



A leader I can(not) trust: understanding the path from epistemic trust to political leader choices via dogmatism

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Abstract


There is growing concern about the impact of declining political trust on democracies. Psychological research has introduced the concept of epistemic (mis)trust as a stable disposition acquired through development, which may influence our sociopolitical engagement. Given trust's prominence in current politics, we examined the relationship between epistemic trust and people's choices of (un)trustworthy political leaders. In two representative samples in the UK and US ($N = 1096$), we tested whether epistemic trust predicts political leader choices through three political dimensions: dogmatism, political trust, and ideology. Although epistemic trust did not directly predict choices of political leaders, it predicted dogmatism and political ideology, which in turn predicted choices of political leaders. A network analysis revealed that epistemic trust and political dimensions only interact through their common connection with dogmatism. These findings suggest that cognitive and affective development may underlie an individual's political ideology and associated beliefs.

Keywords: epistemic trust; political ideology; dogmatism; political trust; authoritarian leader

Introduction

There is growing concern about a breakdown in societal and communicated trust (Sperber et al., 2010). Elites, politicians, and traditional and social media are mistrusted (Citrin & Stoker, 2018), often with grave consequences, as seen during the COVID-19 pandemic, with for example, conservatives expressing less compliance with science-based recommendations and policies (Hamilton & Safford, 2021; see also Latkin et al., 2020). Critically, the politicians we choose to elect play an important role in shaping a society's capital of trust and vice versa. For instance, the Pew Research Center concluded that in the US, trust in government reached a "historical low" right after Trump's election inauguration (van der Bles et al., 2020). Given the prominence of trust in current debates about political behavior, we here set out to investigate how mistrust may be linked to our choices of political leaders and to explore potential intermediary mechanisms to explain such links.

In parallel with the rise of societal mistrust (Citrin & Stoker, 2018), high levels of affective polarization between partisans, the rise of authoritarianism and populism across different countries, and the prevalence of dogmatic worldviews (Algan et al., 2017; Berberoglu, 2020; Bieber, 2020; Inglehart & Norris, 2016) pose challenges to liberal democracies. Responding to such societal challenges, scientists and

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scholars from political science, psychology, social-affective neuroscience, and the humanities have crossed disciplinary boundaries and accelerated the search for key antecedents of people's political ideologies such as dogmatism and authoritarianism. For example, computational and neurocognitive approaches to the political brain have looked at data-driven *ontologies* of cognition and personality traits that may underpin political, nationalistic, religious, and dogmatic beliefs (Zmigrod *et al.*, 2021). If cognitive and personality ontologies do shape our ideology, as recent research suggests (Zmigrod, 2022; Zmigrod *et al.*, 2021), then the search for these building blocks should be also extended to related aspects of the cognitive and affective development of individuals. In an attempt to provide a developmentally informed perspective to the study of sociopolitical trust and political ideology and in line with such attempts in political psychology and neuroscience, we focus here on the key sociological, psychological, and philosophical construct (Faulkner, 2011; McLeod, 2018; Zagzebski, 2013) of epistemic trust.

Epistemic trust refers to trust in communication or communicated knowledge (Sperber *et al.*, 2010). In particular, the concept reflects our capacity to consider the knowledge that is conveyed by others as salient, relevant to the self, and generalizable to other contexts. While initially discussed in sociological and philosophical literature, the concept of epistemic trust has recently become central in explorations of the development of social-cognitive processes in infancy and childhood, especially in relation to efficient learning of culturally shared knowledge (Csibra & Gergely, 2009; Király *et al.*, 2013). Fonagy and colleagues went beyond the infant's cognitive and social learning processes to suggest that a position of epistemic trust underpins resilient social functioning in adulthood (Fonagy *et al.*, 2015, 2017a,b). Epistemic trust does not just concern an open stance to trust any given information or to a general sense of trust (Luyten *et al.*, 2020), but rather concerns the individual's ability to take into account the reliability of the source, the information's relevance and its quality (Fonagy *et al.*, 2015). Critically, our tendency to (mis)trust socially transmittable information is shaped by early developmental experiences, including attachment styles, childhood adversity, and the capacity to reflect on mental states (Fonagy *et al.*, 2015; Fonagy *et al.*, 2017; Fonagy & Allison, 2014; Hildyard & Wolfe, 2002). Indeed, growing literature on the development of epistemic and social trust in infancy suggests that rather than being innocently indiscriminate in relation to trust, young children use judgments of accuracy and reliability when making epistemic trust judgments (Markson & Luo, 2020) and that the quality of the relationship of a child to a communicator determines in large measure the extent to which the child will acquire information from that communicator and generalize this trusting behavior (Corriveau *et al.*, 2009; Eaves & Shafto, 2017; Tong *et al.*, 2020). This work is further supported by experimental data from developmental psychology which suggests that interpersonal signals impact heavily on infants' responses to the communication of cultural knowledge: infants appear sensitive to "ostensive cues" from the communicator that signal the intention to transmit new and relevant information to them (Csibra & Gergely, 2007, 2009, 2011; Gergely & Csibra, 2005).

Following on from this developmental perspective and extending this research in adulthood, there are three dimensions of epistemic trust an individual may adopt in relation to social communication (Campbell *et al.*, 2021). The first is epistemic trust, which reflects an adaptive stance in relatively benign circumstances in which the individual is selectively open to opportunities for social learning in the context of relationships. The second is epistemic mistrust, which reflects a tendency to treat information as unreliable or ill-intentioned and a lower propensity to be influenced by others. Finally, the third is epistemic credulity, reflecting a pronounced lack of vigilance and discrimination, therefore signaling a general lack of clarity about one's own position and potential risk of exploitation by others. The relationship between epistemic stance (*i.e.*, disposition toward trust, mistrust, and credulity) has already been associated with certain wider social-political phenomena: for example, mistrust and credulity have been associated with conspiratorial thinking and vaccine hesitancy, and credulity has been associated with difficulty discriminating between real and fake news. In addition, both mistrust and credulity mediated the relationship between exposure to childhood adversity and difficulty in distinguishing between fake/real news (Tanzer *et al.*, 2021). More generally, our capacity for epistemic (mis)trust, understood as a stable disposition acquired through development, may play an important role in our social and political engagement, shaping, at least to some extent, our levels of political trust, our ideological

tendencies, and political preferences. Here, we set out to investigate if and how epistemic trust, as an individual trait (i.e., trust, mistrust, and credulity), relates to four political dimensions: political trust, political ideology, dogmatism, and political leader choice. Given that choosing a political leader typically involves a manifested behavior, such as the act of voting, it is likely that the relationship between epistemic trust and political leader choice is mediated by certain political attitudes and beliefs. Thus, in our theoretical framework, we posit that epistemic trust predicts political trust, political ideology, and dogmatism, which go on to predict leader choice. Below, we discuss these political dimensions and motivate our hypotheses.

First, closely linked to the concept of epistemic trust and political leader choices is that of political trust. At the heart of the social contract that governs liberal democracies lies the capital of political trust that citizens have, that is, the basic evaluative orientation toward the government (Boggild et al., 2021; Citrin & Stoker, 2018; Locke, 1689). Across many western countries, even where government performance is high, it seems that trust in politicians is low (Boggild, 2020; Hibbing & Theiss-Morse, 2001). Americans' trust in their national government has declined over the past 50 years (Citrin & Stoker, 2018). While political scientists have examined a range of different explanations (for a review, see Citrin & Stoker, 2018) for this decline in trust, none of these alone are capable of fully accounting for the observed pattern. There are important factors such as government performance, polarization, policy dissatisfaction, and economic growth that shape political trust in a context-specific manner. But as political trust is relational and context specific (Newton et al., 2018), the aforementioned factors reflect the context-specific aspect and one part of the relational dimension, that is, the side of the politicians. To understand the other part of this relational dimension, one could look at the citizen's disposition to trust, a facet that can be captured by the concept of epistemic trust. In the US and UK context, when this study was conducted, we could expect that more socially conservative and more socially liberal individuals would report lower levels of political trust in the US and UK, respectively, given their respective governments. But at the same time, our focus here was on the relationship between a more stable disposition such as epistemic trust and the more context-specific political trust, and we hypothesized that epistemic trust and epistemic mistrust would be positively and negatively linked to political trust, respectively, independently of partisanship.

The second political dimension we focus on is political ideology. Trust seems to vary across political ideologies, with conservatives expressing consistently lower faith in mainstream news, science, and their elected leaders. In the US, for example, the Pew Research Center (2021) concluded that Republicans are less likely than Democrats to trust the media outlet they turn to most frequently for political news. This phenomenon has been attributed, at least in part, to the political context in the US, which has been shaped by the narrative of "fake media" propagated by former President Trump and his supporters (Baptista & Gradim, 2020). However, mistrust among conservatives has been observed for some time. In the early 2000s, Lee (2005) reported that levels of conservatism and republican partisanship were significant predictors of mistrust in the media, suggesting a general breakdown of trust in media that is not context specific but instead may depend on people's tendency to trust. In line with this evidence, we expected lower epistemic trust and higher epistemic mistrust to correlate with more conservative political ideology. Moreover, growing evidence suggests that more conservative participants tend to show a preference for more authoritarian-looking political leaders (Ambroziak et al., 2022; Azevedo et al., 2021; Olivola et al., 2012; Sussman et al., 2013; Todorov et al., 2005), highlighting this political dimension as a potentially important connecting hub between epistemic trust and political leader choices.

Lastly, the third political dimension we examine is dogmatism, that is, the tendency to lay down principles as undeniably true, without consideration of evidence or the opinions of others. Conservative ideology has been associated with caution in perceptual decision-making tasks and a reduced strategic information processing ability (Zmigrod et al., 2021), implying that there may be underlying cognitive correlates of ideological thinking that influence the ways in which liberals and conservatives react to and process new information. In a separate study, Zmigrod (2022) used theory and data-driven cognitive personality predictors and found that the cognitive signature of dogmatism involves a slow speed of evidence accumulation, similar to conservatism. Moreover, the psychological signature of dogmatism

overlaps to some degree with that of political conservatism. As such, these insights fit with the hypothesis that conservatives may be more dogmatic and as such beg the question of whether epistemic trust contributes to their dogmatic predispositions, mediating the relationship between epistemic trust and leader choice. Indeed, dogmatism has been understood as an ideological defense against threat, and at the same time, a cognitive framework for satisfying one's need to know and comprehend the world one lives in (Rokeach, 1956). Interestingly, a recent study found that epistemic mistrust and credulity are associated with difficulty in discriminating between real and fake news and conspiracy thinking (Tanzer et al., 2021), with the latter linked to dogmatic thinking (Enders et al., 2022). With this in mind, we expected lower epistemic trust, higher epistemic mistrust, and epistemic credulity to correlate with dogmatism.

