Democracy and belief in conspiracy theories in New Zealand

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Abstract

The COVID-19 pandemic supercharged the spread of fake news, misinformation, and conspiracy theories worldwide. Using a national probability sample of adults from the New Zealand Attitudes and Values Study during 2020 (17–99 years old; *M*=48.59, *SD*=13.86; 63% women, 37% men; *N*=41,487), we examined the associations between agreement with general conspiracy beliefs and political indicators of intention to vote and satisfaction with government, alongside political factors including trust in politicians, political efficacy, identity centrality, and political ideology. Left-wing political ideology, trust in politicians, and political efficacy accounted for most of the explained variance in satisfaction with the government. General conspiracy belief was also a unique contributor to lower satisfaction with the government. We also found a curvilinear relationship between political ideology with heightened belief in conspiracies at both ideological extremes and the centre. Findings are discussed in terms of the consequences of conspiracy belief on democratic engagement.

Keywords

conspiracy belief; democratic engagement; political ideology; political efficacy; trust in politicians.

Introduction

The potential impact of misinformation on democratic citizenship has been known for some time. Kuklinski et al. (2000) suggested that false, inaccurate, and misleading information can skew collective preferences as compared to a parallel universe in which people are correctly informed. However, citizens are exposed to numerous falsities every day, spurring active attempts to correct these with fact-checking initiatives which have had varied success (Walter et al. 2020). Misinformation is the spread of inaccurate or misleading content; disinformation is the conscious intent to mislead, deceive or otherwise cause harm (Carson and Fallon 2021). Conspiracy theories can be considered a specific case of misinformation—they are lay beliefs about a secretive group of, often powerful, actors engaging in a malevolent plot against a society (Swami et al. 2014). These beliefs are often relevant in the political sphere given that targets of conspiracy theories are typically powerful authorities (cf. Nera et al. 2021), and because conspiracy beliefs are often associated with negative consequences such as political apathy and non-normative political actions (Douglas 2021a). In this article, we investigate the association between belief in general conspiracy theories and political ideology. We also considered the impact of these associations alongside political efficacy, political identity, and trust in politicians in explaining collective political actions such as intention to vote, and satisfaction with the New Zealand government during 2020.

The New Zealand context

The 2020 New Zealand General Election was held towards the end of the first tumultuous year of the global COVID-19 pandemic. By 17 October New Zealand had weathered two months (23rd March to 14th June) of stringent national lockdown and had eliminated COVID-19 in the community. A second outbreak in Auckland led to a two-week regional lockdown in August before elimination was once again achieved. The year saw the

popularity of the incumbent centre-left Labour party-led government climb, accompanied by a commensurate drop in fortunes of the main opposition National party which was dogged by poorly received messaging and two leadership changes within a period of two months. Labour won enough votes to govern alone – the first time this had happened since the introduction of the mixed member proportional voting system in 1996 (Knight 2021).

Yet amongst this historically high support for the government, pockets of extreme, often conspiracy theory-driven, activism, spurred on by anti-lockdown protests, had given rise to several minor parties and pressure groups—specifically the New Zealand Public Party (later part of Advance NZ) and the NZ Outdoors Party. Candidates in both parties advocated unfounded claims including that UN agendas aimed to institute a global slave state, and that 5G technology was spreading COVID-19. Other baseless claims were that fluoridation was being used for mind-control, as well as vaccine-related misinformation and conspiracies (Mitchell 2020). It appeared these minority parties were hand in glove with conspiracy theories.

Political ideology and conspiracy belief

The sprouting of minority political parties in New Zealand, often built on conspiracy theory narratives and associated with anti-lockdown protests, echoed the international experience of political divisions during the COVID-19 pandemic. The violent 6 January 2021 riots at the United States Capitol building were built on the unfounded idea that the Democratic victory in the 2020 US presidential election was fraudulent and thus illegitimate (Seitz 2021), with three times fewer Republicans (27%) than Democrats (93%) agreeing on the day that these events were a threat to democracy (Smith, Attwell, and Evers 2020). This is perhaps unsurprising, given partisanship and ideology have been found to be associated with conspiracy belief. For example, Uscinski and Parent (2014) found that increased belief in conspiracy theories was related to support for minority single-issue parties such as the

Libertarian Party as a means to explain their lack of success within a dominant two-party system. Other research has found that self-reported right-wing, or conservative, ideology is associated with belief in conspiracy theories in various countries (van der Linden et al. 2020; Mancosu, Vassallo, and Vezzoni 2017), including Australia and New Zealand (Marques et al. 2022). While there is a general trend of increased belief in conspiracy theories along a left-right continuum, more nuanced findings may be hidden by assumptions of a linear association between these variables.

