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Populist Gullibility: Conspiracy Theories, News Credibility, Bullshit Receptivity, and Paranormal Belief

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The present research examines the relationship between populist attitudes—that construe society as a struggle between the “corrupt elites” versus the “noble people”—and beliefs in unsubstantiated epistemic claims. We specifically sought to assess the often assumed link between conspiracy beliefs and populist attitudes; moreover, we examined if populist attitudes predict conspiracy beliefs in particular, or rather, credulity of unsubstantiated epistemic claims in general. Study 1 revealed that populist attitudes are robustly associated with conspiracy mentality in a large multinational study, drawing samples from 13 European Union (EU) countries. Studies 2 and 3 revealed that besides conspiracy beliefs, populist attitudes also predict increased credulity of obscure and politically neutral news items (regardless of whether they were broadcasted by mainstream or alternative news sources), receptivity to bullshit statements, and supernatural beliefs. Furthermore, Study 3 revealed that these findings were mediated by increased faith in intuition. These studies support the notion of populist gullibility: An increased tendency of people who score high on populist attitudes to accept obscure or unsubstantiated epistemic claims as true, including nonpolitical ones.

KEY WORDS: populist attitudes, conspiracy theories, gullibility, intuition, credulity

Populist movements have done well electorally in the past decade. After campaigns full of misinformation, citizens of various countries have voted populist movements in power within the European Union (EU), the United States, and Latin America. Populism is commonly defined as a political mentality or communication style that construes society as an ongoing struggle between the “corrupt elites” versus the “noble people” (e.g., Jagers & Walgrave, 2007; Mudde, 2004; Rooduijn et al., 2016; for an overview, see Mudde & Kaltwasser, 2017). In keeping with this definition, populist leaders typically present themselves as the sole and uniquely qualified spokesperson of “the people” (i.e., ordinary hard-working citizens) and regularly articulate misinformation and conspiracy theories that blame the elites for societal problems and injustices (Erisen et al., 2021; Silva et al., 2017; for an overview, see Bergmann, 2018). In general, misinformation and conspiracy theories can significantly impact society, for instance by fueling antivaccine beliefs, climate change skepticism, societal discontent, radicalization, and intergroup hostility (e.g., Jolley & Douglas, 2014; Jolley et al., 2019; for overviews, see Douglas et al., 2019; Van Prooijen, 2020; Van Prooijen & Van Vugt, 2018). The present research examines the link between populist attitudes and people’s general tendency to accept unsubstantiated epistemic claims (i.e., knowledge claims about the outside world for which there is little or no evidence) as true. To do so, we examine the relationship of populist attitudes with conspiracy beliefs in particular, but also its relationship with credulity more broadly—that is, a tendency to be easily persuaded by weak or obscure epistemic claims.

Conspiracy theories are defined as assumptions that multiple actors collude in secret agreement to pursue goals that are widely seen as malevolent (Bale, 2007). Although political and psychological theorizing has often argued for a link between populism and conspiracy theories (e.g., Bergmann, 2018; Mudde & Kaltwasser, 2017), only a few quantitative studies actually have tested this link (Erisen et al., 2021; Silva et al., 2017). Instead, research has predominantly focused on the relationship between conspiracy theories and ideological orientation (e.g., liberals versus conservatives; Miller et al., 2016; Uscinski et al., 2016; Van der Linden et al., 2021) and the strength by which people endorse specific ideologies (left- and right-wing extremism; Imhoff et al., 2022; Nera et al., 2021; Van Prooijen et al., 2015). Populism is conceptually different from both ideological orientation and political extremism, however. It has been noted that populism is a “thin-layered ideology” that can occur everywhere on the political spectrum (Mudde & Kaltwasser, 2017). Although differences between populist movements at the left versus right certainly exist (e.g., stronger anti-immigration sentiments at the populist right; Akkerman et al., 2017; Bernhard & Kriesi, 2019), these differences are not part of the definition of populism. Correspondingly, throughout the EU populist movements exist that are right wing (e.g., Germany’s “AfD,” France’s “Front National,” United Kingdom’s “UKIP”) and left wing (e.g., Greece’s “Syriza,” Spain’s “Podemos,” the Netherlands’ “Socialist Party”).

Moreover, although populist attitudes tend to be stronger at the political extremes (Akkerman et al., 2014; Rooduijn et al., 2016; Schumacher & Rooduijn, 2013), centric populism is by no means an anomaly: For instance, Berlusconi in Italy was a center-right but not far-right populist (Mudde, 2004). Moreover, some populist movements are not easy to classify in traditional left-right distinctions. For instance, Italy’s Five-Star movement is an anti-establishment party that combines right-wing attitudes on immigration with left-wing attitudes on income redistribution and environmental sustainability. Finally, populism is conceptually different from authoritarianism: Anti-elitism is a core component of populism, which implies aversion against the ruling authorities. Populism hence is a distinct political dimension, and much is yet unknown about its relationship with people’s tendency to believe unsubstantiated or obscure epistemic claims.

The present research pursues two broad and complementary goals. The first goal is to establish solid evidence for a possible relationship between populist attitudes and belief in conspiracy theories. The second (and related) goal, then, is to test whether populist attitudes are associated with conspiracy beliefs in particular, or rather, credulity of unsubstantiated epistemic claims in general. Together the studies presented here provide evidence for *populist gullibility*, which we

define as an increased tendency for people who score high on populist attitudes to accept unsubstantiated epistemic claims as true, including nonpolitical ones (see also Forgas & Baumeister, 2019).

Why Populist Attitudes Predict Gullibility

Populist attitudes reflect a Manichean worldview that sharply classifies the social world into good groups (“the people”) versus bad outgroups (“the elites”; Erisen et al., 2021; Mudde, 2004; Silva et al., 2017). We propose that construing society as dichotomously consisting of good versus bad groups reflects a relatively simplistic worldview that is associated with a less critical evaluation of epistemic claims. Indeed, populist rhetoric frequently contains catchy one-liners that in fact oversimplify complex political issues (e.g., Farage’s “We want our country back” as an argument for Brexit; for other examples, see Hawkins, 2009; Mols & Jetten, 2014). Accordingly, populist attitudes are empirically related with the belief that simple solutions exist for complex societal problems (Erisen et al., 2021). Paradoxically, this clear-cut worldview that characterizes populist attitudes is likely associated with an increased confidence in the veracity of their cognitions and beliefs—and with it, increased gullibility.

People generally feel confident about judgment domains that appear simple (cf. Kruger & Dunning, 1999), which includes political and nonpolitical judgments. For instance, political extremism predicted the belief that the solution to the 2016 refugee crisis was simple, which mediated political extremists’ confidence in their knowledge of this geopolitical event (Van Prooijen, Krouwel, et al., 2018). Furthermore, radical political beliefs predict belief superiority in a range of policy domains (Toner et al., 2013) and increased confidence in a range of cognitive and perceptual tasks (Brandt et al., 2015; Rollwage et al., 2018). While the above studies did not examine populist attitudes directly, also anti-establishment voting—a core element of populism—is related with overconfidence, as reflected in increased self-perceived understanding, yet decreased actual knowledge of political issues (Van Prooijen & Krouwel, 2020). These insights are consistent with the idea that populist attitudes are associated with increased confidence in one’s cognitions and beliefs.

