

Political Extremism Predicts Belief in Conspiracy Theories

Jan-Willem van Prooijen^{1,2}, André P. M. Krouwel¹, and Thomas V. Pollet¹

Social Psychological and
Personality Science
1-9

© The Author(s) 2015
Reprints and permission:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/1948550614567356
spps.sagepub.com



Abstract

Historical records suggest that the political extremes—at both the “left” and the “right”—substantially endorsed conspiracy beliefs about other-minded groups. The present contribution empirically tests whether extreme political ideologies, at either side of the political spectrum, are positively associated with an increased tendency to believe in conspiracy theories. Four studies conducted in the United States and the Netherlands revealed a quadratic relationship between strength of political ideology and conspiracy beliefs about various political issues. Moreover, participants’ belief in simple political solutions to societal problems mediated conspiracy beliefs among both left- and right-wing extremists. Finally, the effects described here were not attributable to general attitude extremity. Our conclusion is that political extremism and conspiracy beliefs are strongly associated due to a highly structured thinking style that is aimed at making sense of societal events.

Keywords

political extremism, conspiracy beliefs, political ideology

Extreme political ideologies are responsible for several of the major human tragedies in the previous century, both at the left (e.g., communism) and the right extreme (e.g., Fascism) (Baumeister, 1997; Midlarsky, 2011). Although these ideologies differ substantially in content, it has been argued that extreme ideologies are grounded in a similar underlying psychology (Greenberg & Jonas, 2003). Understanding this underlying psychology is necessary for explaining why rigid adherence to political ideology can have such destructive consequences. Historical records suggest that the tragedies caused by extremism are rooted substantially in a tendency to be distrustful and paranoid toward groups of other-minded individuals, as reflected in a belief in conspiracy theories. As a case in point, a core assumption underlying the holocaust was the belief in a Jewish conspiracy for world domination, combined with the belief in a Jewish conspiracy causing the German defeat in WW-I. Likewise, most communist regimes were characterized by a fear for conspiracies, thereby suspecting any citizen that had even the slightest connection with the “imperialist West” of being a potential enemy of the state or spy (Pipes, 1997; Robins & Post, 1997).

Importantly, the political currents that are considered relatively extreme in modern democracies (e.g., populism) are far more moderate than, and in many ways hard to compare with, 20th-century Fascists or communists. Nevertheless, also in modern Western societies, people with (relatively) extreme political beliefs seem less trustful of institutions than people with moderate political beliefs (Inglehart, 1987). As such, there

may be a structural tendency for people with relatively extreme political beliefs to endorse conspiracy theories. Here, we empirically test the prediction that extreme political ideologies are associated with increased susceptibility to conspiracy beliefs.

Political Extremism and Conspiracy Beliefs

One common feature of political extremists is that they have a highly structured thinking style aimed at making sense of societal events. Specifically, political extremism is associated with black-and-white thinking in which social stimuli are dichotomously classified as good or evil, positive or negative, and the like (Greenberg & Jonas, 2003). It has been noted that political extremists have a “crippled epistemology,” in that they receive or trust information about political issues mainly from their extremist ingroup and ignore other sources of information (Hardin, 2002). This crippled epistemology is reflected in political extremists’ tendency to cling to their ideology in a closed-

¹ VU University Amsterdam, The Netherlands

² NSCR, Amsterdam, The Netherlands

Corresponding Author:

Jan-Willem van Prooijen, Department of Social and Organizational Psychology, VU University Amsterdam, Van der Boeorchorststraat 1, 1081BT Amsterdam, The Netherlands.

Email: j.w.van.prooijen@vu.nl

minded and rigid fashion, seeing their preferred policy as the simple and only solution to societal problems (Fernbach, Rogers, Fox, & Sloman, 2013; see also Tetlock, Armor, & Peterson, 1994).

Such belief in simple political solutions facilitates coping with feelings of uncertainty and fear by making the world more understandable and predictable (Kruglanski, Pierro, Mannetti, & De Grada, 2006). The association between managing uncertainty and political extremism is counterintuitive, as political extremists tend to be particularly confident of their political beliefs (Toner, Leary, Asher, & Jongman-Sereno, 2013). This paradox is resolved, however, by theorizing on compensatory conviction. This research domain suggests that uncertainty in one life domain produces increased certainty about one's ideologies, as reflected in values, opinions, and groups (McGregor, 2006). Such personal ideals may compensate for personal uncertainties by providing self-regulatory clarity, and by imbuing the world with meaning and purpose. Complementary research findings indeed reveal that threats or uncertainties increase the extremity by which people endorse their ideologies (e.g., Castano et al., 2011; Hogg, Meehan, & Farquharson, 2010; McGregor, Prentice, & Nash, 2013).

We propose here that belief in conspiracy theories is fundamentally related with these sense-making processes. We define conspiracy beliefs as suspicions that a number of actors join together in secret agreement, and try to achieve a hidden goal, which is perceived as unlawful or malevolent (Zonis & Joseph, 1994; cf. Swami & Furnham, 2014). Such conspiracies typically consist of either powerful others (e.g., politicians, CEOs, scientists) or societally marginalized groups (e.g., Muslims, Jews). Our reasoning is rooted in theorizing that conspiracy beliefs constitute a monological belief system. Specifically, conspiracy beliefs provide a mental framework that confirms and facilitates other conspiratorial ideas, rendering belief in one conspiracy theory an excellent predictor of belief in other conspiracy theories (Goertzel, 1994; Lewandowski, Oberauer, & Gignac, 2013; Swami, Chamorro-Premuzic, & Furnham, 2010; Swami et al., 2011, 2013; Wood, Douglas, & Sutton, 2012). Hence, although conspiracy theories can differ substantially in content, they are driven by similar underlying psychological processes.

