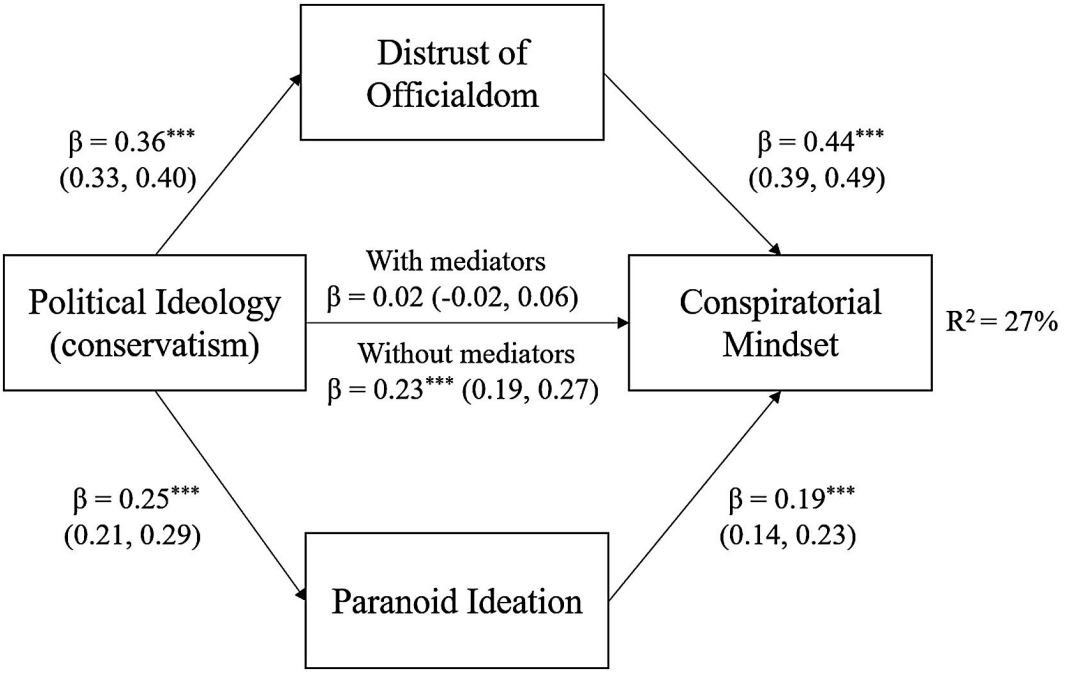

Figure 6. Multiple parallel mediation model (Study 3). *$p < .05$, **$p < .01$, ***$p < .001$. $N = 1500$. Path coefficients are standardized. Bootstrapped (10,000 samples) 95% confidence intervals are provided in parentheses. Model covariates include gender, age, and education.

and economic conservatism; the same issue-based and value-based measures of operational conservatism; belief in climate-change conspiracies; the tendency to engage in conspiratorial thinking in general; two items measuring paranoid ideation; and three items measuring distrust of officialdom.

Method

Participants and Procedure

We used a professional survey firm (SSI; Survey Sampling International) to recruit a large convenience sample of 2119 American adults (22% women). The age distribution was as follows: 18–24 (9%), 25–34 (14%), 35–44 (11%), 45–54 (3%), 55–65(4%), and 65 and older (59%). The ethnic breakdown was White/European American (86%), Black/African American (5%), Latino (4%), and "Other" (5%). In terms of religion, 70% identified as Christian, 16% as religiously affiliated but not Christian, and 14% as Atheist/Agnostic. With respect to educational status, 16% reported "high school or lower," 41% reported "some college," and 43% had attained a "Bachelors" or "graduate" degree. The median income category was US$50,000–$74,999. The survey was administered online via Qualtrics according to German ethical guidelines.

Measures

Because Study 4 was a direct replication of Study 3, participants responded to the same survey items using 9-point Likert scales. The wording of all items listed in Table 1 (and the online

supporting information) were the same. For the sake of simplicity—and because means, standard deviations, and internal consistencies were nearly identical to those reported in Study 3—we omit the reporting of descriptive results and move directly to the reporting of inferential statistics (but see the online supporting information for factor analyses of the scales and all item means and standard deviations).

Results and Discussion

The results of Study 4 replicate those of our first three studies almost perfectly. Whether we measured political orientation in terms of ideological self-placement or issue-based preferences on social or economic dimensions, political conservatism was strongly and positively associated with belief in climate-change conspiracies (with correlations ranging from $r = .54$ to $r = .69$, see Figure 7, panel A and Tables 4 and 5) and with conspiratorial thinking in general (with correlations ranging from $r = .22$ to $r = .37$, see Figure 7, panel B and Tables 4 and 5). These associations were once again linear and robust (see Figure 7) and significant at the $p < .01$ level.[4] Conspiratorial thinking in general was again strongly associated with belief in climate-change conspiracies ($r = .51$, 95% CI: .48, .54). And, as in all of the preceding studies, there was a clear asymmetry in conspiratorial thinking in general such that extreme conservatives ($M = 6.10$, $SD = 1.65$) scored significantly higher than extreme liberals ($M = 4.70$, $SD = 2.19$, t [413] = 8.97, $p < .001$, Cohen's $d = .72$).

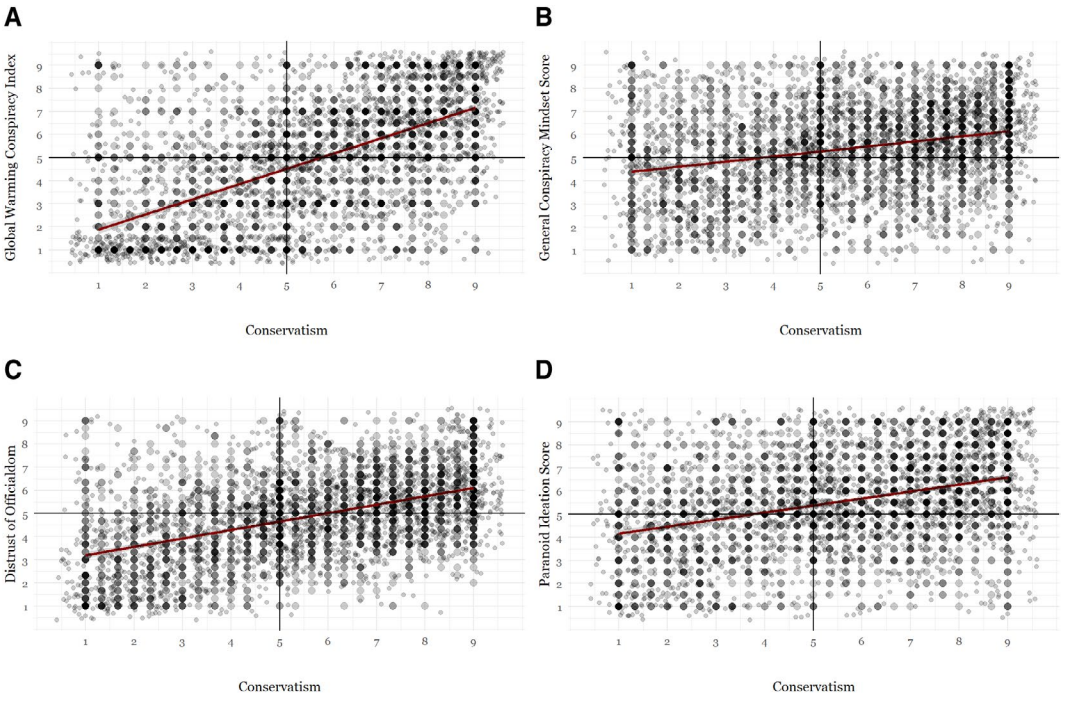

Figure 7. Bivariate linear associations (Study 4) between political conservatism (average ideological self-placement score) and Global Warming Conspiracy Index (A), General Conspiratorial Mindset Score (B), Distrust of Officialdom (C), and Paranoid Ideation Score (D).