Research has found that belief in conspiracy theories is strongest for those on the political right but is also pronounced at the extremes of political ideology. In samples from the United States, the Netherlands, and Sweden, conspiracy theorising appears to be strongest at both the far left and far right, and stronger at the extremes relative to centrists (van Prooijen, Krouwel, and Pollet 2015; Krouwel et al. 2017). Furthermore, it appears that this curvilinear 'U-shaped' relationship is found when purported conspirators are powerful groups (e.g., governments), as compared to less powerful groups (e.g., minorities) where conservatism is a better predictor of conspiracy belief (Nera et al. 2021). A recent study across 26 countries found evidence for both linear and quadratic associations between political ideology and a general tendency to engage in conspiracist ideation especially for those on the far right (Imhoff et al. 2022). This suggests that extreme political ideology may be a driver of belief in conspiracy theories. These findings, often in small samples of convenience, suggest a promising avenue for examining non-linear associations between political ideology and conspiracy belief in larger representative samples.

Democratic engagement and general conspiracy beliefs

Conspiracy theories play an important role in democratic politics (Moore 2016). Conspiracy theorising involves questioning the official narratives for events offered by authorities when the targets of conspiracy theories are powerful groups such as governments.

This creates a paradox, as these behaviours are also compatible with a general democratic principle of questioning and holding governments to account, consistent with the idea of a general conspiracist tendency (Imhoff and Bruder 2014). Some studies find a positive association between belief in conspiracy theories and support for democratic principles such as voicing opposition (e.g., Swami, Chamorro-Premuzic, and Furnham 2010; Stojanov and Douglas 2021), engaging in democratic actions such as joining a demonstration or protest (Imhoff and Bruder 2014), and voting in elections (Kim 2019). A longitudinal study by Jolley et al. (2022) found that conspiracy beliefs specific to the 'Brexit' referendum predicted both support for leaving the EU and voting to leave the EU, one week later. Other research has found that exposure to conspiracy theories may undermine democratic norms such as electoral confidence and willingness to accept official election results (Albertson and Guiler 2020), and decrease intentions to vote (Jolley and Douglas 2014; Butler, Koopman, and Zimbardo 1995). Recent research suggests possible reasons for these conflicting findings.

The association between general tendencies towards conspiracy theorising and democratic engagement may depend on the type of engagement and political system involved. In two experimental studies, Imhoff, Dieterle, and Lamberty (2021), reported that engaging in an increased conspiracist ideation attenuated intentions to engage in normative, legal forms of political engagement (e.g., vote, legal demonstration), but increased intentions to engage in non-normative, illegal forms of political engagement (e.g., refuse to pay taxes, commit a violent attack on a person in power; see also Cichocka et al. 2018). Similarly, in a two-wave panel study across five nations, Ardèvol-Abreu et al. (2020) reported that general conspiracy theory beliefs decreased normative political enagement indirectly through reduced political efficacy. The importance of politics to one's self-identity has also been found to be associated with increased normative engagement, especially for independents (Klar 2014b). People higher on conspiracy mentality also prefer direct democracies, where greater power is

given to people, as compared with traditional democratic systems (Pantazi, Papaioannou, and van Prooijen 2021). While the associations between conspiracy theory beliefs and democratic engagement are shaped by the system (i.e., direct or traditional democracies) and also shape the type of engagement (i.e., normative or non-normative), there are inter-individual differences that underlie both a tendency to believe in conspiracy theories and government support.

A democracy requires trust in the institutions that allow its citizens to engage in collective self-government (Warren 2017). Political distrust has a detrimental impact on the function and stability of democratic political systems (Uslaner 2018). Studies of European countries have found that that increased political distrust was associated with increased likelihood of accepting illegal behaviour such as tax fraud (Marien and Hooghe 2011) and decreased voter turnout (Grönlund and Setälä 2007). In addition to findings where exposure to general conspiracy theories leads to decreased trust in government institutions (Einstein and Glick 2015), increased belief in conspiracy theories is also inversely associated with other factors central to a functioning democracy including political efficacy (Jolley and Douglas 2014). Thus, it appears that conspiracy beliefs, political distrust and low efficacy are associated with negative actions that may serve to undermine collective political actions central to a stable and functional democracy. Inconsistencies in the distribution of conspiracy theorising across the political spectrum may indicate that ideology is a risk factor for the degradation of democratic norms.

The present research

In the current study, we examine the relationship between a tendency to believe in conspiracy theories and political ideology in a large sample from the New Zealand Attitudes and Values Study (NZAVS). The size of our sample ($N = 42{,}684$) permits a far more precise examination of the form of this relationship (whether linear or otherwise) than has previously

been possible. In addition, we examine impact of general tendencies towards conspiracy theorising alongside political factors (trust in politicians, efficacy, identity centrality, ideology) on political indicators (intention to vote, satisfaction with government). Our predictions controlled for general demographic variables listed in Table 1 as plausible confounding variables, as they may affect both conspiracy theorising and political indicators. This allowed us to make tentative causal inferences of a general tendency to believe in conspiracy theories on government satisfaction and intention to vote in the absence of an experiment (Grosz, Rohrer, and Thoemmes 2020).

