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SOCIAL DISTANCTING

Politicizing the COVID-19 Pandemic:

Ideological Differences in Adherence to Social Distancing

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Abstract

Data from two MTurk studies with U.S. respondents (total $N=1,153$) revealed an ideological divide in adherence to social distancing guidelines during the COVID-19 pandemic.

Specifically, political conservatism inversely predicted compliance with behaviors aimed at preventing the spread of the COVID-19. Differences in reported social distancing were mediated by divergent perceptions of the health risk posed by COVID-19 (Studies 1 and 2), which were explained by differences in self-reported knowledge of COVID-19 (Study 1) and perceived media accuracy in covering the pandemic (Studies 1 and 2). The politicization of COVID-19 may have prompted conservatives to discount mainstream media reports of the severity of the virus, leading them to downplay its health risks and consequently adherence less to social distancing protocols. These effects hold when controlling for key demographic characteristics as well as psychological variables, including belief in science and COVID-19-related anxiety. Thus, political ideology may uniquely explain COVID-19 behavior.

Keywords: COVID-19, political ideology, social distancing, media bias, motivated reasoning

Politicizing the COVID-19 Pandemic:

Ideological Differences in Adherence to Social Distancing

Beyond medical treatment and hygiene maintenance, the primary intervention to combat the deadly transmission of the novel coronavirus (COVID-19) in the United States involves social distancing—a behavioral guideline discouraging close physical contact between individuals. Given the severity of the COVID-19 pandemic and the importance of individual behavior in mitigating its impact, it is critical to better understand individual differences in adherence to social distancing guidelines. Although a few contemporaries examine personality factors underlying compliance (Blagov, 2020; Bogg & Milad, 2020; Zettler, Schild, Lillehot, & Bohm, 2020), our focus here is on *psychosocial* and *psychopolitical* factors influencing *who* may be most reluctant to embrace these calls for behavioral change and *why*. Unearthing the antecedents of compliance can help identify at-risk groups and enable the development of strategies to curtail the spread of the virus.

As illustrated by infamous images of American beaches heavily populated with partygoers during the pandemic, it is difficult to persuade people to change ingrained habits of face-to-face social interactions that are ordinarily construed as pro-social and personally satisfying. To motivate such drastic behavioral change, we assert, requires the following sequence: (1) people must be exposed to information that helps them understand the importance of changing their behavior and perceive danger in not changing their behavior (*knowledge*); (2) they must trust that information and find it credible (*perceived media accuracy*); which would then lead them to (3) perceive a collective health risk posed by the condition that demands behavioral change (*perceived health risk*); (4) ultimately leading them to engage in behavioral change (*social distancing*). Our emphasis on perceived risk/threat has some overlap with the

Health Belief Model (HBM; Rosenstock, 1974); unlike the HBM, however, we do not examine belief in the effectiveness of the recommended health behavior, as this seems self-evident given that the virus is spread through personal contact. Thus, we focus primarily on perceived health risk, and its hypothesized antecedents of knowledge and perceived credibility of that knowledge, in predicting compliance with social distancing measures.

Political Ideology

Unlike the phenomena typically addressed by researchers applying the HBM (e.g., cancer screening, adherence to medical regimens, etc.), COVID-19 has become a highly politicized issue in the U.S. Prominent conservatives have generally expressed more skepticism and indifference toward the impact of the pandemic than have liberals. President Trump referred to the virus as a hoax on Feb. 28, 2020 and exaggerated the extent to which the U.S. had diminished its proliferation (Franck, 2020). Fox News host Sean Hannity referred to COVID-19 as a “fraud” (Rupar, 2020) and the network’s Trish Regan accused Democrats of using the virus to “destroy and demonize the president” (Washington Post, 2020). Additionally, Republican governors have generally been slow to stymie viral transmission, with the last eight states to issue stay-at-home orders all having Republican leaders (Masket, 2020); some elected Republican officials encouraged their constituents to patronize restaurants and bars precisely when federal health officials urged the opposite (Padilla & Montague, 2020). Even when reality constraints emerged about the danger of the pandemic, conservatives framed the debate as needing to balance human loss against economic destruction (Glickman, 2020).

The transformation of COVID-19 to a divisive issue imbued with political meaning and implications suggests that how individuals conceptualize virus threat may be shaped by their own *political ideology*. Political ideology not only represents shared beliefs, opinions, and

values held by an identifiable group or constituency (Freeden, 2001; Knight, 2006), but also endeavors to describe and interpret the world and envision the world as it should be (Jost, Federico, & Napier, 2009). Thus, ideology has the potential to impact perceptions of how the media is covering and ought to cover the virus, the collective health risk posed by COVID-19, and what actions are seen as appropriate in response. A pathway through which ideology may do so is *motivated reasoning*.

