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Populist Attitudes as a Mediator between Relative Deprivation and Conspiracy Mentality

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Conspiracy theories can present a threat to society. Both conspiracy and populist beliefs describe society as a struggle between powerful elites and common people, where those individuals feeling powerless or deprived are more gullible to such beliefs. This paper explores the relationship between relative deprivation and conspiracy mentality. It argues that the anti-elitism and popular sovereignty that represent populist attitudes mediate this relationship. The present study draws on a nationally representative sample of the Slovak population aged 18 and above (N = 832). The data were collected online through a research agency. The mediation model was tested using the R program. The effects were tested using a sensitivity analysis. The results have shown that feelings of relative deprivation transfer into a stronger conspiracy mentality. Moreover, the effect on conspiracy mentality was found to be partially mediated by populist attitudes and in particular by anti-elitism and populist sovereignty. In this respect, the study presents a more detailed understanding of the beliefs that drive conspiracy mentality.

Key words: conspiracy mentality, populist attitudes, relative deprivation, mediation

Introduction

Populist and conspiracy beliefs flourish during times of crisis in particular (Guiso et al., 2022; van Prooijen & Douglas, 2017; Maher et al., 2022). During such times, feelings of threat, insecurity and anxiety are essential and often lead people to endorse groups that are involved in conspiracy theories (e.g., the government) (van Prooijen, 2020). However, threat does not necessarily lead to conspiracy beliefs among all citizens. According to empirical research, those who feel disadvantaged, socially excluded or economically deprived compared to others not only tend to believe in conspiracies (e.g., van Prooijen et al., 2018, 2020; Ziegele et al., 2022) but are also more

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inclined to support populism (Manunta et al., 2022), vote for populist political parties (Oliver & Rahn, 2016; Hochschild, 2016), participate in anti-government protests (Lüders et al., 2021), and score higher in populist attitudes (e.g., Elchardus & Spruyt, 2016; Filsinger et al., 2022; Lüders et al., 2021).

In the last decade, research on the 'demand side' of populism has intensified. In order to understand who leans towards populism and what its consequences are, an increasing number of empirical studies have focused on the role of populist beliefs in the social and political mindset of citizens and related behaviors (Eberl et al., 2020; Huber, 2020). While the relationship between conspiracy mentality, populist attitudes and relative deprivation has been a frequently researched topic, most studies have focused on bivariate correlations (Castanho Silva et al., 2017; Erisen et al., 2021; Filsinger et al., 2022; Lüders et al., 2021; Oliver & Rahn, 2016; van Prooijen et al., 2022).

The aim of this study is to contribute to the existing literature by testing the mediating role of populist attitudes in the relationship between relative deprivation and conspiracy mentality. This will validate the role of populist attitudes in fighting against conspiracy beliefs among a group of subjectively deprived people.

Conspiracy Mentality and Populist Attitudes

Conspiracy mentality is the overall tendency to believe in conspiracy theories (CTs) (Imhoff & Bruder, 2014). CTs explain important social and political events through a secret conspiracy of several powerful actors whose actions are conscious and lead to a specific goal that poses a threat to people or groups (van Prooijen & Vugt, 2018). Belief in specific conspiracy theories is associated with beliefs in many others (Brotherton et al., 2013). As such, conspiracy mentality is considered a trait-like predisposition, worldview or belief system (Bruder et al., 2016). In general, populist attitudes are defined as a set of beliefs that include the existence of two opposing groups in society (Manichean outlook) – the uniform group of morally pure people (homogeneity of people) and corrupt elites; and the struggle of common people against the elites (anti-elitism) in order to gain political sovereignty (sovereignty of people) (Schulz et al., 2018; Mudde & Rovira Kaltwasser, 2017). Although these two constructs are empirically and conceptually distinct, they are positively related (Castanho Silva et al., 2017; Erisen et al., 2021; Oliver & Rahn, 2016) and share several common characteristics.

People with both populist attitudes and conspiracy mentality see the world as divided between the powerful elites and vulnerable people. Populist attitudes are characterized by criticism towards those in power (Vittori, 2017) while belief in conspiracies is based on opposition to elites, authorities (Imhoff & Lamberty, 2018), and experts or scientists (Oliver & Rahn, 2016) who conspire against people (van Prooijen & van Vugt, 2018). Neither populists nor conspirators trust the established, universal truths or the experts. Rather, they use simplified explanations or solutions for complex problems. Both are convinced about the threat, deprivation and culprits of their own situation or the situation in their country (Hameleers et al., 2019). However, conspiracies do not assume the moral superiority of common people or the importance of popular political sovereignty.