Method

Participants and Procedure

The NZAVS is a longitudinal panel study of personality, social attitudes, and health outcomes that primarily uses a national probability sample of New Zealand adults. The University of Auckland Human Participants Ethics Committee approved all procedures, and participants gave informed consent. The present study uses data collected at Time 12 (2020, N = 42,684). We focus on participants between ages 18 and 99 (M_{age} = 52.05, SD = 13.87; 64.08% women) who provided complete responses to our variables of interest. Key demographics including an index of decile-ranked deprivation (1 = *least deprived*, 10 = *most deprived*; Atkinson, Salmond, and Crampton 2013), are provided in Table 1. Additional details about the sample, procedure, and retention of participants, are available on the NZAVS website (Sibley 2021).

Materials

Agreement with *General Conspiracy Theories* was assessed on a 7-point scale (1 = *Strongly disagree*, 7 = *Strongly agree*) to a single item adapted from Lantian et al. (2016): 'I think that the official version of major world events given by authorities often hides the truth'. The original item contained a preamble with several examples of political and social

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events that are debated (e.g., 9/11, death Princess Diana, assassination of JFK) as well as an explanation that official versions of these events could have been given to hide the truth to the public by a powerful covert alliance of individuals. Across three studies, Lantian et al. found that this item displayed evidence of acceptable convergent validity (e.g., correlations with other measures of belief in conspiracy theories), predictive validity, discriminant validity, and test-retest reliability. Studies have found agreement with the original single item to be associated with higher levels of political conservatism (Jolley et al. 2022; Stojanov and Douglas 2021) and lower levels of political trust (Jasinskaja-Lahti and Jetten 2019). In a study that sampled 8 countries from March to July 2020, and adapted the item to ask about COVID-19, agreement was negatively associated with education level and SES, and positively with political conservatism (Hornsey et al. 2021).

Political ideology was assessed using two indicators of political orientation and support, adapted from Jost (2006). One item asked participants to 'rate how politically liberal versus conservative you see yourself as being' (1 = *Extremely liberal*; 7 = *Extremely conservative*), the other to 'rate how politically left-wing versus right-wing you see yourself as being' (1 = *Extremely left-wing*; 7 = *Extremely right-wing*). These two self-placement indicators were strongly correlated (Spearman's rho, $\rho = .69$) and averaged together as political ideology.

Political efficacy was conceptualised as the average of three items from the Socio-Political Control scale (Paulhus and Van Selst 1990), each answered on a 7-point scale (1 = *Strongly disagree*, 7 = *Strongly agree*): 'By taking an active part in political and social affairs we, the people, can control world events', 'The average citizen can have an influence on government decisions', and 'With enough effort we can wipe out political corruption'. In this study responses to the scale displayed only moderate internal consistency reliability ($\alpha = .61$), likely due to the small number of items in the scale.

Political identity centrality was assessed as level of agreement on a 7-point scale (1 = *Not important*, 7 = *Very important*) to a single item (Satherley, Sibley, and Osborne 2020): 'How important are your political beliefs to how you see yourself?'.

Trust in politicians was assessed as level of agreement on a 7-point Likert scale (1 = *Strongly disagree*, 7 = *Strongly agree*) to a single item: 'Politicians in New Zealand can generally be trusted' used in previous research (Sibley et al. 2020).

Satisfaction with performance of the current government was assessed as level of satisfaction on an 11-point scale (0 = *Completely dissatisfied*, 10 = *Completely satisfied*) to a single item (Tiliouine, Cummins, and Davern 2006) asking about 'The performance of the current New Zealand government'.

Voting intention was assessed as a no/yes response to the question, 'Do you plan to vote in the next New Zealand election in 2020?'.

Statistical analysis

All data were analysed using R version 4.1.0 (R Core Team 2021). The stats package was used to generate all descriptive statistics and estimate a multiple regression for government satisfaction and binomial logistic regression for voting intention. The ggplot2 package version 3.3.5 (Wickham 2016), and sjPlot package version 2.8.10 (Lüdecke 2021) were used to generate figures. Relative importance analyses (Tonidandel and LeBreton 2011) were conducted to examine the unique and relative (rescaled as a percentage) predictors of government satisfaction. Odds ratios are reported for voting intention. All predictors were centered and scaled. We applied a stringent alpha level ($p < .01$), and models report unstandardised effects with frequentist 99% Confidence Intervals. We selected this stringent alpha level because it reduces the risk of Type I error (false positive), while the very large sample size means that the risk of Type II error (false negative) is very low for any nontrivial effect size even with a lowered alpha level. A sensitivity analysis delivered 99% power to

detect a very small effect size $f^2 > .000273$ in the sample specifying a multiple regression with 19 predictors, and we interpret our results using effect size conventions (Cohen 1992). Syntax for all analyses is available on the Open Science Framework https://osf.io/t89dr/?view_only=5a235f560ae54a93a34f3bfe86e185df .