Motivated Political Reasoning

Individuals trying to discern the truth about COVID-19 are likely to rely on elected officials and news figures they trust. Fiorini and Abrams (2008) and Layman, Carsey, & Horowitz (2006) suggest that the evaluation of policy positions is driven from the top-down with party elites signaling appropriate views and individuals following those cues consistent with their prior ideology (Malka & Lelkes, 2010). Research consistent with the cultural cognition theory suggests that individuals are more persuaded by policy experts perceived to hold similar values to their own (Kahan, Braman, Cohen, Gastil, & Slovic, 2010). Based on the recent American political context, we argue that opinions about COVID-19 have become an important identity marker differentiating liberals from conservatives; the liberal view emphasizes the threat posed by the virus and the urgency in containing its spread, while the conservative view emphasizes overreaction to an exaggerated threat.

Once perceptions of COVID-19 severity became linked to political identities, individuals may have begun to process subsequent information through an ideological lens (Goidel, Shields, & Peffley, 1997), making objectivity more difficult. This motivational desire to arrive at a particular conclusion has been referred to in various terms including directional motivation (Bolsen, Druckman & Cook, 2014; Druckman & McGrath, 2014; Taber & Lodge, 2006),

partisan motivated reasoning (Bolsen et al., 2014), and ideologically motivated cognition (Kahan, 2012), all political applications of the more general motivated reasoning phenomenon (Kunda, 1990). Speaking to its impact, ideology has been shown to affect the processing of information and subsequent judgments of that information in a number of policy domains including embryonic stem cell research, capital punishment, HPV vaccinations, climate change, energy policy, affirmative action, and gun control (Bolsen & Druckman, 2018; Bolsen et al., 2014; Campbell & Kay, 2014; Hart & Nisbet, 2012; Kahan, 2012; Lord, Ross, & Lepper, 1979; Nyhan & Reifler, 2010; Taber & Lodge, 2006).

Lodge and Taber (2013) implicate three mechanisms in directional reasoning: confirmation bias, where people seek out information supporting their prior belief; prior attitude effect, where new information more discrepant from an individual's prior belief is devalued (and congruent information is perceived as stronger); and disconfirmation bias, where information contrary to one's beliefs receives greater scrutiny and counter argumentation. In this way, a highly identified conservative would likely disproportionately expose themselves to media depicting COVID-19 as an exaggerated threat while discrediting contradictory media. These processes help explain why persuasive messages can boomerang and increase predispositions to do and think the opposite (Byrne & Hart, 2009; Wolburg, 2006) and how the politicization of an issue may amplify group differences and lead to even more polarization (Druckman & McGrath, 2019; Taber & Lodge, 2012).

Perceived Media Bias

Motivated political reasoning and its effect on information processing can also be contextualized in the unique relationship between partisans and contemporary media. That is, the source of COVID-19 information also likely affects subsequent processing of it. Partisans

perceive neutral news content as biased against their views, a phenomenon known as the hostile media effect (HME; e.g., Gunther, Edgerly, Akin, & Broesch, 2012). Conservatives in particular are more likely to distrust the news media (Lee, 2005; 2010) and show the HME (Eveland & Shah, 2003; Vraga & Tully, 2015). This may help explain why conservatives are most likely to display partisan selective exposure (Rodriguez, Moskowitz, Salem, & Ditto, 2017), increasing the chances that their skeptical views on COVID-19 severity are formed through isolated echo chambers. There is further evidence that these conservative information silos are more likely to contain fake news than their liberal counterparts (Allcott & Gentzkow, 2017; Guess, Nyhan, & Reifler, 2018), distortions potentially magnified by findings that conservatives are less discerning of the truth in news media than are liberals (Pennycook & Rand, 2019). Being lower in trust of science (Gauchat, 2012), especially to use scientific knowledge in policy pursuit, may also make conservatives less trustful of the scientific experts influencing COVID-19 policy. As such, conservatives may be inclined to (a) believe the mainstream media's coverage of COVID-19 to be inaccurate, (b) consume biased, erroneous information about COVID-19 downplaying its risks, and (c) fail to recognize the inaccuracies in these news accounts, thus promoting conservatives to underestimate the health risks of the virus.

Because of the confluence of these factors related to motivated political reasoning, we proposed the following hypotheses, H_1 stating the effect and H_{2-3} implicating mediators of the effect:

Hypothesis 1: More conservative participants would be less likely to follow social distancing guidelines.