Castanho Silva et al. (2017) have found that populist attitudes are mostly associated with two facets of conspiracy beliefs. These are either malevolent global conspiracies (which depict elites as greedy actors who do evil for their own sake and for the sake of gaining power) or control of information (i.e., the belief

that organizations like the government censor information from the public). Moreover, their results suggest that the relationship between the constructs goes beyond the lack of political trust and may be more psychological in nature. The same study has also shown that conspiracy mentality is strongly related to anti-elitism, moderately to people-centrism (combination of sovereignty and homogeneity of people) and weakly to the Manichean outlook. Similar results have also been obtained by Oliver and Wood (2014) and Erisen et al. (2021). The latter however, found a negative association between conspiracy mentality and the Manichean outlook. The study of Christner (2022) has found strong associations between anti-elitism, the sovereignty of people and three conspiracist facets that involve governmental participation – government malfeasance (i.e., allegations of government involvement in a common criminal conspiracy), malevolent global conspiracies and control of information. However, homogeneity of people was not strongly associated with those facets of conspiracy beliefs. Moreover, conspiracy beliefs, sovereignty of people and anti-elitism were moderately to strongly associated with political trust although belief in the homogeneity of people was not.

While conspiracy mentality has been identified as a significant predictor of both anti-elitism and people-centrism (Castanho Silva et al., 2017), this was found to be in the opposite direction in a large multinational sample (van Prooijen et al., 2022), providing a more robust rationale for the current study. The present research assumes that populist attitudes of anti-elitism and popular sovereignty in particular, will predict conspiracy mentality. This is based on recently provided cross-cultural evidence for the prediction of conspiracy mentality as well as more general unsubstantiated epistemic claims by populist attitudes (van Prooijen et al., 2022). It means that people with a high level of populist attitudes not only tend to accept conspiracies but also obscure or unsubstantiated epistemic claims as being true, including non-political ones. This has been named populist gullibility (van Prooijen et al., 2022, p. 1063). It is built upon a simplistic understanding of society and societal problems by people who hold populist attitudes (Erisen et al., 2021). The increased faith in intuition mediates the relationship between populist attitudes and conspiracy mentality (van Prooijen et al., 2022). Thus, the cognitive style that underlies populist attitudes explains why populist attitudes predict conspiracy mentality, belief in specific conspiracy theories as well as increasing the credulity of politically neutral news items, bullshit receptivity, and paranormal beliefs.

Although both populist attitudes and conspiracy mentality are relatively general and stable, the theoretical idea behind the proposed direction of the relationship is that a general political (populist) worldview shapes the processes of thinking about and interpreting world events as secret plots. Moreover, it may go beyond specific political conspiracy beliefs, forming a more general conspiracy mindset and increasing populist gullibility through biased reasoning processes (van Prooijen et al., 2022).

The Role of Relative Deprivation

There is a body of research looking at the relationship between populist attitudes or conspiracy mentality and economic vulnerability (e.g., Jetten et al., 2022; Rico & Anduiza, 2019). This is opposed to research that suggests that it is not low socioeconomic status but the feeling of relative personal or group deprivation that has a direct effect on populist attitudes (e.g., Elchardus & Spruyt, 2016; Filsinger et al., 2022; Lüders et al., 2021) and conspiracy beliefs (e.g., van Prooijen et al.,

2018, 2020; Ziegele et al., 2022). This paper focuses on relative deprivation, which is defined as "a judgment that one or one's in-group is disadvantaged compared to a relevant referent and that this judgment invokes feelings of anger, resentment, and entitlement" (Pettigrew, 2015, p. 12). In particular, subjective group relative deprivation is used, which highlights the importance of group membership. This is relevant in the context of populist attitudes as well as conspiracy mentality that shares the Manichean worldview and the struggle of common people against powerful groups.

The aim of populism is to give a voice back to the people who are not being heard. As such, populism is particularly appealing to those who are marginalized or excluded (Mudde & Rovira Kaltwasser, 2017). Those who feel deprived may easily identify as being common people and be attracted to the populist messages which emphasize the evil behavior of elites. However, people who feel disadvantaged, deprived or exploited do not just support populist political parties (Oliver & Rahn, 2016; Hochschild, 2016) and take part in leaderless anti-government protests (Lüders et al., 2021) but also hold populist attitudes (Filsinger et al., 2022). The latter study has also provided cross-country and longitudinal evidence of both directions of causality, suggesting that populist attitudes also affect the feeling of disadvantage.

Those who feel deprived are also much more likely to believe in conspiracy theories (Oliver & Rahn, 2016; van Prooijen et al., 2018). This may be related to the high distrust in elites and experts (anti-elitism), which is shared with populist beliefs. According to the Existential Threat Model of Conspiracy Theories, feelings of threat enhance epistemic sense-making processes, which in turn stimulate conspiracy theories. Moreover, when conspiracy theories no longer work in reducing feelings of threat, they may become a source of threat and help the development of a general conspiracist mindset (van Prooijen, 2020).

