

Title

The impact of the need to feel unique on taking COVID-19 seriously:
an alternative explanation for the impact of partisan elite persuasion

Highlights

- We challenge conventional wisdom that the COVID partisan divide was caused by partisan elite persuasion and have identified the need for uniqueness as a possible confounder.
- Three proxies for the need for uniqueness and the related concept, the illusion of unique invulnerability, are statistically significant; interactions suggest that conservative Republicans low on need for uniqueness take COVID much more seriously, whereas Democrats who are high on the need for uniqueness take COVID much less seriously.
- Structural equations models indicate that a single proxy of the need for uniqueness, associated with denying racial unfairness, reduces the effect of partisanship and ideology to be indistinguishable from zero, whereas other forms of racial resentment that are not likely to be related to a need for uniqueness have no impact.
- Need for uniqueness is likely a fruitful avenue for future research in understanding the tendency to deny a multitude of health risks, and for explaining a diverse set of political attitudes.

Keywords: U.S. public opinion, need for uniqueness, unique invulnerability, COVID-19 attitudes, racial resentment

Abstract

Rationale: In this paper, we set out to challenge the conventional wisdom that elites caused the partisan divide in COVID attitudes and behaviors. Previous scholarship in political science casts doubt that elite persuasion could be responsible for this magnitude of an effect. We set out to identify a potential alternative explanation that could reasonably be argued to cause both political attitudes and the perception of health risks.

Objective: Our search revealed a potential culprit: a need to believe in personal uniqueness, a trait thought to be associated with riskiness, eschewing conformity, a tendency to look down on those with “lower status,” and an internal locus of control.

Methods: We use ordinary multiple regression, interactions, and structural equations modeling with missing imputations.

Results: Our structural equations analysis confirms that these proxies of the need to feel unique drive the impact of partisan affiliation to statistical insignificance, implying that future scholars should investigate the need to feel unique, for its possible impact on health behaviors (as well as political attitudes).

Conclusions: Though we are careful not to draw causal conclusions, we believe our analysis uncovers a possible alternative explanation for the COVID-19 partisan divide that is not a function of contemporary elite persuasion, which we believe holds a key for understanding how medical professionals can persuade people who may tend to discount a whole host of health risks.

Introduction

The recent pattern of Americans' diminishing trust in science (Gauchat, 2012; Lewandowsky and Oberauer, 2016) and institutions (Dalton 2005; Miller 1974), along with the partisan divide, has put a wrench in the ability of medical professionals to be effective in convincing members of the public to take action to prevent the spread of COVID. The partisan divide has had serious consequences, potentially causing unnecessary deaths in Republican counties (Chen and Karim, 2022; Sehgal et al., 2022) and its politicization likely caused the harassment of many health professionals (Mello et al., 2020). As a result, many researchers have focused on confirming this partisan divide (Bisbee and Lee, 2022; Green et al., 2020; Pink et al., 2021), with some turning their attention to understanding the nature of elite persuasion (e.g., Flores et al., 2022; Hamilton and Safford, 2021; Juen et al., 2023; Sylvester et al., 2023).

We are skeptical that elite rhetoric was the primary cause of Republican partisan elites' tendency to dismiss their personal risk, despite so many having done that so loudly. For one, much of previous scholarship in political science fails to find evidence of elite persuasion. In their review essay, entitled, "The Limits of Elite Persuasion," Feldman, Huddy, and Marcus (2012) cast doubt on the effectiveness of elites to persuade ordinary people. Even if elites had some impact; they likely did: see (Gonzalez et al., 2021; Simonov et al., 2022), there is also evidence for a backlash effect, as Republican elites may have caused Democrats to take COVID more seriously (Flores et al., 2022; Grossman et al., 2020). But more importantly, we set out to identify whether a psychological attribute made the message, "Don't worry; COVID is not serious" so persuasive.

We also find the connection between racial attitudes and COVID puzzling: why should a person who disparages people of color also tend to dismiss risks to their own health? Indeed, Miller et al. (2023) reveal that the impact of anti-Black attitudes surpassed the impact of partisan affiliation in both Brazil and the U.S., which is not consistent with an elite persuasion phenomenon. We suspect a neglected role of a psychological attribute may hold clues for why

COVID attitudes are more strongly related to indicators of social dominance than to partisan preferences.

Motivated by these puzzles, we consulted the wider literature to identify a possible confounder, an attribute that could arguably cause all three types of attitudes: general political ideology or partisan affiliation, perceptions of personal risk, and attitudes of racial supremacy. After scouring a set of seemingly unrelated literatures, we identified a potential culprit: *the need to feel unique*, (Snyder and Fromkin, 1977), an attribute commonly associated with the *illusion of unique invincibility* (Wickman and Koniak-Griffin, 2013). Scholars working in distinct corners of social science (work on Air Force pilots, risky drivers, and adolescent decision-making) have argued that this illusion may cause people to deny *personal* health vulnerabilities, risks, and other whims of fate. Moreover, though these literatures seem to exist in relative isolation from one another, work on terror management theory (TMT) reveals findings that we argue are consistent with a theory that the need for uniqueness will be particularly prominent when mortality is salient (such as in a global pandemic).

The need for uniqueness may give rise to the beliefs about *personal* superiority, which could lead people to distance themselves from those they believe occupy the lower echelons of society (i.e., social dominance orientation; see Lantian et al. 2017). We believe (and our results confirm) that is not that they resent increased power for women or people of color; it is that some have a need to deny societal unfairness, which would undermine their need to believe that they are personally, uniquely, responsible for their success. We argue that implications that societal racial unfairness exists are rejected by those who have a need to believe that they are responsible for whatever they are proud of, pride that may be made more salient when their mortality is salient. Indeed, recent research indicates that the belief that bad things only happen to bad people (i.e., “belief in a just world”) decrease individual’s tendency to take COVID seriously (Wiese and Powdthavee, 2023), which may also lead to lower support for redistribution, (i.e., partisan or ideological preferences Wiese et al., 2023). In other words, those who need to feel unique may be

attracted to the Republican party, because presidential candidates like Romney tell them they are “makers,” not “takers,” and that his “job is not to worry about *those* people” (McCarthy, 2012).

Scholars working on COVID-19 attitudes have mostly ignored the role of the need for uniqueness (c.f., (Park et al., 2021; Ük and Bahcekapili, 2022), yet prior research foreshadowed its likely importance for COVID attitudes. One is an article entitled, “Too special to be duped,” (Imhoff and Lamberty, 2017) which implies that people with a high need for uniqueness resist conformity to the majority in action and belief, which makes them susceptible to conspiracy beliefs. Much of the research on the need for uniqueness has centered on attracting customers in marketing research. In a macabre example of such research in the context of COVID-19, one piece tells airlines that potential travelers with a need for uniqueness should be targeted because they will downplay the risks of catching COVID in a crowd (Park et al., 2021).