Various authors noted that these underlying processes are characterized by a desire to make sense of threatening societal events. Early writings by Hofstadter (1966) already suggested that conspiracy beliefs are aimed at providing causal explanations for complex but distressing social events, an insight that was resonated theoretically by various authors (e.g., Bale, 2007; Clarke, 2002). Empirically, research reveals that interventions designed to increase sense-making desires—such as inducing a lack of control or uncertainty—have the potential to increase conspiracy beliefs (Newheiser, Farias, & Tausch, 2011; Sullivan, Landau, & Rothschild, 2010; Van Prooijen & Jostmann, 2013; Whitson & Galinsky, 2008). This suggests that conspiracy beliefs feed into a core feature of political extremists, namely, a desire to make sense of societal events through a set of clear-cut

assumptions about the world. Various authors noted that the crippled epistemology that characterizes political extremism is also inherent to conspiracy beliefs (Sunstein & Vermeule, 2009; Swami et al., 2013).

Thus far, only one study observed a relation between political extremism and conspiracy beliefs (Inglehart, 1987). However, this study neither conducted a statistical test of this relation nor did it test for mediating processes. Moreover, instead of measuring conspiracy beliefs, Inglehart measured respondents' distrust in their nation's judicial system. This is an unsatisfactory measure of conspiracy beliefs, as people may distrust institutions for nonconspiratorial reasons (e.g., suspected incompetence). At present, the empirical evidence for a relation between political extremism and belief in conspiracy theories is scarce at best. The current research aims to fill this void.

We conducted four studies (one in the United States and three in the Netherlands) in which we asked participants to classify themselves on a political left versus right dimension. In addition, participants responded to questions assessing their conspiracy beliefs about a range of current political issues (Douglas & Sutton, 2011). We predicted a quadratic effect, indicating that participants at the extreme left and the extreme right are more strongly inclined to believe in conspiracy theories than politically moderate participants.

Study 1

Method

Study 1 was conducted among 207 U.S. participants (92 male, 97 female, and 18 gender not reported; age range: 18–76 years) through Amazon Mechanical Turk. Only 185 participants were retained due to missing values on political ideology. Participants classified themselves on a political left-right dimension (1 = *extremely left-wing*, 7 = *extremely right-wing*; $M = 3.65$, $SD = 1.69$).

Participants responded to 6 items pertaining to conspiracy beliefs about the financial crisis (1 = *completely disagree*, 7 = *completely agree*), an example item being “The financial crisis is the result of a conspiracy between bankers and corrupt politicians.”¹ Responses to these items were averaged into a reliable financial conspiracy scale ($\alpha = .86$; $M = 3.69$, $SD = 1.45$). Furthermore, participants answered four questions about their conspiracy beliefs regarding global warming (1 = *certainly not*, 7 = *certainly*), for example, “Do you believe that politicians have a vested interest in changing the facts about global warming?”. Responses to these items were averaged into a reliable climate conspiracy scale ($\alpha = .80$; $M = 4.02$, $SD = 1.50$).

Additionally, we assessed the 20-item paranoia scale by Fenigstein and Vanable (1992), which measures how paranoid people are about others trying to harm them personally. Example items are “I sometimes feel as if I'm being followed” and “I have often felt that strangers were looking at me critically.”

Table 1. Statistics for the Regression Models of Studies 1, 2a, 2b, and 3.

Study	Dependent variable	Model	<i>F</i> (<i>df</i>)	ΔR^2	AIC	Rel. LL
1	Financial conspiracy beliefs	Control variables	9.06 (3, 181) ^{***}	.13	648.94	0.625
		Linear	0.60 (1, 180)	<.01	650.32	0.313
		Quadratic	4.23 (1, 179) [*]	.02	648.00	1
	Climate conspiracy beliefs	Control variables	11.07 (3, 181) ^{***}	.16	648.39	<.001
		Linear	25.67 (1, 180) ^{***}	.11	625.72	0.844
		Quadratic	2.29 (1, 179)	.01	625.38	1
2a	Conspiracy beliefs	Control variables	23.79 (3, 1006) ^{***}	.07	3213.91	0.126
		Linear	0.29 (1, 1005)	<.01	3215.61	0.054
		Quadratic	7.83 (1, 1004) ^{**}	.01	3209.76	1
	Belief in simple political solutions	Control variables	12.89 (3, 1006) ^{***}	.04	3667.72	0.007
		Linear	4.07 (1, 1005)	<.01	3665.64	0.019
		Quadratic	9.89 (1, 1004) ^{**}	.01	3657.74	1
2b	Conspiracy beliefs	Control variables	51.00 (3, 1293) ^{***}	.011	4135.29	0.11
		Linear	5.92 (1, 1292) [*]	<.01	4131.36	0.075
		Quadratic	7.17 (1, 1291) ^{**}	.01	4126.18	1
	Belief in simple political solutions	Control variables	22.59 (3, 1293) ^{***}	.05	4695.76	<.001
		Linear	8.21 (1, 1292) ^{**}	.01	4689.55	<.001
		Quadratic	22.07 (1, 1291) ^{***}	.02	4669.56	1
3	Conspiracy beliefs	Control variables	0.65 (2, 243)	<.001	4669.56	<.001
		Linear	1.42 (1, 242)	.01	771.07	0.129
		Quadratic	6.05(1, 241) [*]	.02	766.97	1

Note. Akaike information criterion (AIC) is based on the MIXED procedure in SPSS 21.0 with ML estimation (smaller-is-better); rel. LL denotes the relative likelihood of a model, $\exp([AIC_{\min} - AIC_i]/2)$.