In brief, this study aimed to examine if and how epistemic trust (i.e., epistemic trust, mistrust, and credulity), as an individual trait, can explain political dimensions (i.e., political trust, ideology, and dogmatism) and whether these political dimensions in turn explain leader choice. We measured participants' choices of political leaders based on their facial features (Laustsen & Petersen, 2015; Little et al., 2007), in the context of a hypothetical national election. Facial cues inform social judgments, are sensitive to environmental factors and reflect actual political preferences (Little et al., 2007; Olivola et al., 2012; Todorov et al., 2005). To do so, we asked participants to select whom they would vote for in a hypothetical upcoming election by choosing among pairs of faces. In each trial, participants saw two avatar faces, generated by Facegen (Oosterhof & Todorov, 2008; Todorov et al., 2013) and controlled for their level of perceived dominance and trustworthiness (Safra, 2017). These two dimensions are crucial for social cognition as they can rapidly, but not necessarily veridically, indicate who could potentially be a foe or a friend, and encompass how leaders are viewed. In fact, their combination is thought to give rise to perceptions of authoritarian leaders. For example, an authoritarian leader might not only be dominant but also perceived in a certain way on the trustworthiness spectrum to maintain control and legitimacy. A leader perceived as both dominant and trustworthy might be seen as a strong but fair authority figure and is less likely to be perceived as authoritarian. Conversely, a leader who is dominant but untrustworthy is more likely to be viewed as oppressive. Indeed, people who prefer leaders with facial characteristics higher in dominance and lower in trustworthiness also report explicit authoritarian preferences (Safra et al., 2017). As an experimental measure of political preferences, performance in this task has been shown to vary with participants' political orientation (Ambroziak et al., 2022; Azevedo et al., 2021; Laustsen & Petersen, 2016, 2017) and people's individual predispositions to respond to social and economic conflict (Laustsen & Petersen, 2017; Petersen & Laustsen, 2020).

To investigate the proposed relationship between these variables, we used both a structural equation model (SEM) and a network analysis. While in SEMs, path-tracing rules on network representations are used to determine the value of empirical correlations implied within a given model (Wright, 1921), in network analyses, unconnected variables (also called nodes) are conditionally independent given all—or a subset—of other nodes in the network (Murphy et al., 1998). Given that people's capacity for epistemic trust and epistemic disruption affects several social-cognitive processes, we speculated that epistemic trust dimensions would shape political dimensions and not the other way around. Thus, we entered epistemic trust dimensions as the lowest level in the SEM, with the hypothesis that they may explain political dimensions (higher level) which in turn may explain the preference for a more or less authoritarian leader. By contrast, no predetermined structure was set for how these variables are related in the network analysis. The combination of these analyses allowed us to analyze and interpret patterns in terms of existing theory as well as not miss opportunities about how these variables are related beyond our knowledge thus far.

Methods

Participants

We recruited 1,096 participants (547 from the UK and 549 participants from the US) using the online survey platform Prolific (<https://www.prolific.co>). Prolific was used to recruit two different

representative samples that approximately match the UK and US population distributions in terms of age (five brackets 18–27, 28–37, 38–47, 48–57, and 58+), sex (male and female), and ethnicity (five groups). Participants were all aged 18 or older, currently living in the US or UK, and proficient in written and spoken English. In the UK sample, the mean participant age was 45.2 with a standard deviation of 15.8; participants were 83% white. In the US sample, the mean participant age was 44.7 with a standard deviation of 16.1; participants were 68% white. See Table 1 for details. Participants were paid £7.50 per hour for their participation. This study was approved by the Royal Holloway Research Ethics Committee.

Procedure

Questionnaires were administered online using Gorilla Experiment Builder (<https://gorilla.sc>). Participants were asked to first complete a leader choice task (see below) before completing a battery of questionnaires and providing demographic information. The questionnaires included the Epistemic Trust, Mistrust, and Credulity Questionnaire (ETMCQ; Campbell et al., 2021), the Dogmatism Questionnaire (Shearman & Levine, 2006), and questions about their political ideology and trust (see below for details). Questionnaires were presented in a randomized order to each participant. Attention checks were placed in the leader choice task and the battery of questionnaires; participants were excluded if they failed an attention check during the leader choice task or if they failed at least half of all checks. As a result of these criteria, 17 participants (3%) were excluded from the UK sample, and 22 participants (4%) were excluded from the US sample, creating a final sample size of 1,057 (UK *N* = 530, US *N* = 527).

Materials

Leader choice task

Participants were first presented with the leader choice task (Ambroziak et al., 2022; Azevedo et al., 2021), in which participants were shown pairs of non-gendered faces and instructed to click on the one they would vote for in a hypothetical upcoming national election. In each trial, participants were given 3 seconds to view the faces and provide an answer by clicking on the face they chose. The pairs of faces were created offline using nine faces selected from a freely available database (<https://tlab.uchicago.edu/databases/>) that varied along the two main dimensions of interest: trustworthiness and dominance (Oosterhof & Todorov, 2008). These faces have already been successfully demonstrated to elicit dominance and trustworthiness judgments both at the explicit and implicit level (Stewart et al., 2012). Each face was characterized by two dimensions: dominance and trustworthiness in a range of –

Table 1. Demographic information of the representative samples that approximately match the UK and US population distributions

Age range	UK population					US population				
	18–27	28–37	38–47	48–57	58+	18–27	28–37	38–47	48–57	58+
Ethnicity										
Asian	13.04%	12.50%	6.93%	5.88%	9.90%	7.07%	10.20%	7.87%	7.95%	7.93%
Black	7.61%	6.82%	5.94%	3.53%	5.73%	17.17%	17.35%	13.48%	13.64%	15.60%
Latino	0%	1.14%	0.99%	1.18%	0.78%	11.11%	8.16%	3.37%	2.27%	6.14%
White	73.91%	75%	83.17%	88.24%	80.21%	60.61%	62.24%	74.16%	73.86%	68.03%
Mixed	5.43%	4.55%	2.97%	1.18%	3.39%	4.04%	2.04%	1.12%	2.27%	2.30%
Gender										
Female	48.31%	51.11%	48.04%	51.16%	50.39%	46.88%	46.94%	48.31%	53.41%	49.23%
Male	51.69%	48.89%	51.96%	48.84%	49.61%	53.12%	53.06%	51.69%	46.59%	50.77%
Age	17.39%	17.20%	19.28%	16.26%	29.87%	18.98%	18.98%	17.27%	16.70%	28.08%

to +2 points with an increment of two points. The stimuli included every combination of dominance and trustworthiness in this range resulting in nine faces (see Figure 1). Stimuli were always presented in pairs in which the faces were 2 to 4 points different from each other on at least one dimension (dominance or trustworthiness). This resulted in 36 pairs of faces/trials.

We calculated the political authoritarian leader choice index as in previous work (Ambroziak *et al.*, 2022; Azevedo *et al.*, 2021; Laustsen & Petersen, 2017; Safra *et al.*, 2017). As recommended by McFadden in his seminal paper on choice experiments (McFadden, 1980), choices were analyzed using mixed logistic regression for each subject, taking the trial number and face position as random factors and faces' levels of trustworthiness and dominance as regressors. The coefficients from these regressions were then used to compute the probability of choosing a strong leader. Specifically, for each participant, the two estimated parameters were then combined into a unique value, using the following formula:

$$\text{Authoritarian leader choice} = \frac{e^{\beta_0 + \beta_{\text{Dominance}} - \beta_{\text{Trustworthiness}}}}{1 + e^{\beta_0 + \beta_{\text{Dominance}} - \beta_{\text{Trustworthiness}}}}$$

In the formula, e is Euler's number, approximately equal to 2.71828, which is the base of the natural logarithm. β_0 , $\beta_{\text{Dominance}}$, $\beta_{\text{Trustworthiness}}$ reflect the coefficients associated with the intercept term (β_0) and the predictor variables Dominance ($\beta_{\text{Dominance}}$) and Trustworthiness ($\beta_{\text{Trustworthiness}}$). These coefficients represent the change in the log odds of the outcome for a one-unit change in the predictor variable, holding other variables constant. $e^{(\beta_0 + \beta_{\text{Dominance}} - \beta_{\text{Trustworthiness}})}$ is the exponentiation of the linear combination of the coefficients and predictor variables. It represents the odds ratio of the outcome variable (in this case, the choice of an authoritarian leader) given the values of the predictor variables. $1 + e^{(\beta_0 + \beta_{\text{Dominance}} - \beta_{\text{Trustworthiness}})}$ is the denominator of the formula, which ensures that the outcome of the formula is bounded in a continuous between 0 and 1. It's used to transform the odds ratio into a probability. As such, the index indicates the probability of choosing a leader with authoritarian traits for each participant (i.e., a one-point more dominant and one-point less trustworthy leader).

Therefore, the authoritarian leader choice index would increase for each unit increase in dominance and unit decrease in trustworthiness. In other words, the index indicates the probability of choosing a leader with authoritarian-looking traits for each participant. This approach was preferred to a simpler one (e.g., treating each trial as the unit of analysis, coding which face was more dominant or trustworthy, and running a logistic regression for trustworthiness and dominance separately) given that analyzing dominance and trustworthiness separately misses the interaction between these factors, which have been found to contribute to explicit authoritarian preferences (Safra *et al.*, 2017). Indeed, the current approach simultaneously considers the impact of both dominance and trustworthiness on the choice. In addition, it adjusts for trial and face position, and provides personalized probability estimates, making it a better choice for understanding complex decision-making processes.

We were interested in understanding what factors could predict the variability observed for the leader preference task. On average, the probability of choosing an authoritarian leader score in our sample was 0.40 ($SD = 0.12$). Higher scores indicate a preference for a more authoritarian-looking leader (Figure 1). On average, the probability of choosing an authoritarian-looking leader score was 0.40 ($SD = 0.12$).