Our main goal in this paper is to test hypotheses that might highlight the need for uniqueness as an omitted confounder in previous analyses. We then test a variety of corroborative and competing hypotheses (see Platt, 1964), using a nationally representative sample (from the summer 2020 Cooperative Election Study). Unfortunately, our data has no direct measures of the need for uniqueness, but the literature we review provides hints about what would work as proxy measures. Because we use proxy measures – and because we analyze observational survey data – we are not able to draw causal conclusions.

But a firm causal inference is not our goal. Rather, our goal is to inspire future researchers to pursue alternative explanations for what causes individuals to dismiss serious medical threats (including the need for uniqueness). We believe that focusing on elite persuasion could be a dead end if scholars fail to seek out underlying attributes that makes messages of invincibility so persuasive. Moreover, it is essential that medical practitioners understand that advising people resistant to medical advice from the perspective that they are simpleminded followers of politicians could backfire, particularly for those who need to feel that they are incapable of being duped. Messages that honor people’s uniqueness would give rise to more fruitful communications. In other words, the findings we present here are not important because

they are evidence for causality; rather, *if* our theory can be confirmed by future research, then it leads to the opposite conclusion about how the medical community should communicate to people who may exhibit a general tendency to deny the gravity of serious health risks.

Indeed, we hope to persuade readers that our use of proxy measures turns out to be a great strength of this manuscript. We conduct multiple conservative tests of our hypotheses, with evidence that the need to believe that society is fair is what is connected to COVID attitudes, driving the correlation between partisan preference – and other forms of social dominance – to zero. In turn, our findings revealed as much about what underlies partisan preferences and racial resentment as they do about what brought so many not to take COVID seriously. It is our hope that these findings inspire future research on the need to believe that one’s life accomplishments were achieved *fairly* by what they perceive as their personal unique contribution to what they are proud of in their lives, something that may have coincided with mortality salience. It may be that decades of elite messaging by partisan elites unwittingly created a cleavage borne by personality between those who need to feel unique – and those who view that their humanity is intertwined with those who are more vulnerable in our society.

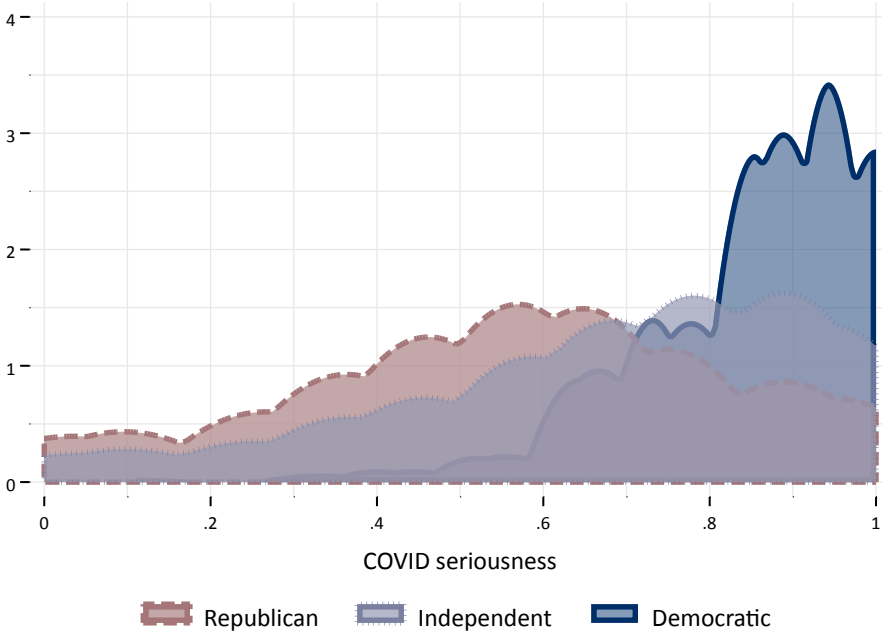
Measuring taking COVID-19 seriously

Our data are from the 2020 Cooperative Congressional Election Study (CCES). Fieldwork for the 2020 CCES was conducted by YouGov and the sample size for [REDACTED] module is 1000 (see cces.gov.harvard.edu). The CCES uses a matching method, first drawing a random sample from the target population and then selecting a matching member from a pool of opt-in respondents for each person in the target sample. This technique accomplishes a nationally representative sample, but does not yield exact matches in terms of demographic traits (Herrick and Pryor, 2020).

Our measurement of COVID seriousness follows Karoly’s (1993) and Gochman’s (1998) examination of health behavior as a function of attitudes and actions. Table 1 reports the exact question wording and descriptive statistics for this variable. Figure 1 presents a histogram of this

index, overlaid with a kernel density specific to partisan identification. Notably, though many scholars have represented Republicans as overwhelmingly less serious about COVID, there is a substantial degree of variation. Moreover, though most Democrats hug the high end of the scale, there is notable variation toward the midpoint of the scale.

Figure 1. Kernel density of COVID-19 seriousness, by party affiliation



Literature review

The refusal to follow medical advice during a pandemic is not new and accounts of such defiance date back to the Black Plague (Newman, 2012). However, the twentieth century’s success against smallpox gave epidemiologists hope that a new era of trust in medical science had begun. This optimism turned out to be misguided. Alexander D. Langmuir, one of the twentieth century’s greatest epidemiologists and first Chief Epidemiologist at the CDC (1949-1970), wrote an article at the end of his career, giving the reasons for his mistaken optimism that measles would be eradicated in the same way that smallpox was:

Intrinsic in my personal thinking was the mistaken belief that once measles was eliminated from a community its reintroduction and beginning spread would lead to a spontaneous community response to immunize all susceptibles in the immediate vicinity and thus promptly snuff out the disease... Instead, there was to me an amazing apathy on the part of both citizens and health authorities (Langmuir 1980: 38).

What had dismayed Fauci's predecessor was that the effectiveness of medical science to eradicate disease ultimately depends on advances in social science. Note that resistance to the seriousness of measles preceded the existence of presidents who loudly dismiss health risks. We then turn to the literature on the need for uniqueness, beliefs and reactions to injustice, and mortality salience.

Identifying proxies for the need for uniqueness: what happens when people are reminded of their mortality

We believe the key to dismissing the seriousness of COVID lies in whether vulnerability to mortality is threatening to one's sense of self. For this, we begin with the research on "mortality salience," also called "terror management theory" (TMT). Mortality salience tends to people's attention to the distinctiveness of their self-concept, which highlights its possible connection to a preexisting need for uniqueness. Though scholars find that people with a need for uniqueness tend to seek out danger (Cantarella and Desrichard, 2020), the application of this concept relative to health-specific behaviors is newer in scope.

When people are reminded of their mortality in experimental settings, it leads to perplexing results that confound researchers. First, people may react by denying their mortality (Greenberg et al., 2000) and by *increasing* behaviors that jeopardize their risk (Hansen et al., 2010; Jessop and Wade, 2008). Second, mortality salience induces people to overstate an internal locus of control, which can work to bolster their self-esteem (Mikulincer and Florian, 2002).