Hypothesis 2: The behavioral differences in H_1 would be explained by more conservative participants perceiving the virus as presenting less of a health risk.

Hypothesis 3: How well-informed participants are about COVID-19 and beliefs about the accuracy of the mainstream's media coverage of the virus would mediate the relationship between conservatism and perceived health risk.

The Present Research

Our predictions stand on a solid data-driven basis in addition to their grounding in theory. Public opinion polls conducted in the U.S. during March 2020 (e.g., Civiqs, 2020; Gallup, 2020; Marist, 2020; NBC News/Wall Street Journal, 2020; NPR/PBS NewsHour/Marist, 2020; Pew, 2020; You Gov Blue, 2020) indicate that Democrats are more likely to report trusting information about the virus from the media, fear becoming infected with the virus, evaluate COVID-19 as a major threat to the U.S. population, and be concerned about its spread to their community. These greater concerns about the virus among Democrats translate in polling into greater willingness to report practicing social distancing, including refraining from eating out, travelling, or attending social gatherings.

Several recent empirical studies have examined ideology as a factor in COVID-19-related perceptions and behaviors, with contrary results. The majority of studies have reported small but significant correlations (r values ranging from $-.11$ to $-.26$) between conservative ideology and (a) preventive behavior (e.g., Jordan, Yoeli & Rand, 2020; Oosterhoff & Palmer, 2020; Pfattheicher, Nockur, Bohm, Sassenrath, & Petersen, 2020; Plohl & Musil, 2020; but see Harper, Satchell, Fido, & Latzman, 2020) and (b) perceived threat (Oosterhoff & Palmer, 2020; Plohl & Musil, 2020; but see Kackanoff, Bigman, Kapsaskis, & Gray, 2020).

In short, there is tentative, but not unequivocal evidence, to support our contentions about the role of ideology. However, a critical limitation is that none of these existing studies primarily set out to assess the impact of ideology on social distancing behavior and potential mediators of

this effect. Because our predictions were rooted in how COVID-19 became politicized uniquely in a U.S. context, we tested our mediation model in an exclusively U.S. sample. Extending knowledge beyond that generated by public opinion polls, the current research assessed constructs with multiple items typically continuously measured, tested mediational pathways, controlled for demographic variables, and measured political ideology as an individual continuous predictor rather than a categorical variable of party affiliation. In addition to measuring our predictor, outcome, and hypothesized mediators, we also assessed other potentially relevant variables, including perceived threat of the virus to self/known others, belief in science, and COVID-19-induced anxiety.

Study 1

Method & Results

Participants. Six-hundred twenty-four U.S. adults with an Amazon Mechanical Turk (AMT) approval rating exceeding 96% participated in this study on AMT for monetary compensation (US \$0.40) on April 1, 2020. Twelve participants were excluded for failing an attention check, as were thirty-five participants who reported being diagnosed with COVID-19; thus, data were analyzed with the remaining 573 individuals ($M_{\text{age}} = 39.43$ years old, $SD = 12.61$, age range = [18-78], 338 males, 235 females). This sample provided 80% power to detect a small effect size of $r = .12$. This study received Institutional Review Board approval.

Measures and Data Analysis. Composite scores for the outcome variable *social distancing* and hypothesized predictive variables *conservatism*, perceived *health risk*, belief in *media accuracy*, how *well-informed*, and the covariates *age*, *likelihood infected*, *likelihood others infected*, *belief in science*, and *anxiety* were computed by arithmetic average of the individual questionnaire item ratings (see Appendix). Descriptive statistics for all original scales

are presented in Table 1 including their internal consistency, all α 's $> .83$. A strong negative skew was noted for *social distancing* (-2.05) and *health risk* (-1.43) and *well-informed* (-1.35). Because the kurtosis for these was also high and positive, a base-10 logarithmic transformation on reflection scores was performed on each, reducing the skewness in *social distancing* scores (1.41), *health risk* (.85), and *well-informed* (.77). The following analyses included parameters that estimated the proximal effects of *conservatism* on hypothesized mediators and the indirect effects of *conservatism* on *social distancing* through hypothesized mediators in a single model.

Results

The data for this research is available at OSF, osf.io/su27g/files; no coding is available. The analytic strategy began with inspecting the correlations among the measures (see Table 2). *Conservatism* was significantly negatively associated with *social distancing*, *media accuracy*, *well-informed*, *likelihood infected (and others infected)*, *belief in science*, *anxiety*, and positively associated with *age*. Importantly for the present hypotheses, these particular variables were reliable individual predictors of reported social distancing: *media accuracy* ($r = .44$), how *well-informed* ($r = .56$), and perception of *health risk* ($r = .59$); the covariates were positively related to social distancing, except *likelihood infected*.