Epistemic Trust, Mistrust, and Credulity Questionnaire (ETMCQ)

We used a 15-item self-report questionnaire designed to measure trust in communicated knowledge (Campbell *et al.*, 2021), see items in Supplementary Material. The questionnaire contains three subscales: Epistemic Trust, Epistemic Mistrust, and Epistemic Credulity, all of which have shown high internal reliability and construct validity (Campbell *et al.*, 2021) with the epistemic trust, mistrust, and credulity subscales in our sample demonstrating acceptable internal consistency: Cronbach's $\alpha = 0.78, 0.65, \text{ and } 0.79$, respectively. The minimum and maximum scores are 1 and 7, respectively, with higher values indicating more trust, mistrust, or credulity (see Figure 2A–C for density plots). On average, the

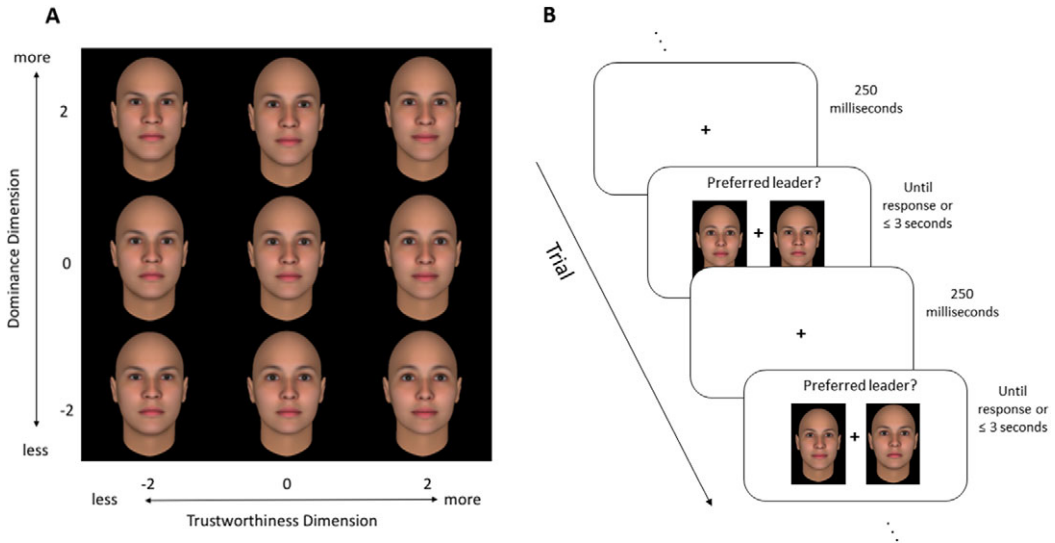


Figure 1. Stimuli used in the leader choice task and experimental design.

epistemic trust score was 4.71 ($SD = 1.09$), mistrust 4.10 ($SD = 0.98$), and credulity 2.82 ($SD = 1.13$). The UK and US did not differ in terms of trust and credulity scores, p 's > 0.059 , but they did in terms of mistrust. Specifically, on average, the UK ($M = 4.16$, $SD = 0.96$) scored higher on mistrust than the US ($M = 4.03$, $SD = 0.99$), $t(1055) = 2.16$, $p = 0.031$.

Dogmatism Questionnaire

We used a validated 11-item self-report questionnaire measuring the tendency toward dogmatic thinking (Shearman & Levine, 2006), see items in Supplementary Material. The scale is an updated version of Altemeyer's (1981) dogmatism scale. Individuals were asked about the extent to which they agreed with various statements (e.g., "I am a 'my way or the highway' type of person") and responded on a seven-point Likert scale. The Dogmatism scale is well validated (Shearman & Levine, 2006) and demonstrates very good internal consistency, Cronbach's $\alpha = 0.75$. The minimum and maximum scores is 1 and 7, respectively, with higher values indicating more dogmatism (see Figure 2D for density plot). On average, the dogmatism score was 2.56 ($SD = 0.83$) across countries, and 2.58 ($SD = 0.80$) and 2.55 ($SD = 0.85$) for the UK and US, respectively. The UK and US did not differ in terms of dogmatism, $t(1055) = 0.67$, $p = 0.50$.

Political trust

Participants were asked to report on a scale from 0 to 10 (where 0 means no trust and 10 means complete trust) how much trust they generally have in elected politicians in their country, independently of the party currently governing (see Figure 2E for density plot). On average, the political trust score was 3.08 ($SD = 2.23$) across countries, and the UK and US did not differ in terms of political trust, $t(1055) = 1.27$, $p = 0.203$.

Political ideology

Participants were asked to report their political ideology on a seven-point scale from 1 "very conservative" to 7 "very liberal/progressive" (see Figure 2F for density plot). On average, political ideology score was 4.73 ($SD = 1.59$) across countries. Political ideology score did not differ between the UK and US, $t(1055) = 1.18$, $p = 0.236$.

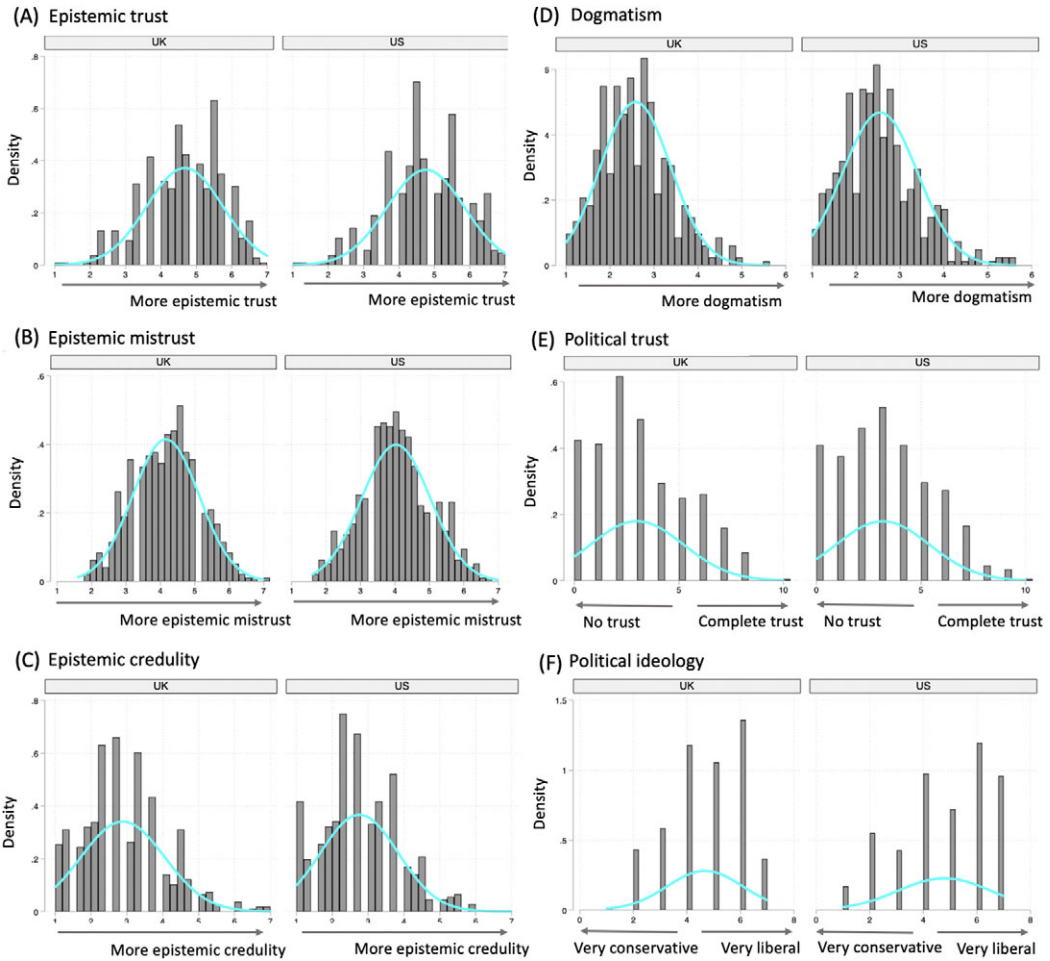


Figure 2. Density plots for the questionnaires. For each questionnaire, the left panel depicts the UK and the right panel depicts the US. The blue cyan line depicts the density normal curve. (A) Epistemic trust; (B) Epistemic mistrust; (C) Epistemic credibility; (D) Dogmatism; (E) Political trust; (F) Political ideology.

Statistical analysis plan

All analyses were carried out in STATA 15 and R/R Studio.

First, to inspect the data and the relationship between our variables without controlling for the influence of any other variables, we conducted a zero-order correlation (Figure 3).

Second, as we wanted to explore a specific theory of how participants might choose an authoritarian leader, we ran a path analysis, which is a type of SEM analysis (i.e., they include the observed variables only and no latent variables). We opted to present the model in a manifest way (i.e., without modeling latent variables) given that our model is already computationally demanding given the number of constructs we are investigating and modeling these variables as latent could be a gateway for multiple computational problems. In addition, using sum scores instead of latent variables can make results more comparable across studies (Widaman & Revelle, 2023). Nevertheless, our results are comparable when modeling theoretically latent constructs (see Supplementary Material for model results). For this model, we hypothesized that political leader choices are partly influenced by people’s epistemic trust and their political attitudes and thinking. In addition, as people’s epistemic trust may partly explain their political attitudes and thinking, we adopted a two-layer model with epistemic trust at the lower level (level 1) and political attitudes and thinking at the higher level (level 2). Variables within each level were allowed to

correlate with each other. In terms of demographic variables, we only included age in this SEM (and were allowed to covariate with epistemic trust), whereas other variables such as gender, income, and education are included in a generalized SEM (GSEM) presented in the Supplementary Material. These variables were not included here as Stata SEMs do not allow factor variables (and GSEM does not show the model fit statistics). Nevertheless, we get the exact same pattern of results in the SEM presented here and the GSEM in Supplementary Material (with the exception of the relationship between dogmatism and probability of choosing an authoritarian leader, which is discussed in the “Discussion” section). We opted to present the SEM in the “Results” section, instead of the GSEM, given the importance of model fit statistics when assessing a model (Hooper et al., 2008; Schermelleh-Engel et al., 2003). In terms of multicollinearity, exploration of the data revealed that all VIF scores were below 1.32 and all tolerance scores above 0.76, thus indicating that there is not a problematic amount of collinearity (Hastie et al., 2006). As multivariate normality of the measured variables did not hold (Doornik–Hansen, $p = 0.001$), we used Satorra–Bentler adjustments (Nevitt & Hancock, 2000; Satorra & Bentler, 1994). Model fits were evaluated using the χ^2 test, root mean square error of approximation (RMSEA), comparative fit index (CFI), and standardized root mean square residual (SRMR). Cutoffs for good fit were taken from Schermelleh-Engel et al. (2003). We called this model *semA* and it is depicted in Figure 4. In the model above, we imposed the stringent theoretical assumption that epistemic trust would explain leader choice by influencing political attitudes and thinking. However, it is likely that direct effects between epistemic trust and the leader choice were also present. Therefore, we defined a new model (Model *semB*) that included direct paths between epistemic trust and leader choice to test: 1) whether this model would explain the data better than the model above (Model *semA*); and 2) whether a direct versus indirect (mediated) effect existed between epistemic trust and leader choice.