Results

As seen in Table 1, 97% of the sample indicated a future intention to vote and mean level of satisfaction with the government was slightly above the mid-point of the 11-point scale. Political identity centrality, political efficacy, and general conspiracy theories were also above the mid-point, whereas trust in politicians was below. Overall, the sample was slightly more liberal/left-wing than conservative/right-wing. While there were only small associations with intention to vote, increased government satisfaction was associated with increased political efficacy and trust in politicians, and liberal/left-wing political ideology. Finally, increased belief in general conspiracy theories had small associations with decreased intention to vote, decreased satisfaction in government, decreased political efficacy, and moderate levels of distrust in politicians.

Table 1. Means, Standard Deviations, Ranges, and Correlations of all Variables

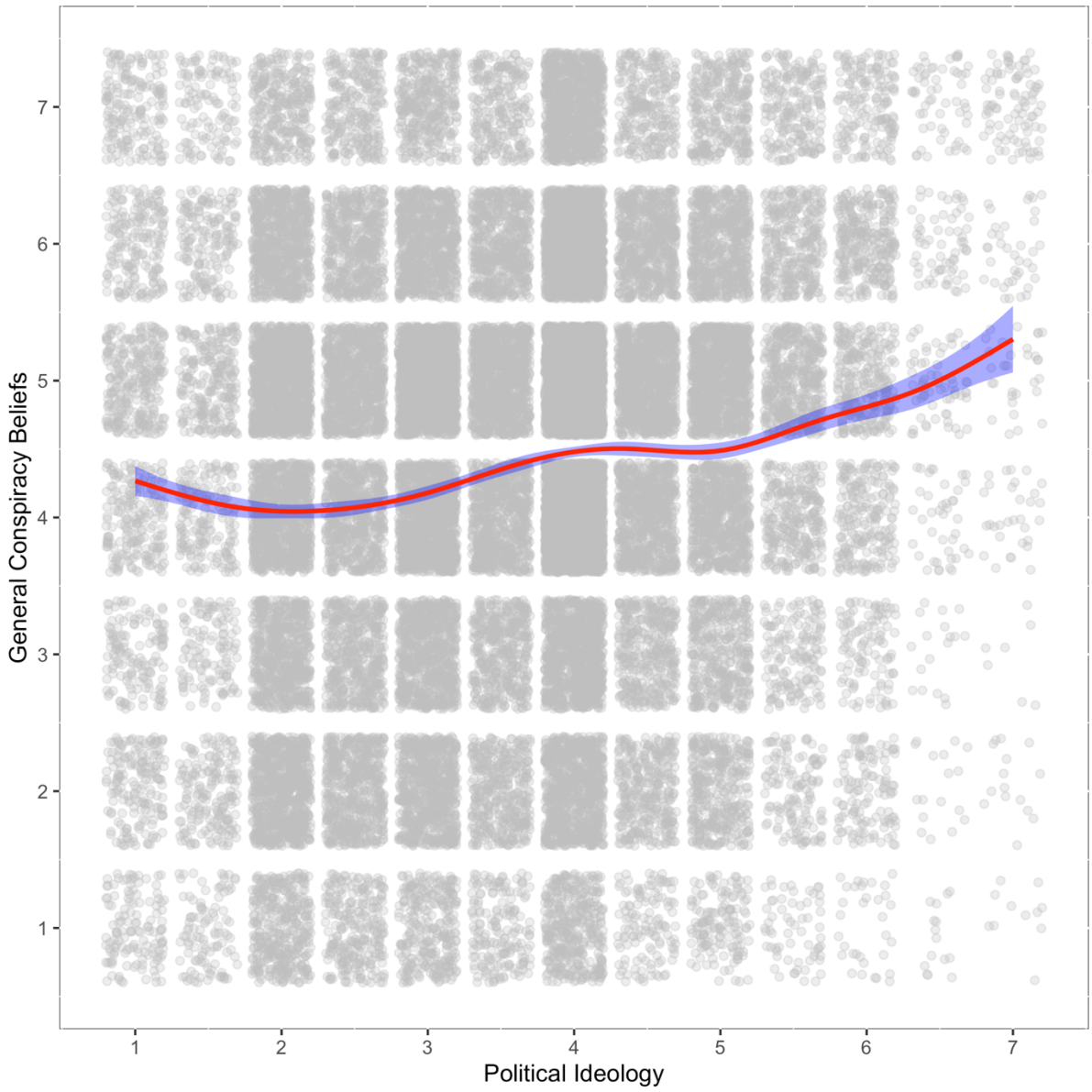
Variable	*N*	*M*	*SD*	Range	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1. Intention to Vote	41,720	.97	.17	0–1																				
2. Satisfaction with Government	42,514	5.75	2.83	0–10	.06																			
3. Political Identity Centrality	41,040	4.26	1.78	1–7	.13	.09																		
4. Political Efficacy	42,663	4.45	1.24	1–7	.11	.31	.25																	
5. Trust in Politicians	41,831	3.76	1.45	1–7	.08	.37	.09	.36																
6. Political Ideology	40,872	3.57	1.25	1–7	-.03	-.48	-.19	-.28	-.13															