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

These items were averaged into a reliable interpersonal paranoia scale ($\alpha = .92$; $M = 3.17$, $SD = 1.12$).

Results and Discussion

Interpersonal Paranoia

We entered gender and age as control variables in Step 1 of a hierarchical regression analysis, added the linear effect of political ideology in Step 2, and added the quadratic term in Step 3. Political ideology did not display a linear or quadratic relationship with interpersonal paranoia, linear $F(1, 181) = 1.26$, $p = .26$; quadratic $F < 1$. This excludes the alternative possibility that the political extremes are more paranoid in general. To further test whether the political extremes are more paranoid only about political and societal events, we include interpersonal paranoia as an additional control variable in Step 1 of our analysis of conspiracy beliefs.

Financial Conspiracy Beliefs

The main findings of all four studies are displayed in Table 1. The analysis of belief in a financial conspiracy theory revealed significant effects of age ($\beta = .14$, $p = .03$) and of interpersonal paranoia ($\beta = .35$, $p < .001$) in Step 1. In Step 2, no linear association between political ideology and conspiracy beliefs about the financial crisis emerged ($\beta = -.06$, $p = .44$). The linear term was significant in Step 3 ($\beta = -.61$, $p = .03$), but more important was that the quadratic effect was significant as well ($\beta = .58$, $p = .04$). As predicted, belief in conspiracy theories about the financial crisis were endorsed by participants at both

political extremes, and less so by politically moderate participants (see Figure 1a).

Climate Conspiracy Beliefs

At Step 1, the analysis of belief in a climate conspiracy theory revealed strong effects of interpersonal paranoia ($\beta = .25$, $p < .001$) and of gender, indicating that men endorsed climate conspiracy theories more strongly ($M = 4.48$, $SD = 1.50$) than women ($M = 3.61$, $SD = 1.36$; $\beta = -.25$, $p < .001$). The linear effect of ideology in Step 2 was significant ($\beta = .33$, $p < .001$); as might be expected, the political right endorsed climate conspiracy theories more strongly than the political left. The quadratic effect in Step 3 was not significant ($\beta = .40$, $p = .13$), but the quadratic pattern suggested that particularly the *extreme* right believes in a climate conspiracy theory (see Figure 1b). In that sense, it is noteworthy that the quadratic effect is significant if gender is removed as control variable ($\beta = .52$, $p = .05$), suggesting that climate conspiracy theories flourish particularly among right-wing extremist men—a possibility that future research may examine further.

Studies 2a and 2b

Studies 2a and 2b were two independently conducted, nationally representative samples of the Dutch electorate. We measured conspiracy beliefs through a composite scale with items assessing how probable or improbable participants perceived a range of conspiracy theories (for a similar procedure, see Douglas & Sutton, 2011), thereby testing whether the

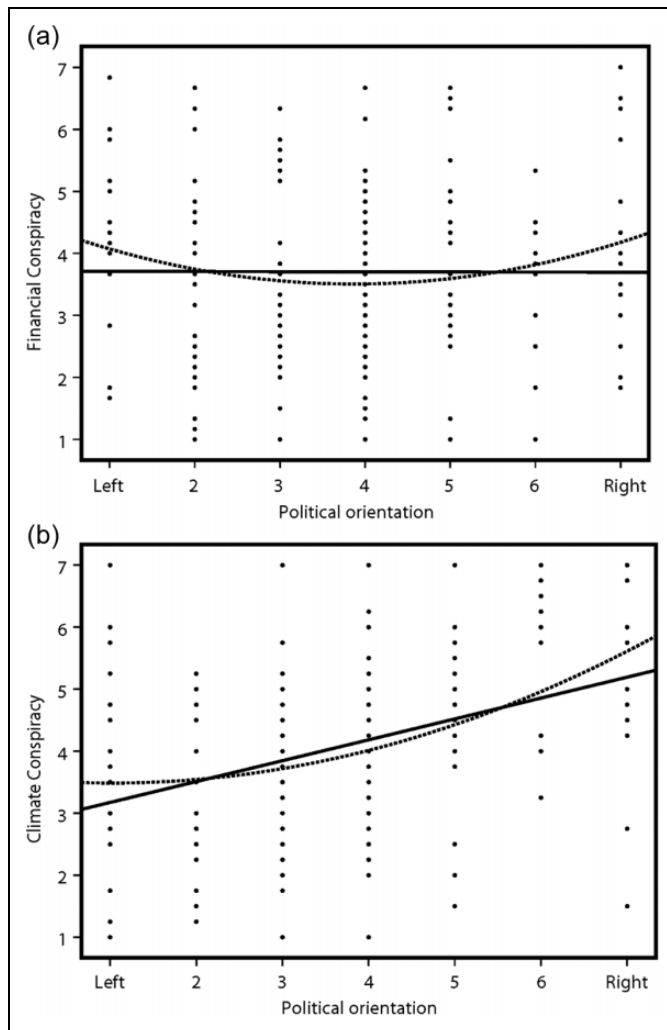


Figure 1. Belief in a financial conspiracy theories (1a) and belief in a climate conspiracy theory (1b) as a linear and quadratic function of political orientation (Study 1).

hypothesized quadratic effect reflects a generalized tendency to believe in conspiracy theories among both political extremes. Moreover, we tested the assumption that the hypothesized quadratic relation is mediated by political extremists' tendency to believe in simple political solutions for societal problems (Fernbach et al., 2013; Hardin, 2002).