Aims of the Study and Hypotheses

This research aims to explore the mediation role of populist attitudes (anti-elitism and popular sovereignty) between relative deprivation and conspiracy mentality. There is theoretical and empirical evidence for the association between conspiracy mentality and anti-elitism, people-centrism and the Manichean outlook (Castanho Silva et al., 2017; Oliver & Wood, 2014; Erisen et al., 2021). However, the latter was not included in the proposed model since the populist attitudes scale proposed by Schulz et al. (2018) was used, which does not differentiate the Manichean perspective of populism as a separate dimension. Rather, it is included in the items across the dimensions. Moreover, the homogeneity of people as a third dimension of populist attitudes proposed by Schulz et al. (2018) was not included in the model. The reasons are threefold: 1) ethnic, racial, or national homogeneity is considered outside the conceptual core of populism (Mansbridge & Macedo, 2019); 2) empirical evidence has suggested that populist attitudes and homogenizing and unitary anti-pluralism are not necessarily mutually exclusive (Akkeman et al., 2014); 3) there is no robust evidence specifically on the association with conspiracy mentality. Thus, the current study is focused on two key elements of populism – anti-elitism and sovereignty of people, assuming that "the people" is not necessarily a homogeneous group (Mansbridge & Macedo, 2019). The study also examines the direct effect of relative deprivation on conspiracy mentality. In addition, the research tests the goodness of fit of the assumed model described in Figure 1.

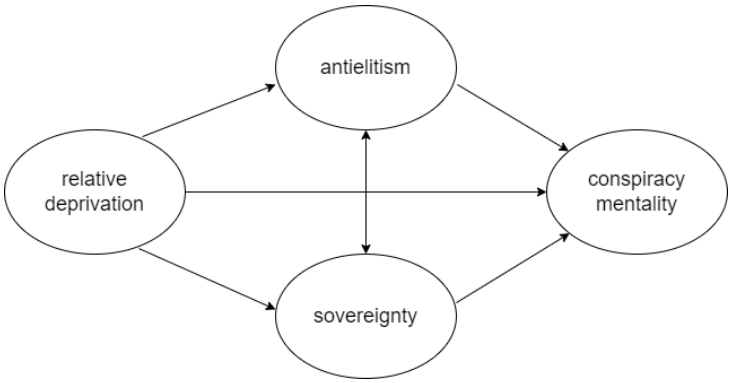


Figure 1 Theoretical model of variables.

Based on the existing research, it can be assumed that:

H1: Relative deprivation has an effect on anti-elitism.

H2: Relative deprivation has an effect on popular sovereignty.

H3: Anti-elitism has an effect on conspiracy mentality.

H4: Popular sovereignty has an effect on conspiracy mentality.

H5: Relative deprivation has a direct effect on conspiracy mentality.

H6: Relative deprivation has an indirect effect on the conspiracy mentality mediated by anti-elitism.

H7: Relative deprivation has an indirect effect on the conspiracy mentality mediated by popular sovereignty.

Methodology

Methods

In order to fulfil the aims of the study and test the hypotheses, the hypothesized model was examined using the maximum likelihood method (ML) and a standardized estimate-based SEM. A SEM was used in this study for several reasons: 1) the study examines the relationship between latent variables (Lei & Wu, 2007); 2) the primary aim of the study is to examine the direct and indirect (mediated) effects (Lei & Wu, 2007); 3) for inferences about the indirect effects, bootstrapping is used in this study to increase the stability and accuracy of the model.

The data were analyzed using the lavaan package (Rosseel, 2012) and mediation package (Tingley et al., 2014) in R software (R Core Team, 2021; RStudio team, 2019).

Participants

This study used a cross-sectional representative sample of the Slovak adult population based on gender, age, education and region of residence. The participants were recruited through an online panel of a research agency. The data collection took place in November 2021. All participants in the study provided informed consent and were assured of the confidentiality and anonymity of the provided information. There were 23 participants who completed the survey in less than 2 minutes and were thus excluded from the initial sample (N = 902). The data were also screened for careless responses by calculating the longstrings and the Mahalanobis distance. Based

on these calculations, additional 47 respondents were removed from the sample. The final sample consisted of 832 participants (48.8% men, 51.2% women, average age: *M* = 43.79, *SD* = 15.01, 10.9% with primary school education, 31.1% with secondary school education without a degree, 39.3% with secondary school education with a degree and 18.6% with university education.

Materials

Relative deprivation was measured using six items from the questionnaire by Elchardus and Spruyt (2016). The degree of compliance with the individual statements was reported on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). The items express the feeling of belonging to a group that is considered deprived in our society. Higher scores on the scale demonstrate more intense feelings of relative deprivation.