Third, societally induced mortality salience (e.g., 9-11; the COVID pandemic) can cause people to cling more tightly to personal worldviews (Solomon et al., 2004). Notably, this effect is often found to be asymmetrically effective in a conservative direction (Harvell and Nisbett, 2016), and even induces people to support for racist groups (Greenberg et al., 2001). People may also cling to a belief that they are uniquely moral and fair, especially in the context of values that are perceived as collectively shared, such as procedural fairness (Van den Bos, 2001). Mortality salience causes people to simultaneously embrace societal values and believe they are unique in doing so, yet continue to build a self-concept that they reject conformity (Simon et al., 1997).

People whose mortality has been made salient may be more likely to promote their personal self-concept, which would likely be magnified among those with a preexisting need for uniqueness in multiple ways. They will be more likely to believe they are uniquely invulnerable, uniquely exemplifying societal views of fairness and morality (yet resist a belief that they do out of a desire to conform), and uniquely in control of the outcomes in their life. Using this literature as a guide, we identified three proxies for the need for uniqueness, and relatedly, a need to believe that one is uniquely invulnerable, in our data: 1) internal locus of control, 2) denying societal (racial) unfairness, 3) a tendency to engage in risky behavior.

Internal locus of control: a proxy for the need for unique invulnerability

First, we argue that perceived internal locus of control, acting as a proxy for the need to feel unique, should lead people to discount COVID as a serious risk. Their sense of control can be soothing that they are not at the whims of others or the universe; indeed, cancer denial may be associated with beneficial outcomes provided that mortality denial can be self-soothing (Vos et al., 2011). This expectation, however, runs counter to an existing hypothesis: the prevailing view of the Health Belief Model (HBM) is that people who believe in their personal efficacy and agency will take actions to improve their health (Bandura, 1984; Becker et al., 1974; Fathian-Dastgerdi et al., 2021; Guidry et al., 2021; Rosenstock, 1974; Shmueli, 2021). In sum, the HBM

and perceived control literature would predict that both self-efficacy and an internal locus of control lead individuals to take COVID-19 precautions seriously.

Nonetheless, other literature hints that there are some contexts in which those with agency may overestimate their invincibility, leading them to underestimate their risk of negative outcomes. For instance, Langer (1975) found that internals are more likely to adhere to an illusion of control, rendering it less of an accurate evaluation of the self but more likely a need to feel powerful. Hoorens and Buunk (1993) find that “unique invulnerability,” a psychological construct created by Perloff (1983), is related to the “illusion of control.” Likewise, Măirean et al. (2017), Özkan and Lajunen (2005), and (Arthur and Doverspike 1992) suggest that the illusion of control may explain riskiness and overconfidence. attribute a similar finding to overconfidence among internals.

Accordingly, we believe that in a context of high mortality salience, self-efficacy and internal versus external sense of agency will have disparate effects. Self-efficacy is a perception that refers to one’s personal abilities to solve problems without reference to others, making it a weak proxy for a tendency to feel unique. Uniqueness, an attitude directly related to comparing the self to others, is more likely to be related to the *comparative* locus of power as residing in oneself. The appendix reports the measure for self-efficacy and the two indicators of perceived internal locus of control.

Denying the unfairness of race: a proxy for the need for uniqueness

The need for uniqueness is associated with downward social comparison (Hoorens 1994; Perloff and Fetzer 1986). For example, internals were more likely to exhibit negative attitudes toward overweight people (Elison and Çiftçi 2015; Yamaoka and Stapleton 2016). Perloff argues that a sense of psychological insecurity may be causing some people to assuage their fears by distancing themselves psychologically from people they perceive as weaker or occupying low status (1987). These negative attitudes came to be called “social dominance orientation” (Pratto et al., 1994). Lantian et al. (2017) indicate that social dominance is related to a need to believe

that one is unique, which turns out to be associated with numerous health risks (Hoorens and Buunk, 1993). Houston et al. (1997) find that social dominance predicts *all-cause mortality* in men.

But we argue that it is the need for uniqueness, not social dominance itself, that is contributing to these health outcomes. We rely here on the evidence that most people reject unfairness, *even unfairness that leads to their advantage*. Markovsky (1988) used skin reactivity tests to show that people react negatively to being told that they would receive unfair access to material benefits; people dislike unfair gain as much as they dislike unfair loss. We deduce that perhaps the need to feel that one's sense of accomplishment is not sullied by racial unfairness may be even more true for those with a need for uniqueness. If our theory is correct, then the items that capture people's denial that White people have an unfair advantage ought to predict ignoring COVID advice rather than the threat that women or people of color are seeking increased power or benefits. In other words, the need to feel unique – indicated by some social dominance items but not others – could be underlying their need to deny that they, *like everyone*, are vulnerable to COVID. Again, this may be why a need for uniqueness may predict people's unwillingness to support policies that ameliorate poverty, again, a clue that this is a confounding cause of both COVID denial, and policy or partisan preferences. The appendix presents measures for both forms of social dominance.

Risk orientation: a proxy for the need for unique invulnerability

Unsurprisingly, people with a higher tendency to believe in their own invincibility are less likely to take COVID seriously, a finding that has been confirmed by prior research (Clark et al. 2020). We use general risk orientation as a proxy for the belief that one is uniquely invulnerable. Though these are distinct concepts, those who hold an illusion that they are not vulnerable to risk likely have a higher propensity to take risks. Though most of the work on risk perception is specific to the medical issue being studied (Savadori and Lauriola, 2021), our

measure is trait risk orientation, rather than COVID-specific risk perceptions. Our measure for riskiness is indicated by a single item, that asks the respondent to put their answer to this question on a 0-10 scale: “Are you a person who is generally willing to take risks, or do you try to avoid taking risks?” About a quarter fall above the midpoint, suggesting that most exhibit a level of cautiousness.

Controls

We also control for government distrust and demographics. We expect that distrust in government will be negatively associated with COVID seriousness (Gauchat, 2012; Freimuth et al., 2017; Mooney, 2012; McCright et al., 2013). Plohl and Musil (2021) found that trust in science predicts compliance, and Bargain and Aminjonov (2020) discovered that devalued institutional trust yields resistance. Distrust in physicians is detrimental for compliance (Davis, 1968; Hulka et al., 1976; Winnick et al., 2005). We expect age and education will lead people to take COVID-19 seriously (Boulware et al. 2003; Freimuth et al. 2017; Hamilton et al. 2015; Lin et al. 2021), though these associations are unclear as some studies on COVID-19 report that those who are more educated (Nivette et al., 2021) have lower levels of compliance, while others find no significant associations (Berg and Lin, 2020; Clark et al., 2020b). For specific question wording and descriptive statistics of distrust, see Appendix Table A1.