Method

Study 2a

Through a professional research agency, we recruited a nationally representative sample of the Dutch electorate, consisting of 1,010 participants (534 men, 476 women; 172 participants were younger than 35 years, 298 participants were between 35 and 49 years, and 540 participants were 50 years or older). Participants' education level was classified as low ($n = 285$), average ($n = 389$), or high ($n = 336$). Political ideology was measured on an 11-point scale (1 = *extremely left-wing*,

11 = *extremely right-wing*; $M = 5.58$, $SD = 2.41$). The study was conducted online.

To measure conspiracy beliefs, we asked how probable or improbable participants considered six conspiracy theories (e.g., "It often happens that politicians are connected to organized crime"; "The political arena was infiltrated by oil companies when making the decision to go to war against Iraq"). All items were measured on a scale ranging from 1 = *highly probable* to 7 = *highly improbable*, but for simplicity we recoded all items so that high scores reflect stronger conspiracy beliefs. These items formed a reliable composite scale ($\alpha = .80$; $M = 3.71$, $SD = 1.22$). Finally, we measured participants' belief in simple political solutions with the following item: "With the correct policies, most societal problems can be solved very easily" (1 = *completely agree*, 7 = *completely disagree*; recoded so that high scores reflect stronger belief in simple political solutions; $M = 4.63$, $SD = 1.51$).

Study 2b

Study 2b was a different nationally representative sample of the Dutch electorate, conducted by the same research agency as Study 2a. We recruited a total of 1,297 participants (681 men and 616 women; 306 participants were younger than 35 years, 372 participants were between 35 and 49 years, and 619 participants were 50 years or older). Of these, 354 had a low education level, 534 an average education level, and 409 a high education level. We again assessed political ideology on an 11-point scale ($M = 5.67$, $SD = 2.48$), measured conspiracy beliefs with the same scale as in Study 2a ($\alpha = .82$; $M = 3.66$, $SD = 1.26$), and solicited participants' responses to the same item of belief in simple structure ($M = 4.60$, $SD = 1.51$).

Results and Discussion

Study 2a

We entered gender, age, and education level as controls in Step 1 of the regression analyses. The linear effect of ideology was added to the model in Step 2, and the quadratic term was added in Step 3. The analysis on conspiracy beliefs indicated a significant effect of education level at Step 1 ($\beta = -.23$, $p < .001$). In Step 2, there was no linear association between political ideology and conspiracy beliefs ($\beta = .02$, $p = .59$). The linear term was significant in Step 3 ($\beta = -.32$, $p = .01$), but more importantly, there was strong support for the predicted quadratic relation ($\beta = .35$, $p = .005$; see Table 1 for model fit statistics). These findings, which are displayed in Figure 2a, again support the assertion that the political extremes at both the left and the right are most susceptible to conspiracy beliefs.

The analysis on participants' belief in simple political solutions revealed significant effects of age ($\beta = .08$, $p = .01$) and education level ($\beta = -.15$, $p < .001$) at Step 1. The linear effect at Step 2 was significant ($\beta = .06$, $p = .04$), pointing toward slightly stronger belief in simple political solutions among the right as opposed to the left. More important was the finding that at Step 3 the quadratic effect was significant ($\beta = .40$, $p = .002$).