Third, we also conducted a network analysis, using the Bootnet R package (Epskamp et al., 2018) to test the same hypothesis as described above. We present a graphical Gaussian model that was regularized via the graphical lasso absolute shrinkage and selector operator (LASSO), in combination with the Extended Bayesian Information Criterion (i.e., the default “EBICglasso”), which has two main goals. First, it estimates regularized partial correlations between pairs of nodes, thereby excluding spurious correlations (or edges) occurring from the influence of other nodes in the network. Second, it shrinks trivially small associations to zero, thereby removing possible “false-positive” edges from the model (Epskamp et al., 2018). In terms of interpretation, the network analysis allows us to estimate the data structure and assess the relationship between two variables, called nodes, by indicating their type of interaction (positive or negative) and their strength (edge weight). Moreover, we can assess in the network the importance of individual nodes in the model and compute centrality indices: strength (i.e., how strongly a node is directly connected to other nodes in the network) closeness (i.e., how strongly a node is indirectly connected to other nodes in the network), and betweenness (i.e., how many of the shortest paths between two nodes go through the node in question). We follow the recommendations from Epskamp et al. (2018) to make sure our network inferences about edge strength and node centrality are accurate.

In all our analyses outlined above, we focus on the whole sample (data from the UK and US together). Nevertheless, to examine whether there are any differences specific to each country and its political climate, we repeated the analyses above but this time separately on the UK and US subsamples. Differences observed between these countries are described in the main text; details about analyses can be found in Supplementary Material.

Results

Zero-order correlation matrix

We present in Figure 3 the zero-order correlation matrix. Epistemic trust subscales correlated with each other (p 's < 0.001): epistemic trust positively correlated with epistemic credulity, but negatively with epistemic mistrust, and epistemic mistrust correlated positively with epistemic credulity. Epistemic trust

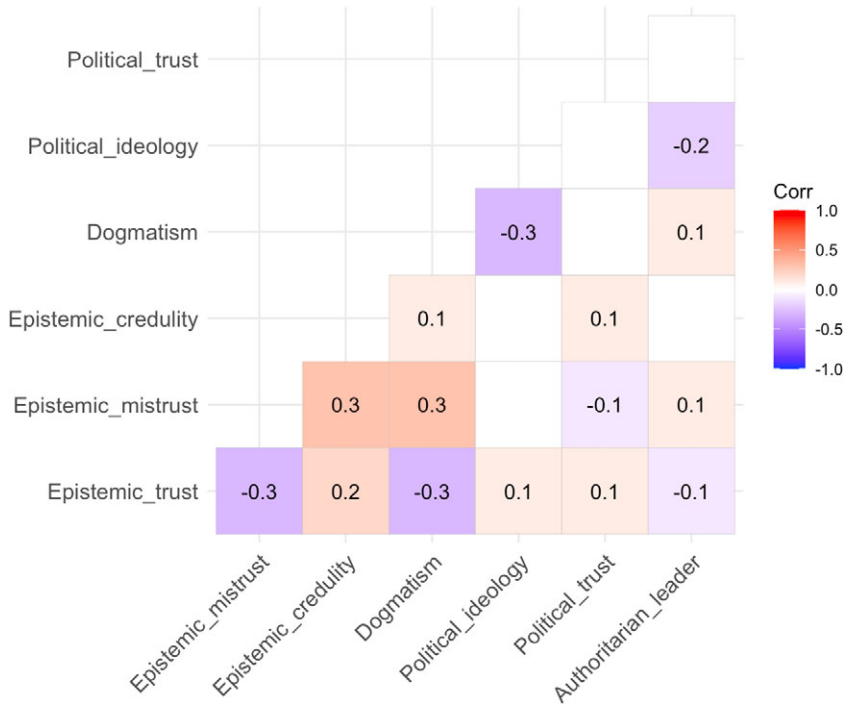


Figure 3. Zero-order correlation matrix between all our variables across UK and US samples. Blank squares depict nonsignificant coefficients. Significant correlations are depicted with colored squares. Red hues indicate a more positive correlation coefficient; purple hues indicate a more negative correlation coefficient. The numbers inside the squares indicate the correlation coefficients. See Figure S1 in the Supplementary Material for UK and US correlation matrix separately.

correlated positively with political ideology ($r = 0.11$, $p = 0.001$; i.e., participants with higher epistemic trust were more liberal), and political trust ($r = 0.12$, $p < 0.001$), and negatively with preference for an authoritarian leader ($r = -0.08$, $p = 0.01$). Epistemic mistrust correlated positively with dogmatism ($r = 0.26$, $p < 0.001$) and preference for an authoritarian leader ($r = 0.07$, $p < 0.001$), and negatively with political trust ($r = -0.10$, $p < 0.001$). Epistemic credulity correlated positively with dogmatism ($r = 0.15$, $p < 0.001$) and political trust ($r = 0.09$, $p = 0.002$). Political ideology correlated negatively with dogmatism ($r = -0.31$, $p < 0.001$), that is ADD. Choosing an authoritarian leader correlated positively with dogmatism ($r = 0.12$, $p < 0.001$) and negatively with political ideology ($r = -0.17$, $p < 0.001$). All other correlations were nonsignificant. See Figure S1 in the Supplementary Material for the correlation matrix conducted separately on the UK and US subsamples.

Path analysis

We ran a path analysis to fit the observed data using the model depicted in Figure 4. The fit of model (Model *semA*) was at the limit to be considered acceptable ($\chi^2 = 72.06$, $df = 7$, $P < 0.001$, RMSEA = 0.095, CFI = 0.841, SRMR = 0.042, sb corrected).

The negative significant predictors for choosing an authoritarian leader were political ideology ($b = -0.01$, $SE = 0.00$, $P < 0.001$) and age ($b = -0.01$, $SE = 0.00$, $P = 0.013$), indicating that the more liberal, or the older participants were, they were less likely to vote for an authoritarian-looking leader. The positive significant predictor was dogmatism ($b = 0.01$, $SE = 0.01$, $P = 0.047$), indicating that individuals with a greater tendency toward dogmatic thinking also have a greater tendency toward authoritarian-looking leaders. Stronger conservatism was also correlated with more dogmatism ($b = -0.36$, $SE = 0.04$, $P < 0.001$). With regards to epistemic trust, higher epistemic trust predicted

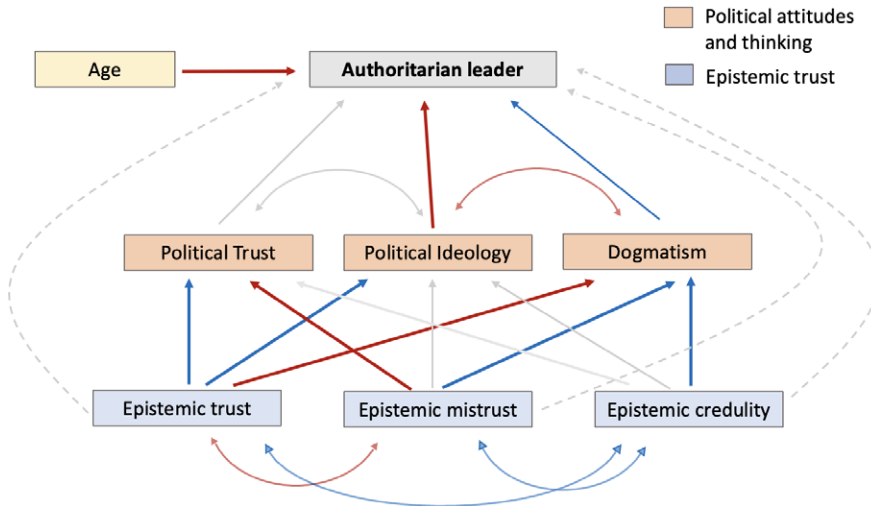


Figure 4. Authoritarian leader choice model including the direct and indirect paths. *semA* path model (i.e., SEM without latent variables) used to explain the authoritarian leader choice. The hypothesis was that epistemic trust (the lowest level) can explain political attitudes and thinking (highest level) which in turn explains the authoritarian leader choice. Variables were allowed to covary within each level. Straight red arrows indicate a negative significant relationship; blue arrows indicate a positive significant relationship. Curve red arrows indicate that the variables negatively covary; blue curve arrows indicate that the variables positively covary. Gray dotted lines depict the added direct paths between the three dimensions of epistemic trust and authoritarian leader added for model *semB*.

higher political trust ($b = 0.14$, $SE = 0.07$, $P < 0.001$), more liberal political orientation ($b = 0.19$, $SE = 0.05$, $P < 0.001$) and less dogmatic thinking ($b = -0.25$, $SE = 0.03$, $P < 0.001$). Second, higher epistemic mistrust predicted lower political trust ($b = -0.26$, $SE = 0.08$, $P = 0.001$) and more dogmatism ($b = 0.11$, $SE = 0.03$, $P < 0.001$). Third, higher epistemic credulity predicted more dogmatic thinking ($b = 0.12$, $SE = 0.02$, $P < 0.001$). Note that we get the exact same pattern of results when controlling for country in the *semA* model, yet country predicts the probability of choosing an authoritarian-looking leader: US participants were more likely to choose a more authoritarian-looking leader than UK participants, $b = 0.02$, $SE = 0.01$, $P = 0.012$.

Moreover, Model *semB* (i.e., mediation analysis, see above for details) did not explain the data better than model *semA* ($LR \Delta\chi^2 = 4.76$, $\Delta df = 3$, $p = 0.190$), suggesting that adding the direct paths from the epistemic trust dimensions to authoritarian leader did not improve the fit of the data. Furthermore, there was no significant effect between epistemic trust ($b = -0.01$, $SE = 0.00$, $P = 0.107$), mistrust, ($b = 0.00$, $SE = 0.00$, $P = 0.392$), or credulity ($b = 0.00$, $SE = 0.00$, $P = 0.465$), and authoritarian leader choice. Thus, there are no direct links between epistemic trust and leader choice, but epistemic trust explains the leader choice indirectly by shaping political attitudes and dogmatic thinking.