Such overconfidence may also imply an exaggerated tendency to trust one’s initial hunches when evaluating a variety of claims about the world. Put differently, we propose that a populist worldview is associated with faith in one’s own intuitions, suggesting a strong reliance on the automatic, experiential mental system when processing information (Epstein et al., 1996; cf. “System 1”; Kahneman, 2011). Such confidence in intuitions arguably stimulates people to relatively easily accept a range of unsubstantiated epistemic claims as true. This is consistent with the general notion that people’s first intuitive response after comprehending a proposition is to believe it, and *unbelieving* a proposition requires mental effort (Gilbert, 1991; see also Levine, 2014). It is particularly likely that populist attitudes are related with acceptance of unsubstantiated propositions that match their worldview, notably conspiracy theories that fit a populist narrative by assuming illegal collusion of elite groups. Indeed, conspiracy beliefs are positively associated with intuitive thinking and negatively with analytic thinking (“System 2”; Swami et al., 2014).

But what about unsubstantiated propositions that are nonpolitical, and irrelevant, for a populist worldview? Many epistemic claims are politically neutral and are therefore compatible with any political worldview (e.g., nonpolitical news reports; claims about the existence of supernatural phenomena; and so on). It is well-known, however, that increased intuitive thinking (and/or decreased analytic thinking) makes people more susceptible to a wide range of weak epistemic claims, such as supernatural beliefs (Aarnio & Lindeman, 2005), perceiving meaning in nonsense statements (“bullshit receptivity”), and fake-news acceptance (Pennycook & Rand, 2020). This is

closely related with the notion of “reflexive open-mindedness,” referring to an intuitive mindset that is open to accepting implausible epistemic claims in many domains, without much deliberation (see also Pennycook et al., 2015). Consistently, conspiracy beliefs are associated with other belief in other unsubstantiated claims such as supernatural beliefs, spiritualism, pseudoscience, and misconceptions (Bensley et al., 2020; Darwin et al., 2011). Combining these arguments with the idea that populist attitudes are associated with strong confidence in one’s intuitions, it follows that populist attitudes predict an increased likelihood of believing a wide range of unsubstantiated epistemic claims as true.

The Current Research

In the current research, we first examine the link between populist attitudes and conspiracy mentality—that is, a dispositional tendency to perceive a world full of conspiracies (Bruder et al., 2013)—in a large-scale multinational study including 14 samples from 13 countries (Study 1; $N = 70,882$). As such, Study 1 may provide evidence about the scope and cultural consistency of the relationship between populist attitudes and conspiracy beliefs. Populist attitudes and conspiracy mentality are conceptually heavily intertwined, however: After all, both constructs reflect an aversion against societal elites, and as such, it has been noted that conspiracy theories are an unavoidable part of a populist worldview (Bergmann, 2018). Our line of reasoning, however, suggests that populist attitudes are associated with credulity more broadly, also extending to nonpolitical epistemic claims. In Studies 2 and 3, we therefore extended our investigation to nonpolitical epistemic claims. We examined the relationship between populist attitudes and perceived credibility of relatively obscure (and politically neutral) news items and manipulated whether either mainstream or alternative news channels provided them. In addition, we included measures of supernatural beliefs (Orenstein, 2002) and bullshit receptivity, while again testing the relationship between populist attitudes and belief in conspiracy theories. Furthermore, we explored possible mediators, specifically analytic thinking (Study 2), need for cognition, and faith in intuition (Study 3). Assuming that populist attitudes take time to develop while gullibility is more malleable, throughout the studies we analyzed populist attitudes as an independent variable and the gullibility indicators as dependent variables. In all studies, we empirically controlled for age, gender, education level, and political orientation.

Open Practices Statement

An anonymized copy of the data of Studies 2, 3, and S1 (reported in the online supporting information) are available at OSF (<https://osf.io/sufdk/>).¹ Study 2 was preregistered (<https://osf.io/6r7jv/>).

STUDY 1

Method

Sample and Procedure

The study was part of a large-scale two-wave online panel study conducted in 13 EU countries (Belgium-Flanders and Belgium-Wallonia were collected separately, yielding 14 samples). The data

¹The Study 1 data are formal property of the political-research organization “Kieskompas,” and due to contractual obligations, the authors of this contribution are not at liberty to make these data online available at the OSF. It is possible, however, to receive a copy of the data and code necessary to reproduce the results reported here, on the condition of signing a nondisclosure agreement. For this, please contact either Jan-Willem van Prooijen (j.w.van.prooijen@vu.nl), Andre Krouwel (andre.krouwel@vu.nl), or Kieskompas (info@kieskompas.nl).

Table 1. Sample Characteristics Study 1—EVES Data (Krouwel et al., 2019)

Country	<i>N</i>	Gender	<i>M</i> _{age} (<i>SD</i>)	<i>r</i>
Austria	3,880	2,148 men, 1,732 women	47.36 (14.45)	0.452***
Belgium-Flanders	2,194	1,443 men, 751 women	48.64 (16.31)	0.556***
Belgium-Wallonia	1,726	1,141 men, 585 women	50.46 (15.80)	0.551***
Denmark	1,706	1,044 men, 662 women	48.90 (17.56)	0.645***
France	10,618	7,044 men, 3,574 women	48.30 (17.20)	0.517***
Germany	4,575	2,835 men, 1,740 women	50.56 (15.67)	0.632***
Hungary	3,116	1,714 men, 1,402 women	54.99 (16.10)	0.443***
Italy	6,328	4,018 men, 2,310 women	38.14 (15.98)	0.473***
Poland	4,602	2,661 men, 1,941 women	44.98 (17.34)	0.235***
Portugal	3,039	1,966 men, 1,073 women	43.90 (16.78)	0.374***
Romania	5,714	3,537 men, 2,177 women	48.93 (15.17)	0.068***
Spain	8,468	6,142 men, 2,326 women	43.78 (14.47)	0.494***
Sweden	3,924	2,398 men, 1,526 women	51.56 (15.90)	0.658***
The Netherlands	10,992	7,866 men, 3,126 women	57.30 (15.05)	0.568***

Note. Correlation coefficient *r* is between conspiracy mentality and populist attitudes.

****p* < .001.

contains a total of 70,882 responses (45,957 men, 24,925 women; *M*_{age} = 48.51 years, *SD* = 16.75). Table 1 displays specific sample characteristics per country. Data collection was coordinated by Kieskompas (“Election Compass”), a Dutch political-research organization that fully adheres to GDPR (i.e., EU privacy) regulations, is closely monitored by the Dutch Privacy Authority, and complies with the ethical norms of VU Amsterdam. Kieskompas coordinates large research panels in over 40 countries, which were acquired through online Voting Advice Applications (VAAs) prior to elections. Participants received an e-mail invitation with an online link to participate. In countries where panel responses were insufficient (Austria, Belgium, Denmark, Germany, Hungary, Italy, Poland, Portugal, Romania, and Sweden) respondents were also recruited via social media, where they were invited to take the same survey as panel respondents. The study was conducted in each participating country’s native language. The full dataset is referred to as the European Voter Election Study (EVES) data (Krouwel et al., 2019; see also Imhoff et al., 2022). Although the full study had two waves, all the measures relevant for the present purposes were only included in the first wave, which took place from February to May 2018.

Measures

The questionnaire contained a measure of political ideology where participants were asked to place their views on an 11-point scale (1 = *Left*, 11 = *Right*). Furthermore, the questionnaire contained a measure of education specifically tailored towards the educational system of each country in question. For each country, however, responses were subsequently transformed into a single education index, in line with the International Standard Classification of Education (ISCED) framework, ranging from 1 (*Primary education or first stage of basic education*) to 6 (*Second stage of tertiary education [PhD]*).