[4]As in Study 3, we explored curvilinear relationships in the context of a regression framework and—in light of the small and directionally inconsistent effect sizes observed for quadratic coefficients—we concluded once again that the relationship between ideology and conspiratorial thinking was linear in general.

Table 4. Means, Standard Deviations, and Correlations with Confidence Intervals

Variable	*M*	*SD*	1	2	3	4	5	6
1. Conspiratorial mindset	5.40	1.93						
2. Climate-change conspiracies	4.91	2.63	.51**					
			[.48, .54]					
3. Paranoid ideation	5.56	2.04	.39**	.37**				
			[.35, .42]	[.34, .41]				
4. Distrust of officialdom	4.86	1.84	.50**	.62**	.43**			
			[.47, .53]	[.59, .64]	[.39, .46]			
5. General conservatism	5.62	2.44	.26**	.58**	.34**	.45**		
			[.22, .30]	[.56, .61]	[.30, .38]	[.42, .48]		
6. Economic conservatism	5.85	2.60	.22**	.54**	.30**	.38**	.84**	
			[.18, .26]	[.51, .57]	[.26, .34]	[.34, .42]	[.82, .85]	
7. Social conservatism	5.27	2.78	.29**	.58**	.37**	.50**	.83**	.74**
			[.25, .33]	[.55, .61]	[.33, .40]	[.47, .53]	[.82, .84]	[.72, .76]

Note. *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation.
**$p < .01$.

As in the previous studies, political conservatives were significantly more distrusting of official sources ($r = .36$, 95% CI: .34, .39, Figure 7, panel C) and more likely to engage in paranoid ideation ($r = .30$, 95% CI: .27, .30, Figure 7, panel D), in comparison with liberals. Distrust of officialdom ($r = .43$, 95% CI: .39, .47) and paranoid ideation ($r = .20$, 95% CI: .16, .23) were significantly associated with conspiratorial thinking in general. As shown in Figure 8, the association between conservatism and conspiratorial thinking was again mediated by distrust of officialdom and paranoid ideation. Thus, the results of Study 4 strongly and unambiguously replicate the results of Study 3 and provide further evidence of an ideological asymmetry in the psychological tendency to engage in conspiratorial thinking in general.

Quantitative Synthesis of Results

With the goals of providing a formal synthesis of effect sizes and working towards cumulative social science (Mischel, 2009), we aggregated the associations observed in each of the four studies and calculated their overall magnitude and direction (Table 6). We also conducted an analysis on the pooled data (see Webster, Smith, Brunell, Paddock, & Nezlek, 2017). Similar to integrative data analysis (IDA; Curran & Hussong, 2009), this procedure offers two advantages over traditional meta-analysis for studies with similar constructs in situations in which researchers have access to the raw data. First, it makes fewer methodological assumptions than meta-analysis, and, second, it maximizes statistical power by combining individual-level data from each study. Accordingly, we conducted a parallel mediation analysis on the pooled data; results are displayed in Figure 9. We reach two major conclusions: (1) The association between political conservatism and general conspiratorial thinking is linear, positive, robust, and replicable ($r = .27$, 95% CI: .24, .30); and (2) the association between conservatism and conspiratorial thinking is fully mediated by distrust of officialdom and paranoid ideation.[5]

[5]The association between political conservatism and conspiratorial thinking is robust with respect to both symbolic and operational measures of ideology, prospective voting intentions, retrospective voting behavior, and perceptions of candidate likeability.

Table 5. Means, Standard Deviations, and Correlations with Confidence Intervals

Variable	*M*	*SD*	1	2	3	4	5	6	7	8
1. Conspiratorial mindset	5.4	1.9								
2. Climate-change conspiracies	4.9	2.6	.51** [.48, .54]							
3. Paranoid ideation	5.6	2.0	.39** [.35, .42]	.37** [.34, .41]						
4. Distrust officialdom	4.9	1.8	.50** [.47, .53]	.62** [.59, .64]	.43** [.39, .46]					
5. Core issues	5.0	1.7	.30** [.26, .33]	.69** [.67, .71]	.39** [.35, .42]	.52** [.49, .55]				
6. Political issue statements	5.1	1.6	.37** [.33, .41]	.69** [.66, .71]	.43** [.40, .47]	.56** [.53, .59]	.85** [.83, .86]			
7. Social and economic conservatism	4.8	1.5	.33** [.29, .37]	.66** [.64, .69]	.43** [.40, .47]	.57** [.55, .60]	.87** [.86, .88]	.83** [.82, .85]		
8. Core domains	4.5	1.7	.28** [.24, .32]	.62** [.60, .65]	.34** [.30, .38]	.48** [.44, .51]	.86** [.85, .87]	.80** [.78, .81]	.82** [.81, .84]	
9. SECS	6.6	1.5	.23** [.18, .27]	.54** [.51, .57]	.35** [.31, .38]	.42** [.38, .45]	.74** [.72, .76]	.69** [.67, .71]	.71** [.68, .73]	.68** [.65, .70]

Note. *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation.
**$p < .01$.