7. General Conspiracy Beliefs	41,487	4.36	1.63	1–7	-.05	-.16	-.01	-.15	-.27	.12														
8. Gender	42,481	.36	.48	0–1	-.01	-.13	.03	-.05	-.02	.10	.00													
9. Age	42,684	52.05	13.87	18–99	.06	-.02	.09	-.01	.07	.17	.09	.08												
10. Education	41,443	5.69	2.66	0–10	.06	.14	.11	.16	.12	-.25	-.17	-.06	-.13											
11. NZ SES	42,306	4.75	2.72	1–10	-.05	.05	.01	-.01	-.06	-.03	.08	-.02	-.03	-.14										
12. Ethnicity Māori	42,684	.10	.30	0–1	-.02	.03	.02	.01	-.05	-.01	.07	-.02	-.05	-.08	.14									
13. Ethnicity Pacific	42,684	.03	.16	0–1	-.01	.02	.02	.03	-.02	.01	.04	-.01	-.05	-.03	.08	.10								
14. Ethnicity Asian	42,684	.04	.21	0–1	-.04	-.01	.01	.05	.01	.02	.02	-.00	-.11	.09	.02	-.03	.03							
15. Religion	41,721	.34	.47	0–1	-.01	-.09	.02	-.02	-.00	.25	.05	-.04	.13	.00	.03	.01	.06	.06						
16. Parent	42,615	.73	.44	0–1	.05	-.04	-.01	-.04	.02	.16	.04	.01	.43	-.08	-.06	.01	-.02	-.07	.10					
17. Partner	41,652	.75	.43	0–1	.05	-.07	-.01	-.02	.02	.07	-.05	.08	.04	.06	-.18	-.07	-.03	-.02	.00	.26				
18. Employed	42,134	.76	.43	0–1	.02	-.03	-.04	.00	-.00	-.03	-.07	.04	-.27	.15	-.08	-.01	-.00	.01	-.04	-.05	.08			
19. Urban	42,311	.81	.39	0–1	.00	.09	.04	.06	.05	-.08	-.06	-.00	-.07	.08	.08	.00	.03	.07	.01	-.08	-.09	.00		
20. Born in NZ	42,556	.78	.41	0–1	.02	-.06	-.05	-.06	-.04	.06	.01	-.03	-.03	-.16	.05	.15	-.01	-.25	-.02	-.00	-.07	.01	-.02	
21. NZ Citizen	42,556	.94	.24	0–1	.03	-.04	-.01	-.03	-.02	.04	.00	-.01	.01	-.07	.01	.08	.02	-.11	.00	.00	-.05	.00	-.00	.48