Participants responded to the 5-item Conspiracy Mentality Questionnaire (CMQ; Bruder et al., 2013). An example item is “I think that many very important things happen in the world, which the public is never informed about.” Responses were on an 11-point scale ranging from 1 (*certainly not 0%*) to 11 (*certain 100%*; $\alpha = .85$). Populist attitudes were measured with the 9-item populist-attitudes scale (Silva et al., 2017). Example items include “Politicians should always listen closely to the problems of the people”; “Government officials use their power to try to improve people’s lives” (recoded); and “You can tell if a person is good or bad if you know their politics” (1 = *completely disagree*, 5 = *completely agree*; $\alpha = .69$).

Results and Discussion

We analyzed the results with a multilevel regression model using the `lme4` package in R, with conspiracy mentality as dependent variable, the four control variables (gender, age, education, and political orientation), populist attitudes entered as fixed effects, and country added as level-2 random effect. This analysis revealed higher conspiracy mentality among women, $B = 0.205$, $SE = .016$, $CI_{95\%} [0.17; 0.24]$, $p < .001$; moreover, conspiracy mentality was associated with older age, $B = 0.006$, $SE = .0005$, $CI_{95\%} [0.005; 0.007]$, $p < .001$, lower education levels, $B = -0.160$, $SE = .006$, $CI_{95\%} [-0.172; -0.147]$, $p < .001$, and right-wing orientation, $B = 0.066$, $SE = .003$, $CI_{95\%} [0.061; 0.072]$, $p < .001$. More importantly, populist attitudes predicted conspiracy mentality, $B = 1.742$, $SE = .015$, $CI_{95\%} [1.713; 1.771]$, $p < .001$.

To assess possible acquiescence bias, we repeated the main analysis for a scale consisting of only the three reverse-scored populism items (before recoding). The reverse-coded items negatively predicted conspiracy mentality, $B = -0.904$, $SE = .013$, $CI_{95\%} [-0.931; -0.878]$, $p < .001$, suggesting that acquiescence bias is unlikely to explain the present results.

We also examined the correlation between conspiracy mentality and populist attitudes separately for each country and report the results in [Table 1](#). Although the size of the correlation varied considerably across countries, ranging from $r = .068$ (Romania) to $r = .658$ (Sweden), it was significant in all countries ($ps < .001$). These findings suggest a robust association between populist attitudes and conspiracy mentality.

STUDY 2

While Study 1 provides solid evidence for a relationship between populist attitudes and conspiracy mentality, it does not yield conclusive evidence for the more general notion of populist gullibility: After all, there is substantial conceptual overlap between a populist worldview and conspiracy mentality (Bergmann, 2018), and hence, their relationship does not prove that populist attitudes predict gullibility in nonpolitical judgment domains. Study 2 therefore extended the present investigation to the relationship between populist attitudes and acceptance of other non-conspiratorial claims. Prior to running it, we conducted an additional study, reported in the online supporting information (Study S1). In it, participants read a range of tabloid-style politically neutral news items, presented by mainstream news channels (e.g., CNN) or unknown (nonexisting) news channels. Moreover, we again measured conspiracy mentality and participants' belief in a range of specific conspiracy theories. Given that Cronbach's alpha of the populist-attitudes scale of Study 1 was sufficient at best, we measured a different populist-attitudes scale (Akkerman et al., 2014). Study S1 assessed the relationship between populist attitudes and perceived credibility of both nonpolitical news and implausible conspiracy theories (e.g., beliefs that the moon landings were a hoax).

Initially, Study S1 started as a separate research project with a different hypothesis. Based on the anti-elitist qualities of populist attitudes, we expected that populist attitudes would predict decreased credulity of news provided by mainstream U.S. news channels (e.g., CNN; CBS) and increased credulity of news provided by alternative channels. As can be read in the online supporting information, this hypothesis was not supported. What the results did reveal were far more interesting, however: Populist attitudes predicted an increased tendency to accept *any* statement as true, including news presented by mainstream channels, news presented by alternative channels, conspiracy mentality, and a range of implausible conspiracy theories. This supports the notion of populist gullibility: Although the news items were real, they were also relatively obscure, and populist attitudes predicted increased credulity of such surprising information independent

of whether the source was a mainstream or unknown news channel. Moreover, the specific conspiracy theories were highly implausible.

The present study sought to expand on this in various ways. First, the study included the same measures as Study S1 and extended them with a range of additional measures reflecting gullibility more broadly. We particularly included a measure of bullshit receptivity (Pennycook et al., 2015), defined as people's tendency to perceive nonsense statements that consists of randomly chosen buzzwords (e.g., "Hidden meaning transforms unparalleled abstract beauty") as profound, that is, as containing some deeper truth. In addition, the study included participants' belief in supernatural phenomena (Orenstein, 2002). Based on the notion of populist gullibility, we hypothesized that participants' populist attitudes would predict increased news credibility (independent of its source), conspiracy mentality, belief in conspiracy theories, bullshit receptivity, and belief in supernatural phenomena.

Furthermore, we predicted that decreased analytic thinking would mediate these effects. After all, our line of reasoning entails that populist attitudes are associated with exaggerated reliance on one's intuitions, which often implies decreased analytic thinking. Consistently, previous research found that decreased analytic thinking predicts conspiracy belief (Swami et al., 2014; Van Prooijen, 2017), supernatural beliefs (Aarnio & Lindeman, 2005), and bullshit receptivity (Pennycook et al., 2015). As such, it stands to reason that populist attitudes are rooted in a decreased tendency to think analytically, which in turn predicts gullibility.

Method

Participants and Design

The study was run on the Figure Eight forum among U.S. participants, and the final data set contained 308 complete cases.² Of these, we coded the age of two cases as missing values for being underage and one case for reporting an unrealistically high age, rendering 305 cases for the analyses (152 men, 152 women, 1 other; $M_{age} = 34.93$, $SD = 11.65$). This sample yields 95% power to detect a relatively small effect size ($f^2 = .04$).

Procedure

After providing their informed consent, participants first responded to the 8-item populist-attitudes scale by Akkerman and colleagues (2014).³ Example items are "The people, and not politicians, should make our most important policy decisions" and "The political differences between the elite and the people are larger than the differences among the people" (1 = *completely disagree*, 5 = *completely agree*). This scale had good reliability ($\alpha = .74$). Furthermore, participants indicated their political ideology on two items (1 = *very democratic*, 7 = *very republican*; and 1 = *very liberal*, 7 = *very conservative*). These items were strongly correlated ($r = .81$, $p < .001$) and were averaged into a single political ideology scale. After this, we measured the 3-item cognitive reflection test (CRT; Frederick, 2005) and the alternative 4-item CRT-2 (Thomson & Oppenheimer, 2016). Participants' responses to both measures were aggregated into a single index of analytic thinking ($\alpha = .70$; Ståhl & Van Prooijen, 2021).

²Although we ordered 350 participants on Figure Eight as preregistered, there turned out to be less participants in our final sample. As our power analysis indicates, however, the present sample offers ample statistical power for the present purposes.

³In the original scale, Akkerman et al. (2014) cut two items, leaving a six-item populism scale. Cutting these two items in the present research slightly reduced Cronbach's alpha for the scale, however ($\alpha = .70$). We therefore used all eight items to construct the populism scale.

Participants would then read five politically neutral news items (e.g., about how a judge decides that a lottery winner can stay anonymous; about a puppy that died of suffocation on a United Airlines flight because a flight attendant mandated the animal to be stored in the overhead bins; full news stories in the online supporting information). In the *mainstream* news condition, these items had banners from mainstream news channels (e.g., CBS; CNN). In the *alternative* news conditions, the content and layout of the news items were the same, but the items had banners from unknown, experimenter-designed news channels (e.g., “Your news”; “US.net”). After each news item, participants responded to four items (1 = *completely disagree*, 5 = *completely agree*): “The news item is accurate”; “The news item is credible”; “I trust the news item to be true”; and “I think the news item is fake news” (recoded). Together this yields a reliable 20-item scale of perceived news credibility ($\alpha = .86$).