Differences between UK and US subsamples

We ran two separate path analyses to fit the observed data in the UK and US (see Figure S2 in the Supplementary Material). Full model results are presented in Tables S1 and S2 in the Supplementary Material. The observed key differences between these two path analyses are that (1) epistemic mistrust (negatively) and epistemic credulity (positively) predict political trust ($b = -0.33$, $SE = 0.11$, $P = 0.002$, $b = 0.32$, $SE = 0.10$, $P = 0.002$, respectively) in the US, whereas these do not predict political trust in the UK; and (2) there is a positive relationship between political trust and ideology in the US ($b = 0.41$, $SE = 0.16$, $P = 0.008$), whereas a negative relationship between political trust and ideology in the UK ($b = -0.71$, $SE = 0.13$, $P < 0.001$). For both countries, political liberalism is negatively predictive of authoritarian leader choice ($b = -0.01$, $SE = 0.00$, $P < 0.001$, $b = -0.01$, $SE = 0.00$, $P = 0.007$, respectively).

Network analysis

Next, we conducted a network analysis to (i) explore the structure of the data and test whether the pattern of results resembles our SEM findings and to (ii) examine centrality estimates about the importance of each node based on its strength, closeness, and betweenness (see statistical analysis plan for details).

As shown in Figure 5A, our network analysis suggests a direct strong negative connection between epistemic trust and dogmatism, and dogmatism and political ideology. Authoritarian leader is medium-to-weakly connected to political ideology (negatively) and dogmatism (positively), yet authoritarian leaders and political ideologies do not interact with any dimension of epistemic trust in any other way than through their common connection with dogmatism. As expected, all three dimensions of epistemic trust are medium-to-strongly connected. Even though weak, political trust is directly connected to all dimensions of epistemic trust (negatively to epistemic mistrust and positively to epistemic trust and credulity). Interestingly, political trust does not directly interact with dogmatism or political ideology (which have a direct connection with political ideology and authoritarian leader choice), except through its connection with the three epistemic trust dimensions (see also Figure 6D for edges-weight ordered from the most positive to the most negative, and Figure 6C for difference tests between edge weights that were nonzero in the estimated network). Overall, as shown in Figure 6A, the model had acceptable edge-weight accuracy.

Using the CentralityPlot function, we also examined centrality indices in the network. The resulting plot is shown in Figure 6B and shows the nodes that have the highest strength, closeness, and betweenness. However, using the 0.5 cutoff required to consider a metric stable, the centrality index of betweenness ($CS(\text{cor} = 0.7) = 0.05$) and closeness ($CS(\text{cor} = 0.7) = 0.44$) were not found stable enough, only strength ($CS(\text{cor} = 0.7) = 0.67$). Thus, only the order of node strength is interpretable. Interestingly, while looking at the strength centrality index (Figure 6B), we observe that even though it appears that dogmatism has the highest strength, there is no statistical difference between dogmatism and epistemic

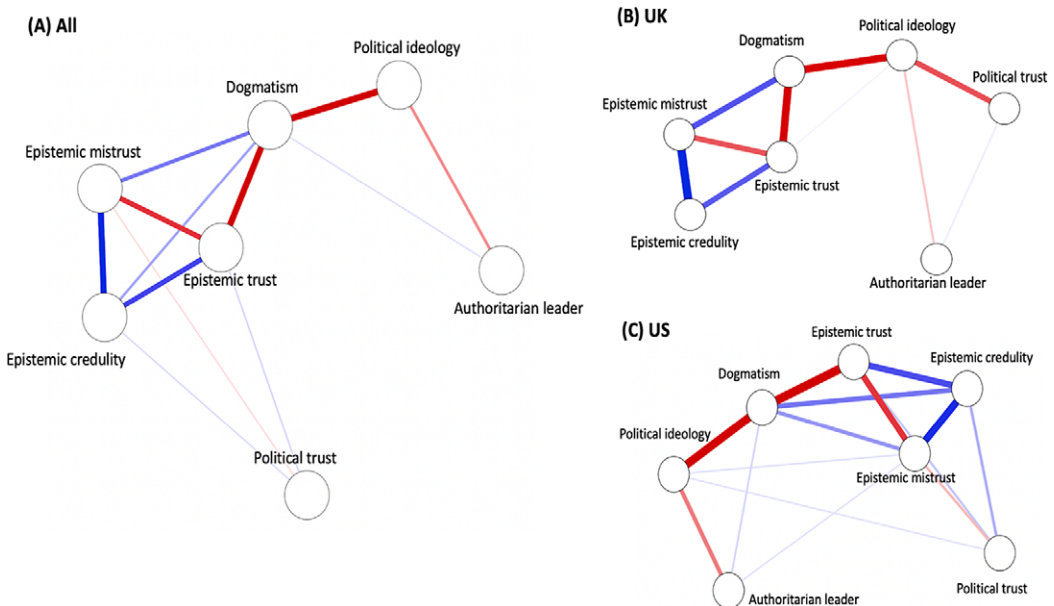


Figure 5. Network analyses. The nodes reflect our psychological variables. These nodes are connected by edges which indicate a relationship between them. The edges differ in strength connection (i.e., edge weight) indicating if a relationship is strong (visualized with thick edges) or weak (thin, less saturated edges), and positive (blue edges) or negative (red edges). The length of an edge is defined as the inverse of the edge strength. (A) Network analysis conducted on both UK and US samples. (B) Network analysis conducted on the UK subsample. (C) Network analysis conducted on the US subsample. All models showed acceptable edge-weight accuracy.

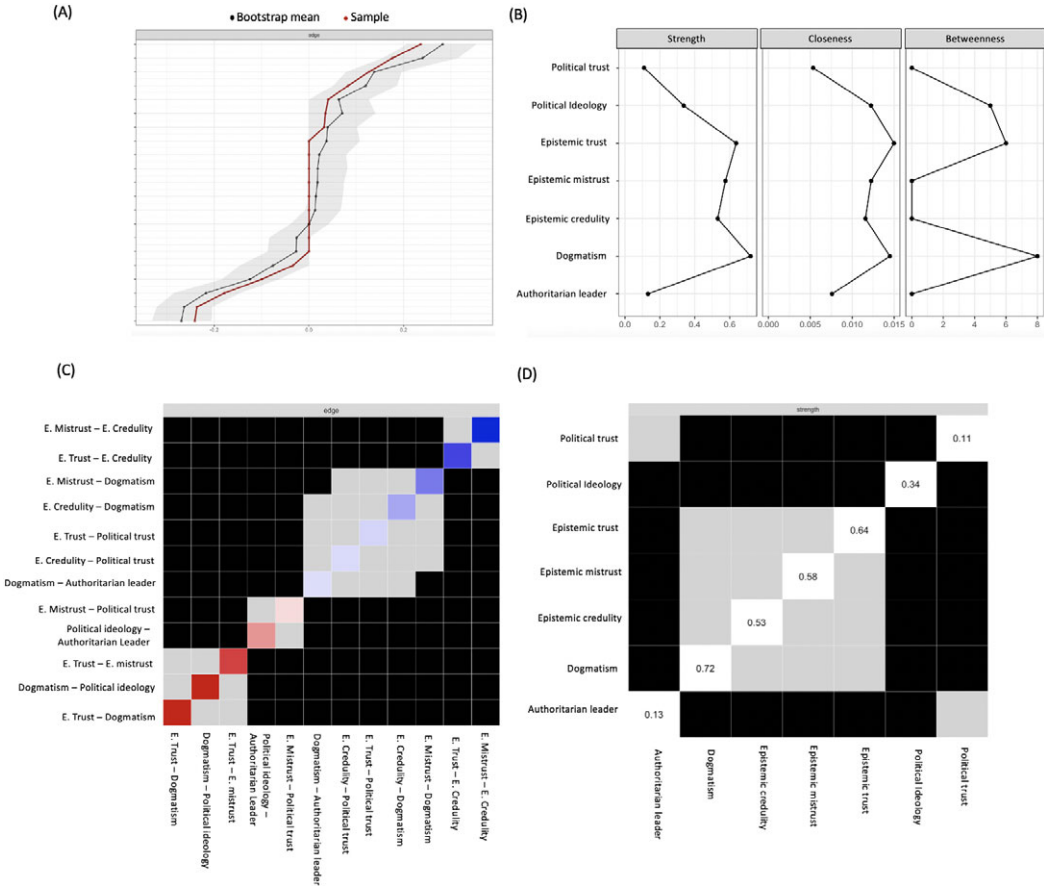


Figure 6. Model accuracy and centrality indices for the network analyses conducted on the whole sample (i.e., UK and US subsamples). (A) Bootstrapped confidence intervals of estimated edge weights for the estimated network. The red line indicates the sample values and the gray area the bootstrapped CIs. Each horizontal line represents one edge of the network, ordered from the edge with the highest edge weight to the edge with the lowest edge weight. In the case of ties (for instance, multiple edge weights were estimated to be exactly 0), the mean of the bootstrap samples was used in ordering the edges. The y-axis labels have been removed to avoid cluttering. (B) Corresponding centrality indices. Centrality indices are shown as standardized z-scores. (C) Bootstrapped difference tests ($\alpha = 0.05$) between edge weights that were nonzero in the estimated network. Colored boxes correspond to the color of the edge and edge weight is ordered from the most positive to the most negative. Gray boxes indicate nodes or edges that do not differ significantly from one another and black boxes represent nodes or edges that do differ significantly from one another. (D) Node strength of the nodes in the network. Gray boxes indicate nodes or edges that do not differ significantly from one another and black boxes represent nodes or edges that do differ significantly from one another. White boxes in the centrality plot show the value of node strength.

trust (lower -0.17 , upper 0.19), or epistemic mistrust (lower -0.11 , upper 0.26), or epistemic credulity (lower -0.08 , upper 0.29); see also Figure 6D for the value of node strength. Thus, in terms of centrality, dogmatism and the three epistemic trust dimensions have the highest strength. In other words, these are the ones most strongly directly connected to the other nodes in the network.