Populist attitudes were measured by the scale created by Schulz et al. (2018). This consists of twelve items divided into three dimensions: *anti-elitism*, *popular sovereignty,* and *homogeneity of people*. However, only the first two dimensions were used in this research. The authors conceptualize populist attitudes as a latent higher-order construct with three distinct first-order dimensions, therefore using *anti-elitism* and *popular sovereignty* in our research as separate dimensions (variables) is justifiable. Populist attitudes were measured on a 7-point scale, ranging from 1 (strongly disagree) to 7 (strongly agree).

Conspiracy mentality was assessed using five items from the *Conspiracy Mentality Questionnaire* (CMQ) proposed by Bruder et al. (2013). The respondents reported the extent to which they believe or do not believe particular statements are true based on an 11-point scale, ranging from 0 (0%, certainly not) to 10 (100%, certain). Higher scores on the conspiracy mentality scale reflect a greater vulnerability to believing in conspiracies. The method's factorial structure, reliability and validity were successfully tested by the authors in cross-cultural research.

The exact wording of the items and sources (questionnaires) are provided in Table 1.

Results

Internal Consistency of the Scales

The reliability, or internal consistency, of the used scales was tested. While Cronbach's alpha (α) is probably the most popular way of measuring reliability and is recommended (e.g., Trochim & Donnelly, 2010), many authors (e.g., Hayes & Coutts, 2020) have started leaning towards the McDonald's omega (ω) in recent years. For all variables, both these coefficients are reported as well as the means, 95% confidence intervals for the means and standard deviations (Table 2).

The Cronbach's alpha and McDonald's omega scores range from 0.733 to 0.858 which represents adequate reliability.

Normality Assessment

Table 3 provides the means, standard deviation, skewness and kurtosis for all the items.

According to Brown (2006), acceptable values of skewness fall between -3 and +3, and kurtosis is appropriate in the range of -10 to +10 when utilizing SEM. All tested items meet these criteria.

Correlation Matrix

The bivariate correlations of all variables are provided in Table 4.

All the bivariate correlations in Table 4 reached statistical significance ($p \leq 0.05$).

Table 1 *Instrument items and sources*

Items	*Sources*
Relative deprivation	Elchardus & Spruyt (2016)
It is always other people who can profit from all kinds of advantages offered in this society.	
I never got what I deserved.	
Whichever way you look at it, we are the kind of people that never get a break.	
Government doesn't do enough for people like me, others are always advantaged.	
The streets in our neighborhood are less well kept up than those in many other neighborhoods.	
When there is an economic downturn, we are the first to be its victims.	
Anti-elitism	Schulz et al. (2018)
MPs in Parliament very quickly lose touch with ordinary people.	
The differences between ordinary people and the ruling elite are much greater than the differences between ordinary people.	
People like me have no influence on what the government does.	
Politicians talk too much and take too little action.	
Popular sovereignty	Schulz et al. (2018)
The people should have the final say on the most important political issues by voting on them directly in referendums.	
The people should be asked whenever important decisions are taken.	
The people, not the politicians, should make our most important policy decisions.	
The politicians in Parliament need to follow the will of the people.	
Conspiracy mentality	Bruder et al. (2013)
I think that many very important things happen in the world which the public is never informed about.	
I think that politicians usually do not tell us the true motives for their decisions.	
I think that government agencies closely monitor all citizens.	
I think that events which superficially seem to lack a connection are often the result of secret activities.	
I think that there are secret organizations that greatly influence political decisions.	

Table 2 *Descriptive statistics and internal consistency of variables*

			95% CI		Internal consistency	
	M	*SD*	lower	higher	ω	α
relative deprivation	4.62	1.07	4.54	4.69	0.801	0.797
anti-elitism	5.97	1.10	5.90	6.05	0.748	0.733
popular sovereignty	5.60	1.26	5.52	5.69	0.843	0.839
conspiracy mentality	6.78	2.11	6.64	6.92	0.858	0.845