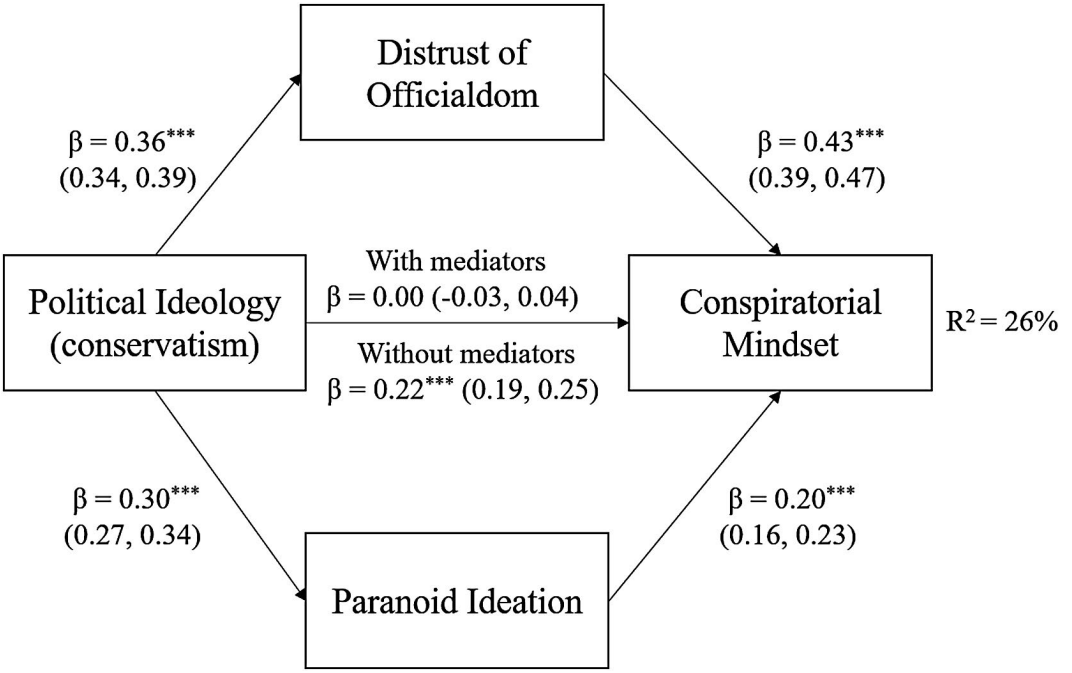

Figure 8. Multiple parallel mediation model (Study 4). *$p < .05$, **$p < .01$, ***$p < .001$. $N = 2119$. Path coefficients are standardized. Bootstrapped (10,000 samples) 95% confidence intervals are provided in parentheses. Model covariates include gender, age, and education.

Table 6. Aggregated Spearman's Correlations across Studies

Study	*N*	Ideology & Distrust	Ideology & Paranoid Ideation	Conspiracy Mindset & Distrust	Conspiracy Mindset & Paranoid Ideation	Ideology & Conspiracy Mindset
U.S. convenience sample	2119	.47	.35	.49	.36	.28
Mturk sample	311	.36	.07	.29	.40	.18
National sample	1500	.45	.28	.50	.36	.28
National sample	1000	.50	–	.22	–	.17
Aggregated correlations	4930	.46	.30	.43	.36	.25

Note. Spearman's rank correlations coefficients using pairwise complete observations.

In addition, we sought to quantify the overall evidence pertaining to the average ideological asymmetry in conspiratorial thinking. For this analysis, we conducted a random effects meta-analysis on the standardized mean differences between ideological extremes across the four studies. As shown in Figure 10, we obtained an effect-size estimate for the standardized mean difference of Hedges' $g = .77$, $SE = .07$, $p < .001$.[6] We interpret this as providing very strong evidence (aggregating across four different samples) that a significant and substantial ideological asymmetry exists in conspiratorial thinking between liberals and conservatives in the United States, even at the extremes.

[6]Hedges *g* is an unbiased variation of Cohen's *d* (Hedges & Olkin, 1985).

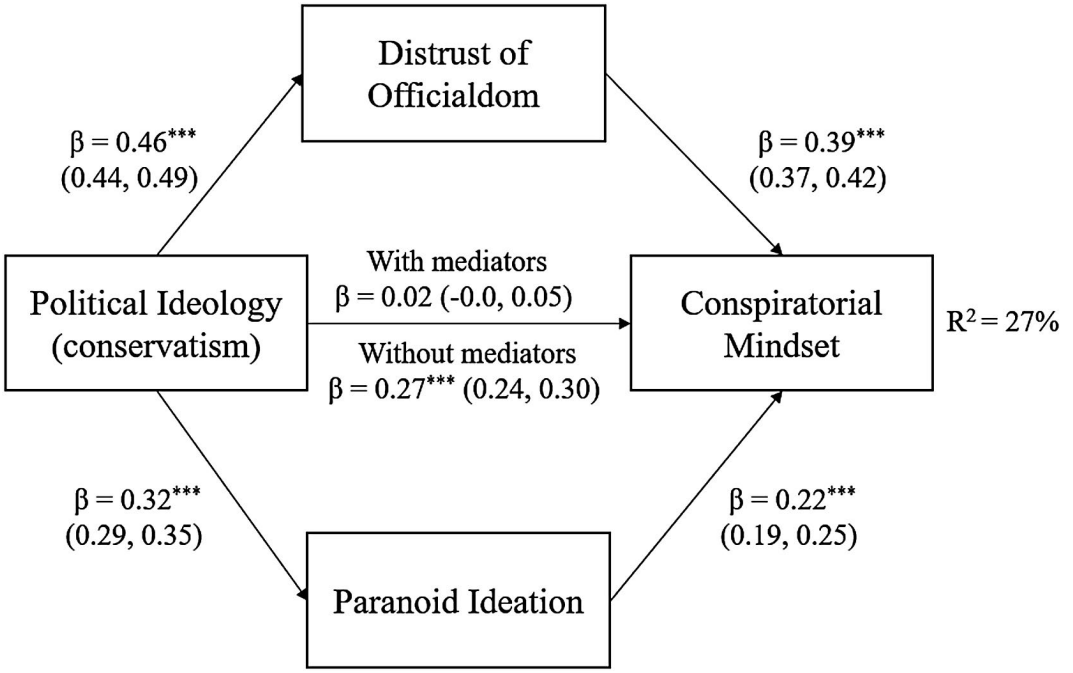

Figure 9. Pooled multiple parallel mediation model (N = 4930). Path coefficients are standardized. Bootstrapped (10,000 samples) 95% confidence intervals are provided in parentheses. *p < .05, **p < .01, ***p < .001.

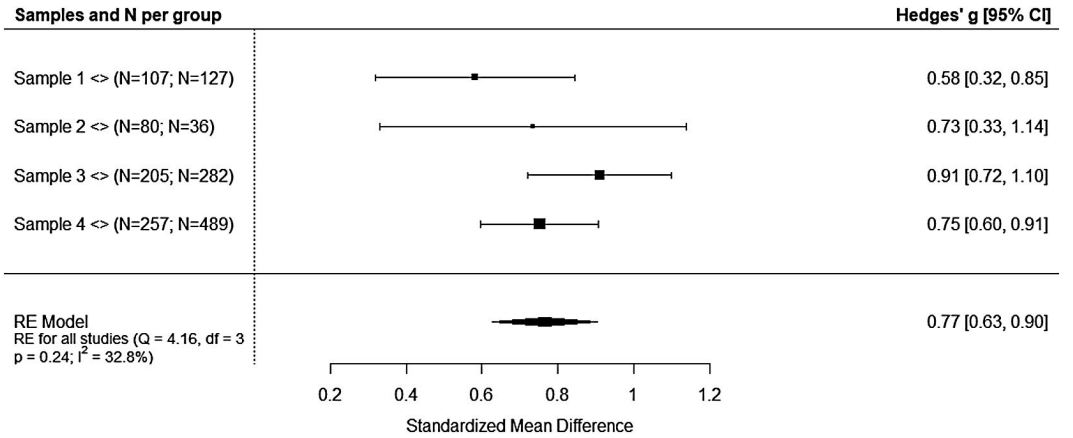

Figure 10. Random effects meta-analysis synthesizing the evidence for an ideological asymmetry in conspiratorial thinking between liberals and conservatives.