Differences between UK and US subsamples

As shown in Figure 5B,C, epistemic trust dimensions and political attitudes and choices nodes (i.e., political trust, ideology, and authoritarian leader choice) do not directly interact with each other in the UK sample (except for a small edge weight, i.e., a very weak relation between epistemic trust and political ideology) in any other way than through their common connection with dogmatism. In

contrast, while we still observe a strong connection between epistemic trust dimensions and dogmatism, as well as dogmatism and political ideology, we also observe that political attitudes, political choices, and epistemic trust are all directly connected, albeit weakly, in the US sample. Moreover, when comparing these two subsamples in terms of their centrality indices, the US sample has higher stability in terms of strength, closeness, and betweenness (0.52, 0.36, 0.21, respectively) than the UK sample (0.44, 0.05, 0.20, respectively), even though only strength in the US passed the 0.5 cutoff required to consider a metric stable. Notably, dogmatism, epistemic trust, epistemic mistrust, and epistemic credulity showed the highest strength in both the UK and US subsamples (as in the whole sample above).

In sum, the network analyses provided a similar pattern in terms of significant relationships and their type of interaction (i.e., positive or negative) to the theory-driven SEM. However, in the network analysis, we observed that with the exception of political trust, epistemic trust, and political dimensions do not directly interact with each other in any other way than through their common connection with dogmatism. Moreover, together with dogmatism, the epistemic trust dimensions are the nodes most strongly directly connected to the other nodes in the network. Finally, we observe a slightly different network structure, specifically in relation to political trust, between the UK and the US.

Discussion

In an attempt to bring a developmentally informed perspective to the study of sociopolitical trust and political ideology, we focused here on the key sociological and philosophical construct (Faulkner, 2011; McLeod, 2018; Zagzebski, 2013) of epistemic trust and how it relates to key political dimensions, which could mediate the preference for political leaders. We used an SEM and a network analysis to investigate such links. Broadly, our findings suggest that epistemic trust dimensions play an important role in our social and political engagement, shaping, at least to some extent, our levels of political trust and ideological tendencies. Specifically, we found that epistemic trust does not predict political leader choice, but it predicts dogmatism and political ideology which in turn predict leader choice. Crucially, dogmatism and political ideology were negatively related to each other in that the more conservative a person is, the more dogmatic their thinking. We discuss these findings in detail below.

Our SEM indicated that the higher the epistemic trust, the higher the trust in politicians, the more liberal and less dogmatic the thinking, whereas the reverse was found for higher levels of epistemic mistrust. Thus, epistemic stance, as a stable disposition acquired through development, appears to shape political trust, ideology, and dogmatic thinking. Such findings add to existing research examining perceptual, cognitive, and personality signatures of political ideology and beliefs (Zmigrod, 2022; Zmigrod et al., 2021) by suggesting that related aspects of the cognitive and affective development of individuals underpin their political ideology and associated beliefs. Further, it may support emerging thinking about the role of epistemic trust as one of the mechanisms by which individual developmental trajectories are both influenced by and shape wider social phenomena and social change (Campbell & Allison, 2022; Fonagy et al., 2021; Fonagy & Allison, 2023).

Our focus on epistemic trust also provided novel and significant findings consistent with our hypotheses. As expected, dogmatism and political ideology, but not political trust, worked as pathways through which epistemic trust shapes political leader choice. Indeed, the SEM analysis indicated that in addition to the links described above between epistemic trust and the political dimensions, political ideology and dogmatism predicted people's preference for an authoritarian-looking leader: the less liberal a person is, or the higher their dogmatism, the stronger their preference for an authoritarian-looking (i.e., more dominant-looking and less trustworthy-looking) leader. These findings are in line with past research showing that people's preference for a leader based on the dominance of their facial features varies with participants' political orientation (Ambroziak et al., 2022; Azevedo et al., 2021; Todorov et al., 2005), with conservatives showing a preference for more authoritarian-looking leaders. Such political-driven preferences for particular bodily features also extend beyond facial cues. For example, political candidates with lower-pitched voices are preferred more among conservative

Republicans, who also display more dogmatic thinking (Crowson, 2009), than among liberal Democrats (Laustsen et al., 2015). Moreover, dogmatism and conservative political attitudes correlated in line with recent research suggesting that there are underlying cognitive correlates of ideological thinking which influence the ways in which liberals and conservatives react to and process new information (Zmigrod et al., 2021). More generally, our findings suggest that the way that epistemic trust may impact political behavior, such as choosing a political leader, is through political attitudes and cognitive styles of thinking. While it has long been thought that political attitudes and related beliefs shape political behavior, such as voting for a political leader (Campbell, 1979), here, we show that a trait acquired early during cognitive and social developmental shape political ideology and related beliefs and may have political consequences. In other words, higher epistemic mistrust and lower epistemic trust may shape people's dogmatic way of thinking and their political ideology and in turn lead to a preference for more authoritarian leaders. These findings are consistent with the idea that conservatives express lower trust in mainstream news, science, and their elected leaders (Baptista & Gradim, 2020; Lee, 2005; Sussman et al., 2013; Todorov et al., 2005).

It is possible that those who are high in epistemic mistrust, dogmatism, and conservatism do not necessarily explicitly support less trustworthy leaders, but that they perceive faces' trustworthiness differently (or dominance for that matter). However, we think this is unlikely and we provide indirect evidence using findings on political orientation to support this argument. First, the effect of political orientation on the preference for a more authoritarian-looking individual (i.e., high on perceived dominance and low on perceived trustworthiness) is specific to the political context. For example, when participants are asked to choose the face of the political leader that they would like to vote for, conservatives are more likely to choose an authoritarian-looking leader. However, when participants are asked to indicate their preference for an individual in a nonpolitical context, there is no difference between liberals and conservatives (Ambroziak et al., 2022). The fact that the distinct effects of political attitudes depend on the context (i.e., political or nonpolitical) suggests that it is unlikely that liberals and conservatives perceive the faces as inherently differently, because if that was the case one would expect similar patterns across the different contexts. Second, we reanalyzed the data from a published study that examined certain political factors that may shape the perceived "likeability" of faces ($n = 150$; Malloy et al., 2023, <https://osf.io/xdff6m/>). Likeability is used here as a proxy for trustworthiness (which have been shown to strongly correlate, $r = 0.77, p < 0.001$, Oosterhof & Todorov, 2011). We found no evidence for an association between the perceived likeability of a face and political ideology ($r = 0.07, p = 0.408$). This null finding points to no underlying differences between conservatives and liberals in the perception of faces, at least in nonpolitical contexts. Thus, we propose that our findings on people high in epistemic mistrust, dogmatism, and conservatism voting for a leader that looks more dominant and less trustworthy are not driven by an underlying inherent difference in the way people of different political orientation actually "see" facial traits (e.g., attractiveness, trustworthiness, dominance, etc.), but instead are driven by what kind of psychological dispositions they want their leaders to have (e.g., be more dominant and less trustworthy).

We found no evidence to suggest a direct relationship between epistemic trust and a preference for a political leader, or that political trust works as a pathway through which epistemic trust shapes political leader choices. The latter was particularly surprising given evidence on the role of political (dis)trust and voting behavior (Hetherington, 1999) and negative assessments of political leaders (Sigelman et al., 1992) as well as the relationship between social trust and political trust (Levi & Stoker, 2000). As observed in our data, one possibility is that political trust judgments are irrelevant to explaining citizen's vote choices, which is in line with recent proposals suggesting that political trust may be important for voting participation but not alter voter's relative evaluations of candidates, making trust irrelevant to voting decisions (Levi & Stoker, 2000).

The network analysis provided a similar pattern in terms of significant relationships and their type of interaction (i.e., positive or negative) to the SEM. However, in the network analysis, we observed that epistemic trust dimensions and political ideology/choices are *conditionally independent* given dogmatism. In other words, with the exception of political trust, epistemic trust, and political dimensions,

including ideology and leader choice, do not directly interact with each other in any other way than through their common connection with dogmatism. Moreover, together with the three epistemic dimensions, dogmatism showed the highest node strength, suggesting they are the most strongly directly connected to the other nodes in the network. Thus, it seems that the influence of epistemic stance on political ideology and choices works through the lens of engrained ways of thinking and approaching new information, such as inflexibility in the case of dogmatism, as suggested by the correlation between higher epistemic mistrust and dogmatism. Specifically, following a developmental approach, we propose that it is through attachment figures in early life (e.g., caregiver) that we learn new and relevant cultural information rapidly (Fonagy & Campbell, 2017), with differences in the responsiveness and availability of the infant's attachment needs leading to individual differences in attachment styles (Main et al., 1985), mentalization (Luyten & Fonagy, 2015), and epistemic trust (Fonagy & Campbell, 2017). In turn, epistemic trust marks the extent to which we trust socially transmittable information, which ends up shaping mentalization abilities, cognitive strategies, and frameworks (Fonagy et al., 2017b) including ways to approach new information based on beliefs. Dogmatism in turn influences various spheres of human activity, including but not limited to politics (Altemeyer, 2002; Fast & Horvitz, 2016; van Prooijen & Krouwel, 2017).

Notably, similar to the SEM, we observe that the dimensions of epistemic trust and political trust are connected—although weakly—with each other, but political trust does not relate to political ideology or leader choices. On the one hand, these findings suggest that the trust people place in their politicians depends, at least partly, on their tendency to trust socially transmittable information, above and beyond the political context. On the other hand, however, we observe a different network structure, specifically in relation to political trust in the UK and the US, likely depending on the political context. Specifically, while liberalism and political trust are negatively related in the UK, they are positively related in the US (see also UK and US SEMs in Supplementary Material for a similar pattern), which can be explained by the fact that at the time of data collection, the elected leader in the US was liberal, whereas in the UK, the elected government was conservative. Importantly, in contrast to the US, we observe that political trust is not linked to epistemic trust in the UK (also reflected in the SEMs), which may indicate the political context's role on the influence of epistemic trust on political trust. Future studies should consider such cross-cultural differences and their underlying causes.

Our findings should be considered in light of their limitations. In particular, two main limitations should be noted. First, while the network analyses may provide information about potentially missed opportunities on how these variables are related beyond our knowledge thus far, neither the SEM nor network analyses can address causal relations. Indeed, one may think, for example, of specifying the different variables or levels in a different order. However, it is not recommended to examine whether changing the order of the model provides a better fit given that the model is non-nested (see Rohrer et al., 2022 for general pitfalls of path models). Ultimately, future studies are required to clarify the directionality and temporal order of our suggested relations. Nevertheless, the order of our SEM was specified based on theory. Specifically, we specified epistemic trust as level 1 given that it is formed as an individual trait through interactions with attachment figures in early life (Fonagy et al., 2017b) and political attitudes and ways of thinking (dogmatism, political trust, and political ideology) as level 2 given that these develop later in life. Even though at first glance “dogmatism” may not seem political, it has been strongly linked to political attitudes and ideology (Crowson, 2009; Zmigrod et al., 2021). Moreover, as it involves belief formation (Davies, 1998), which depends on cognitive systems that are not fully developed when children develop their epistemic trust and is therefore thought to be developed later in life and reinforced throughout the lifespan through cognitive biases (Davies, 1998; Seitz & Angel, 2020), we considered dogmatism different from epistemic trust and thus excluded it from level 1.