Table 3 *Normality assessment of items*

Items	Mean	Std. Deviation	Skewness	Kurtosis	
				Stat	Std. Error
RD1	4.89	1.48	-0.21	-0.32	0.05
RD2	4.20	1.60	-0.06	-0.33	0.06
RD3	4.50	1.35	0.03	0.29	0.05
RD4	4.96	1.58	-0.37	-0.40	0.05
RD5	3.79	1.59	0.09	-0.27	0.06
RD6	5.36	1.51	-0.65	-0.15	0.05
A1	5.93	1.38	-1.35	1.53	0.05
A2	5.88	1.41	-1.19	0.84	0.05
A3	5.54	1.64	-0.96	-0.01	0.06
A4	6.12	1.28	-1.64	2.49	0.04
S1	5.31	1.67	-0.78	-0.18	0.06
S2	5.59	1.43	-0.87	0.23	0.05
S3	4.91	1.67	-0.38	-0.65	0.06
S4	5.90	1.33	-1.27	1.54	0.05
CM1	7.89	2.40	-1.04	0.39	0.08
CM2	7.92	2.23	-1.02	0.41	0.08
CM3	4.90	3.05	0.00	-0.96	0.11
CM4	6.54	2.72	-0.51	-0.42	0.09
CM5	6.66	2.94	-0.68	-0.46	0.10

Table 4 *Correlational table of all variables*

	r. deprivation	anti-elitism	sovereignty	conspiracy m.
r. deprivation		0.35	0.43	0.52
anti-elitism	0.35		0.58	0.44
sovereignty	0.43	0.58		0.51
conspiracy m.	0.52	0.44	0.51	

Structural Equation Modelling

A structural model of relative deprivation, anti-elitism, popular sovereignty and conspiracy mentality was developed with two main objectives. The first was to test the fitness or validity of such a model while the second was to explore the impact of relative deprivation on conspiracy mentality, as well as mediating the effect of certain dimensions of populist attitudes (anti-elitism, popular sovereignty) between relative deprivation and conspiracy mentality. The SEM path diagram of the model is shown in Figure 2. The model is overidentified. Maximum likelihood estimation was used. The fitness of the model is evaluated in Table 5.

The validity of a structural model can be assessed in several ways such as assessing the

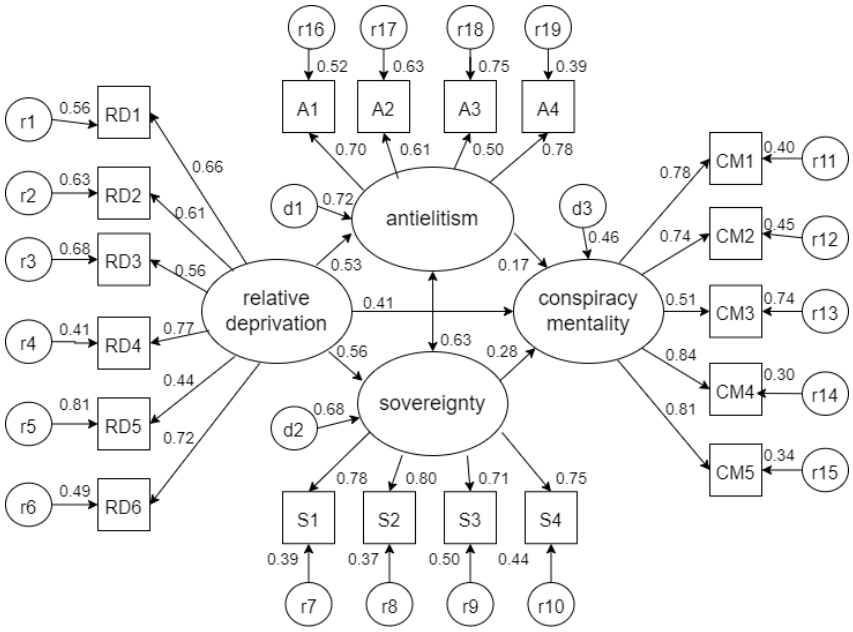


Figure 2 Structural equation model of items and latent variables.

Table 5 *Evaluation of fitness of the structural model*

Category	*Index*	*Level of Acceptance*	*Index Value*	*Comments*
Absolute Fit	Chi-square	*p*-values > 0.05	< 0.001	not supported
	RMSEA	< 0.07	0.055	good fit
	SRMR	< 0.05	0.046	good fit
Incremental Fit	CFI	> 0.90	0.945	good fit
	TLI	> 0.90	0.933	good fit

indices with Chi-square, RMSEA or CFI (Kline, 2015). As recommended by Hoyle and Panter (1995), several fit indices were used. For the absolute fit indices, the Chi-square was significant ($p < 0.05$) although the RMSEA (0.055) and SRMR (0.046) indicated a good fit. For the incremental fit indices, the values of CFI (0.945) and TLI (0.933), which are greater than 0.90, also indicated a good level of model fit.

Mediation Analysis in SEM

A mediation analysis with 2000 bootstrapped iterations was applied to test the model shown in Figure 2.

In Figure 3, a simplified model with emphasis on the mediation and names of the effects are depicted.