General Discussion

Although it may be reasonable to suggest that liberals and conservatives may both be susceptible to conspiratorial forms of thinking under certain circumstances (Moore et al., 2014), the results of our investigation point to meaningful psychological differences, at least in the context of American politics. Although previous accounts have suggested that conspiratorial thinking should be equally

prevalent among ideological extremists on the left and right (e.g., Kahan, 2016; McClosky & Chong, 1985; Oliver & Wood, 2014; van Prooijen et al., 2015)—with some concluding that "there is no marked ideological asymmetry in conspiracy belief" (Sutton & Douglas, 2020, p. 1)—this is not what we find. Consistent with Hofstadter's (1964) historical observations about "the paranoid style in American politics" and the theory of political conservatism as motivated social cognition (Jost, 2006, 2017; Jost et al., 2003, 2018), we observed a replicable ideological asymmetry when it comes to the adoption of a conspiratorial mindset in general. Overall, the relationship between conservatism and conspiratorial thinking was positive, linear, and statistically robust ($r = .27$, 95% CI: .24, .30).

To begin with, we observed a strong, linear relationship between political conservatism and the belief that "global warming is a hoax"—a position that maintains the socioeconomic status quo and obviates the need for social change aimed at protecting the natural environment (Hennes, Ruisch, Feygina, Monteiro, & Jost, 2016; Jolley, Douglas, & Sutton, 2018). More surprisingly, at least from the standpoint of certain perspectives in social science, we observed the very same pattern with respect to *generalized* conspiratorial mindsets. In four studies based on diverse (and in two cases, nationally representative) samples and a broad constellation of measures of political ideology and conspiratorial thinking, we found that conservatives in the United States were significantly and substantially more likely than liberals to embrace conspiratorial ways of thinking. These findings are consistent with independent lines of research indicating that (1) political conservatism is associated with heightened epistemic, existential, and relational needs to reduce uncertainty, threat, and social deviance (Jost, 2017; Jost et al., 2018), and (2) heightened epistemic, existential, and relational needs are associated with conspiratorial thinking (Douglas, Sutton, & Cichocka, 2017; Garrett & Weeks, 2017; Kay, Whitson, Gaucher, & Galinsky, 2009; Krekó, 2015; Whitson, Galinsky, & Kay, 2015).

In contrast to the suppositions of van Prooijen and colleagues (2015), we found little or no evidence of a curvilinear or quadratic relationship between ideological extremity and conspiratorial thinking in the U.S. context. Extreme liberals were *not* as likely as extreme conservatives to adopt a conspiratorial mindset, although it is possible that extreme liberals would be more motivated than moderate liberals to embrace some conspiracy theories. We observed that extreme conservatives scored significantly higher on conspiratorial thinking than extreme liberals, aggregating across all four studies (Hedges' $g = .77$, $SE = .07$, $p < .001$). Importantly, this pattern of ideological asymmetry applied to conspiratorial thinking in general as well as belief in an ideologically congenial conspiracy theory, namely, the conspiracy theory that global warming is a hoax.

It is perhaps worth noting that we obtained very similar results with respect to social and economic dimensions of ideology. That is, in Studies 3 and 4 economic conservatism was positively and significantly associated with conspiratorial ways of thinking in general, endorsement of conspiracy theories about global warming in particular, paranoid ideation, and distrust of officialdom—much as social conservatism was. These findings are not readily reconciled with suggestions that the psychological underpinnings of economic conservatism are vastly different from those of social or cultural conservatism and, in particular, that psychological needs for certainty and security are associated with social conservatism but not economic conservatism (Feldman & Johnston, 2014; Johnston, Lavine, & Federico, 2017; Malka & Soto, 2015).

Of course, we readily note several limitations of our research program, including the fact that we have relied upon cross-sectional, correlational analyses of data. Clearly, it is impossible to draw causal inferences about the relationship between political ideology and conspiratorial worldviews on the basis of these studies. Some readers might suggest that belief in conspiracy theories could, in certain media environments, also lead people to embrace political conservatism. If this is true, it would not necessarily contradict the theory of political ideology as motivated social cognition, which stresses the existence of *elective affinities* arising from a reciprocal combination of "top-down," elite-driven communication processes and "bottom-up" psychological needs and interests (Jost, Federico, & Napier, 2009). We decided not to conduct mediation models that reverse the order of the variables,

because this approach has been criticized sharply on methodological grounds (Lemmer & Gollwitzer, 2017). Instead, we cite a number of theoretical reasons why statistically equivalent models would be less plausible than the model we have developed in the present research program (Pieters, 2017).

First, political ideology is generally understood to be a reasonably stable disposition that remains fairly consistent throughout the lifespan of an adult (Peterson, Smith, & Hibbing, 2020; Sears & Funk, 1999), whereas conspiratorial thinking may not be. Second, there is a good deal of evidence linking political conservatism in particular to epistemic, existential, and relational needs (Jost, 2017; Jost et al., 2003, 2009, 2018) which, as noted above, are themselves linked to the endorsement of conspiracy theories (Douglas et al., 2017; Kay et al., 2009; Whitson et al., 2015). Third, although there are alternative theoretical accounts emphasizing ideological symmetry, which would suggest that conspiratorial thinking should be equally prevalent on the left and right (Kahan, 2016; McClosky & Chong, 1985; van Prooijen et al., 2015; Uscinski et al., 2016), we know of no theories in social science that would make the opposite prediction, namely that liberals would be *more* prone to conspiratorial thinking than conservatives. Nor are we aware of any patterns of data that show an asymmetry in the direction opposite to the one we have observed here.

It is conceivable that—as suggested by an anonymous reviewer—conservatives may be more likely than liberals to *admit* to thinking in conspiratorial terms, but that both groups actually engage in such thinking to an approximately equivalent degree. To the extent that conspiracy theorizing is considered to be socially undesirable in American society, however, this is not the pattern that one would expect on the basis of other psychological evidence indicating that conservatives tend to score higher rather than lower than liberals on measures of socially desirable responding (Jost et al., 2010; Wojcik, Hovasapian, Graham, Motyl, & Ditto, 2015). It is possible that social norms differ among liberals and conservatives with respect to conspiratorial thinking and other epistemic practices, and this would be a fruitful direction for future research. At the same time, if it is in fact true that conservatives feel that conspiratorial thinking is more socially appropriate than liberals do, this difference in social norms would also seem to require explanation in social psychological terms, along the lines of what we have attempted in this article.

Another clear limitation is that we are focusing in particular on the United States shortly before and during the era of Donald Trump. This could be important, because cross-national studies suggest that the link between political conservatism and skepticism about global warming, for instance, is stronger in the United States than in other countries (Hornsey, Harris, & Fielding, 2018). It is worth recounting that Hofstadter's (1964) observations about the "paranoid style" of conservative (or pseudo-conservative) thinking were confined to the American context—although he was describing a decidedly different historical period.

In any case, we suspect that our findings might also have resonance in other countries where right-wing authoritarianism is in the ascendancy, such as Hungary, Austria, Poland, Turkey, Israel, and Brazil. To take just a few examples, right-wing conspiracy theories blaming liberals, Jews, immigrants, foreigners, journalists, academics, and other secret cabals for domestic and international problems—including plans for an alleged "replacement" of the White Christian population with non-White Muslims—have gained political currency throughout Europe (e.g., Davies, 2016; Faragó, Kende, & Krekó, 2020; Feffer, 2019). Conspiracy theories involving George Soros, a liberal Jewish businessman and philanthropist, have been extremely popular among rightists not only in his native country of Hungary, where government-sponsored billboards spread misinformation about him, but also in Russia, Poland, Ukraine, Romania, Slovakia, Turkey, Malaysia, Canada, and the United States (Baram, 2018; Holmes, 2019). In future research, it would be important—for theoretical and practical reasons—to determine the extent to which left-right ideological asymmetries operate in contexts outside of the United States.