Results

Part 1: Structural equation models

To summarize our literature review, we believe that need for uniqueness is a confounder that may be causing partisan and ideological preferences, some forms of social dominance (but not others), and COVID attitudes. If these proxies are indeed omitted confounders much of the previous scholarship, they should mitigate the impact of right leaning partisan and ideological beliefs. A more conservative test of this test would be a simple model: those that have only the proxies and our variable for partisanship and ideology. If our hypothesis is correct, then we

should be able to show that without any other control, the proxies for need for uniqueness mitigate the impact of partisan and ideological preferences.

For this, we turn to a set of structural equations analyses, as this allows for hypothesis tests in the context of high multicollinearity and measurement error (Iacobucci, 2009). We use Stata's SEM package with Full Information Maximum Likelihood (FIML), which has been shown to be the best estimation method for dealing with a variety of causes of missing data (El-Sheikh et al., 2017). This is standard for imputing missing data due to post-election survey non-response (Chouhy et al., 2023).

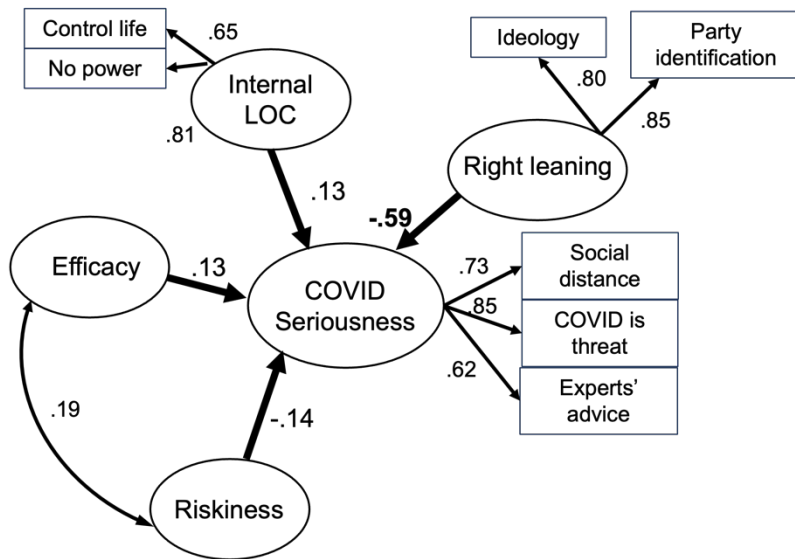
Figure 2 presents two models for the effect of the three indicators of need for uniqueness in the presence of right learning ideology and partisan affiliation, both with and without the variable associated most prominently with a need for uniqueness: the perception that racial problems are rare, that whites have no advantage, and that discrimination does not make it hard for Black people in American society. The results offer quite stark support for our hypothesis. In model 1, which excludes the presence of racial unfairness perceptions, the index for partisanship and ideology reduces COVID seriousness by about .6, which is more than two standard deviations of the variable for COVID seriousness. Model 2 reveals that including perceptions of racial unfairness reduces the impact of right leaning index of party identification and conservatism to -.16, which is no longer significant (standard error is .13).

Figure 3 illustrates two corroborative tests of this disparate effect. Model 3 presents a multiple indicator, multiple causes (MIMIC) model, which allows each indicator of social dominance to load independently on the belief that COVID poses a serious risk to people's health. This is a more rigorous test than using researcher decisions about how these indicators should be grouped. This model confirms our suspicions: the only indicators that are significantly related to the seriousness of COVID are the ones related to denying the existence of unfairness, and each are significant on their own, despite their collinearity. Indeed, the only indicator that indicates a normative belief about race, the indicator that suggests that "Blacks *should* work their way up" like the Irish and Italians, etc., is slightly positive (though not significant), suggesting

that these are not opinions about what the world “should” look like (i.e., people should take personal responsibility). Rather, the opinions that matter are the people’s diverging perceptions of *reality* about whether racism advantages white people (or harms people of color), just as the need for uniqueness is a need to see reality in such a way that bolsters their self-concept. Model 4 confirms that the resentment about women and people of color might gain in power or receive special treatment is not significant. Note that we do not report our CFI and RMSEA because the multiple imputation missing data analysis does not permit either (Lee and Shi, 2021).

Figure 2. The impact of including the tendency to deny racial unfairness on the partisan and ideological divide in COVID seriousness

Model 1: The structural equations model of the impact of right leaning party and ideology, **excluding** the need to deny unfairness



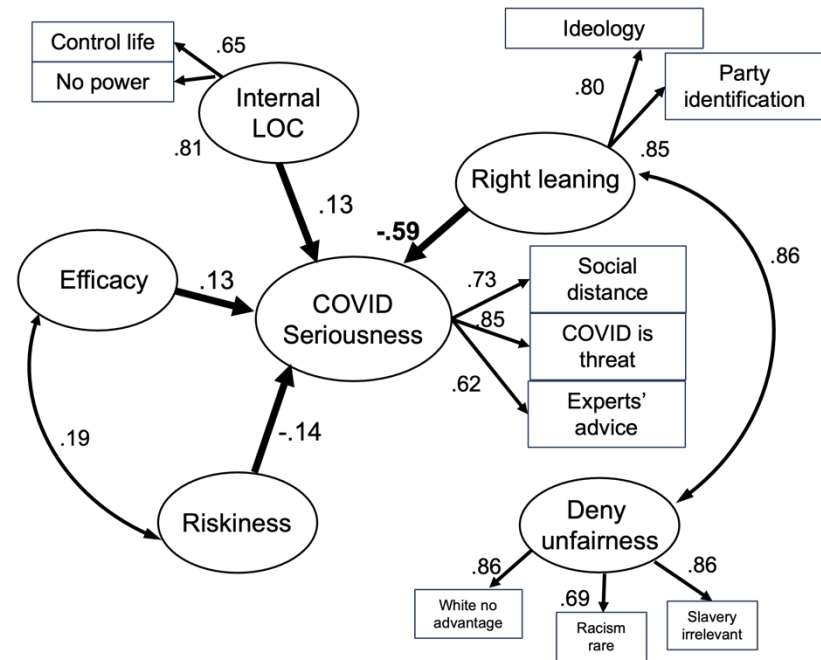
Model 1: Fit statistics

Coefficient of determination = .95

$\chi^2 = 205 (4), p < .00001$

Endogenous fit statistic for COVID seriousness $R^2 = .42$

Model 2: The structural equations model of the impact of right leaning party and ideology, **including** the need to deny unfairness