Note. $p<.01$ where $|r| > .01$. Intention to Vote is coded as 1 = Yes. Political Ideology. 1 = Extremely liberal/left-wing to 7 = Extremely conservative/right-wing. Gender is coded as 0 = Women, 1 = Men. Education is coded as (11-unit ordinal rank). Socio Economic Status (SES) is coded as decile ranked level of deprivation (1 = least deprived, 10 = most deprived). Ethnicity, Religion, Parent, Partner, Employed, Urban, Born in NZ, NZ Citizen is coded as 1 = indicated.

Political Ideology and General Conspiracy Beliefs

The zero-order correlation between political ideology and general conspiracy beliefs was small and positive, suggesting that a tendency towards conspiracy theorising increased as political ideology increased from liberal/left-wing to conservative/right-wing. To further investigate this relationship, a plot using Generalised Additive Model of smoothed conditional means was generated and is presented in Figure 1.

Figure 1. Generalised Additive Model of Political Ideology with General Conspiracy Beliefs.



Note. The fitted line is red with a 99% confidence interval in blue. Political Ideology 1 = Extremely liberal/left-wing to 7 = Extremely conservative/right-wing.

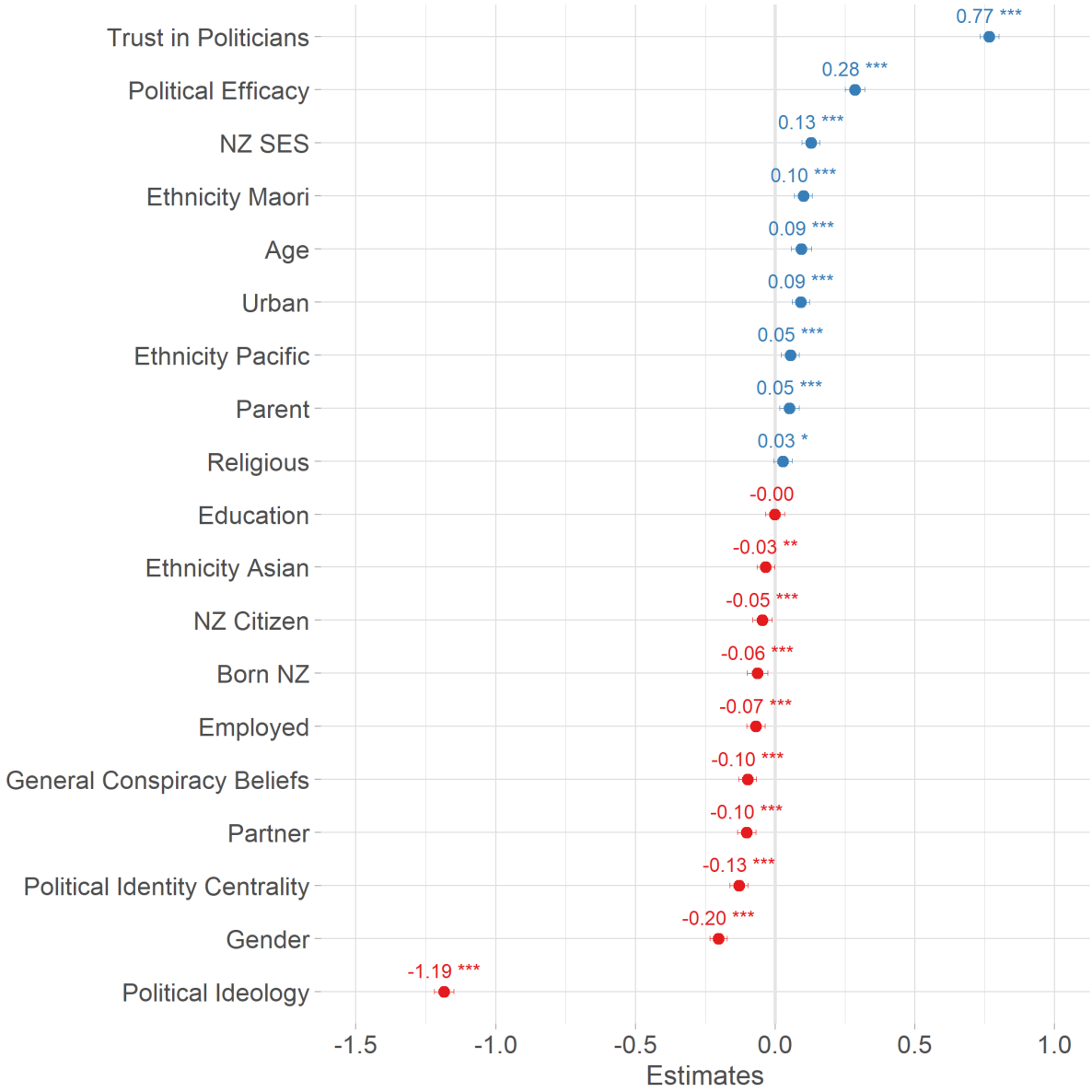
The plot displays a non-linear association that is positive across the majority of the political ideology range with increased belief in general conspiracy theories at either extreme and a less pronounced bump at the centre. A series of models with increasing polynomial functions were fitted to the data, and a Lagrange Multiplier test was used to assess the best fitting model (see Supplementary Materials also for fitted estimated means curve). The best fitting polynomial model had 5 terms:

$$General\ Conspiracy\ beliefs = -2.435 * Ideology + 1.124 * Ideology^2 - 0.201 * Ideology^3 + 0.013 * Ideology^4 + 5.802$$

Satisfaction with Government and Intention to Vote

Satisfaction with the government was regressed on the predictors using a multiple regression. Descriptive statistics and zero-order correlations for all variables are reported in Table 1. Almost all predictors were significantly associated with satisfaction with the current government and the model explained a total of 35.3% of the variance in satisfaction. Approximately half of this variance was uniquely accounted for by self-reported left/liberal political identification, and one quarter by increased trust in politicians (Rescaled Relative Weight = 25.4%; as reported in Supplementary Tables). Increased belief in political efficacy (12.1%), decreased conspiracy beliefs (2.8%), and political centrality (0.6%) were the next largest unique predictors. The demographic predictors uniquely explained approximately 10.5% of the remaining variance in government satisfaction**.** All estimates and confidence intervals are presented in Figure 2.

Figure 2. Multiple Regression predicting Satisfaction in Government.