Second, the faces we used in the leader choice task may be perceived as varying in gender (i.e., more trustworthy/less dominant-looking faces are typically perceived as more feminine and less trustworthy/more dominant looking tend to appear more masculine). However, this gender dimension is not explicit in the task we used as we just asked people to choose the leader without providing information about their gender. Nor did we ask participants to rate the faces on that dimension. It will be interesting for

future studies that use the leader choice task to explicitly integrate the gender dimension by providing, for example, information about the gender of the political leader.

Conclusion

In sum, we show that epistemic trust shapes political dimensions, and through these the choice for a more/less authoritarian-looking leader, with dogmatism and political ideology playing a crucial role. Specifically, we show a link between epistemic trust dimensions and dogmatism and between dogmatism and political ideology and leader choice. Even though we cannot assume directionality, based on our theoretical assumptions, we speculate that epistemic mistrust contributes to dogmatic predispositions, which in turn shape political ideology and choices. Taken together, these findings advance our understanding of how a stable, developmentally rooted disposition such as epistemic trust may bias cognitive frameworks that help us comprehend the world we live in, including the political sphere.

Supplementary material. The supplementary material for this article can be found at <http://doi.org/10.1017/pls.2024.11>.

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Data availability statement. Data are available at the Open Science Framework at <https://osf.io/jv7kb/>.

Competing interest. The authors declare no competing interests.

References

- Algan, Y., Guriev, S., Papaioannou, E., & Passari, E. (2017). The European trust crisis and the rise of populism. *Brookings papers on economic activity*, 2017(2), 309–400.
- Altemeyer, B. (1981). *Right-wing authoritarianism*. University of Manitoba Press.
- Altemeyer, B. (2002). Dogmatic behavior among students: Testing a new measure of dogmatism. *Journal of Social Psychology*, 142(6), 713–721. <https://doi.org/10.1080/00224540209603931>
- Altemeyer, B. (2012). Dogmatism and authoritarianism. In *How dogmatic beliefs harm creativity and higher-level thinking*, 22, 50.
- Ambroziak, K., Safra, L., & Tsakiris, M. (2022). Non-political anger shifts political preferences towards stronger leaders. *Scientific Reports*, 12, 11766.
- Azevedo, R. T., De Beukelaer, S., Jones, I. L., Safra, L., & Tsakiris, M. (2021). When the lens is too wide: The political consequences of the visual dehumanization of refugees. *Humanities and Social Sciences Communications*, 8, 115. <https://doi.org/10.1057/s41599-021-00786-x>
- Baptista, J. P., & Gradim, A. (2020). Understanding fake news consumption: A review. *Social Sciences*, 9, 185. <https://doi.org/10.3390/socsci9100185>
- Berberoglu, B. (Ed.). (2020). *The global rise of authoritarianism in the 21st century: Crisis of neoliberal globalization and the nationalist response*. Routledge.
- Bieber, F. (2020). *Debating nationalism: The global spread of nations*. Bloomsbury Academic.
- Boggild, T. (2020). Politicians as party hacks: Party loyalty and public distrust in politicians. *Journal of Politics*, 82(4), 1517–1529. <https://doi.org/10.1086/708681>
- Boggild, T., Aaroe, L., & Petersen, M. B. (2021). Citizens as complicit: Distrust in politicians and biased social dissemination of political information. *American Political Science Review*, 115(1), 269–285. <https://doi.org/10.1017/S0003055420000805>
- Campbell, C., & Allison, E. (2022). Mentalizing the modern world. *Psychoanalytic Psychotherapy*, 36(3), 206–217.
- Campbell, C., Tanzer, M., Saunders, R., Booker, T., Allison, E., Li, E., ... Fonagy, P. (2021). Development and validation of a self-report measure of epistemic trust. *PLoS ONE*, 16, e0250264. <https://doi.org/10.1371/journal.pone.0250264>
- Campbell, M. L. (1979). *Dogmatism and political behavior*. Wayne State University.
- Citrin, J., & Stoker, L. (2018). Political trust in a cynical age. *Annual Review of Political Science*, 29, 49–70. <https://doi.org/10.1146/annurev-polisci-050316-092550>
- Corriveau, K. H., Harris, P. L., Meins, E., Fernyhough, C., Arnott, B., Elliott, L., ... De Rosnay, M. (2009). Young children's trust in their mother's claims: Longitudinal links with attachment security in infancy. *Child Development*, 80(3), 750–761. <https://doi.org/10.1111/j.1467-8624.2009.01295.x>

- Crowson, H. M. (2009). Are all conservatives alike? A study of the psychological correlates of cultural and economic conservatism. *Journal of Psychology: Interdisciplinary and Applied*, **143**(5), 449–463. <https://doi.org/10.3200/JRL.143.5.449-463>
- Csibra, G., & Gergely, G. (2007). Social learning and social cognition: The role of pedagogy. *Magyar Pszichologiai Szemle*, **62**(1), 5–30. <https://doi.org/10.1556/MPSzle.62.2007.1.2>
- Csibra, G., & Gergely, G. (2009). Natural pedagogy. *Trends in Cognitive Sciences*, **13**(4), 148–153. <https://doi.org/10.1016/j.tics.2009.01.005>
- Csibra, G., & Gergely, G. (2011). Natural pedagogy as evolutionary adaptation. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **366**(1567), 1149–1157. <https://doi.org/10.1098/rstb.2010.0319>
- Davies, M. F. (1998). Dogmatism and belief formation: Output interference in the processing of supporting and contradictory cognitions. *Journal of Personality and Social Psychology*, **75**(2), 456.
- Eaves, B. S., & Shafto, P. (2017). Parameterizing developmental changes in epistemic trust. *Psychonomic Bulletin and Review*, **24**(2), 277–306. <https://doi.org/10.3758/s13423-016-1082-x>
- Enders, A., Farhart, C., Miller, J., Uscinski, J., Saunders, K., & Drochon, H. (2022). Are republicans and conservatives more likely to believe conspiracy theories? *Political Behavior*, **45**(4), 2001–2024.
- Epskamp, S., Borsboom, D., & Fried, E. I. (2018). Estimating psychological networks and their accuracy: A tutorial paper. *Behavior Research Methods*, **50**(1), 195–212. <https://doi.org/10.3758/s13428-017-0862-1>
- Fast, E., & Horvitz, E. (2016). Identifying dogmatism in social media: Signals and models. In *EMNLP 2016 - Conference on Empirical Methods in Natural Language Processing, Proceedings* (pp. 690–699). <https://doi.org/10.18653/v1/d16-1066>
- Faulkner, P. (2011). *Knowledge on trust*. Oxford University Press.
- Fonagy, P., & Allison, E. (2014). The role of mentalizing and epistemic trust in the therapeutic relationship. *Psychotherapy*, **51**(3), 372–380. <https://doi.org/10.1037/a0036505>
- Fonagy, P., & Campbell, C. (2017). Mentalizing, attachment and epistemic trust: How psychotherapy can promote resilience. *Psychiatria Hungarica: A Magyar Pszichiatriai Tarsasag Tudományos Folyoirata*, **32**(3), 283–287.
- Fonagy, P., & Allison, E. (2023). Beyond mentalizing: Epistemic trust and the transmission of culture. *The Psychoanalytic Quarterly*, **92**(4), 599–640.
- Fonagy, P., Campbell, C., & Bateman, A. (2017). Mentalizing, attachment, and epistemic trust in group therapy. *International Journal of Group Psychotherapy*, **67**(2), 176–201. <https://doi.org/10.1080/00207284.2016.1263156>
- Fonagy, P., Luyten, P., & Allison, E. (2015). Epistemic petrification and the restoration of epistemic trust: A new conceptualization of borderline personality disorder and its psychosocial treatment. *Journal of Personality Disorders*, **29**(5), 575–609. <https://doi.org/10.1521/pedi.2015.29.5.575>
- Fonagy, P., Luyten, P., Allison, E., & Campbell, C. (2017a). What we have changed our minds about: Part 1. Borderline personality disorder as a limitation of resilience. *Borderline Personality Disorder and Emotion Dysregulation*, **4**, 11.
- Fonagy, P., Luyten, P., Allison, E., & Campbell, C. (2017b). What we have changed our minds about: Part 2. Borderline personality disorder, epistemic trust and the developmental significance of social communication. *Borderline Personality Disorder and Emotion Dysregulation*, **4**, 9. <https://doi.org/10.1186/s40479-017-0062-8>
- Fonagy, P., Campbell, C., Constantinou, M., Higgitt, A., Allison, E., & Luyten, P. (2021). Culture and psychopathology: an attempt at reconsidering the role of social learning. *Dev. Psychopathol.*, **34**:1205–1220.
- Gergely, G., & Csibra, G. (2005). The social construction of the cultural mind: Imitative learning as a mechanism of human pedagogy. *Interaction Studies*, **6**(3), 463–481. <https://doi.org/10.1075/is.6.3.10ger>
- Hamilton, L. C., & Safford, T. G. (2021). Elite cues and the rapid decline in trust in science agencies on COVID-19. *Sociological Perspectives*, **64**(5), 988–1011. <https://doi.org/10.1177/07311214211022391>
- Hastie, T., Tibshirani, R., James, G., & Witten, D. (2006). *An introduction to statistical learning*, vol. **102**, 618 p. New York: Springer.
- Hetherington, M. J. (1999). The effect of political trust on the presidential vote, 1968–96. *American Political Science Review*, **93**(2), 311–326.
- Hibbing, J. R., & Theiss-Morse, E. (2001). Process preferences and American politics: What the people want government to be. *American Political Science Review*, **95**(1), 145–153. <https://doi.org/10.1017/s0003055401000107>
- Hildyard, K. L., & Wolfe, D. A. (2002). Child neglect: Developmental issues and outcomes. *Child Abuse and Neglect*, **26**(6–7), 679–695. [https://doi.org/10.1016/S0145-2134\(02\)00341-1](https://doi.org/10.1016/S0145-2134(02)00341-1)
- Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modelling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, **6**(1), 53–60.
- Inglehart, R. F., & Norris, P. (2016). Trump, Brexit, and the rise of populism: Economic have-nots and cultural backlash. Király, I., Csibra, G., & Gergely, G. (2013). Beyond rational imitation: Learning arbitrary means actions from communicative demonstrations. *Journal of Experimental Child Psychology*, **116**(2), 471–486. <https://doi.org/10.1016/j.jecp.2012.12.003>
- Latkin, C. A., Dayton, L., Strickland, J. C., Colon, B., Rimal, R., & Boodram, B. (2020). An assessment of the rapid decline of trust in US sources of public information about COVID-19. *Journal of Health Communication*, **25**(10), 764–773. <https://doi.org/10.1080/10810730.2020.1865487>