Model 2: Fit statistics

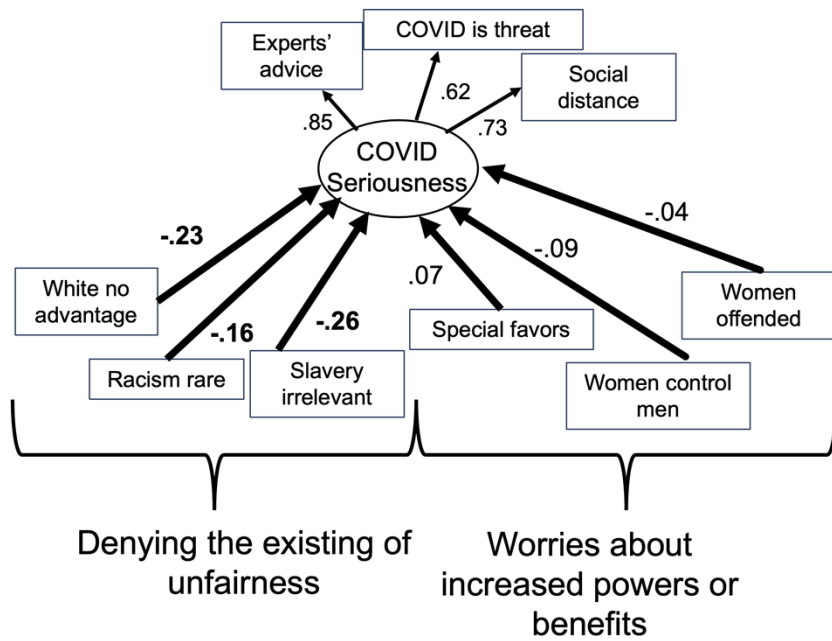
Coefficient of determination = .99

$\chi^2 = 343 (5), p < .00001$

Endogenous fit statistic for COVID seriousness $R^2 = .47$

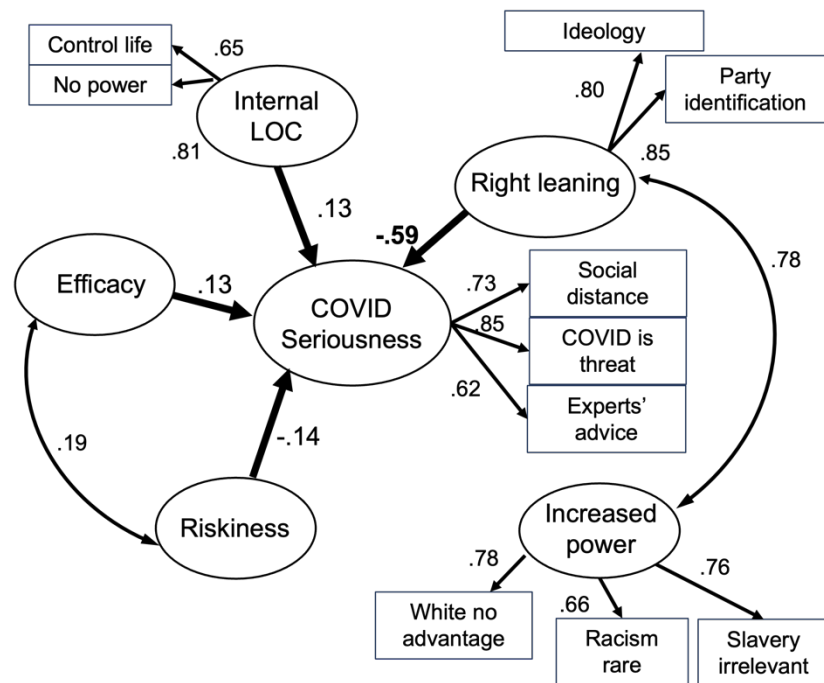
Figure 3. Corroborating hypotheses that the denial of unfairness, as a proxy for the need for uniqueness, undermines COVID seriousness, not other forms of social dominance that indicates worries about increased power

Model 3: Multiple indicators, multiple causes model of social dominance predictors of COVID-19 seriousness



Model 3: Fit statistics
 Coefficient of determination = .98
 $R^2 = .44$ $\chi^2 = 238$ (6), $p < .00001$

Model 4: The structural equations model of the impact of right leaning party and ideology, including the resentment of increased power



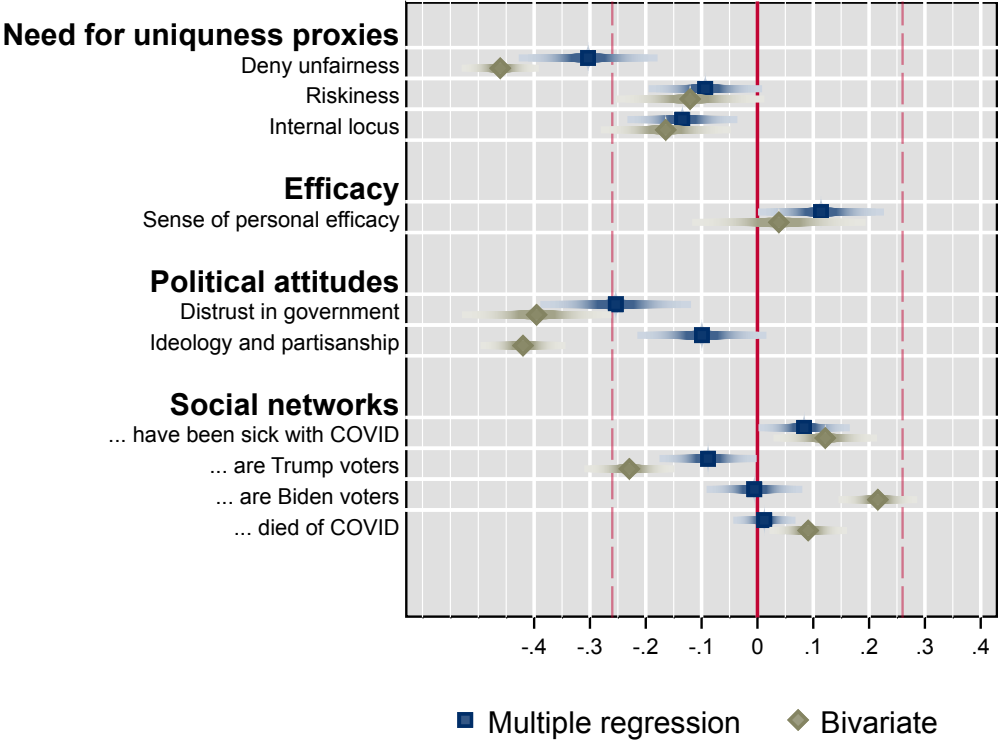
Model 4: Fit statistics
 Coefficient of determination = .98
 $R^2 = .44$ $\chi^2 = 238$ (5), $p < .00001$

Part 2: Multiple regression

We now present a full multiple regression with control variables, using missing imputation for three variables with missing data, as the indicators for government distrust, the measures of denying unfairness, and riskiness, were surveyed in the post-election version of the CES. Figure 4 presents a coefficient plot of the results of both the bivariate regression and the multiple regression results. The solid line is the zero point, and the dotted lines represent \pm one standard deviation of COVID seriousness. Notably, our hypothesis related to the internal locus of control is confirmed, which is the opposite of what the Health Behavior Model would suggest, as scholars generally believe that the more agency a person has, the more they will use that agency to promote their health. We suspect that only in certain circumstances (such as a global pandemic or when people come face to face with their mortality) some people may look for ways to shore up their self-esteem, which may cause them to overestimate their control over their lives. It may be that with better measures of the need for uniqueness, we can better disentangle these effects. Our results also confirm our suspicions about the disparate impact of self-efficacy in that the higher the efficacy, the more serious about COVID-19. All in all, this means that the Health Behavior Model should include the need for uniqueness in their models in future research.