Variable	<i>M</i>	<i>SD</i>	Skew	α^a	β^b	<i>t</i>	<i>p</i>
Social Distancing	5.39	.87	-2.05 ^c	.91			
Predictors							
Conservatism	3.07	1.70	.17	.90	-.028	- .71	.479
Health Risk	5.00	1.09	-1.43 ^c	.92	.325**	7.42	.001
Media Accuracy	4.18	1.22	-.40	.83	.155**	3.65	.001
Well-informed	5.11	.96	-1.35 ^c	.84	.299**	7.99	.001
Covariates							
Age	39.32	12.61	.79	--	.093*	2.83	.005
Infected	3.20	1.37	.14	.94	-.207**	-4.30	.001
Others Infected	3.85	1.48	-.37	.95	.080	1.65	.100
Belief in Science	4.40	1.31	-.80	.93	.007	.19	.851
Anxiety	3.54	.83	-.06	.90	-.024	-.70	.485

Table 1. *Sample Statistics and Coefficients Regressing all Measures on Social Distancing in Study 1*^aCronbach's statistic^bStandardized coefficients^cUntransformed value

	Age	Conserv	Infected	Others Infected	Health Risk	Well- Informed	Media Accuracy	Belief in Sci	Anxiety
Social Distancing	.184**	-.240**	.034	.181**	.588**	.557**	.440**	.141**	.172**
Age		.095*	-.004	.054	.099*	.150**	.089*	-.145**	-.045
Conservatism			-.095*	-.157**	-.327**	-.165**	-.509**	-.366**	-.276**
Infected				.742**	.330**	.100*	.151**	.100*	.275**
Others Infected					.391**	.217**	.234**	.111**	.266**
Health Risk						.496**	.550**	.206**	.322**
Well-informed							.370**	.121**	.194**
Media Accuracy								.254**	.262**
Belief in Science									.191**

Table 2. *Correlation Matrix of Measured Scales in Study 1** $p < .01$ level (2-tailed)** $p < .001$ level (2-tailed)

All measures were entered into an ordinary least squares multiple regression analysis to evaluate their ability to predict social distancing. The full model predicted social distancing, $F(9,563) = 48.46, p < .001, R^2 = .437$, with five of the nine scales resulting in significant model coefficients (see Table 1). To model the causal pathway from *conservatism* to reported *social distancing*, multiple regression analyses provided model parameter estimates for indirect effects through the three hypothesized correlates—*health risk*, *media accuracy*, and *well-informed*—with the variability in social distancing attributable to significant correlates of the outcome variable controlled. The first regression revealed a significant total effect of *conservatism* on *social distancing* ($B = -.20, p < .001$), supporting Hypothesis 1 that compliance with social distancing guidelines is inversely related to conservatism. The scores for *health risk* were then regressed onto *conservatism*, revealing a significant inverse relationship ($B = -.23, p < .001$). Next, *health risk* was entered with *conservatism* as predictors of *social distancing*, resulting in significant relationships: *health risk* ($B = .52, p < .001$) and *conservatism* ($B = -.08, p = .046$). In support of Hypothesis 2, the conservative Sobel test (MacKinnon, Warsi, & Dwyer, 1995) indicated significant mediation of the relationship by *health risk* scores, $z = -5.14, p < .001$, 95% CI $(-.02, -.01)$. Regression analyses also provided parameter estimates to rule out mediation by each covariate, resulting in no significant indirect effects of *age*, *likelihood infected*, *others infected*, *belief in science*, and *anxiety*: all 95% confidence intervals for indirect effects included zero.

To address Hypothesis 3, the two related factors *well-informed* and *media accuracy* were assessed as potential mediators of perceived *health risk* as an outcome variable. That is, a further decomposition of the indirect effect of *conservatism* on *social distancing* examined the effect of *conservatism* on *health risk* through *media accuracy* and *well-informed*. *Conservatism* was first regressed on the two mediators, resulting in significant relationships for both *media accuracy* (B

$= -.45, p < .001$) and *well-informed* ($B = -.10, p = .022$). Next, these mediators were entered with *conservatism* as predictors of perceived *health risk*, resulting in significant relationships for both *media accuracy* ($B = .43, p < .001$) and *well-informed* ($B = .38, p < .001$) but a null effect of *conservatism* ($B = -.06, p = .145$). Together, the *media accuracy* and *well-informed* significantly mediated the inverse effect of conservatism on likelihood of perceiving a risk to community health, $z = -6.94, p = .002$, 95% CI $(-.04, -.02)$. Each mediator explained unique variance: *media accuracy*, $z = -7.78, p < .001$, 95% CI $(-.03, -.02)$ and *well-informed*, $z = -2.35, p = .019$, 95% CI $(-.01, -.001)$. The resulting pathway model is shown in Figure 1.