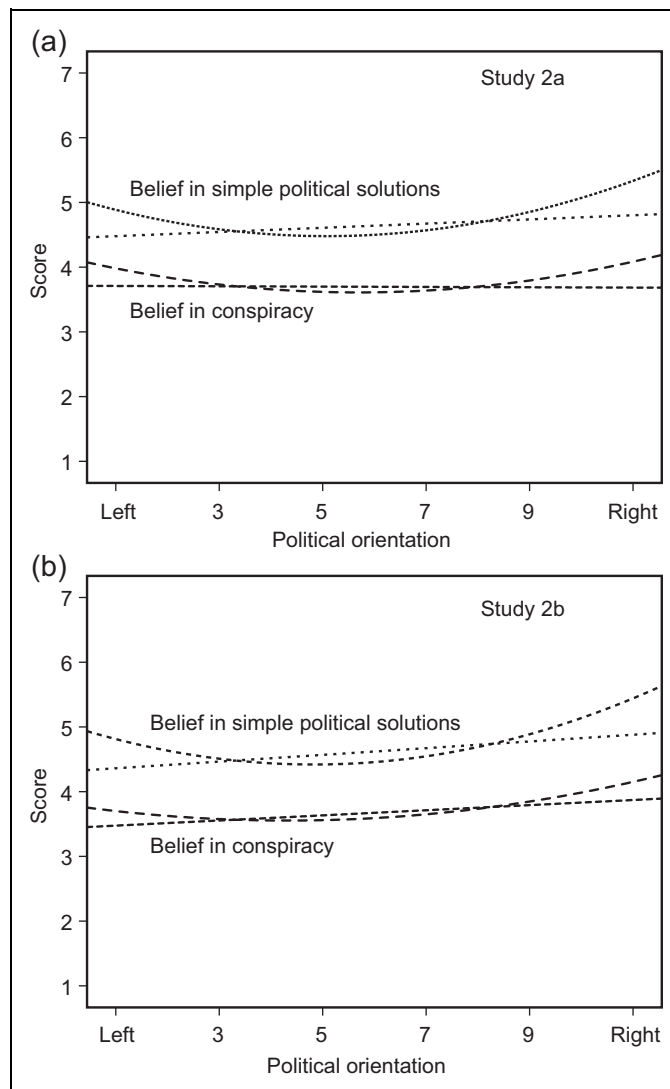


Figure 2. Belief in conspiracy theories and belief in simple political solutions as linear 2b quadratic functions of political orientation (Studies 2a and 2b).

and had a better fit to the data than the linear model (see Akaike information criterion [AIC] values, Table 1). Both political extremes believe—more strongly than politically moderate participants—in simple solutions to societal problems (Figure 2a). Moreover, belief in simple political solutions was significantly correlated with conspiracy beliefs ($r = .28, p < .001$).

Next, we tested whether belief in simple political solutions mediates the quadratic association between political ideology and conspiracy beliefs. For this purpose, we used the MEDCURVE SPSS macro by Hayes and Preacher (2010; 5,000 bootstrap samples). Results revealed a significant indirect effect at the left extreme ($-1 SD$), $\theta = .02$, as indicated by the fact that 0 is not in the 95% confidence interval, 95% CI $[-.04, -.001]$. Likewise, the indirect effect at the right extreme ($+1 SD$) was significant, $\theta = .03$, 95% CI $[.02, .05]$. The indirect effect at the scale midst (i.e., the

political centre) was not significant, $\theta = .005$, 95% CI $[-.003, .015]$. Belief in simple political solutions mediates the relation between political ideology and conspiracy beliefs among participants at both extremes, but not among participants in the political centre.

Study 2b

In this sample, results revealed significant effects of gender ($\beta = -.10, p < .001$) and education level ($\beta = -.32, p = .001$) in Step 1. The linear association between political ideology and conspiracy beliefs in Step 2 was significant, indicating stronger conspiracy beliefs at the political right ($\beta = .07, p = .02$). More importantly, the predicted quadratic effect in Step 3 also was significant ($\beta = .29, p = .008$) and had a better fit to the data than the linear model (see AIC values, Table 1).

Results on belief in simple political solutions revealed a significant effect of education level in Step 1 ($\beta = -.23, p < .001$). In Step 2, the linear association between political ideology and belief in simple political solutions was significant ($\beta = .08, p = .004$), as was the quadratic effect in Step 3 ($\beta = .53, p < .001$). The quadratic model had a better fit to the data than the linear model (see AIC values, Table 1). The effects on conspiracy beliefs and belief in simple political solutions are displayed in Figure 2b. Conspiracy beliefs and belief in simple political solutions were again significantly correlated ($r = .32, p < .001$).

We again tested the indirect effect of political ideology on conspiracy beliefs through belief in simple political solutions using MEDCURVE (Hayes & Preacher, 2010). Results revealed significant indirect effects at the left extreme ($-1 SD$), $\theta = .023$, 95% CI $[-.04, -.005]$, and at the right extreme ($+1 SD$), $\theta = .046$, 95% CI $[.03, .07]$. This time, the indirect effect was also significant at the midpoint of the scale (i.e., the political centre), albeit more than twice as weak compared to the extremes, $\theta = .01$, 95% CI $[.002, .02]$. More important is that the main finding of Study 2a—that belief in simple political solutions mediates the relation between political ideology and conspiracy beliefs among participants at both extremes—is replicated in this second nationally representative sample of the Dutch electorate.

Study 3

Study 3 was designed to rule out a possible alternative explanation for the effects reported here. Our line of reasoning is based on the assumption that only *ideological* attitudes—and not just any attitude—regulate uncertainty by providing meaning to the world (e.g., McGregor & Marigold, 2003). It is possible, however, that people with extreme political attitudes have more extreme attitudes in general, leading them to also endorse relatively extreme beliefs (such as belief in various conspiracy theories). In Study 3, we tested whether the effects are specific for political ideology by also measuring a range of nonideological attitudes.

Method

As part of a larger study on voting behavior (relying on a research panel coordinated by the second author), we included a brief questionnaire. The study was conducted online, and participants were approached through e-mail. A total of 268 participants were recruited (190 men, 71 women, 7 gender not reported; age range 27–88 years).

Political ideology was measured on a scale ranging from 1 (*very left-wing*) to 11 (*very right-wing*; $M = 4.63$, $SD = 2.09$). We measured conspiracy beliefs by asking how probable participants considered nine conspiracy theories (1 = *very improbable*, 7 = *very probable*), such as “Major companies within the pharmaceutical industry deliberately spread diseases, to sell medication” and “Illegal activities of politicians and managers are usually covered up.” These items were averaged into a reliable scale of conspiracy beliefs ($\alpha = .86$; $M = 2.80$, $SD = 1.15$).