After this, participants responded to the 5-item conspiracy mentality questionnaire (CMQ), measured on a 7-point scale (1 = *certainly not*, 7 = *certainly*; $\alpha = .80$). Furthermore, participants indicated the degree to which they believed nine specific conspiracy theories to be true (1 = *definitely not true*, 7 = *definitely true*), such as “The U.S. government had advance knowledge of the 9/11 attacks” and “The moon landing was a hoax” ($\alpha = .87$; Van Prooijen, Douglas, et al., 2018). Participants also responded to the bullshit-receptivity scale (Pennycook et al., 2015), in which participants rated how profound they thought ten (actually nonsense) statements were (1 = *Not at all profound*, 5 = *Very profound*). Example items include “Wholeness quiets infinite phenomena,” and “Good health imparts reality to subtle creativity” ($\alpha = .92$). To measure supernatural beliefs, participants indicated to what extent they believed in six supernatural phenomena (e.g., reincarnation, astrology, psychic powers; 1 = *definitely not*, 7 = *yes, definitely*; $\alpha = .90$).

We also checked the news-source manipulation by showing each news banner used in this study and asking how familiar it was to participants (1 = *very familiar*, 5 = *I have never seen this news site before*; all items recoded so that high scores indicate high familiarity). These yielded reliable scales of familiarity with mainstream news sites ($\alpha = .87$) and alternative news sites ($\alpha = .90$). At the end of the study participants were debriefed, thanked, and given a code to collect payment of a small fee.

Results and Discussion

Means, standard deviations, and intercorrelations of the measured variables are displayed in Table 2. Prior to analyzing the data, we effect coded the news-source manipulation (1 = mainstream news, -1 = alternative news), mean centered the populist-attitudes measure, and calculated the interaction based on these variables. The hierarchical regression model for perceived news credibility included the control variables in Step 1 (gender, age, education, and political ideology), the main effects of news source and populist attitudes in Step 2, and the interaction in Step 3. Given that the news-source manipulation was conceptually irrelevant for the remaining dependent variables (conspiracy mentality, conspiracy beliefs, bullshit receptivity, and paranormal beliefs), on these variables the analyses only included populist attitudes in Step 2.

Perceived Familiarity

We first checked the news-source manipulation by comparing familiarity ratings of the mainstream news sources with those of the alternative news sources. A paired samples t-test revealed that participants were more familiar with the mainstream sites ($M = 3.43$, $SD = 1.15$) than the alternative sites ($M = 2.04$, $SD = 1.02$), $t(304) = 15.53$, $p < .001$, indicating that the manipulation was successful.

Table 2. Mean, Standard Deviations, and Intercorrelations of the Measured Variables—Study 2

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Populist attitudes	3.75	0.58	—									
2. Political ideology	3.72	1.52	-.07	—								
3. Perceived news credibility	3.50	0.58	.27***	-.12*	—							
4. CRT	3.16	1.83	.13*	-.06	.19**	—						
5. Conspiracy mentality	5.04	1.13	.49***	.11	.19**	-.04	—					
6. Belief in conspiracy theories	4.34	1.32	.32***	.23***	-.14*	-.10	.61***	—				
7. Bullshit receptivity	3.14	0.94	.24***	.23***	.00	-.14*	.43***	.67***	—			
8. Supernatural beliefs	4.06	1.65	.24***	.10	-.11*	-.02	.38***	.64***	.59***	—		
9. Familiarity of mainstream news sites	3.43	1.15	-.05	-.20***	.31***	-.10	-.08	-.50***	-.47***	-.48***	—	
10. Familiarity of alternative news sites	2.04	1.02	-.12*	.05	-.13*	-.25***	-.05	.23***	.33***	.20***	-.04	—

Note. Populist attitudes, perceived news credibility, bullshit receptivity, and familiarity ratings were measured on 5-point scales; political ideology, conspiracy mentality, belief in conspiracy theories, and supernatural beliefs were measured on 7-point scales; Responses on the CRT ranged from 0 to 7.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Dependent Variables

Results of the hierarchical regression analyses are in Table 3. Step 1 was significant for perceived news credibility ($R^2 = .04$), $F(4, 299) = 3.45$, $p = .009$, conspiracy mentality, ($R^2 = .03$), $F(4, 299) = 2.43$, $p = .048$, belief in conspiracy theories, ($R^2 = .15$), $F(4, 299) = 12.99$, $p < .001$, bullshit receptivity, ($R^2 = .16$), $F(4, 299) = 14.92$, $p < .001$, and supernatural beliefs, ($R^2 = .07$), $F(4, 299) = 5.20$, $p < .001$ (details about the specific effects of the control variables in Table 3). More important was that Step 2 added significantly to the regression model for all the dependent variables: For perceived news credibility, ($\Delta R^2 = .07$), $F(2, 297) = 11.96$, $p < .001$; for conspiracy mentality, ($\Delta R^2 = .25$), $F(1, 298) = 105.43$, $p < .001$; for belief in conspiracy theories, ($\Delta R^2 = .12$), $F(1, 298) = 47.15$, $p < .001$; for bullshit receptivity, ($\Delta R^2 = .07$), $F(1, 298) = 27.48$, $p < .001$; and for supernatural beliefs, ($\Delta R^2 = .06$), $F(1, 298) = 20.91$, $p < .001$. For all the measures, higher populist attitudes predicted stronger credulity (see Table 3). For perceived news credibility, the main effect of news source was nonsignificant ($p = .897$) as was the added variance of Step 3 containing the interaction, $F < 1$.

In sum, populist attitudes were associated with increased credulity of obscure news items (independent of whether the source was mainstream or alternative), conspiracy mentality, belief in a range of specific conspiracy theories, receptivity to bullshit statements, and belief in supernatural phenomena. These findings support the notion of populist gullibility.

Mediation Analysis

We then tested whether analytic thinking mediated the relationships between populist attitudes and the dependent variables. For this purpose, we ran a series of PROCESS analyses (model 4, 1,000 samples; Hayes, 2013) while including the control variables as covariates. The indirect effect of analytic thinking was nonsignificant for all dependent variables: For perceived news credibility, $B = 0.01$, $SE = .01$, $CI_{95\%} [-0.004; 0.04]$; for conspiracy mentality, $B = -0.01$, $SE = .01$, $CI_{95\%} [-0.05; 0.004]$; for belief in conspiracy theories, $B = -0.02$, $SE = .02$, $CI_{95\%} [-0.08; 0.01]$; for bullshit receptivity, $B = -0.02$, $SE = .02$, $CI_{95\%} [-0.07; 0.01]$, and for supernatural beliefs, $B = -0.01$, $SE = .02$, $CI_{95\%} [-0.08; 0.01]$. These findings did not support the prediction that analytic thinking would mediate the relationship between populist attitudes and the gullibility indicators.