- Laustsen, L., & Petersen, M. B.** (2015). Does a competent leader make a good friend? Conflict, ideology and the psychologies of friendship and followership. *Evolution and Human Behavior*, *36*(4), 286–293. <https://doi.org/10.1016/j.evolhumbehav.2015.01.001>
- Laustsen, L., & Petersen, M. B.** (2016). Winning faces vary by ideology: How nonverbal source cues influence election and communication success in politics. *Political Communication*, *33*(2), 188–211.
- Laustsen, L., & Petersen, M. B.** (2017). Perceived conflict and leader dominance: Individual and contextual factors behind preferences for dominant leaders. *Political Psychology*, *38*, 1083–1101. <https://doi.org/10.1111/pops.12403>
- Laustsen, L., Petersen, M. B., & Klofstad, C. A.** (2015). Vote choice, ideology, and social dominance orientation influence preferences for lower pitched voices in political candidates. *Evolutionary Psychology*, *13*(3), 1–13. <https://doi.org/10.1177/1474704915600576>
- Lee, T. T.** (2005). The liberal media myth revisited: An examination of factors influencing perceptions of media bias. *Journal of Broadcasting & Electronic Media*, *49*(1), 43–64.
- Levi, M., & Stoker, L.** (2000). Political trust and trustworthiness. *Annual Review of Political Science*, *3*(1), 475–507.
- Little, A. C., Burriss, R. P., Jones, B. C., & Roberts, S. C.** (2007). Facial appearance affects voting decisions. *Evolution and Human Behavior*, *28*(1), 18–27. <https://doi.org/10.1016/j.evolhumbehav.2006.09.002>
- Locke, J.** (1689). *Two treatises of government*. The anthropology of citizenship: A reader, 43–46.
- Luyten, P., Campbell, C., & Fonagy, P.** (2020). Borderline personality disorder, complex trauma, and problems with self and identity: A social-communicative approach. *Journal of Personality*, *88*(1), 88–105. <https://doi.org/10.1111/jopy.12483>
- Luyten, P., & Fonagy, P.** (2015). The neurobiology of mentalizing. *Personality Disorders: Theory, Research, and Treatment*, *6*(4), 366–379. <https://doi.org/10.1037/per0000117>
- Main, M., Kaplan, N., & Cassidy, J.** (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. *Monographs of the Society for Research in Child Development*, *50*(1/2), 66. <https://doi.org/10.2307/3333827>
- Malloy, C. S., Hughes, C., & Cassidy, B. S.** (2023). Perceiver and target partisanship shift facial trustworthiness effects on likability. *Scientific Reports*, *13*(1), 6130.
- Markson, P., & Luo, Y.** (2020). Chapter Five - Trust in early childhood. In J. B. Benson (Ed.), *Advances in child development and behavior* (pp. 137–162).
- McFadden, D.** (1980). Econometric models for probabilistic choice among products. *Journal of Business*, *53*, S13–S29.
- McLeod, C.** (2018). *Self-trust and reproductive autonomy. self-trust and reproductive autonomy*. MIT Press. <https://doi.org/10.7551/mitpress/6157.001.0001>
- Murphy, S. A., Cox, D. R., & Wermouth, N.** (1998). Multivariate dependencies: Models, analysis and interpretation. *Biometrics*, *54*(1), 393. <https://doi.org/10.2307/2534028>
- Nevitt, J., & Hancock, G. R.** (2000). Improving the root mean square error of approximation for nonnormal conditions in structural equation modeling. *Journal of Experimental Education*, *68*(3), 251–268. <https://doi.org/10.1080/00220970009600095>
- Newton, K., Stolle, D., & Zmerli, S.** (2018). Social and political trust. In *The Oxford handbook of social and political trust* (37th ed., pp. 961–976).
- Olivola, C. Y., Sussman, A. B., Tsetsos, K., Kang, O. E., & Todorov, A.** (2012). Republicans prefer republican-Looking leaders: Political facial stereotypes predict candidate electoral success among right-leaning voters. *Social Psychological and Personality Science*, *3*(5), 605–613. <https://doi.org/10.1177/1948550611432770>
- Oosterhof, N. N., & Todorov, A.** (2008). The functional basis of face evaluation. *Proceedings of the National Academy of Sciences*, *105*(32), 11087–11092. <https://doi.org/10.1073/pnas.0805664105>
- Petersen, M. B., & Laustsen, L.** (2020). Dominant leaders and the political psychology of followership. *Current Opinion in Psychology*, *33*, 136–141.
- Pew Res Center.** (2021). Partisan divides in media trust widen, driven by a decline among Republicans. Available at <https://www.pewresearch.org/fact-tank/2021/08/30/partisan-divides-in-media-trust-widen-driven-by-a-decline-among-republicans/>
- Rohrer, J. M., Hünermund, P., Arslan, R. C., & Elson, M.** (2022). That’s a lot to process! Pitfalls of popular path models. *Advances in Methods and Practices in Psychological Science*, *5*(2).
- Rokeach, M.** (1956). Political and religious dogmatism: An alternative to the authoritarian personality. *Psychological Monographs: General and Applied*, *70*(18), 1–43. <https://doi.org/10.1037/h0093727>
- Safra, L.** (2017). Using facial cues to produce social decisions. A cognitive and evolutionary approach. Available at <https://tel.archives-ouvertes.fr/tel-01724105>
- Safra, L., Algan, Y., Tecu, T., Grèzes, J., Baumard, N., & Chevallier, C.** (2017). Childhood harshness predicts long-lasting leader preferences. *Evolution and Human Behavior*, *38*(5), 645–651. <https://doi.org/10.1016/j.evolhumbehav.2017.05.001>
- Satorra, A., & Bentler, P. M.** (1994). Corrections to test statistics and standard errors in covariance structure analysis. In *Latent variables analysis: Applications for developmental research* (pp. 399–419).
- Seitz, R. J., & Angel, H. F.** (2020). Belief formation—A driving force for brain evolution. *Brain and Cognition*, *140*, 105548.
- Schermelleh-Engel, K., Moosbrugger, H., & Müller, H.** (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of psychological research online*, *8*(2), 23–74.

- Shearman, S. M., & Levine, T. R. (2006). Dogmatism updated: A scale revision and validation. *Communication Quarterly*, *54*(3), 275–291. <https://doi.org/10.1080/01463370600877950>
- Sigelman, L., Sigelman, C. K., & Walkosz, B. J. (1992). The public and the paradox of leadership: An experimental analysis. *American Journal of Political Science*, *36*, 366–385.
- Sperber, D., Clément, F., Heintz, C., Mascaro, O., Mercier, H., Origg, G., & Wilson, D. (2010). Epistemic vigilance. *Mind and Language*, *25*(4), 359–393. <https://doi.org/10.1111/j.1468-0017.2010.01394.x>
- Stewart, L. H., Ajina, S., Getov, S., Bahrami, B., Todorov, A., & Rees, G. (2012). Unconscious evaluation of faces on social dimensions. *Journal of Experimental Psychology: General*, *141*(4), 715.
- Sussman, A. B., Petkova, K., & Todorov, A. (2013). Competence ratings in US predict presidential election outcomes in Bulgaria. *Journal of Experimental Social Psychology*, *49*(4), 771–775. <https://doi.org/10.1016/j.jesp.2013.02.003>
- Tanzer, M., Campbell, C., Saunders, R., Luyten, P., Booker, T., & Fonagy, P. (2021). Acquiring knowledge: Epistemic trust in the age of fake news.
- Todorov, A., & Oosterhof, N. N. (2011). Modeling social perception of faces [social sciences]. *IEEE Signal Processing Magazine*, *28*(2), 117–122.
- Todorov, A., Dotsch, R., Porter, J. M., Oosterhof, N. N., & Falvello, V. B. (2013). Validation of data-driven computational models of social perception of faces. *Emotion*, *13*(4), 724–738. <https://doi.org/10.1037/a0032335>
- Todorov, A., Mandisodza, A. N., Goren, A., & Hall, C. C. (2005). Inferences of competence from faces predict election outcomes. *Science*, *308*(5728), 1623–1626.
- Tong, Y., Wang, F., & Danovitch, J. (2020). The role of epistemic and social characteristics in children’s selective trust: Three meta-analyses. *Developmental Science*, *23*(2), e12895. <https://doi.org/10.1111/desc.12895>
- van der Bles, A. M., van der Linden, S., Freeman, A. L. J., & Spiegelhalter, D. J. (2020). The effects of communicating uncertainty on public trust in facts and numbers. *Proceedings of the National Academy of Sciences of the United States of America*, *117*(14), 7672–7683. <https://doi.org/10.1073/pnas.1913678117>
- van Prooijen, J. W., & Krouwel, A. P. M. (2017). Extreme political beliefs predict dogmatic intolerance. *Social Psychological and Personality Science*, *8*(3), 292–300. <https://doi.org/10.1177/1948550616671403>
- Widaman, K. F., & Revelle, W. (2023). Thinking thrice about sum scores, and then some more about measurement and analysis. *Behavior Research Methods*, *55*(2), 788–806.
- Wright, S. (1921). Correlation and causation. *Journal of Agricultural Research*, *20*, 557–585.
- Zagzebski, L. T. (2013). *Epistemic authority: A theory of trust, authority, and autonomy in belief*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199936472.001.0001>
- Zmigrod, L. (2022). Individual-level cognitive and personality predictors of ideological worldviews: The psychological profiles of political, nationalistic, dogmatic, religious, and extreme believers. OSF. <https://doi.org/10.31234/osf.io/srgup>
- Zmigrod, L., Eisenberg, I. W., Bissett, P. G., Robbins, T. W., & Poldrack, R. A. (2021). The cognitive and perceptual correlates of ideological attitudes: A data-driven approach. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *376*(1822), 20200424. <https://doi.org/10.1098/rstb.2020.0424>

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