In the meantime, our findings, which are clearly focused on the context of American politics, provide strong support for the notion that conspiratorial ideation—and the related phenomenon of

science denial—are forms of motivated reasoning that resonate more with politically conservative than liberal or progressive audiences (see also Dieguez, Wagner-Egger, & Gauvrit, 2015; Fessler, Pisor, & Holbrook, 2017; Jolley et al., 2018; Kraft et al., 2014; Lewandowsky, Oberauer, et al., 2013; Miller et al., 2015; Mooney, 2012). Conspiracy theories—like many other types of rumors—provide relatively simple causal explanations for events that are otherwise experienced as complex, uncertain, ambiguous, and potentially troubling or threatening (Allport & Postman, 1946; Kay et al., 2009). It is important, then, to bear in mind that psychological needs to reduce uncertainty and threat are correlated not with ideological extremity in general, but with right-wing conservatism in particular (Jost, 2006, 2017).

Concluding Remarks

In the present research program, we administered a variety of psychological and political instruments to large samples of American adults and observed that political conservatives were significantly more likely than liberals to exhibit paranoid ideation, to be more distrustful of officialdom, and to espouse conspiratorial thinking in general and in particular (for example, with respect to the scientific evidence about climate change). As noted above, these observations are remarkably consistent with Hofstadter's (1964) historical analysis of the "paranoid style in American politics"—as well as previous research indicating that paranoia is positively associated with right-wing authoritarianism and SDO (Wilson & Rose, 2014).

The fact that conservatives—or perhaps "pseudo-conservatives"—are especially distrustful of scientists, governmental representatives, and the mainstream media as sources of information presumably makes them more susceptible to conspiratorial thinking. Likewise, conspiratorial thinking is likely to increase distrust of conventional epistemic authorities. In conclusion, then, we have provided new and robust evidence that a meaningful ideological asymmetry exists in the United States when it comes to the adoption of conspiratorial mindsets. As Hofstadter (1964) pointed out, there are some troubling implications of the paranoid style for the stable functioning of liberal-democratic societies—insofar as some level of political trust is required for citizens to share power with and consent to being governed by others with whom they disagree (see also Morisi, Jost, & Singh, 2019). Although these normative implications are beyond the scope of the present article, they are well worth considering.

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DATA AVAILABILITY STATEMENT

All data required to reproduce the main analyses reported in this article are available on the Open Science Framework (OSF): https://osf.io/r9jnh/

REFERENCES

Abalakina-Paap, M., Stephan, W. G., Craig, T., & Gregory, W. L. (1999). Beliefs in conspiracies. *Political Psychology, 20*(3), 637–647.

Adorno, T. W., Frenkel-Brunswick, E., Levinson, D. J., & Sanford, R. N. (1950). *The authoritarian personality*. New York, NY: Harper and Row.

Allport, G. W., & Postman, L. (1946). An analysis of rumor. *Public Opinion Quarterly, 10,* 501–517.

Altemeyer, B. (1996). *The authoritarian specter*. Cambridge, MA: Harvard University Press.

Baram, M. (2018). Buckle up! Here's a timeline of George Soros conspiracy theories. *Fast Company*. Retrieved from https://www.fastcompany.com/90247335/a-timeline-of-george-soros-conspiracy-theories

Baron, J., & Jost, J. T. (2019). False equivalence: Are liberals and conservatives in the U.S. equally "biased"? *Perspectives on Psychological Science, 14,* 292–303.

Barron, D., Morgan, K., Towell, T., Altemeyer, B., & Swami, V. (2014). Associations between schizotypy and belief in conspiracist ideation. *Personality and Individual Differences, 70,* 156–159.

Bartlett, J., & Miller, C. (2010). *The power of unreason: Conspiracy theories, extremism and counter-terrorism*. London, United Kingdom: Demos.

Basol, M., Roozenbeek, J., & van der Linden, S. (2020). Good news about bad news: Gamified inoculation boosts confidence and cognitive immunity against fake news. *Journal of Cognition, 3*(1), 2.

Benkler, Y., Faris, R., Roberts, H., & Zuckerman, E. (2017). Study: Breitbart-led right-wing media ecosystem altered broader media agenda. *Columbia Journalism Review, 3*.

Bennett, D. H. (1995). *The party of fear: The American far right from nativism to the militia movement*. New York, NY: Vintage.

Blank, J. M., & Shaw, D. (2015). Does partisanship shape attitudes toward science and public policy? The case for ideology and religion. *The ANNALS of the American Academy of Political and Social Science, 658*(1), 18–35.

Brotherton, R., & Eser, S. (2015). Bored to fears: Boredom proneness, paranoia, and conspiracy theories. *Personality and Individual Differences, 80,* 1–5.

Brotherton, R., French, C. C., & Pickering, A. D. (2013). Measuring belief in conspiracy theories: The generic conspiracist beliefs scale. *Frontiers in Psychology, 4*(279), 1–15.

Bruder, M., Haffke, P., Neave, N., Nouripanah, N., & Imhoff, R. (2013). Measuring individual differences in generic beliefs in conspiracy theories across cultures: Conspiracy mentality questionnaire. *Frontiers in Psychology, 4*(225), 1–15.

Carl, N., Cofnas, N., & Michael A. Woodley of Menie. (2016). Scientific literacy, optimism about science and conservatism. *Personality and Individual Differences, 94,* 299–302.

Cichocka, A., Marchlewska, M., & de Zavala, A. G. (2016). Does self-love or self-hate predict conspiracy beliefs? Narcissism, self-esteem, and the endorsement of conspiracy theories. *Social Psychological and Personality Science, 7*(2), 157–166.

Clifford, S., Jewell, R. M., & Waggoner, P. D. (2015). Are samples drawn from Mechanical Turk valid for research on political ideology? *Research & Politics, 2*(4), 2053168015622072.

Curran, P. J., & Hussong, A. M. (2009). Integrative data analysis: The simultaneous analysis of multiple data sets. *Psychological Methods, 14,* 81–100.

Darwin, H., Neave, N., & Holmes, J. (2011). Belief in conspiracy theories. The role of paranormal belief, paranoid ideation and schizotypy. *Personality and Individual Differences, 50*(8), 1289–1293.

Davies, C. (2016). The conspiracy theorists who have taken over Poland. *The Guardian*. Retrieved from https://www.theguardian.com/world/2016/feb/16/conspiracy-theorists-who-have-taken-over-poland

Deppe, K. D., Gonzalez, F. J., Neiman, J. L., Jacobs, C., Pahlke, J., Smith, K. B., & Hibbing, J. R. (2015). Reflective liberals and intuitive conservatives: A look at the cognitive reflection test and ideology. *Judgment and Decision Making, 10*(4), 314–331.

Dieguez, S., Wagner-Egger, P., & Gauvrit, N. (2015). Nothing happens by accident, or does it? A low prior for randomness does not explain belief in conspiracy theories. *Psychological Science, 26*(11), 1762–1770.