STUDY 3

The third study served two purposes. First, it aimed to replicate the Study 2 findings to gain more solid evidence for the relationship between populist attitudes and gullibility. Second, and more importantly, it explored different mediators of this relationship. Study 2 did not reveal evidence that decreased analytic thinking mediated the link between populist attitudes and gullibility; in fact, populist attitudes were slightly positively correlated with analytic thinking (see Table 2). It is important to keep in mind that Study 2 assessed analytic thinking with the cognitive-reflection tests (Frederick, 2005; Thomson & Oppenheimer, 2016), which captures participants' inclinations and skills to think analytically. It has been noted, however, that people's rational, analytic information-processing system operates in parallel to the more intuitive, experiential system (Epstein et al., 1996; see also Kahneman, 2011). Our line of reasoning was based on the argument that populist attitudes are associated with increased faith in intuition (i.e., strong reliance on the experiential information-processing system) without necessarily implying decreased functioning of the rational information-processing system. In Study 3, we therefore explored whether participants' faith in intuition may be a possible mediator for these effects.

Table 3. Results of Hierarchical Regression Analyses—Study 2

	Conspiracy Mentality		Conspiracy Beliefs		Bullshit Receptivity	
	<i>B</i> (<i>SE</i>)	<i>CI</i> _{95%}	<i>B</i> (<i>SE</i>)	<i>CI</i> _{95%}	<i>B</i> (<i>SE</i>)	<i>CI</i> _{95%}
<i>Step 1</i>						
Gender	0.229 (.134) [†]	-0.034; 0.492	-0.174 (.147)	-0.464; 0.116	-0.169 (.104)	-0.373; 0.035
Age	-0.009 (.006)	-0.020; 0.002	-0.025 (.006) ^{***}	-0.037; -0.012	-0.019 (.004) ^{***}	-0.028; -0.01
Education	0.101 (.077)	-0.050; 0.252	0.299 (.085) ^{***}	0.133; 0.465	0.218 (.060) ^{***}	0.101; 0.336
Political ideology	0.086 (.042) [*]	0.003; 0.169	0.180 (.047) ^{***}	0.088; 0.271	0.128 (.033) ^{***}	0.063; 0.193
<i>Step 2</i>						
Populist attitudes	0.996 (0.097) ^{***}	0.805; 1.187	0.793 (.115) ^{***}	0.566; 1.020	0.439 (.084) ^{***}	0.274; 0.604
		Supernatural Beliefs		News Credibility		
		<i>B</i> (<i>SE</i>)	<i>CI</i> _{95%}	<i>B</i> (<i>SE</i>)	<i>CI</i> _{95%}	
<i>Step 1</i>						
Gender		-0.079 (.192)	-0.457; 0.300	0.049 (.068)	-0.085; 0.184	
Age		-0.024 (.008) ^{**}	-0.040; -0.008	0.008 (.003) ^{**}	0.002; 0.014	
Education		0.294 (.111) ^{**}	0.077; 0.512	-0.001 (.039)	-0.078; 0.076	
Political ideology		0.095 (.061)	-0.025; 0.215	-0.042 (.022) [†]	-0.085; 0.001	
<i>Step 2</i>						
Populist attitudes		0.717 (.157) ^{***}	0.409; 1.026	0.272 (.056) ^{***}	0.163; 0.381	
News source				0.004 (.032)	-0.058; 0.067	
<i>Step 3</i>						
Populist attitudes × News source				-0.049 (.055)	-0.157; 0.060	

[†]*p* < .10; ^{*}*p* < .05; ^{**}*p* < .01; ^{***}*p* < .001.

Method

Participants and Design

We ran the study on Amazon Mechanical Turk. A total of 353 participants completed the study. Two of them did not report a gender, and one participants' age was unrealistic and hence coded as missing, leaving 350 participants for the analyses (179 men, 171 women; $M_{\text{age}} = 39.35$, $SD = 11.40$). This sample yields 95% power for relatively small effect sizes ($f^2 = .037$).

Procedure

The procedure was largely the same as Study 2. Participants first responded to the same populist-attitudes scale ($\alpha = .74$). After this, we measured the abbreviated, 10-item rational-experiential inventory (Epstein et al., 1996), which consists of two 5-item subscales (1 = *completely disagree*, 5 = *completely agree*).⁴ One of these subscales is designed to assess reliance on the rational information-processing system ("Need for Cognition"; example item "I don't like to have to do a lot of thinking," recoded; $\alpha = .86$), and one is designed to assess reliance on the experiential information-processing system ("Faith in Intuition"; example item "I believe in trusting my hunches"; $\alpha = .92$). Consistent with the notion that these scales represent separate mental systems, they were uncorrelated ($r = -.02$, $p = .77$).

After this, we measured political ideology with the same two items as in Study 3 ($r = .85$, $p < .001$) and also manipulated news source in the same manner. Furthermore, we used the same measures to assess perceived news credibility ($\alpha = .91$), conspiracy mentality ($\alpha = .83$), belief in conspiracy theories ($\alpha = .87$), bullshit receptivity ($\alpha = .90$), and supernatural beliefs ($\alpha = .91$). At the end participants were thanked, debriefed, and given a code to collect a small fee.

Results and Discussion

Means, standard deviations, and intercorrelations of the measured variables are displayed in Table 4 and results of the hierarchical regression analyses in Table 5. The analytical strategy was the same as Study 2.

Dependent Variables

Step 1 containing the control variables was significant for perceived news credibility ($R^2 = .04$), $F(4, 344) = 3.39$, $p = .010$, conspiracy mentality ($R^2 = .05$), $F(4, 344) = 4.18$, $p = .003$, belief in conspiracy theories ($R^2 = .10$), $F(4, 344) = 9.76$, $p < .001$, bullshit receptivity ($R^2 = .05$), $F(4, 344) = 4.43$, $p = .002$, and supernatural beliefs ($R^2 = .08$), $F(4, 344) = 7.86$, $p < .001$ (details about the specific effects of the control variables in Table 5). More importantly, Step 2 added significantly to the regression models for perceived news credibility ($\Delta R^2 = .02$), $F(2, 342) = 3.48$, $p = .033$; conspiracy mentality ($\Delta R^2 = .18$), $F(1, 343) = 78.56$, $p < .001$; belief in conspiracy theories ($\Delta R^2 = .08$), $F(1, 343) = 33.76$, $p < .001$; bullshit receptivity ($\Delta R^2 = .014$), $F(1, 343) = 5.08$, $p = .025$; and marginally for supernatural beliefs ($\Delta R^2 = .010$), $F(1, 343) = 3.80$, $p = .052$. Populist attitudes were associated with increased gullibility as reflected on all dependent variables (see Table 5). For perceived news credibility, both the news-source main effect ($p = .587$) and the added variance of Step 3 containing the interaction ($F < 1$) were again

⁴We also explored a range of other possible mediators; more information in the online supporting information.

Table 4. Mean, Standard Deviations, and Intercorrelations of the Measured Variables—Study 3

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. Populist attitudes	3.65	0.60	—								
2. Political ideology	3.58	1.65	-.13*	—							
3. Need for cognition	3.63	0.86	.03	-.17**	—						
4. Faith in intuition	3.53	0.89	.28***	.15**	-.02	—					
5. Perceived news credibility	3.46	0.63	.17**	-.16**	.10 [†]	.11*	—				
6. Conspiracy mentality	4.70	1.30	.43***	.08	-.07	.37***	.04	—			
7. Belief in conspiracy theories	3.31	1.27	.27***	.17**	-.15**	.35***	-.08	.65***	—		
8. Bullshit receptivity	2.64	0.88	.14**	-.07	.04	.21***	.12*	.30***	.27***	—	
9. Supernatural beliefs	2.79	1.63	.10 [†]	.08	.01	.33***	.03	.42***	.58***	.40***	—

Note. Populist attitudes, need for cognition, faith in intuition, perceived news credibility, and bullshit receptivity were measured on 5-point scales; political ideology, conspiracy mentality, belief in conspiracy theories, and supernatural beliefs were measured on 7-point scales.