To measure nonideological attitudes, we asked participants to evaluate a total of 18 different attitude objects (1 = *very unfavourable*, 7 = *very favourable*). Participants specifically evaluated various *products* (e.g., Apple computers), *activities* (e.g., camping), *types of food* (e.g., pizza), and *ideas* (e.g., astrology).

Results and Discussion

Conspiracy Beliefs

Gender and age were again entered as control variables in a hierarchical regression model, with the linear and quadratic effects of ideology as the main predictors. The effects of the control variables at Step 1, and of ideology at Step 2, were not significant ($ps > .23$). The linear term was significant in Step 3 ($\beta = -.61$, $p = .03$), but more importantly, the quadratic term was significant as well ($\beta = .70$, $p = .01$; see model fit statistics in Table 1). As can be seen in Figure 3, the political extremes again endorsed stronger conspiracy beliefs than political moderates, replicating the main finding.

Nonideological Attitudes

We then tested how these effects relate to participants’ nonideological attitudes through three types of analyses. First, we tested the quadratic effects of ideology on these attitude items (while again controlling for the linear effect, and for gender and age). This analysis revealed nonsignificant quadratic effects for 17 of the 18 attitude items ($.08 < ps < .99$). The only exception was that the political extremes had a more positive attitude about watching documentaries than moderates; ($\Delta R^2 = .03$) quadratic $\beta = .77$, $p = .008$; Bonferroni corrected threshold (assuming $r = 0$ and $\alpha = .05$) = .003. The political extremes did not differ in most of their general attitudes from political moderates.

Second, we tested whether the political extremes would respond more *extremely* on the general attitude items. We calculated extremity indexes for each attitude item using the

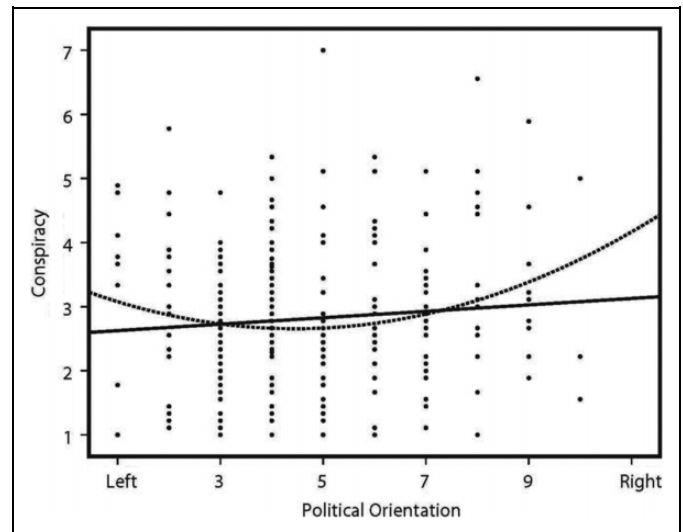


Figure 3. Belief in conspiracy theories as a linear and quadratic function of political orientation (Study 3).

procedure by Fernbach et al. (2013): We subtracted the scale mean (4.0) from participants’ raw scores and took the absolute value. This renders scores ranging from 0 (i.e., a raw score of 4) to 3 (i.e., raw scores of 1 or 7). The results indicated that the quadratic effect of political ideology was nonsignificant for the extremity scores of all 18 attitude items ($.06 < ps < .96$). Extreme political ideology was not associated with more extreme nonideological attitudes.

Third, we calculated correlations between belief in conspiracy theories and the extremity indexes for the general attitudes. Our analyses revealed that only 5 (of the 18) of these correlations were significant. Conspiracy beliefs were positively correlated with more extreme attitudes about Apple computers ($r = .13$, $p < .05$), Ikea furniture ($r = .15$, $p < .02$), smartphones ($r = .20$, $p = .001$), and public transport ($r = .13$, $p < .04$). Conspiracy beliefs were negatively correlated with extreme attitudes about astrology ($r = -.26$, $p < .001$). The remaining 13 correlations were nonsignificant. After Bonferroni correction for multiple testing, as indicated earlier, then only the correlations with smartphones (+) and astrology (–) remain upheld. Thus, the association between extremity of nonideological attitudes and conspiracy beliefs is inconsistent at best. The results of Study 3 suggest that the effects of political extremism do not generalize to any extreme attitude.

General Discussion

The present studies sought to test the hypothesis that the political extremes—at both the left and the right—are most susceptible to conspiracy beliefs. Results obtained in four studies support this hypothesis by revealing a quadratic association between political ideology and conspiracy beliefs. These findings were mediated by participants’ belief in simple solutions to societal problems (Studies 2a and 2b). These results suggest that political extremists’ susceptibility to conspiracy beliefs is

attributable to a highly structured thinking style that is aimed at making sense of societal events (cf. Fernbach et al., 2013; Greenberg & Jonas, 2003; Kruglanski et al., 2006).

The key contribution of the present research is twofold. First, the increased susceptibility to conspiratorial ideas among the political extremes is a relation that has previously been speculated about (Inglehart, 1987) but that has not been adequately tested. Second, the studies presented here add to the more general observation that the extreme left and the extreme right, despite their differing ideologies, share an underlying psychology to some extent (Greenberg & Jonas, 2003). Due to a crippled epistemology, both extremes might adhere to their belief system in a rigid fashion (Hardin, 2002), leading them to perceive their political ideas as the simple and only solution to societal problems—a style of sense making that also induces them to perceive evil conspiracies as causal explanations for various societal events.