Figure 1: Mediation model from Study 1 for the effect of conservatism on social distancing via perceived health risk and the effect of conservatism on perceived health risk via media accuracy and how well-informed.

* $p < .05$, ** $p < .01$

Discussion

Political ideology predicted differences in perceptions and behavior related to COVID-19 for all the variables measured in Study 1. Conservatives were less likely to report being informed about the virus, believe in the accuracy of the mainstream media's coverage of the epidemic, perceive the virus to pose a health risk, believe in science, be anxious because of COVID-19, believe they or someone they knew would become infected, or practice social distancing. The data supported hypotheses II and III: Social distancing was mediated by belief that COVID-19 presents a societal health risk, which in turn was mediated by how informed of the virus individuals rated themselves to be and the accuracy they ascribed to mainstream media accounts of the disease. Thus, results support our theorizing grounded in motivated political reasoning that ideology affects knowledge, which shapes overall risk perception, which then shapes behavior. Interestingly, none of the other variables mediated the ideology-behavior link, including belief in science.

Several demographic explanations may also account for these results. Conservatives live in more sparsely populated areas hit less hard by COVID-19. Relative to liberals, they face the weakest incentives to follow social distancing. Accordingly, in Study 2, we examined whether Study 1's effects would hold when controlling for population density of participants' residences, income, and education level, as these may impact social distancing and differ based on ideology. We also assessed whether ideology would still predict social distancing as the pandemic increased in severity. Wise, Zbozinek, Michelini, & Mobbs (2020) in samples from March 11 and March 16 found growing awareness of risk and reported that individuals were increasingly engaging in protective behavior. In the U.S., from sample 1 (April 1) to sample 2 (April 4), the number of states issuing lockdown orders increased from 34 to 40 (Mervosh, Lu, & Swales,

2020). Total U.S. cases increased 40% during the three-day period, and total deaths increased 105% (W.H.O., 2020). Thus, we tested whether changes in the reality of the epidemic would attenuate the ideological effects we obtained in Study 1.

Study 2

Method

The method of data collection was analogous to Study 1. Six-hundred thirty U.S. adults with an approval rating exceeding 96% participated in this study on AMT for monetary compensation (US \$0.40) on April 4, 2020. Eight participants were excluded for failing an attention check, as were fifty-two participants who reported being diagnosed with COVID-19; thus, data were analyzed with the remaining 580 individuals ($M_{\text{age}} = 39.12$ years old, $SD = 12.85$, age range = [19-79], 310 males, 270 females). This sample provided 80% power to detect a small effect size of $r = .12$.

Composite scores for the variables (including *population size*, *education*, and *income*) were computed by arithmetic average of the individual questionnaire item ratings (see Appendix). Descriptive statistics for all original scales are presented in Table 3 including their internal consistency, all α 's $> .79$. A base-10 logarithmic transformation was again performed to reduce negative skew in *social distancing* scores, *health risk*, and *well-informed*.

Results

The same analyses were performed to model the causal pathway from *conservatism* to reported *social distancing* compliance. The correlation matrix of data from Study 2 (see Table 4) revealed the same pattern of relationships as found in study 1, with one main exception: *well-informed* was no longer related to *conservatism*. When all measured scales were entered into multiple regression analysis, the combination of all factors predicted *social distancing*, $F(12, 567)$

$= 22.49, p < .001, R^2 = .322$, resulting in the same five predictors as significant model coefficients (see Table 3). The first regression for the model revealed a significant total effect of *conservatism* on *social distancing* ($B = -.11, p = .012$), replicating the negative relationship of social distancing and conservatism. Regressing the scores for *health risk* onto *conservatism* again resulted in a significant inverse relationship ($B = -.13, p = .003$) and when *health risk* was entered with *conservatism* as predictors of *social distancing*, a significant relationship was obtained for *health risk* ($B = .47, p < .001$) but not for *conservatism* ($B = -.05, p = .206$). Evidence of the significant indirect effect through *health risk* was provided by Sobel test, $z = -2.76, p = .002$, 95% CI $(-.01, -.001)$. Performing similar regressions to assess any mediation by covariates in Study 2 resulted in no evidence of significant mediation.