[†] $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$.

Table 5. Results of Hierarchical Regression Analyses—Study 3

	Conspiracy Mentality		Conspiracy Beliefs		Bullshit Receptivity	
	<i>B</i> (<i>SE</i>)	CI _{95%}	<i>B</i> (<i>SE</i>)	CI _{95%}	<i>B</i> (<i>SE</i>)	CI _{95%}
<i>Step 1</i>						
Gender	0.219 (.139)	-0.055; 0.493	0.395 (.133)**	0.134; 0.656	0.307 (.174)**	0.121; 0.494
Age	-0.014 (.006)*	-0.026; -0.002	-0.011 (.006) [†]	-0.023; 0.000	-0.011 (.004)**	-0.02; -0.003
Education	-0.255 (.094)**	-0.440; -0.070	-0.372 (.090)**	-0.549; -0.196	-0.052 (.064)	-0.179; 0.074
Political ideology	0.070 (.043)	-0.014; 0.153	0.131 (.041)**	0.051; 0.211	-0.024 (.029)	-0.081; 0.033
<i>Step 2</i>						
Populist attitudes	0.920 (.104)**	0.716; 1.124	0.608 (.105)**	0.402; 0.814	0.175 (.078)*	0.022; 0.328
			Supernatural Beliefs	News Credibility		
			<i>B</i> (<i>SE</i>)	<i>B</i> (<i>SE</i>)	CI _{95%}	
<i>Step 1</i>						
Gender			0.839 (.172)**	0.500; 1.178	0.040 (.068)	-0.093; 0.173
Age			-0.003 (.008)	-0.018; 0.012	-0.003 (.003)	-0.008; 0.003
Education			-0.270 (.117)*	-0.499; -0.040	0.064 (.046)	-0.026; 0.154
Political ideology			0.078 (.053)	-0.026; 0.182	-0.060 (.021)*	-0.100; -0.019
<i>Step 2</i>						
Populist attitudes			0.276 (.142) [†]	-0.002; 0.555	0.141 (.055)*	0.031; 0.250
News source					0.018 (.033)	-0.047; 0.083
<i>Step 3</i>						
Populist attitudes × News source					0.001 (.055)	-0.108; 0.110

[†]*p* < .10; **p* < .05; ***p* < .01; ****p* < .001.

nonsignificant. These findings are consistent with those observed in Study 2 and support the notion of populist gullibility.

Mediational Analyses

We then conducted mediational analyses (PROCESS model 4, 1,000 bootstrap samples) with need for cognition and faith in intuition as parallel mediators of the link between populist attitudes and the gullibility indicators. In the analyses, we again included all the control variables as covariates. Consistent with the Study 2 finding that analytic thinking did not mediate these effects, the indirect effect through need for cognition was nonsignificant for all dependent variables: For perceived news credibility, $B = -.001$, $SE = .005$, $CI_{95\%} [-.017; .007]$; for conspiracy mentality, $B = .001$, $SE = .007$, $CI_{95\%} [-.010; .019]$; for belief in conspiracy theories, $B = .002$, $SE = .012$, $CI_{95\%} [-.018; .035]$; for bullshit receptivity, $B = -.001$, $SE = .007$, $CI_{95\%} [-.023; .008]$; and for supernatural beliefs, $B = -.001$, $SE = .010$, $CI_{95\%} [-.037; .012]$. The indirect effect through faith in intuition, however, was significant for conspiracy mentality, $B = .141$, $SE = .041$, $CI_{95\%} [.078; .242]$; belief in conspiracy theories, $B = .134$, $SE = .039$, $CI_{95\%} [.074; .234]$; bullshit receptivity, $B = .074$, $SE = .031$, $CI_{95\%} [.026; .152]$; and supernatural beliefs, $B = .208$, $SE = .059$, $CI_{95\%} [.113; .345]$. The indirect effect was nonsignificant for perceived news credibility, $B = .029$, $SE = .021$, $CI_{95\%} [-.007; .073]$. Perceived news credibility also was positively correlated with faith in intuition, however (see Table 4), and the indirect effect did fall within the 90% confidence interval, $CI_{90\%} [.0007; .068]$. These findings suggest that faith in intuition mediates the link between populist attitudes and gullibility.

General Discussion

How is the human predisposition to readily accept weak epistemic claims as true related to people's political attitudes? The present research project examined the notion of populist gullibility, defined as an increased tendency for people high in populist attitudes to believe unsubstantiated or obscure epistemic claims as true, including nonpolitical ones. Study 1 found a robust association between populist attitudes and conspiracy mentality (after controlling for possible confounders such as education level and political orientation) in a large-scale multinational study in 13 EU countries (14 samples, more than 70,000 participants). Studies S1, 2, and 3, then, revealed that the relationship between populist attitudes and credulity is not specific for conspiracy theories. Besides conspiracy mentality and belief in a range of specific conspiracy theories, populist attitudes predicted increased credulity of politically neutral news items (regardless of the news source), bullshit receptivity, and paranormal beliefs. Furthermore, these findings were not mediated by analytic thinking or need for cognition, but instead by increased faith in intuition. Taken together, these findings support the notion of populist gullibility.

The more specific theoretical contributions of the current research are threefold. First, the studies presented here offer an empirical foundation that may stimulate further research on the psychological basis of populist attitudes. While populism is a growing research field within political science (e.g., Akkerman et al., 2014; Rooduijn et al., 2016; Schumacher & Rooduijn, 2013; for an overview, see Mudde & Kaltwasser, 2017), relatively few studies have explicitly addressed the psychological processes underlying this important political dimension, that is conceptually distinct from conservatism, extremism, and authoritarianism (Erisen et al., 2021). Second, the studies offer solid empirical evidence for a link between populist attitudes and conspiracy beliefs. In all studies, we included indicators of conspiracy beliefs or conspiracy mentality (or both) and found consistent evidence that populist attitudes are associated with conspiracy beliefs. This appears to be the case cross-culturally: The relationship between conspiracy mentality and populist attitudes emerged in all the countries assessed in Study 1 (although with varying effect sizes). Third, the studies underscore that populist attitudes are associated with gullibility beyond belief in conspiracy theories. Moreover, the links between populist attitudes and the

various gullibility indicators were mediated by an increased reliance on one's intuitions. This suggests that a high confidence in one's hunches (rather than knowledge or reasoning) is part of the cognitive style underlying populist attitudes, and such faith in intuition may help explain the link between populist attitudes and accepting unsubstantiated epistemic claims as true.

The results reported here also provide insights into the broader question of what psychological characteristics may be associated with citizens' susceptibility to the rhetoric of populist leaders. Populist rhetoric often oversimplifies complex societal problems through catchy one-liners and contains policy proposals that sometimes are incompatible with the constitution or international treaties (e.g., populist movements within various EU member states that promise to lower their country's financial contributions to the EU or to close the borders for immigrants entirely). Moreover, a populist worldview assumes a Manichean perception of the social world through relatively sharp categorizations of "good groups" (e.g., hard-working citizens) versus "bad groups" (e.g., "the corrupt elites"; e.g., Mudde, 2004). What psychological factors predict if citizens fall for such populist rhetoric and worldviews? The present research suggests that gullibility is an important factor to consider: People who accept populist rhetoric as a viable alternative to mainstream political movements may also be more likely to accept weak epistemic claims as true.