Denying racial unfairness and government distrust dwarf the other variables in the model; both reduce COVID seriousness by about a standard deviation. As expected, those who are more likely to take risks in general are less likely to take COVID-19 seriously. It is worth noting that knowing people who have been infected reveals a small but statistically significant difference, whereas knowing people who had already died of COVID makes little difference. While knowing more Biden or Trump voters is correlated in the bivariate analysis, they make little difference in the multiple regression. We note the impact of knowing people who will vote for Trump is more effective at getting people to be less serious about COVID, even controlling for party identification.

Figure 4. Predicting COVID-19 Seriousness



Part 3: Interactions between the three proxies of uniqueness and the index of party identification and conservative ideology

Because we believe that the need for uniqueness is at least part of the reason that Republicans or conservatives are more suspicious about COVID, we expect that conservative Republicans who are low on proxies for a need for uniqueness will exhibit more seriousness about COVID. Figures 5-7 present the results of these interactions, all of which provide strong evidence for our hypotheses. Riskiness and an internal locus of control reduces the impact of conservative Republican identification yet has no impact on liberal Democrats. The denial of unfairness, however, has a negative impact on both right and left leaning people. Indeed, those Republicans who do not deny racial unfairness are predicted to be as serious about COVID as liberal Democrats (though there are not many in this category, indicated by the histogram).

Figure 5. Interaction of riskiness and right-leaning party and ideology

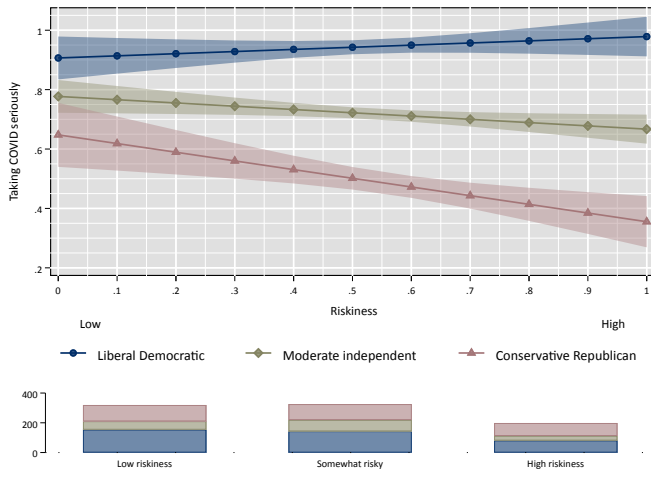


Figure 6. Interaction of locus of control and right-leaning party and ideology

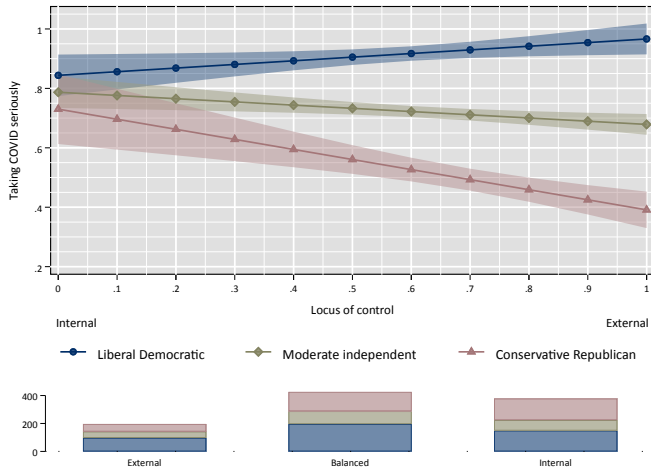
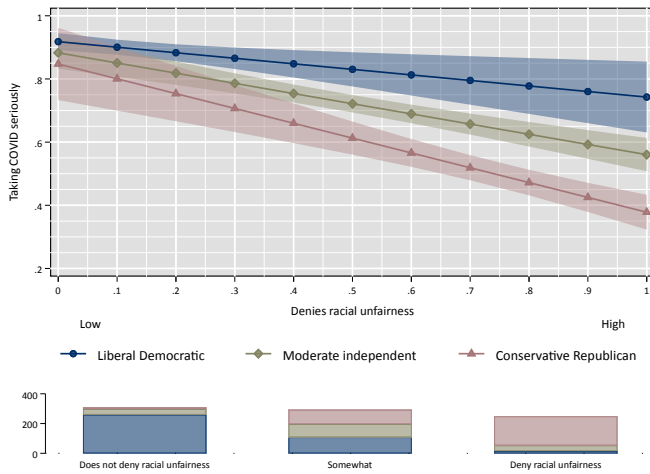


Figure 7. Interaction of denying racial unfairness and right-leaning party and ideology



Part 4: The comparative effect of social versus elite persuasion

We test several hypotheses related to elite versus social network persuasion. Figure 9 presents abridged results of the multiple regression (the complete results are reported in the Appendix, in Table A2). We set out to explain that Republicans were not dismissive of COVID risks because of elite cues, which are more likely to be represented by news on social media or from Fox news. Conventional wisdom might suggest that conservatives or Republicans who may have been exposed to elite cues on Fox news would likely be less serious about COVID, while our theory suggests that watching Fox news would likely have little effect.

Importantly, while we reject the idea of elite persuasion, we admit that social pressure can be an effective source of persuasion, we also test to see how partisan affiliation interacts with partisan networks to see the impact of social networks that contain like and unlike partisans. Therefore, we not only control for the effects of these social networks in the general analysis, but we can also test for the interaction between ideological and partisan preferences with members of similar and dissimilar members of their social networks. We also test for the effects of people's

likely interaction with others in their networks who had been sick with (or died) of COVID-19 by the summer of 2020.

Table A3 reports the presence of COVID illnesses in people's social networks, as well as the number of people in their networks who intended to vote for Biden or Trump. We note that by the summer of 2020, about half of our respondents knew someone who had COVID. We note the striking variation of partisan networks, with a standard deviation of .4 (scale is normalized to range from 0 to 1). Only about 25% of people have no Biden voters in their networks, with similar numbers for Trump voters. Watching news that has ideological leanings (Fox news, versus PBS and MSNBC) was measured with a dichotomous variable in which people were asked to indicate which of these networks have you watch in the last 24 hours and is meant to indicate regularity. 25% indicated that they watched Fox news and 13% indicate having watched MSNBC or PBS news.