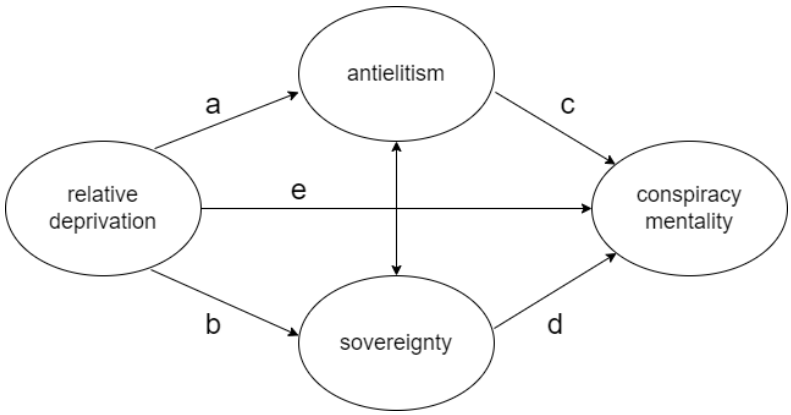


Figure 3 Mediation model of the latent variables and effect's names.

Table 6 *Evaluation of calculated effects*

Effects	*H*	*z-value*	*p-value*	*Standardized Estimate*
a (relative deprivation - anti-elitism)	H1	15.11	<0.001	0.428
b (relative deprivation - popular sovereignty)	H2	19.00	<0.001	0.441
c (anti-elitism - conspiracy mentality)	H3	13.20	<0.001	0.198
d (popular sovereignty - conspiracy mentality)	H4	14.73	<0.001	0.402
e (relative deprivation - conspiracy mentality)	H5	15.00	<0.001	0.285
a*c (relative deprivation - anti-elitism - conspiracy mentality)	H6	11.28	<0.001	0.085
b*d (relative deprivation - popular sovereignty - conspiracy mentality)	H7	13.19	<0.001	0.178
total (e + a*c + b*d)		22.43	<0.001	0.548

In Table 6, the z-values, standardized estimates and statistical significance of the calculated effects are shown. The results confirm the statistical significance of effects *a*, *b*, *c* and *d* ($p < 0.001$). A direct effect of relative deprivation on conspiracy mentality was found to be significant ($p < 0.001$, $SE = 0.285$) as was an indirect effect mediated by anti-elitism ($SE = 0.085$) and an indirect effect mediated by popular sovereignty ($SE = 0.178$) also confirmed as being significant ($p < 0.001$). The total effect was also found to be statistically significant ($p < 0.001$, $SE = 0.548$).

Estimating the Causal Mediation Effects and Sensitivity Analysis

An estimation of the causal mediation effects and a sensitivity analysis were also carried out for the proposed mediation model, as suggested by Imai et al. (2011). This analysis is crucial for testing the violation or non-violation of the basic assumption of sequential ignorability. Sequential ignorability is an assumption in mediation analysis that states that the relationship between the treatment, mediator, and outcome variables is independent of the unobserved confounding factors. This assumption was tested separately for each mediator. Both the mediation analyses and sensitivity tests were performed using R-package mediation (Tingley et al., 2014). The correlation ρ between the residuals of the mediator and outcome regressions was chosen as the sensitivity parameter. If there are unobserved pre-treatment confounders which affect both the mediator and the outcome, ρ is no longer zero and it can be

Table 7 *Results of the Causal Mediation Analysis*

	Estimate	*95 % CI lower*	*95 % CI upper*	*p-value*
mediator – anti-elitism				
ACME*	0.185	0.133	0.24	<0.001
ADE*	0.804	0.696	0.92	<0.001
total effect	0.989	0.873	1.13	<0.001
mediator – sovereignty				
ACME*	0.282	0.211	0.36	<0.001
ADE*	0.715	0.602	0.85	<0.001
total effect	0.996	0.887	1.12	<0.001

Note. ACME – The Average Causal Mediated Effect, ADE – Average Direct Effect.