Strengths, Limitations, and Future Research

The studies reported here provide consistent evidence for the notion of populist gullibility. Furthermore, one of the studies (Study 1) underscored the cross-cultural robustness of the relationships between populist attitudes and conspiracy mentality. Finally, the hypotheses of one of the studies reported here were preregistered before collecting the data (Study 2), and results were in line with predictions. These features suggest that the present studies provide a solid basis for future research on the relationship between populist attitudes and human credulity.

One limitation, however, is that the current studies reveal no causal evidence for the link between gullibility and populist attitudes. A common theoretical idea is that affect and cognition stimulate broader attitudes (Edwards, 1990), and therefore, a mindset that regularly accepts weak claims as true may contribute to the psychological foundations of a populist worldview. Another common theoretical idea, however, is that people's general political worldview shapes their specific beliefs about the world, for instance through rationalization processes (cf. Festinger, 1957) or moral convictions (Skitka, 2010). To illuminate, whether or not people accept or reject new policy depends more on the ideology of the politician who proposed it than on the policy's content (Cohen, 2003). Relatedly, through motivated reasoning people particularly believe conspiracy theories that accuse their political opponents of malpractice (Miller et al., 2016; Uscinski et al., 2016). More generally, people's political worldview shapes how they interpret information and therefore may lead to biased reasoning processes and flawed conclusions (Gampa et al., 2019).

Given their cross-sectional nature, in the present studies it made most sense to treat populist attitudes as an independent variable and the various measures of credulity as dependent variables. After all, populist attitudes reflect a relatively stable worldview that takes time to develop, while responses to most epistemic claims are likely to be more malleable as participants presumably saw them for the first time (e.g., the various news items; the bullshit-receptivity measure). If assessed over a longer period of time, however, we speculate that the link between populist attitudes and credulity might be bidirectional and self-reinforcing. Indeed, longitudinal research shows a bidirectional link of populism with other beliefs about society: Political discontent predicts a progressive increase in populist attitudes, but also, populist attitudes predict a progressive increase in political discontent (Rooduijn et al., 2016). Longitudinal designs seem necessary to assess the causal relationships between populist attitudes and gullibility. This is an important task for future research.

A possible alternative explanation for these findings might be acquiescence bias: A methodological artefact due to participants agreeing with any statement provided. Indeed, this problem is inherent to any cross-sectional design, and therefore it is impossible to exclude this possibility with complete certainty. We do note, however, that the data are more consistent with the notion of populist gullibility. For instance, in Study 1 the populist-attitudes scale contained various reverse-coded items, yet a separate analysis of these items provided no evidence for acquiescence bias. Moreover, the strength of the association varied substantially across countries, ranging from very strong (Sweden) to very weak (Romania) which is difficult to explain through acquiescence bias. Yet to fully exclude this possibility, more sophisticated measurements are necessary, that for instance measure populist attitudes and indicators of gullibility with a larger proportion of reverse-scored items.

We conceptualized populist gullibility specifically in terms of acceptance of weak epistemic claims that are compatible with, or unrelated to, perceivers' political worldview. What to expect when epistemic claims are *incompatible* with one's worldview? It is quite likely that populist attitudes are associated with a strong rejection of ideologically incompatible propositions (e.g., right-wing populists rejecting left-wing policy proposals, and vice versa). It might be speculated that the excessive confidence in one's intuitions that are associated with populist attitudes produces polarized beliefs—including strong acceptance of claims that are either consistent with, or unrelated to, one's ideological beliefs (as revealed in the current research), but also a strong and confident rejection of claims that diametrically oppose one's ideological beliefs. Research, for example, suggests that when one's values and beliefs (e.g., about the reality of climate change) are incompatible with scientific consensus, people often uphold their values by misperceiving the scientific consensus (Kahan et al., 2011). Future research may more extensively pursue the relationship between populist attitudes and credulity of statements that oppose one's worldview.

Concluding Remarks

Populist movements have been remarkably successful in recent years: In various countries, populist leaders have managed to seize power in the past decade (e.g., Trump, Bolsonaro), and populist movements have been responsible for significant societal changes (e.g., Brexit). Although these societal developments suggest that it is important to understand the psychology of populist attitudes, little is yet known of how populist attitudes are related with human belief systems. The present research was designed to make a novel contribution by investigating the relationships of populist attitudes with a variety of credulity indicators, including conspiracy beliefs, perceived credibility of news items, bullshit receptivity, and supernatural beliefs. Results of all studies reported here support the notion of populist gullibility. While populist movements frequently articulate a critical view of the way society is governed, paradoxically it may require an uncritical mind to support such movements.

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REFERENCES

- Aarnio, K., & Lindeman, M. (2005). Paranormal beliefs, education, and thinking styles. *Personality and Individual Differences*, 39, 1227–1236.

- Akkerman, A., Mudde, C., & Zaslove, A. (2014). How populist are the people? Measuring populist attitudes in voters. *Comparative Political Studies*, *47*, 1324–1353.
- Akkerman, A., Zaslove, A., & Spruyt, B. (2017). ‘We the People’ or ‘We the Peoples’? A comparison of support for the populist radical right and populist radical left in the Netherlands. *Swiss Political Science Review*, *23*, 377–403.
- Bale, J. M. (2007). Political paranoia v. political realism: On distinguishing between bogus conspiracy theories and genuine conspiratorial politics. *Patterns of Prejudice*, *41*, 45–60.
- Bensley, D. A., Lilienfeld, S. O., Rowan, K. A., Masciocchi, C. M., & Grain, F. (2020). The generality of belief in unsubstantiated claims. *Applied Cognitive Psychology*, *34*, 16–28.
- Bergmann, E. (2018). *Conspiracy & populism: The politics of misinformation*. Palgrave MacMillan.
- Bernhard, L., & Kriesi, H. (2019). Populism in election times: A comparative analysis of 11 countries in Western Europe. *West European Politics*, *42*, 1188–1208.
- Brandt, M. J., Evans, A. M., & Crawford, J. T. (2015). The unthinking or confident extremist? Political extremists are more likely than moderates to reject experimenter-generated anchors. *Psychological Science*, *26*, 189–202.
- Bruder, M., Haffke, P., Neave, N., Nouripanah, N., & Imhoff, R. (2013). Measuring individual differences in generic belief in conspiracy theories across cultures: Conspiracy Mentality Questionnaire. *Frontiers in Psychology*, *4*, 225.
- Cohen, G. L. (2003). Party over policy: The dominating impact of group influence on political beliefs. *Journal of Personality and Social Psychology*, *85*, 808–822.
- 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*, 1289–1293.
- Douglas, K. M., Uscinski, J. E., Sutton, R. M., Cichocka, A., Nefes, T., Ang, C. S., & Deravi, F. (2019). Understanding conspiracy theories. *Advances in Political Psychology*, *40*, 3–35.
- Edwards, K. (1990). The interplay of affect and cognition in attitude formation and change. *Journal of Personality and Social Psychology*, *59*, 202–216.
- Epstein, S., Pacini, R., Denes-Raj, V., & Heier, H. (1996). Individual differences in intuitive-experiential and analytical-rational thinking styles. *Journal of Personality and Social Psychology*, *71*, 390–405.
- Erisen, C., Guidi, M., Martini, M., Toprakkiran, S., Isernia, P., & Littvay, L. (2021). Psychological correlates of populist attitudes. *Advances in Political Psychology*, *42*, 149–171. <https://doi.org/10.1111/pops.12768>
- Festinger, F. (1957). *A theory of cognitive dissonance*. Stanford University Press.
- Forgas, J. P., & Baumeister, R. (2019). *The social psychology of gullibility: Conspiracy theories, fake news, and irrational beliefs*. Routledge.
- Frederick, S. (2005). Cognitive reflection and decision-making. *Journal of Economic Perspectives*, *19*, 25–42.
- Gampa, A., Wojcik, S. P., Motyl, M., Nosek, B. A., & Ditto, P. H. (2019). (Ideo)Logical reasoning: Ideology impairs sound reasoning. *Social Psychological and Personality Science*, *10*, 1075–1083.
- Gilbert, D. T. (1991). How mental systems believe. *American Psychologist*, *46*, 107–119.
- Hawkins, K. (2009). Is Chávez populist? Measuring populist discourse in comparative perspective. *Comparative Political Studies*, *42*, 1040–1067.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.
- Imhoff, R., Zimmer, F., Klein, O., António, J. H. C., Babinska, M., Bangerter, A., Bilewicz, M., Blanuša, N., Bovan, K., Bužarovska, R., Cichocka, A., Delouvée, S., Douglas, K. M., Dyrendal, A., Etienne, T., Gjoneska, B., Graf, S., Gualda, E., Hirschberger, G., ... van Prooijen, J.-W. (2022). Conspiracy mentality and political orientation across 26 countries. *Nature Human Behaviour*, *6*, 392–403.
- Jagers, J., & Walgrave, S. (2007). Populism as political communication style: An empirical study of political parties’ discourse in Belgium. *European Journal of Political Research*, *46*, 319–345.
- Jolley, D., & Douglas, K. (2014). The social consequences of conspiracism: Exposure to conspiracy theories decreases intentions to engage in politics and to reduce one’s carbon footprints. *British Journal of Psychology*, *105*, 35–56.
- Jolley, D., Douglas, K. M., Leite, A. C., & Schrader, T. (2019). Belief in conspiracy theories and intentions to engage in everyday crime. *British Journal of Social Psychology*, *58*, 534–549.
- Kahan, D. M., Jenkins-Smith, H., & Braman, D. (2011). Cultural cognition of scientific consensus. *Journal of Risk Research*, *14*, 147–174.
- Kahneman, D. (2011). *Thinking, fast and slow*. Farrar, Straus and Giroux.
- Krouwel, A. P. M., Kutyski, Y., & Thomaczek, P. (2019). *EVES: European Voter Election Survey Data*. Kieskompas.
- Kruger, J., & Dunning, D. (1999). Unskilled and unaware of it: How difficulties in recognizing one’s own incompetence leads to inflated self-assessments. *Journal of Personality and Social Psychology*, *77*, 1121–1134.
- Levine, T. R. (2014). Truth-default theory (TDT): A theory of human deception and deception detection. *Journal of Language and Social Psychology*, *33*, 378–392.