Ditto, P. H., Liu, B. S., Clark, C. J., Wojcik, S. P., Chen, E. E., Grady, R. H., … Zinger, J. F. (2019). At least bias is bipartisan: A meta-analytic comparison of partisan bias in liberals and conservatives. *Perspectives on Psychological Science, 14,* 273–291.

Douglas, K. M., Sutton, R. M., & Cichocka, A. (2017). The psychology of conspiracy theories. *Current Directions in Psychological Science, 26,* 538–542.

Duckitt, J. (2001). A dual-process cognitive-motivational theory of ideology and prejudice. *Advances in Experimental Social Psychology, 33,* 41–113.

Einstein, K. L., & Glick, D. M. (2015). Do I think BLS data are BS? The consequences of conspiracy theories. *Political Behavior, 37*(3), 679–701.

Everett, J. A. (2013). The 12 item social and economic conservatism scale (SECS). *PLoS One, 8*(12), e82131.

Faragó, L., Kende, A., & Krekó, P. (2020). We only believe in news that we doctored ourselves: The connection between partisanship and political fake news. *Social Psychology, 51,* 77–90. https://doi.org/10.1027/1864-9335/a000391

Feffer, J. (2019). The 'great replacement' is a genocidal playbook. *The Nation*. Retrieved from https://www.thenation.com/article/archive/white-supremacist-great-replacement/

Feldman, S., & Johnston, C. (2014). Understanding the determinants of political ideology: Implications of structural complexity. *Political Psychology, 35*(3), 337–358.

Fenigstein, A., & Vanable, P. A. (1992). Paranoia and self-consciousness. *Journal of Personality and Social Psychology, 62*(1), 129–138.

Fessler, D. M. T., Pisor, A. C., & Holbrook, C. (2017). Political orientation predicts credulity regarding putative hazards. *Psychological Science, 28,* 651–660.

Flynn, D. J., Nyhan, B., & Reifler, J. (2017). The nature and origins of misperceptions: Understanding false and unsupported beliefs about politics. *Political Psychology, 38,* 127–150.

Frankovic, K. (2019). Americans who favor impeachment want President Trump removed, too. *YouGov*. Retrieved from https://today.yougov.com/topics/politics/articles-reports/2019/10/16/americans-favor-impeachment-want-trump-removed

Garrett, R. K., & Weeks, B. E. (2017). Epistemic beliefs' role in promoting misperceptions and conspiracist ideation. *PLoS One, 12*(9), e0184733.

Gauchat, G. (2012). Politicization of science in the public sphere: A study of public trust in the United States, 1974 to 2010. *American Sociological Review, 77*(2), 167–187.

Goertzel, T. (1994). Belief in conspiracy theories. *Political Psychology, 15*(4), 731–742.

Grzesiak-Feldman, M. (2015). Are the high authoritarians more prone to adopt conspiracy theories? In M. Bilewicz, A. Cichocka, & W. Soral (Eds.), *The psychology of conspiracy* (pp. 99–117). New York, NY: Routledge.

Grzesiak-Feldman, M., & Ejsmont, A. (2008). Paranoia and conspiracy thinking of Jews, Arabs, Germans, and Russians in a Polish sample. *Psychological Reports, 102*(3), 884–886.

Grzesiak-Feldman, M., & Irzycka, M. (2009). Right-wing authoritarianism and conspiracy thinking in a Polish sample. *Psychological Reports, 105*(2), 389–393.

Guess, A., Nagler, J., & Tucker, J. (2019). Less than you think: Prevalence and predictors of fake news dissemination on Facebook. *Science Advances, 5*(1), eaau4586.

Guess, A., Nyhan, B., & Reifler, J. (2020). Exposure to untrustworthy websites in the 2016 U.S. election. *Nature Human Behaviour, 4*(5), 472–480. https://doi.org/10.1038/s41562-020-0833-x

Haberman, M. (2016). Even as He Rises, Donald Trump Entertains Conspiracy Theories. New York Times. Retrieved from https://www.nytimes.com/2016/03/01/us/politics/donald-trump-conspiracy-theories.html

Hedges, L., & Olkin, I. (1985). *Statistical models for meta-analysis*, Orlando, FL: Elsevier, Academic Press.

Hennes, E. P., Ruisch, B., Feygina, I., Monteiro, C., & Jost, J. T. (2016). Motivated recall in the service of the economic system: The case of anthropogenic climate change. *Journal of Experimental Psychology: General, 145,* 755–771.

Henningham, J. P. (1996). A 12-item scale of social conservatism. *Personality and Individual Differences, 20*(4), 517–519.

Henningham, J. P. (1997). A short scale of economic conservatism. *Psychological Reports, 81*(3), 1019–1024.

Hofstadter, R. (1954/1955). The pseudo-conservative revolt. *The American Scholar*, 9–27. Retrieved from https://theamericanscholar.org/the-pseudo-conservative-revolt/#.W5JzJ85Kiyo

Hofstadter, R. (1964). *The paranoid style in American politics*. New York, NY: Vintage.

Holmes, C. (2019). Scapegoating George Soros: How media-savvy far-right activists spread lies. *The Conversation*. Retrieved from http://theconversation.com/scapegoating-george-soros-how-media-savvy-far-right-activists-spread-lies-114550

Hornsey, M. J., Harris, E. A., & Fielding, K. S. (2018). Relationships among conspiratorial beliefs, conservatism and climate scepticism across nations. *Nature Climate Change, 8*(7), 614–620.

Imhoff, R. (2015). Beyond (right-wing) authoritarianism: Conspiracy mentality as an incremental predictor of prejudice. In M. Bilewicz, A. Cichocka, & W. Soral (Eds.), *The psychology of conspiracy* (pp. 122–142). New York, NY: Routledge.

Imhoff, R., & Bruder, M. (2014). Speaking (un-) truth to power: Conspiracy mentality as a generalised political attitude. *European Journal of Personality, 28*(1), 25–43.

Imhoff, R., & Lamberty, P. (2018). How paranoid are conspiracy believers? Toward a more fine-grained understanding of the connect and disconnect between paranoia and belief in conspiracy theories. *European Journal of Social Psychology, 48*(7), 909–926.

Inbar, Y., Pizarro, D. A., & Bloom, P. (2009). Conservatives are more easily disgusted than liberals. *Cognition and Emotion, 23*(4), 714–725.

Johnston, C. D., Lavine, H. G., & Federico, C. M. (2017). *Open versus closed: Personality, identity, and the politics of redistribution*. New York, NY: Cambridge University Press.

Jolley, D., & Douglas, K. M. (2014). The social consequences of conspiracism: Exposure to conspiracy theories decreases intentions to engage in politics and to reduce one's carbon footprint. *British Journal of Psychology, 105*(1), 35–56.

Jolley, D., Douglas, K. M., & Sutton, R. M. (2018). Blaming a few bad apples to save a threatened barrel: The system-justifying function of conspiracy theories. *Political Psychology, 39,* 465–478.

Jones, D. A. (2004). Why Americans don't trust the media: A preliminary analysis. *Harvard International Journal of Press/Politics, 9*(2), 60–75.

Jost, J. T. (2006). The end of the end of ideology. *American Psychologist, 61*(7), 651–670.

Jost, J. T. (2017). Ideological asymmetries and the essence of political psychology. *Political Psychology, 38,* 167–208.