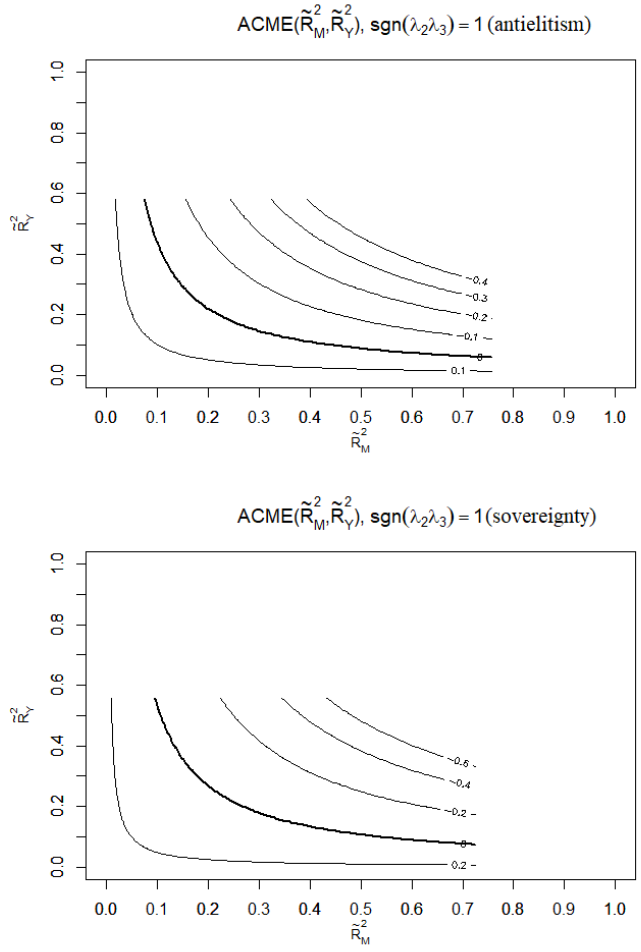
Table 8 *Results of the Mediation Sensitivity Analysis for the Average Causal Mediation Effect*

	Rho	*ACME**	*95 % CI lower*	*95 % CI upper*	*R^2_M*R^2_Y**	*R^2_M~R^2_Y~*
mediator – anti-elitism	0.3	0.0109	-0.0321	0.054	0.09	0.0488
mediator – sovereignty	0.3	0.0553	-0.0035	0.114	0.09	0.0499

Note. ACME – The Average Causal Mediated Effect, R^2_M*R^2_Y* – the point at which the ACME is 0 as a function of the proportions of residual variance in the mediator and outcome explained by the hypothesized unobserved confounder, R^2_M~R^2_Y~ – total variance instead of residual variance.

assumed that the sequential ignorability assumption is violated. Gender, age, and education were added as pre-treatment covariates into the analyses. The results are presented in Table 7 and Table 8 as well as Figure 4.

For both analyses of the two mediators (anti-elitism and sovereignty), the confidence intervals for the ACME contain zero when ρ specified by Rho equals 0.3. In addition, the plots in Figure 4 show that for anti-elitism as a mediator the upper bounds are 0.75 for the mediator model and 0.6 for the outcome model. For sovereignty as a mediator the upper bounds are 0.72 for the mediator model and 0.55 for the outcome model. Based on these indicators, the sequential ignorability



Note. The contours depict the true ACME plotted as a function of the proportion of the total mediator variance (horizontal axis) and the total outcome variance (vertical axis), which are each explained by the unobserved confounder included in the regression models.

Figure 4 Sensitivity analysis plot, ACME plotted as a function.

assumption was likely not violated and it is plausible that the relationship between the treatment, mediator, and outcome variables is independent of the unobserved confounding factors (Imai et al., 2011).

Discussion

The literature suggests that both relative deprivation and populist attitudes have a significant and important impact on conspiracy mentality (Filsinger et al., 2022; van Prooijen et al., 2022). The main aim of the present study was to contribute to the existing literature by 1) exploring the mediating role of anti-elitism and popular sovereignty, as dimensions of populist attitudes (Schulz et al., 2018), between perceived group relative deprivation and conspiracy mentality; and 2) testing various direct effects between the studied variables. The testing of the direct paths indicated statistical significance and thus supported hypotheses H1 to H5. The statistically significant indirect paths through anti-elitism and popular sovereignty supported hypotheses H6 and H7. The total effect showed a moderate effect size. The proposed models were also supported by the causal mediation analysis and sensitivity analysis, confirming that the results are likely not influenced by gender, age, education or any unobserved confounding factors.

The study has shown that relative deprivation interacts with populist attitudes (anti-elitism and sovereignty of people) towards the conspiracy mindset. The assumption that populist attitudes precede the conspiracy mentality is in line with the study of van Prooijen et al. (2022). Their cross-national research supported the idea of populist gullibility; the tendency of people holding populist attitudes to believe in more general obscure or unsubstantiated epistemic claims as true because of their reasoning processes, such as faith in intuition or simplistic understanding of society. Similarly, Oliver and Wood (2014) found that the Manichean view of politics (good versus evil) predicts beliefs in specific conspiracy theories. In addition, feelings of relative deprivation predicted an increase in both populist beliefs and conspiracy beliefs, coinciding with the results of other studies (Elchardus & Spruyt, 2016; Filsinger et al., 2022; Lüders et al., 2021; van Prooijen et al., 2018, 2020; Ziegele et al., 2022). However, it has also been found that conspiracy mentality predicts anti-elitism and people-centrism (Castanho Silva et al., 2017), and that populist attitudes may lead to feelings of deprivation (Filsinger et al., 2022). Thus, the relationships in the proposed model may also work in the opposite direction. In such a model, the conspiracy beliefs which should decrease feelings of threat may become a source of threat and encourage the development of a general conspiracy mindset (van Prooijen, 2020) which increases populist attitudes, leading to feelings of disadvantage. Moreover, Filsinger et al. (2022) have proposed the idea of a vicious circle of disadvantage and populism, indicating that research should take both directions of causality into account. The idea of conspiracy mentality preceding populist attitudes is based on the assumption that the adoption of a mindset that regularly accepts unsubstantiated claims as true may serve as a contributing factor in establishing the psychological foundations of a populist worldview (van Prooijen et al., 2022). In the case of this study, however, the assumed direction of associations seemed more reasonable.