The replication of analysis for the two related factors *well-informed* and *media accuracy* as mediators of perceived *health risk* as an outcome variable revealed a similar significant relationship between *conservatism* with *media accuracy* ($B = -.38, p < .001$) but not with *well-informed* ($B = .01, p = .841$). When these mediators were entered with *conservatism* as predictors of perceived *health risk*, significant relationships were found for both *media accuracy* ($B = .49, p < .001$) and *well-informed* ($B = .39, p < .001$) but not with *conservatism* ($B = .03, p = .482$). Together the measures significantly mediated the decreasing likelihood of perceiving *health risk* with increasing *conservatism*, $z = -2.36, p < .001$, 95% CI $(-.14, -.03)$. Finally, although *media accuracy* was again a significant individual mediator of the effect of *conservatism* on perceived *health risk*, $z = -8.04, p < .001$, 95% CI $(-.06, -.04)$, *well-formed* scores did not mediate the effect, $p = .842$. The resulting pathway model is shown in Figure 2.

Variable	<i>M</i>	<i>SD</i>	Skew	α^a	B^b	<i>t</i>	<i>p</i> -level
Social Distancing	5.43	.85	-2.31 ^c	.85			
Predictors							
Conservatism	3.24	1.61	.15	.87	-.009	-0.20	.841
Health Risk	5.06	1.05	-1.68 ^c	.92	.342**	7.57	.001
Media Accuracy	4.13	1.15	-.43	.79	.157**	3.47	.001
Well-informed	5.04	.91	-1.15 ^c	.84	.186**	4.69	.001
Covariates							
Age	39.11	12.84	.73	--	.084	2.31	.021
Population	3.06	1.97	.61	--	.025	0.69	.493
Education	3.43	1.55	.23	--	.100*	2.69	.007
Income	3.77	1.13	.10	--	.024	0.65	.515
Infected	3.10	1.29	.01	.91	-.110*	-2.13	.034
Others Infected	3.92	1.43	-.43	.92	.029	0.55	.586
Belief in Science	4.36	1.29	-.70	.93	.004	0.10	.922
Anxiety	3.50	.77	-.09	.87	-.003	-0.69	.945

Table 3. *Sample Statistics and Coefficients Regressing all Measures on Social Distancing in Study 2*^aCronbach's statistic^bStandardized coefficient^cUntransformed value

	Age	Conserv	Infected	Others Infected	Health Risk	Well- Informed	Media Accuracy	Belief in Sci	Anxiety
Social Distancing	.105*	-.120**	.081	.189**	.538**	.428**	.376**	.093*	.106*
Age		.177**	-.107*	-.086*	.014	.113**	-.015	-.131**	-.174**
Conservatism			-.148**	-.182**	-.202**	-.036	-.476**	-.374**	-.253**
Infected				.726**	.328**	.089*	.154**	.079	.345**
Others Infected					.402**	.205**	.228**	.073	.325**
Health Risk						.401**	.521**	.140**	.292**
Well-informed							.337**	.110**	.080
Media Accuracy								.232**	.210**
Belief in Science									.085*
Anxiety									
Population									
Education									

(Table continues)

(Table 4 continued)

	Population	Education	Income
Social Distancing	-.022	.114**	.059
Age	.101*	.024	.062
Conservatism	.145**	.079	-.011
Infected	.012	.014	-.017
Others Infected	.021	.073	-.022
Health Risk	-.071	.058	.024
Well-informed	.031	.063	-.001
Media Accuracy	-.053	-.016	-.048
Belief in Science	-.103*	.013	.145**
Anxiety	.006	-.098*	-.067
Population		-.082*	-.139**
Education			.317**

Table 4. *Correlation Matrix of Measured Scales in Study 2** $p < .01$ level (2-tailed)** $p < .001$ level (2-tailed)

Figure 2: Mediation model from Study 2 for the effect of conservatism on social distancing via perceived health risk and the effect of conservatism on perceived health risk via media accuracy and how well-informed.

* $p < .05$, ** $p < .01$

Discussion

Overall, Study 2 yielded similar results to Study 1 (which occurred three days earlier), even after controlling for residential population density, education, income, and age. Consistent with predictions, conservatism inversely predicted social distancing adherence, an effect that was mediated by conservatives perceiving COVID-19 as less of a societal health risk. The lowered perceived health risk among conservatives was itself mediated by beliefs that the mainstream media is inaccurately exaggerating virus severity. Unlike Study 1, reported knowledge did not

mediate the link between conservatism and perceived health risk. Here, the time elapsed between the two studies may have been impactful. As the reality of the lockdowns became more realized and the disruptive effects of the pandemic became harder to ignore, conservatives came to believe themselves as informed about the virus as liberals. With the knowledge gap erased, the more enduring beliefs about media bias remained to influence perceptions of the health threat posed by the virus. Thus, results are still largely consistent with the mechanisms we propose while contradicting alternative accounts.