First, we test a simple hypothesis with a bivariate analysis: Do people who watch Fox news tend to deny the seriousness of COVID-19? Unlike many tests of media persuasion, a bivariate test is a more conservative test of our hypothesis, as a bivariate correlation excludes self-selection into this news source. Not accounting for this self-selection is not evidence of persuasion. Even with this very conservative test of our hypothesis, we find that there is a very minor effect that is statistically significant, but the coefficient would be too small to provide much evidence for persuasion effect, even if it were a fair test ($b=.07$; standard error = $.03$). The bivariate effect of watching MSNBC or PBS is more evidence of elite persuasion, yet, again, this does not account for self-selection.

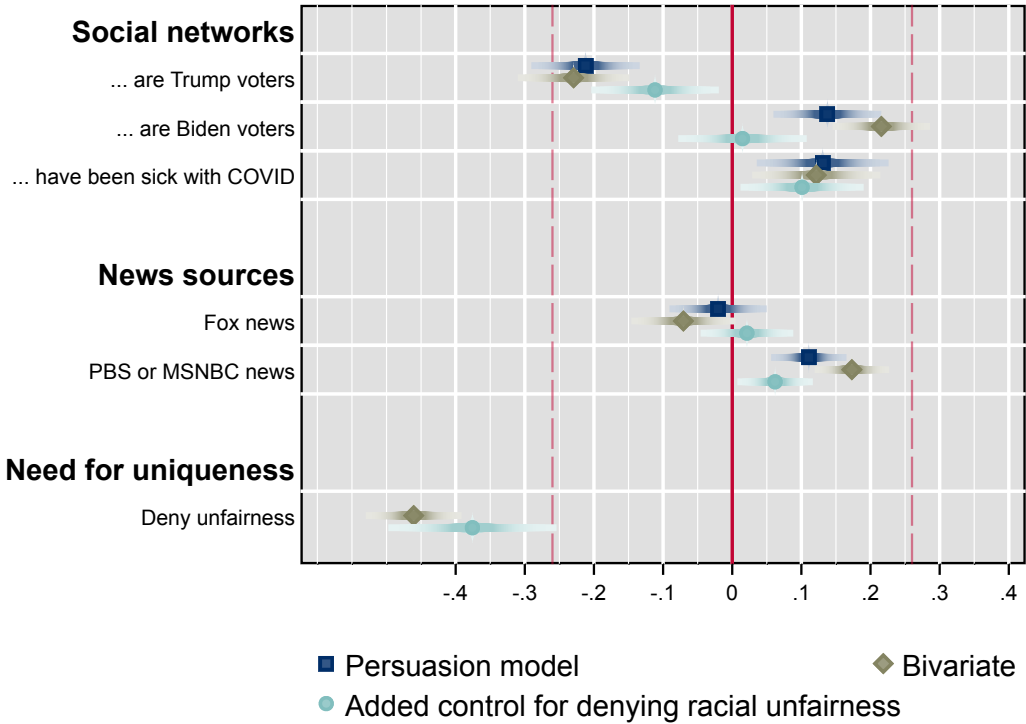
We believe that it is too easy to dismiss the effect of Fox news if we were to control for our index of right leaning party identity and ideology. Because party and ideology are so strongly correlated with taking COVID seriously, it obviously nullifies the effect of Fox news (see Model 2 in Table A2). Instead, we use the number of likely Trump voters a person knows, which is a more understated proxy for right leaning attitudes. With this control, Fox news is also

insignificant (see Model 3 in Table A2), yet the model reveals support for the impact of knowing Trump voters.

We also tested several interactions to see whether watching Fox news would increase the impact of party and ideology (see Models 4 and 5 in Table A2). Neither interaction was significant. We also tested for whether political activity on social media interacted with 1) right leaning index of party and ideology, and social networks mostly comprised of 2) Biden or 3) Trump voters. None were significant. See Table A3 for descriptive statistics of political activity on social media.

Finally, Figure 8 present a more fully identified model of persuasion effects that include exposure to left-leaning news sources (indications of watching either MSNBC or PBS), controlling all three social network variables (knowing people who had COVID, likely voters for Trump, and those supporting Biden). Note that we present these results with and without the control to show the outsized effect of denying racial unfairness and its tendency to soften the effects of persuasion (though knowing Trump voters and those suffering from COVID were significant even with this control). Even without this control, Fox news had no effect, yet the effect of watching MSNBC or PBS is slightly significant in a positive direction, indicating that people who watched those networks were more likely to take COVID-19 seriously. Knowing likely Biden and Trump voters is much more significant as compared with the effects of the media, consistent with our expectations that people are more likely to be persuaded by their social networks than exposure to elite messages.

Figure 8. The impact of elite versus social network persuasion on COVID seriousness, with and without the control for denying racial unfairness



Discussion

Our findings suggest that upon hearing that the Center for Disease Control has advice for how to limit their vulnerability to COVID-19, those who are attached to the illusion that they are unique (and uniquely invulnerable) might prefer to ignore that advice rather than confront their illusion. A need for uniqueness might also drive some people to distance themselves from people they perceive are in the lowest rungs of society, which may be one source of social dominance theory (Sidanius and Pratto, 2001). Some people may have fused their identity with those they believe embody the illusion of total control over destiny (e.g., wealthy White men), potentially leading to a sense that they (too) are invulnerable, which may also be why they exhibit more conservative policies and party preferences. This may be serving as an unconscious salve for their fear of mortality, which was likely made salient during the height of the pandemic. Sadly,

an unwillingness to accept one's mortality may have resulted in their illness or death, a phenomenon that will sound familiar to cancer doctors (Vos and De Haes, 2007). In the end, our findings suggest that the COVID partisan divide could have been a disaster waiting to happen, as people with a need for uniqueness, who had right leaning preferences, were possibly unlikely to have taken any pandemic seriously, even without elites who obviously made the serious reality of COVID easier to reject.

There are many weaknesses in this analysis. One weakness is that we analyze observational survey data, which is inappropriate for causal inference. The most serious weakness is that we have no direct measures for our primary independent variables; instead, we identified proxies that explain some puzzling result from previous literature, such as the common finding that racial attitudes are connected to the perceived risk posed by COVID. Using a host of corroborative hypotheses, we were able to explain most, if not all, the variation explained by partisanship and ideology, statistically speaking. We believe that using proxies in the context of high collinearity makes these tests more, not less, conservative.

Of course, there may be other omitted variables in our analysis that might be explaining why only certain racial attitudes – those describing *perceptions* about the way racism makes society unfair – not *prescriptions* about how we should ameliorate racial problems in society. We believe that what is underlying these attitudes is the comparison between what can be said to be uniquely one's own accomplishment versus that caused by racial (or perhaps other) inequalities. This comparison is also at the heart of the comparative locus of control between the self and the external world, which also has a significant effect on COVID attitudes in our statistical models, against the conventional wisdom of the Health Behavior Model.