Jost, J. T., Federico, C. M., & Napier, J. L. (2009). Political ideology: Its structure, functions, and elective affinities. *Annual Review of Psychology, 60,* 307–337.

Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003a). Political conservatism as motivated social cognition. *Psychological Bulletin, 129*(3), 339–375.

Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. (2003b). Exceptions that prove the rule—Using a theory of motivated social cognition to account for ideological incongruities and political anomalies: Reply to Greenberg & Jonas (2003). *Psychological Bulletin, 129,* 383–393.

Jost, J. T., Liviatan, I., van der Toorn, J., Ledgerwood, A., Mandisodza, A., & Nosek, B. A. (2010). System justification: How do we know it's motivated? In R. C. Bobocel, A. C. Kay, M. Zanna, & J. Olson (Eds.), *The psychology of justice and legitimacy: The Ontario symposium* (Vol. *11,* pp. 173–203). Hillsdale, NJ: Erlbaum.

Jost, J. T., Stern, C., Rule, N. O., & Sterling, J. (2017). The politics of fear: Is there an ideological asymmetry in existential motivation? *Social Cognition, 35*(4), 324–353.

Jost, J. T., van der Linden, S., Panagopoulos, C., & Hardin, C. (2018). Ideological asymmetries in conformity, desire for shared reality, and the spread of misinformation. *Current Opinion in Psychology, 23,* 77–83.

Kahan, D. M. (2016). The politically motivated reasoning paradigm, Part 2: Unanswered questions. In R. Scott & S. Kosslyn (Eds.), *Emerging trends in the social and behavioral sciences*, (pp. 1–15). New York, NY: Wiley.

Kay, A. C., Whitson, J. A., Gaucher, D., & Galinsky, A. D. (2009). Compensatory control: Achieving order through the mind, our institutions, and the heavens. *Current Directions in Psychological Science, 18,* 264–268.

Kraft, P. W., Lodge, M., & Taber, C. S. (2014). Why people 'don't trust the evidence': Motivated reasoning and scientific beliefs. *The ANNALS of the American Academy of Political and Social Science, 658,* 121–133.

Krekó, P. (2015). Conspiracy theory as collective motivated cognition. In M. Bilewicz & A. Cichocka (Eds.), *The psychology of conspiracy* (pp. 62–76). New York, NY: Routledge.

Landreville, K. D., & Niles, C. (2019). "And that's a fact!" The roles of political ideology, PSR's, and perceived source credibility in estimating factual content in partisan news. *Journal of Broadcasting & Electronic Media, 63,* 177–194.

Lantian, A., Muller, D., Nurra, C., & Douglas, K. M. (2016). Measuring belief in conspiracy theories: Validation of a French and English single-item scale. *International Review of Social Psychology, 29*(1), 1–14.

Lee, T. T. (2005). The liberal media myth revisited: An examination of factors influencing perceptions of media bias. *Journal of Broadcasting & Electronic Media, 49*(1), 43–64.

Lemmer, G., & Gollwitzer, M. (2017). The "true" indirect effect won't (always) stand up: When and why reverse mediation testing fails. *Journal of Experimental Social Psychology, 69,* 144–149.

Levin, B. (2020). Trump supporters have a predictably insane coronavirus conspiracy theory. *Vanity Fair*. Retrieved from https://www.vanityfair.com/news/2020/02/trump-supporters-coronavirus-conspiracies

Lewandowsky, S., Gignac, G. E., & Oberauer, K. (2013). The role of conspiracist ideation and worldviews in predicting rejection of science. *PLoS One, 8*(10), e75637.

Lewandowsky, S., & Oberauer, K. (2016). Motivated rejection of science. *Current Directions in Psychological Science, 25*(4), 217–222.

Lewandowsky, S., Oberauer, K., & Gignac, G. (2013). NASA faked the moon landing: Therefore, (climate) science is a hoax: An anatomy of the motivated rejection of science. *Psychological Science, 24*(5), 622–633.

Lewandowsky, S., Woike, J. K., & Oberauer, K. (2020). Genesis or evolution of gender differences? Worldview-based dilemmas in the processing of scientific information. *Journal of Cognition, 3*(1), 9. http://doi.org/10.5334/joc.99.

van der Linden, S. (2013). What a hoax: Why people believe in conspiracy theories. *Scientific American Mind, 24*(4), 41–43.

van der Linden, S. (2015). The conspiracy-effect: Exposure to conspiracy theories (about global warming) decreases pro-social behavior and science acceptance. *Personality and Individual Differences, 87,* 171–173.

van der Linden, S., Panagopoulos, C., & Roozenbeek, J. (2020). You are fake news: political bias in perceptions of fake news. *Media, Culture & Society, 42*(3), 460–470.

Lipset, S. M., & Raab, E. (1978). *The politics of unreason: Right-wing extremism in America, 1790–1977* (2nd ed.). Chicago, IL: University of Chicago Press.

Lobato, E., Mendoza, J., Sims, V., & Chin, M. (2014). Examining the relationship between conspiracy theories, paranormal beliefs, and pseudoscience acceptance among a university population. *Applied Cognitive Psychology, 28*(5), 617–625.

Malka, A., & Soto, C. J. (2015). Rigidity of the economic right? Menu-independent and menu-dependent influences of psychological dispositions on political attitudes. *Current Directions in Psychological Science, 24*(2), 137–142.

Matthews, D. (2017). Donald Trump has tweeted climate change skepticism 115 times. Here's all of it. *Vox*. Retrieved from https://www.vox.com/policy-and-politics/2017/6/1/15726472/trump-tweets-global-warming-paris-climate-agreement

McClosky, H., & Chong, D. (1985). Similarities and differences between left-wing and right-wing radicals. *British Journal of Political Science, 15,* 329–363.

McCright, A. M., & Dunlap, R. E. (2011). Cool dudes: The denial of climate change among conservative white males in the United States. *Global Environmental Change, 21*(4), 1163–1172.

Meade, A. W., & Craig, S. B. (2012). Identifying careless responses in survey data. *Psychological Methods, 17*(3), 437–455.

Miller, J. M., Saunders, K. L., & Farhart, C. E. (2015). Conspiracy endorsement as motivated reasoning: The moderating roles of political knowledge and trust. *American Journal of Political Science, 60*(4), 824–844.

Mischel, W. (2009). Becoming a cumulative science. *APS Observer, 22*(1).

Mooney, C. (2012). *The Republican brain: The science of why they deny science—And reality*, Hoboken, NJ: John Wiley & Sons.

Moore, A., Parent, J., & Uscinksi, J. (2014). Conspiracy theories aren't just for conservatives. *Washington Post*. Retrieved from https://www.washingtonpost.com/news/monkey-cage/wp/2014/08/21/conspiracy-theories-arent-just-for-conservatives/

Morisi, D., Jost, J. T., & Singh, V. (2019). An asymmetrical "President-in-Power" effect. *American Political Science Review, 113,* 614–620.

Moscovici, S. (1987). The conspiracy mentality. In C. F. Graumann & S. Moscovici (Eds.), *Changing conceptions of conspiracy* (pp. 151–169). New York, NY: Springer.

Motta, M., Stecula, D., & Farhart, C. (2020). How right-leaning media coverage of COVID-19 facilitated the spread of misinformation in the early stages of the pandemic in the U.S. *Canadian Journal of Political Science/Revue Canadienne de Science Politique*, 1–8. https://doi.org/10.1017/S0008423920000396.