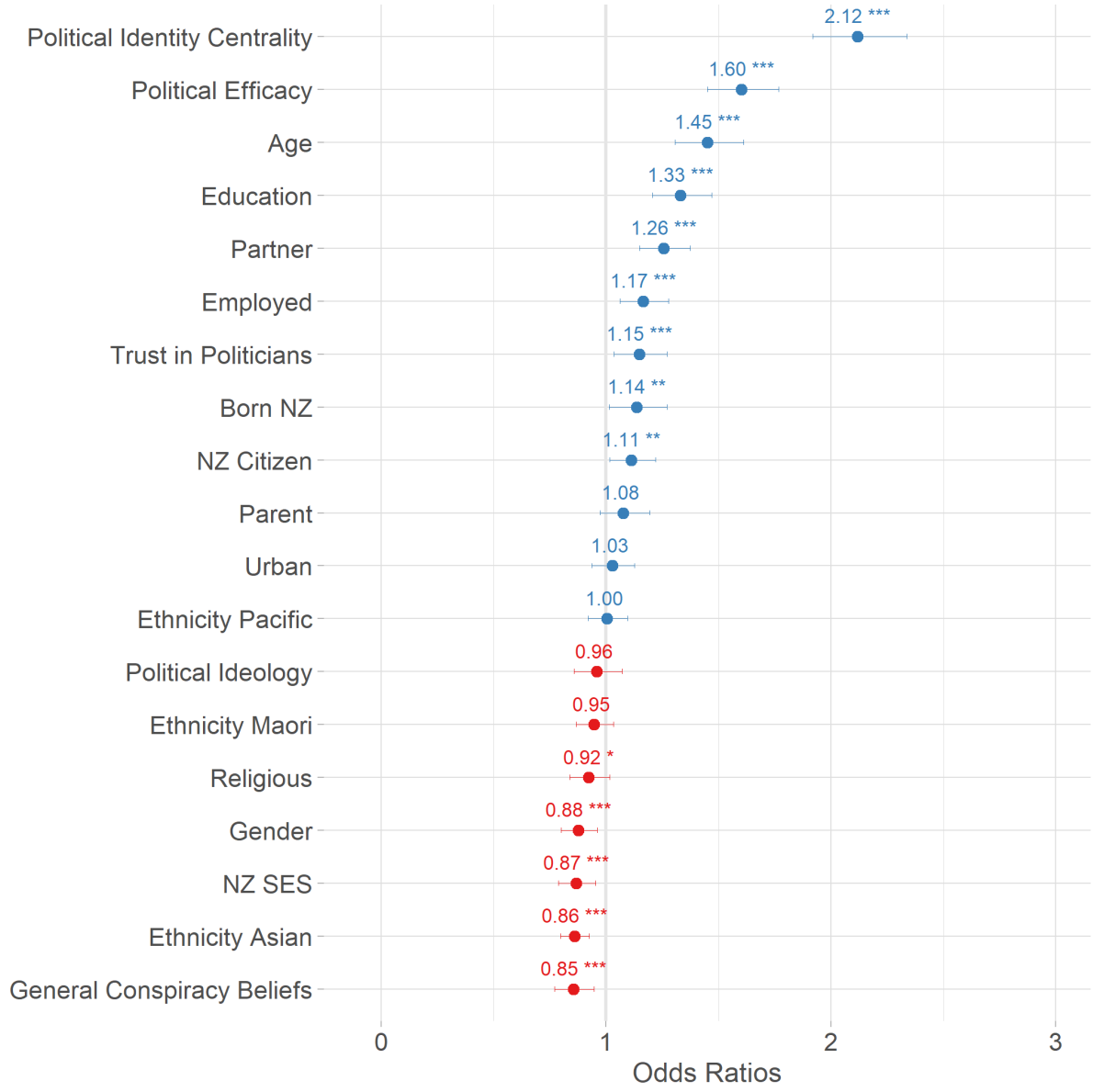


Note. Positive (blue) and negative (red) effects are conditional on all other predictors. All predictors have been scaled and centered. Political Ideology 1 = Extremely liberal/left-wing to 7 = Extremely conservative/right-wing. Gender is coded as 0 = Women, 1 = Men. Education is coded as (11-unit ordinal rank). Socio Economic Status (SES) is coded as decile ranked level of deprivation (1 = least deprived, 10 = most deprived). Ethnicity, Religion, Parent, Partner, Employed, Urban, Born in NZ, NZ Citizen is coded as 1 = indicated.
***$p < .001$, **$p < .01$, *$p < .05$

Most all predictors, but not all demographic variables, were significantly associated with intention to vote. Having higher levels of political identity centrality (odds ratio 2.12 [99% CI 1.92–2.34]), and political efficacy (1.60 [1.45–1.77]), were associated with future intention to vote. Higher trust in politicians (1.15[1.04–1.27]), and lower levels of conspiracy beliefs (0.85[0.77–0.95]) were significantly associated with intention to vote. Several demographic predictors were associated with increased intention to vote, such as being older (1.45[1.31–

1.61], having an increased education level (1.33[1.21–1.47]), being a woman (0.88 [0.80–0.96]), and higher SES (0.87[0.79–0.95]). All associations are presented in Figure 3. Due to the large sample size it was possible to estimate coefficients for this logistic regression model with adequate precision (i.e., narrow confidence intervals) despite limited variability in the outcome variable (i.e., 97% intending to vote).