General Discussion

The present research complements a growing literature on what motivates behavioral change in pandemics. While prior research has shown that demographic characteristics such as age, income, and geography are important determinants of the adoption of recommended public health behaviors (Ibuka et al. 2010; Bults et al. 2011), we found that those factors were relatively trivial compared to ideological differences in predicting reported social distancing adherence for COVID-19. Our findings corroborate recent public opinion polls and replicates empirical results (Jordan et al., 2020; Oosterhoff & Palmer, 2020; Pfattheicher et al., 2020; Plohl & Musil, 2020) while extending them by uniquely testing processes by which conservatism predicts less social distancing. Although conservatives were less likely to report believing in science, to believe they would personally become and know someone who would become infected with the virus, and to feel less anxiety related to the virus, none of these factors explained their lower reported social distancing. Explanations that conservatives rebuke the behavior guidelines because they live in more unaffected rural areas, or are lower in education or income did not account for differences in social distancing. Rather, consistent with predictions derived from a motivated political reasoning account, we found that ideological effects were explained by differences in

reported knowledge of COVID-19 (Study 1), perceived mainstream media accuracy (Studies 1 and 2), and perceived COVID-19 societal health risk (Studies 1 and 2). Our data suggest that conservatives believe less in mainstream media stories about the virus, interpreting sources through an ideological lens, in turn prompting them to discount the threat of the pandemic to society. This skewing of risk perception is not inevitable but seems to depend on the extent health behavior becomes politicized: In the case of the less politicized (H1N1) pandemic influenza, for instance, individuals' perceived likelihood of infection tracked fairly closely to objective risk (Ibulka, Chapman, Meyers, Li., & Galvani, 2010).

Although some behavioral differences may arise from greater liberal sensitivity to suffering and heightened moral emphasis on care/harm (Graham, Haidt, & Nosek, 2009), the present results suggest that at a basic level, liberals and conservatives do not agree on the facts of the pandemic. Epistemic disagreements are nothing new in politics, but here the consequences of believing the wrong truth and acting on it are potentially immediate, tangible, and lethal. That ideology shapes behavior even when the stakes could not be greater highlights the power of what has been called *tribal epistemology* (Roberts, 2017): Information is evaluated based on whether it supports the political ingroup's values and goals and meets leader approval rather than on its conformity to customary standards of evidence or correspondence to a common understanding of the world. It appears that the conservative movement's efforts to undermine trust in journalism among its supporters, building and reinforcing Republican reliance on alternative ideological information sources (Grossman & Hopkins, 2018), is not a switch easily disconnected even when confronted with an issue evoking drastic personal consequences. The resulting lower compliance, then, is a potentially fatal byproduct of politicizing the pandemic.

Another harmful outcome in linking health to political agendas is that when policy success depends on participation, leaders are incentivized to ignite negative policy attitudes to undermine the policy (Trachtman, 2019). To some degree, this dynamic is already unfolding at the time of writing. President Trump and Republican leaders have called to “reopen” the economy and end social distancing while liberals urge the health danger inherent in doing so. Given epistemic disagreement, we expect the two major parties to continue framing the disease in a way consistent with their unique understanding of the facts. A growing part of the conservative narrative seems to emphasize the economic costs of social distancing whereas for liberals, the emphasis is on the potential costs of *not* social distancing. Certainly, the solutions to the pandemic may be distasteful to conservative cultural values emphasizing freedom, economic growth, and weak central government (see Campbell & Kay, 2014; Kahan et al., 2010), motivating conservatives further to discredit information on its risk. Operating with a different set of facts likely lowers the criterion for conservatives to be persuaded by the negative consequences of social distancing (and does the opposite for liberals). Because conservatives believe the virus poses less of a health risk to society, they may be willing to tolerate less economic harm than are liberals, who believe more strongly in the societal health risk raised by the pandemic. We would, therefore, expect conservatives to report less willingness to endure social distancing for an indeterminate timeframe and this to be mediated by greater sensitivity to the immediate economic costs of social distancing.