The present model suggests the following sequence of processes. Individuals, whether due to objective (lower income, lower socioeconomic status, fewer job opportunities) or subjective (attitudinal, personality, emotional factors) circumstances, begin to experience higher levels of subjective personal and/or

group relative deprivation. Identifying with a deprived group of common people and the perception that the group is deprived may lead to anti-elitist attitudes. The deprivation experienced can be justified as a result of the perceived inequality between people and elite and incompetence/corruption of state elites. At the same time, this may lead to attitudes associated with popular sovereignty, i.e., the belief that the social situation that has caused the perceived deprivation can be resolved by having the people, rather than the elites, decide on public affairs. Thus group-based relative deprivation seems more relevant in the context of the Manichean perception of society, which is common for populist and conspiracy beliefs. Populist attitudes (and through this, relative deprivation) may consequently cause an increased level of conspiracy mentality. This is particularly the case when conspiracy mentality is conceptualized as in the measurement instrument of Bruder et al. (2013) which strongly accentuates the element of anti-elitism.

The results also provide answers to the broader question of who is more susceptible to populist rhetoric. Populists use simplistic rhetoric and offer simple solutions; dividing society into two groups of good (pure people) and bad (corrupt elites); while wanting to leave the power in the hands of ordinary people (Mudde, 2004). This study suggests that those who see themselves as part of a deprived group are not only more susceptible to populist rhetoric but as a result of it, may also succumb to more general conspiracies, by increasing their conspiracy mentality. Thus, populist political views – thanks to biased cognitive reasoning – may shape the way they interpret other information and social events (van Prooijen et al., 2022).

It is necessary to acknowledge that there are several limitations to the research. Firstly, the study used a cross-sectional design which did not determine causal relationships. Even though the proposed model may give the impression that it identifies causal relationships, these relationships can (and probably do) work both ways. This was supported in the case of the partial relationship between relative deprivation and populist attitudes (Filsinger et al., 2022), and populist attitudes and conspiracy mentality (Castanho Silva et al., 2017; van Prooijen et al., 2022). Secondly, the current results demonstrate that the effect sizes of the hypothesized relationships among relative deprivation, populistic attitudes and conspiracy mentality are mostly moderate, indicating that there might be other factors accounting for the variance in conspiracy mentality. Thirdly, the data were collected via self-report scales which may have resulted in common method biases (e.g., social desirability) or acquiescence bias (tendency to agree with statements). Fourthly, the model was tested on a single-country sample, so the results should be interpreted carefully before being validated on a cross-country dataset. Finally, although we believe that the decision to exclude homogeneity as a possible mediator in the proposed model is theoretically justified, other researchers should be encouraged to augment the model by including this variable, or any other variable from the dataset, by making the data available.

Despite these limitations, the contribution of the current study lies in the approach applied to these associations in a representative sample. Although these variables have frequently been researched in the past, they have mostly examined the bivariate relationships (Castanho Silva et al., 2017; Erisen et al., 2021; Filsinger et al., 2022; Lüders et al., 2021; Oliver & Rahn, 2016; van Prooijen et al., 2022). The combination of structural modelling and dual-mediation path analysis methods offers a more comprehensive insight into the issue. In this regard, the study presents a

more detailed understanding of the processes that drive conspiracy mentality, broadening existing research on these phenomena.

As the causality of these constructs cannot be confirmed based on the cross-sectional data, experimental and longitudinal studies are needed in future research to examine the causal relationships.

Conclusion

As we live in a time when all information including misinformation, unsubstantiated information or conspiracy theories, is readily available and rapidly disseminated, it is important to investigate the psychological basis of succumbing to it and identify vulnerable groups of people. This research has indicated that political worldviews, such as populist attitudes, can play an important role not only as a predictor of conspiracy mentality but also as a mediator for those feeling deprived. Since populism has thrived in recent decades in Europe and beyond, it is important to continue studying its psychological nature and role in our belief system in order to avoid the consequences it can have for democratic societies.

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