It is likely that the left and the right differ in the type of conspiracy theories that they endorse. One might speculate that the extreme “left” particularly perceives conspiracies about issues concerning—for instance—capitalism (e.g., multinationals), and that the extreme “right” particularly perceives conspiracies about topics such as science (e.g., evolution and climate change) or immigration. Research confirms that specific ideologies may drive specific conspiracy theories (Swami, 2012; Wright & Arbutnot, 1974). More important for the present purposes, however, is the observation that both extremes share a general proneness to conspiracy beliefs about societal events.

The present research focused on socio-cognitive processes (i.e., sense-making strategies) to explain the relation between political ideology and conspiracy beliefs. It is possible, however, that other processes contribute to this relation as well. For instance, extremists tend to display more ingroup-favoritism than moderates (e.g., high levels of nationalism; Greenberg & Jonas, 2003; Inglehart, 1987). Correspondingly, there is a social dimension to conspiracy beliefs, as people endorse conspiracy theories to make sense of threats to a group that they connect their identity to (Crocker, Luhtanen, Broadnax, & Blaine, 1999; Van Prooijen & Van Dijk, 2014; Van Prooijen & Van Lange, 2014). Future research can thus examine additional mediators or moderators of the quadratic relation between political ideology and conspiracy beliefs.

Correlation is not causation; and based on the present findings, we can only speculate about the causality of the effects described here. We suspect that the relation between political extremism and conspiracy beliefs is bidirectional and self-reinforcing. Radicalization toward more extreme views may instigate a crippled epistemology that facilitates the sense-making processes associated with conspiracy beliefs. At the same time, belief in conspiracy theories assumes deception and injustice, and perceived injustice has been argued to be a major precursor of extremism (Midlarsky, 2011). More relevant for the present purposes,

however, is the observation that political extremism and conspiracy beliefs are strongly associated and that this is attributable to a style of sense making that provides a straightforward explanatory framework for the events and problems that our society faces. It is concluded that extreme political ideologies predict increased susceptibility to conspiracy theories.

Acknowledgment

We acknowledge Ipsos (Netherlands) for conducting Studies 2a and 2b.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: NWO Conflict & Security Grant W.07.68.103.00, awarded to Jan-Willem van Prooijen; and NWO Veni Grant 451.10.032, awarded to Thomas Pollet.

Note

1. Complete scale items of all studies reported here, as well as Tables with all Means and Standard Deviations, can be found in the online supplementary materials.

Supplementary Material

The online data supplements are available at <http://spps.sagepub.com/supplemental>.

References

- 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.
- Baumeister, R. F. (1997). *Evil: Inside human violence and cruelty*. New York, NY: Henry Holt.
- Castano, E., Leidner, B., Bonacossa, A., Nikkah, J., Perrulli, R., Spencer, B., & Humphrey, N. (2011). Ideology, fear of death, and death anxiety. *Political Psychology, 32*, 601–621.
- Clarke, S. (2002). Conspiracy theories and conspiracy theorizing. *Philosophy of the Social Sciences, 32*, 131–150.
- Crocker, J., Luhtanen, R., Broadnax, S., & Blaine, B. E. (1999). Belief in U.S. government conspiracies against blacks among black and white college students: Powerlessness or system blame? *Personality and Social Psychology Bulletin, 25*, 941–953.
- Douglas, K. M., & Sutton, R. M. (2011). Does it take one to know one? Endorsement of conspiracy theories is influenced by personal willingness to conspire. *British Journal of Social Psychology, 50*, 544–552.
- Fenigstein, A., & Vanable, P. A. (1992). Paranoia and self-consciousness. *Journal of Personality and Social Psychology, 62*, 129–138.
- Fernbach, P. M., Rogers, T., Fox, C. R., & Sloman, S. A. (2013). Political extremism is supported by an illusion of understanding. *Psychological Science, 24*, 939–946.