Figure 3. Binomial Logistic Regression predicting Intention to Vote



Note. Positive (blue) and negative (red) odds ratios are conditional on all other predictors. All predictors have been scaled and centered. Intention to Vote is coded as 1 = Yes. Political Ideology 1 = Extremely liberal/left-wing to 7 = Extremely conservative/right-wing. Gender is coded as 0 = Women, 1 = Men. Education is coded as (11-unit ordinal rank). Socio Economic Status (SES) is coded as decile ranked level of deprivation (1 = least deprived, 10 = most deprived). Ethnicity, Religion, Parent, Partner, Employed, Urban, Born in NZ, NZ Citizen is coded as 1 = indicated.
***$p < .001$, **$p < .01$, *$p < .05$

Discussion

There is growing evidence that conspiracy theories can often pose a danger to society (Douglas 2021a), including a threat to stable and transparent democracies. An aim of this study was to examine the impact of belief in conspiracy theories alongside additional political factors on democratic norms and engagement. A further aim was to investigate the relationship between political ideology and belief in conspiracy theories. Our findings in a large representative sample of New Zealand adults suggest that: 1) the importance of political ideology, trust, and efficacy in citizen's satisfaction with the government; 2) political identity centrality and efficacy are key to voting intentions; and 3) extreme—and even centrist—political ideology is associated with increased belief in conspiracy theories.

Political ideological extremity was associated with increased belief in conspiracy theories, an effect that would have been overlooked and interpreted as a small positive association with the use of linear regression. This finding is consistent with research considering the curvilinear associations between ideology and belief in conspiracy theories, especially for those on the right (van Prooijen, Krouwel, and Pollet 2015; Krouwel et al. 2017; Nera et al. 2021; Imhoff et al. 2022). Furthermore, our findings indicate a small increase in conspiracy theory belief for those who identified as ideologically neutral or moderate. Those who self-identify as moderate on self-placement measures may not necessarily be centrists, but independents who view themselves as system challengers or individuals with extreme antithetical positions not captured along a left/right or liberal/conservative continuum (Klar 2014a). For example, it is not unusual for individuals to adopt right-wing economic attitudes along with left-wing social attitudes (i.e., libertarians), and vice versa (Feldman and Johnston 2014). Taken together these findings suggest that ideological extremity may be a risk factor for increased belief in conspiracy theories, and that

a more nuanced understanding across social and economic ideology may help clarify whether a 'moderate' position may also be fertile ground for conspiracy theorising.

Our findings also suggest that in addition to belief in conspiracy theories, other political factors are more predictive of satisfaction with government and voting intention. Unsurprisingly, individuals who self-identified as left/liberal reported greater support for a centre-left government as compared to those who self-identified as right/conservative. Notable though were the strong unique contributions of trust in politicians and political efficacy in predicting satisfaction with the government, consistent with findings that positive evaluations of a democratic government are associated with trust in its elected officials (Grönlund and Setälä 2007). Previous research has also found that exposure to conspiracy theories can lead to political distrust (Einstein and Glick 2015) and political disengagement through lower beliefs that individuals can have an effect on politics (Jolley and Douglas 2014; Ardèvol-Abreu, Zúñiga, and Gámez 2020). Conspiracy belief may be driving distrust in politicians and undermining political efficacy (i.e., increasing political powerlessness). In contrast, the main drivers of voting intention in this highly motivated sample (97% indicated they would vote) were a higher level of importance placed on political beliefs as an important aspect of an individual's self-concept (Klar 2014b), as well as higher political efficacy. While belief in conspiracy theories provided a small unique contribution to voting intention consistent with previous research on normative engagement (Imhoff, Dieterle, and Lamberty 2021; Ardèvol-Abreu, Zúñiga, and Gámez 2020; Jolley et al. 2022), even a small impact on trust and engagement can be problematic for democratic institutions.

Strengths of this research include the ability to examine the associations between belief in conspiracy theories and political factors in a large representative sample of New Zealand adults. Also while cross-sectional, controlling for demographic factors—which may plausibly affect both belief in conspiracy theories and indicators of collective political

actions—enhances our ability to make tentative causal inferences from these observational data (Grosz, Rohrer, and Thoemmes 2020).

There are some limitations to our research. Due to the omnibus nature of the NZAVS, we employed single item measures which may be less valid than established scales. The generalisability of our findings may also be circumscribed by the tumultuous year experienced by this sample of New Zealanders during a worldwide pandemic—the conditions likely to fuel belief in conspiracy theories (Douglas 2021b). While voters were over-represented in our sample, perhaps due to a nonresponse bias that occurs when people who are less likely to respond to surveys are also less likely to vote (Lahtinen et al. 2019), a large sample allowed high level of precision to estimate associations with voting intention. The current study offered a unique opportunity to examine the impact of belief in conspiracy theories on democratic engagement and future research may wish to replicate our findings in other countries and contexts.

In sum, our research suggests that increased belief in conspiracy theories is associated with a decreased trust in elected officials of government, lowered political efficacy, and is heightened at ideological extremes. The impact of these beliefs on collective political actions such as voting, and satisfaction with government, is noteworthy. As the adoption of an official explanation for events requires trust in an epistemic authority such as the government, understanding the impact that belief in conspiracy theories has on democratic citizenship is worthy of future study.

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