Conclusion

The rejection of government's role in reducing human suffering – and its relationship to the intertwining of racism with people's sense that they are uniquely responsible for their merit – has been at work for more than a half century. Political scientists refer the earliest versions of this

as the “Southern Strategy,” the first signs of which began in the early 1960s, and grew into an attempt to marry personal – unique – merit with hostility toward government and racial resentment (Haney-López, 2014). As a stark comparison of the evolution of these ideas, compare George Romney, millionaire auto executive, who as Nixon’s Secretary of Housing and Urban Development planned to use federal funds to force racial integration of the suburbs, to his son, who admitted to inciting boos from the NAACP so that video replays would advantage his campaign (Bull and Miskinis, 2015).

This strategy combined free markets and privatization with shaming welfare programs and its recipients (Hohle, 2012). Brunila and Rossi (2018) call it the “ethos of vulnerability,” otherwise known as appeals to identity that disparage the “other” as vulnerable. As another example of this, Obama defended the role of government, “You didn’t get there on your own. ... there are a lot of smart people out there...there are a whole bunch of hardworking people out there,” and insisted that “great teachers” and “roads and bridges” contributed to people’s success. The Republican party responded with the slogan “We Built It,” a direct message that people created their fortunes, on their own, without the government’s help.

Further evidence that this suspiciousness of government has soaked into the greater American consciousness, is that one of our strongest variables, distrust of government, is independent of both party identification and social dominance. Dr. Fauci would probably rename Dr. Langmuir’s sorrow description of apathy as vicious indignance. His instructions to take COVID seriously reminded them of the unimaginable: that they, like everyone, are vulnerable to disease and death. It was only a few years after Langmuir’s essay that Reagan famously said: “The nine most terrifying words in the English language are: I’m from the Government, and I’m here to help.”

American partisan politics is perhaps a cleavage borne - not of class or race – or even racism, but of a personal attribute of those who cannot confront their personal vulnerability, which makes them unable or unwilling to identify with vulnerable. In the end, it may be people’s deeply seated rejection of their vulnerability that worsened the COVID pandemic, ours is a story

of elites who had the government's role in ameliorating vulnerability – from decades of opposition to universal health care to the Supreme Court's refusal to protect people from COVID at work, see *National Federation of Independent Business*, 595 U.S. ____ (2022).

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Appendix

Table A1. Measures of the primary variables

Self-efficacy is indicated by agreeing: When facing difficult tasks, I am certain that I will be able to accomplish them

Internal locus of control indicated by disagreeing: ($r = .51$.)

I feel like what happens in my life is mostly determined by people with all the power.

I believe the problems in my life are completely out of my control.

Measures for denying the existence of unfairness: ($\alpha = .86$.)

Racial problems in the U.S. are rare, isolated situations

White people have certain advantages because of the color of their skin

Generations of slavery and discrimination have created conditions that make it difficult for Blacks to work their way out of the lower class

Measures of resentment of increased power or special treatment ($\alpha = .80$).

High resentment of women and Blacks seeking special treatment indicated by:

Women seek to gain power by getting control over men.

Women are too easily offended.

Irish, Italians, Jewish and many other minorities overcame prejudice and worked their way up.

Blacks should do the same without any special favors

Measures for distrust in government ($\alpha = .9$).

Answering the question: "About how often would you say you can trust each of the following to do what is right?" 1) The federal government, 2) state government, 3) local government, and 4) the state board of elections.

Table A2. Tests for elite and social network persuasion

Models	Bivariate	Simple multiple regression		Interactions with Fox news		Interactions with political activity on social media		
	1	2	3	4	5	6	7	8
Likely elite persuasion in news sources								
Fox news	-.07 (.03)	.03 (.02)	-.03 (.03)	.01 (.04)	.01 (.04)			
MSNBC or PBS	.17 (.02)							
Right-leaning ideology and partisanship		-.43 (.03)		-.44 (.03)		-.39 (.04)		
Number in social network who ...								
... “have been diagnosed with COVID-19”								
... “will vote for Biden”								.18 (.04)
... “will vote for Trump”			-.21 (.03)		-.25 (.03)		-.19 (.04)	
Political activity on social media						.04 (.04)	.16 (.06)	-.09 (.06)
Interactions								
Fox*right leaning index				.02 (.07)				
Fox*knowing likely Trump voters					-.05 (.06)			
Political activity on social media...								
... * right leaning index						.08 (.09)		
... * knowing likely Trump voters							-.14 (.09)	
... * knowing likely Biden voters								.12 (.08)
Number of respondents	1000	1000	1000	1000		1000	1000	1000

Note: Entries are unstandardized regression coefficients from OLS models; all variables were normalized from 0-1. Because there were no missing on any of the variables, there was no need to use missing imputation. Question wording for media asked respondents about the last 24 hours, to ensure that the media activity was regular. Right-leaning index is created from party identification and ideology, with conservative and Republican coded high.

Question wording for social networks: “Think of all of the people that you are acquainted with (meaning that you know their name and would stop and talk at least for a moment if you ran into the person on the street or in a shopping mall). How many of these people are you pretty certain have the following attributes?” Answers were 0, 1-2, 3-4, 6-10, and more than 10. Political activity on social media indicated 1) creating an original post, 2) commenting on another post, 3) reading political information, 4) following an event, or 5) forwarding information to friends. Descriptive statistics are presented in Table A4.

Table A3. Number in social network who ...

	0 %	1 %	2-5 %	6 - 10 %	10 or more %	Mean	St. dev.	N
... “have been diagnosed with COVID-19”	51	16	27	4	3	.23	.27	1000
... “will vote for Biden”	25	9	23	13	30	.53	.39	1000
... “will vote for Trump”	22	9	25	12	32	.56	.38	1000

Question wording: “Think of all of the people that you are acquainted with (meaning that you know their name and would stop and talk at least for a moment if you ran into the person on the street or in a shopping mall). How many of these people are you pretty certain have the following attributes?” Summary statistics presented with variables normalized from 0-1, calculated with survey weights.

Figure captions

Figure 1 caption

Alpha = .80. High support for taking COVID Seriously indicated by:
I believe public health experts are giving good advice about Covid-19
I have continued to socially distance to prevent the spread of Covid-19, even after my state has lifted stay-at-home orders
I believe that the novel coronavirus (Covid-19) poses a threat to the health and safety of myself and my family

Figure 2 caption

Note: Ellipses are latent variables; rectangles indicate observed variables. All entries are standardized coefficients; all coefficients in Model 1 are significant to $p < .05$.

Figure 3 caption

Note: Ellipses are latent variables; rectangles indicate observed variables. All entries are standardized coefficients; coefficients in Model 3 in bold are significant to $p < .01$.

Figure 4 caption

Note: Entries are unstandardized regression coefficients. All variables are normalized to 0-1. Analysis includes controls for general health, age, sex, race, education, and nonwhite race; age and health have a small but significant effect