- Miller, J. M., Saunders, K. L., & Farhart, C. E. (2016). Conspiracy endorsement as motivated reasoning: The moderating roles of political knowledge and trust. *American Journal of Political Science*, *60*, 824–844.
- Mols, F., & Jetten, J. (2014). No guts, no glory: How framing the collective past paves the way for anti-immigrant sentiments. *International Journal of Intercultural Relations*, *43*, 74–86.
- Mudde, C. (2004). The populist zeitgeist. *Government and Opposition*, *39*, 541–563.
- Mudde, C., & Kaltwasser, C. R. (2017). *Populism: A very short introduction*. Oxford University Press.
- Nera, K., Wagner-Egger, P., Bertin, P., Douglas, K., & Klein, O. (2021). A power-challenging theory of society, or a conservative mindset? Upward and downward conspiracy theories as ideologically distinct beliefs. *European Journal of Social Psychology*, *51*(4-5), 740–757. <https://doi.org/10.1002/ejsp.2769>
- Orenstein, A. (2002). Religion and paranormal belief. *Journal for the Scientific Study of Religion*, *41*, 301–311.
- Pennycook, G., Cheyne, J. A., Barr, N., Koehler, D., & Fugelsang, J. A. (2015). On the reception and detection of pseudo-profound bullshit. *Judgment and Decision Making*, *10*, 549–563.
- Pennycook, G., & Rand, D. G. (2020). Who falls for fake news? The roles of bullshit receptivity, overclaiming, familiarity, and analytic thinking. *Journal of Personality*, *88*, 185–200.
- Rollwage, M., Dolan, R. J., & Fleming, S. M. (2018). Metacognitive failure as a feature of those holding radical beliefs. *Current Biology*, *28*, 4014–4021.
- Rooduijn, M., Van der Brug, W., & De Lange, S. L. (2016). Expressing or fueling discontent? The relationship between populist voting and political discontent. *Electoral Studies*, *43*, 32–40.
- Schumacher, G., & Rooduijn, M. (2013). Sympathy for the ‘devil’? Voting for populists in the 2006 and 2010 Dutch general elections. *Electoral Studies*, *32*, 124–133.
- Silva, B. C., Vegetti, F., & Littvay, L. (2017). The elite is up to something: Exploring the relationship between populism and belief in conspiracy theories. *Swiss Political Science Review*, *23*, 423–443.
- Skitka, L. (2010). The psychology of moral conviction. *Social and Personality Psychology Compass*, *4*(4), 267–281.
- Stähl, T., & Van Prooijen, J.-W. (2021). Analytic atheism: Valuing epistemic rationality strengthens the association between analytic thinking and religious disbelief. *Personality and Individual Differences*, *179*, 110914.
- Swami, V., Voracek, M., Stieger, S., Tran, U. S., & Furnham, A. (2014). Analytic thinking reduces belief in conspiracy theories. *Cognition*, *133*, 572–585.
- Thomson, K. S., & Oppenheimer, D. M. (2016). Investigating an alternate form of the cognitive reflection test. *Judgment and Decision Making*, *11*, 99–113.
- Toner, K., Leary, M., Asher, M. W., & Jongman-Sereno, K. P. (2013). Feeling superior is a bipartisan issue: Extremity (not direction) of political views predicts perceived belief superiority. *Psychological Science*, *24*, 2454–2462.
- 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.
- Van der Linden, S., Panagopoulos, C., Azevedo, F., & Jost, J. J. (2021). The paranoid style in American politics revisited: An ideological asymmetry in conspiratorial thinking. *Political Psychology*, *42*, 23–51.
- Van Prooijen, J.-W. (2017). Why education predicts decreased belief in conspiracy theories. *Applied Cognitive Psychology*, *31*, 50–58.
- Van Prooijen, J.-W. (2020). An existential threat model of conspiracy theories. *European Psychologist*, *25*, 16–25.
- Van Prooijen, J.-W., Douglas, K., & De Inocencio, C. (2018). Connecting the dots: Illusory pattern perception predicts belief in conspiracies and the supernatural. *European Journal of Social Psychology*, *48*, 320–335.
- Van Prooijen, J.-W., & Krouwel, A. P. M. (2020). Overclaiming knowledge predicts anti-establishment voting. *Social Psychological and Personality Science*, *11*, 356–363.
- Van Prooijen, J.-W., Krouwel, A. P. M., & Emmer, J. (2018). Ideological responses to the EU refugee crisis: The left, the right, and the extremes. *Social Psychological and Personality Science*, *9*, 143–150.
- Van Prooijen, J.-W., Krouwel, A. P. M., & Pollet, T. (2015). Political extremism predicts belief in conspiracy theories. *Social Psychological and Personality Science*, *6*, 570–578.
- Van Prooijen, J.-W., & Van Vugt, M. (2018). Conspiracy theories: Evolved functions and psychological mechanisms. *Perspectives on Psychological Science*, *13*, 770–788.

Supporting Information

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

Table S1. Mean, Standard Deviations, and Inter-Correlations of the Measured Variables—Study S1