Nilsson, A., Erlandsson, A., & Västfjäll, D. (2019). The complex relation between receptivity to pseudo-profound bullshit and political ideology. *Personality and Social Psychology Bulletin, 45,* 1440–1454.

Oliver, J. E., & Wood, T. J. (2014). Conspiracy theories and the paranoid style(s) of mass opinion. *American Journal of Political Science, 58*(4), 952–966.

Pasek, J., Stark, T. H., Krosnick, J. A., & Tompson, T. (2015). What motivates a conspiracy theory? Birther beliefs, partisanship, liberal-conservative ideology, and anti-Black attitudes. *Electoral Studies, 40,* 482–489.

Peterson, J. C., Smith, K. B., & Hibbing, J. R. (2020). Do people really become more conservative as they age? *The Journal of Politics, 82,* 600–611.

Pew Research Center. (2017). *Public Trust in Government 1958–2017*. Retrieved from http://www.people-press.org/2017/05/03/public-trust-in-government-1958-2017/

Pfattheicher, S., & Schindler, S. (2016). Misperceiving bullshit as profound is associated with favorable views of Cruz, Rubio, trump and conservatism. *Plos One, 11*(4), e0153419.

Pieters, R. (2017). Meaningful mediation analysis: Plausible causal inference and informative communication. *Journal of Consumer Research, 44*(3), 692–716.

van Prooijen, J. W. (2017). Why education predicts decreased belief in conspiracy theories. *Applied Cognitive Psychology, 31*(1), 50–58.

van Prooijen, J. W., & Jostmann, N. B. (2013). Belief in conspiracy theories: The influence of uncertainty and perceived morality. *European Journal of Social Psychology, 43*(1), 109–115.

van Prooijen, J. W., Krouwel, A. P., & Pollet, T. V. (2015). Political extremism predicts belief in conspiracy theories. *Social Psychological and Personality Science, 6*(5), 570–578.

Public Policy Polling. (2013). *Democrats and Republicans differ on conspiracy theory beliefs*. Retrieved from https://www.publicpolicypolling.com/wpcontent/uploads/2017/09/PPP_Release_Nationa_ConspiracyTheories_040213.pdf

Rabinowitz, M., Latella, L., Stern, C., & Jost, J. T. (2016). Beliefs about vaccination in the USA: Political ideology, false consensus, and the illusion of uniqueness. *PLoS One, 11*(7), e0158382.

Robin, C. (2004). *Fear: The history of a political idea*. New York, NY: Oxford University Press.

Roozenbeek, J., & van der Linden, S. (2019). Fake news game confers psychological resistance against online misinformation. *Palgrave, 5*(65).1–10.

Saalfeld, V., Ramadan, Z., Bell, V., & Raihani, N. J. (2018). Experimentally induced social threat increases paranoid thinking. *Royal Society Open Science, 5*(8), 180569.

Sears, D. O., & Funk, C. L. (1999). Evidence of the long-term persistence of adults' political predispositions. *The Journal of Politics, 61*(1), 1–28.

Shear, M. D., Haberman, M., Confessore, N., Yourish, K., Buchanan, L., & Collins, K. (2019). How Trump reshaped the presidency in over 11,000 tweets. *New York Times*. Retrieved from https://www.nytimes.com/interactive/2019/11/02/us/politics/trump-twitter-presidency.html

Sterling, J., Jost, J. T., & Pennycook, G. (2016). Are neoliberals more susceptible to bullshit? *Judgment and Decision Making, 11,* 352–360.

Sunstein, C. R., & Vermeule, A. (2009). Conspiracy theories: Causes and cures. *Journal of Political Philosophy, 17*(2), 202–227.

Sutton, R. M., & Douglas, K. M. (2020). Conspiracy theories and the conspiracy mindset: Implications for political ideology. *Current Opinion in Behavioral Sciences, 34,* 118–122.

Swami, V. (2012). Social psychological origins of conspiracy theories: The case of the Jewish conspiracy theory in Malaysia. *Frontiers in Psychology, 3*(280), 1–9.

Swami, V., Voracek, M., Stieger, S., Tran, U. S., & Furnham, A. (2014). Analytic thinking reduces belief in conspiracy theories. *Cognition, 133*(3), 572–585.

Talhelm, T., Haidt, J., Oishi, S., Zhang, X., Miao, F. F., & Chen, S. (2015). Liberals think more analytically (more "WEIRD") than conservatives. *Personality and Social Psychology Bulletin, 41*(2), 250–267.

Tullett, A. M., Hart, W. P., Feinberg, M., Fetterman, Z. J., & Gottlieb, S. (2016). Is ideology the enemy of inquiry? Examining the link between political orientation and lack of interest in novel data. *Journal of Research in Personality, 63,* 123–132.

Uscinski, J. E., Klofstad, C., & Atkinson, M. D. (2016). What drives conspiratorial beliefs? The role of informational cues and predispositions. *Political Research Quarterly, 69,* 57–71.

Uscinski, J. E., & Parent, J. M. (2014). *American conspiracy theories*. New York, NY: Oxford University Press.

Webster, G. D., Smith, C. V., Brunell, A. B., Paddock, E. L., & Nezlek, J. B. (2017). Can Rosenberg's (1965) Stability of Self Scale capture within-person self-esteem variability? Meta-analytic validity and test–retest reliability. *Journal of Research in Personality, 69,* 156–169.

Whitson, J. A., Galinsky, A. D., & Kay, A. (2015). The emotional roots of conspiratorial perceptions, system justification, and belief in the paranormal. *Journal of Experimental Social Psychology, 56,* 89–95.

Wilson, G. D., & Patterson, J. R. (1968). A new measure of conservatism. *British Journal of Social and Clinical Psychology, 7*(4), 264–269.

Wilson, M. S., & Rose, C. (2014). The role of paranoia in a dual-process motivational model of conspiracy belief. In J. W. van Prooijen & P. A. M. van Lange (Eds.), *Power, politics, and paranoia: Why people are suspicious of their leaders* (pp. 273–291). Cambridge, UK: Cambridge University Press.

Wojcik, S. P., Hovasapian, A., Graham, J., Motyl, M., & Ditto, P. H. (2015). Conservatives report, but liberals display, greater happiness. *Science, 347,* 1243–1246.

Zell, E., & Bernstein, M. J. (2014). You may think you're right … Young adults are more liberal than they realize. *Social Psychological and Personality Science, 5*(3), 326–333.

Supporting Information

Additional supporting information may be found in the online version of this article at the publisher's web site:

Table S1. Global-Warming Conspiracy Scale Items (Study 2)

Table S2. Constructs and Item Text (Studies 3 and 4)

Table S3. Demographic Characteristics of Survey Respondents (Study 3)

Table S4. Means, Standard Deviations, and Correlations with Confidence Intervals for Party ID (Study 3)

Table S5. Means, Standard Deviations, and Correlations With Confidence Intervals for Individual Scale Items (Study 3)

Table S6. Means, Standard Deviations, and Correlations With Confidence Intervals for Individual Scale Items (Study 4)

Figure S1-S7. Scree plots to examine unidimensionality of scales.