- Goertzel, T. (1994). Belief in conspiracy theories. *Political Psychology, 15*, 733–744.
- Greenberg, J., & Jonas, E. (2003). Psychological motives and political orientation—The left, the right, and the rigid: Comment on Jost et al. *Psychological Bulletin, 129*, 376–382.
- Hardin, R. (2002). The crippled epistemology of extremism. In A. Breton, G. Galeotti, P. Salmon, & R. Wintrobe (Eds.), *Political extremism and rationality* (pp. 3–22). Cambridge, UK: Cambridge University Press.
- Hayes, A. F., & Preacher, K. J. (2010). Quantifying and testing indirect effects in simple mediation models when the constituent paths are nonlinear. *Multivariate Behavioral Research, 45*, 627–660.
- Hofstadter, R. (1966). The paranoid style in American politics. In R. Hofstadter (Ed.), *The paranoid style in American politics and other essays* (pp. 3–40). New York, NY: Knopf.
- Hogg, M. A., Meehan, C., & Farqueharson, J. (2010). The solace of radicalism: Self-uncertainty and group identification in the face of threat. *Journal of Experimental Social Psychology, 46*, 1061–1066.
- Inglehart, R. (1987). Extremist political position and perceptions of conspiracy: Even paranoids have real enemies. In C. F. Graumann & S. Moscovici (Eds.), *Changing conceptions of conspiracy* (pp. 231–244). New York, NY: Springer-Verlag.
- Kruglanski, A. W., Pierro, A., Mannetti, L., & De Grada, E. (2006). Groups as epistemic providers: Need for closure and the unfolding of group-centrism. *Psychological Review, 113*, 84–100.
- Lewandowski, 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*, 622–633.
- McGregor, I. (2006). Offensive defensiveness: Toward an integrative neuroscience of compensatory zeal after mortality salience, personal uncertainty, and other poignant self-threats. *Psychological Inquiry, 17*, 299–308.
- McGregor, I., & Marigold, D. C. (2003). Defensive zeal and the uncertain self: What makes you so sure? *Journal of Personality and Social Psychology, 85*, 838–852.
- McGregor, I., Prentice, M., & Nash, K. (2013). Anxious uncertainty and reactive approach motivation (RAM) for religious, idealistic, and lifestyle extremes. *Journal of Social Issues, 69*, 537–563.
- Midlarsky, M. L. (2011). *Origins of political extremism*. Cambridge, UK: Cambridge University Press.
- Newheiser, A.-K., Farias, M., & Tausch, N. (2011). The functional nature of conspiracy beliefs: Examining the underpinnings of belief in the *Da Vinci Code* conspiracy. *Personality and Individual Differences, 51*, 1007–1011.
- Pipes, D. (1997). *Conspiracy: How the paranoid style flourishes and where it comes from*. New York, NY: Simon & Schuster.
- Robins, R. S., & Post, J. M. (1997). *Political paranoia: The psychopolitics of hatred*. New Haven, CT: Yale University Press.
- Sullivan, D., Landau, M. J., & Rothschild, Z. K. (2010). An existential function of enemyship: Evidence that people attribute influence to personal and political enemies to compensate for threats to control. *Journal of Personality and Social Psychology, 98*, 434–449.
- Sunstein, C. R., & Vermeule, A. (2009). Conspiracy theories: Causes and cures. *The Journal of Political Philosophy, 17*, 202–227.
- Swami, V. (2012). Social psychological origins of conspiracy theories: The case of the Jewish conspiracy theory in Malaysia. *Frontiers in Psychology, 3*, 1–9.
- Swami, V., Chamorro-Premuzic, T., & Furnham, A. (2010). Unanswered questions: A preliminary investigation of personality and individual difference predictors of 9/11 conspiracist beliefs. *Applied Cognitive Psychology, 24*, 749–761.
- Swami, V., Coles, R., Stieger, S., Pietschnig, J., Furnham, A., Rehim, S., & Voracek, M. (2011). Conspiracist ideation in Britain and Austria: Evidence of a monological belief system and associations between individual psychological differences and real-world and fictitious conspiracy theories. *British Journal of Psychology, 102*, 443–463.
- Swami, V., & Furnham, A. (2014). Political paranoia and conspiracy theories. In J.-W. van Prooijen & P. A. M. van Lange (Eds.), *Power, politics, and paranoia: Why people are suspicious of their leaders* (pp. 218–236). Cambridge, UK: Cambridge University Press.
- Swami, V., Pietschnig, J., Tran, U. S., Nader, I. W., Stieger, S., & Voracek, M. (2013). Lunar lies: The impact of informational framing and individual differences in shaping conspiracist beliefs about the moon landings. *Applied Cognitive Psychology, 27*, 71–80.
- Tetlock, P. E., Armor, D., & Peterson, R. S. (1994). The slavery debate in antebellum America: Cognitive style, value conflict, and the limits of compromise. *Journal of Personality and Social Psychology, 66*, 115–126.
- 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.
- 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*, 109–115.
- Van Prooijen, J.-W., & Van Dijk, E. (2014). When consequence size predicts belief in conspiracy theories: The moderating role of perspective taking. *Journal of Experimental Social Psychology, 55*, 63–73.
- Van Prooijen, J.-W., & Van Lange, P. A. M. (2014). The social dimension of belief in conspiracy theories. In J.-W. van Prooijen & P. A. M. van Lange (Eds.), *Power, politics, and paranoia: Why people are suspicious of their leaders* (pp. 237–253). Cambridge, UK: Cambridge University Press.
- Whitson, J. A., & Galinsky, A. D. (2008). Lacking control increases illusory pattern perception. *Science, 322*, 115–117.
- Wood, M. J., Douglas, K. M., & Sutton, R. M. (2012). Dead and alive: Beliefs in contradictory conspiracy theories. *Social Psychological and Personality Science, 3*, 767–773.
- Wright, T. L., & Arbutnot, J. (1974). Interpersonal trust, political preference, and perceptions of the Watergate affair. *Personality and Social Psychology Bulletin, 1*, 168–170.
- Zonis, M., & Joseph, C. M. (1994). Conspiracy thinking in the Middle East. *Political Psychology, 15*, 443–459.

Author Biographies

Jan-Willem van Prooijen is an associate professor at the Department of Social and Organizational Psychology, VU University Amsterdam,

and senior researcher at the NSCR. His research focuses on the social origins of injustice.

André P. M. Krouwel is an associate professor at the Department of Communication Science, VU University Amsterdam and academic director of Kieskompas (Election Compass). His research focuses on the structure of political opinions, voting behavior, party choice, and

matching voters opinions with issue-positions of parties and candidates.

Thomas V. Pollet works as an assistant professor at the Department of Social and Organizational Psychology, VU University Amsterdam. His research covers a wide range of topics in evolutionary psychology, such as mate choice, kinship, and individual differences.