It does not seem inevitable that conservatives take a more relaxed approach to disease and epidemics. In 2014, with President Obama in power and conservative trust in government lowered, Republicans were more worried about the Ebola outbreak than were Democrats. In some ways, our findings contradict what may be expected from moral foundations theory

(Graham et al., 2009), which has found conservatives to be more sensitive to purity, disgust, and the risk posed by pathogens than are liberals. Excluding the potential pull of the care/harm foundation for liberals, COVID-19 may be a case where politicization overrides the impulses of these moral instincts. Future research should examine ideological effects in cultural contexts where social distancing has not been as politically divisive; it may be noteworthy that a study done with a predominately English sample found no ideological effects on social distancing adherence (Harper, Satchell, Fido, & Latzman, 2020).

We should also note that the present research did not actually measure compliance with social distancing but rather the self-reporting of it. We are encouraged by a Danish study suggesting that estimates of compliance with COVID-19 regulations do not suffer from social desirability tendencies (Larsen, Petersen, & Nyrup, 2020). Nonetheless, it would be interesting, for example, to examine cell phone data at the county level and determine (a) how much it can be predicted by partisan composition; and (b) how much a given individual's reported deviation from the aggregate behavior of their locality can be explained by ideology.

Finally, the question emerges of how to intervene to prevent the potential loss of life incurred by politically motivated reasoning. One approach may be suggested by Jordan et al. (2020) who found that messaging that frames prevention efforts as public goods – emphasizing the benefits of such behaviors for other people's health (“don't spread it”) – is more effective for increasing prevention intentions than messaging focused on the benefits for the individual (“don't get it”). This approach could be combined with promoting empathy for the most vulnerable, which enhances the motivation for social distancing (Pfattheicher et al., 2020). Whether such interventions would provide push to break through the ideological pull remains a question ripe for investigation.

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Appendix

Measures

Conservative ideology (1 = *strongly disagree*; 6 = *strongly agree*)

- I generally take the conservative view on most issues.
- I identify as politically liberal [reverse scored].
- I generally favor the Republican party over the Democratic party.

Perceived personal risk (1 = *strongly unlikely*; 6 = *strongly likely*)

- How likely are you to become infected with COVID-19 the next few weeks?
- How likely are you to become infected with COVID-19 the next few months?

Perceived other risk (1 = *strongly unlikely*; 6 = *strongly likely*)

- How likely are you to know someone who will become infected with COVID-19 in the next few weeks?
- How likely are you to know someone who will become infected with COVID-19 in the next few months?

Perceived societal COVID-19 health risk (1 = *strongly disagree*; 6 = *strongly agree*)

- I believe COVID-19 poses a large health risk to my community.
- I believe COVID-19 poses a large health risk to my state.
- I believe COVID-19 poses a large health risk to the U.S.

Self-reported knowledge of COVID-19 (1 = *strongly disagree*; 6 = *strongly agree*)

- I have been closely following news stories related to COVID-19.
- I am well informed on the issue of COVID-19.

Belief in mainstream media accuracy (1 = *strongly disagree*; 6 = *strongly agree*)

- The mainstream media has been accurate in covering COVID-19.
- The mainstream media has exaggerated the severity of COVID-19 [reverse scored].
- The mainstream media has overhyped COVID-19 to make President Trump look bad [reverse scored].
- I trust the way the mainstream media has covered the COVID-19 story.

Belief in science; adapted from Farias, Newheiser, Kahane, and de Toledo (2013). (1 = *strongly disagree*; 6 = *strongly agree*)

- Science provides us with a better understanding of the universe than does religion.
- The scientific method is the only reliable path to knowledge.
- The only real kind of knowledge we can have is scientific knowledge.
- Science is the most valuable part of human culture.
- Science is the most efficient means of attaining truth.

COVID-19-related anxiety; modified from the six-item condensed short form of the Spielberger State-Trait Anxiety Inventory (Marteau & Bekker, 1992; Spielberger, 1979). (1 = *not at all*; 4 = *very much so*; alpha = .90),

Select how do you feel right now, at this moment, when thinking about COVID-19 in terms of: calm (reverse scored); tense; upset; relaxed (reverse scored); content (reverse scored); and worried.

Social distancing (1 = *strongly disagree*; 6 = *strongly agree*)

I have intentionally avoided social gatherings because of COVID-19.

In general, I have followed the government guidelines concerning appropriate social distance from others in response to COVID-19.

I have consistently maintained a distance of >6 feet from other people outside my immediate family because of COVID19.

In general, I have followed the government guidelines concerning appropriate social distance from others in response to COVID-19.

Age

Indicate your age.

Gender

Indicate your gender.

Population size (study 2)

Which best characterizes the population size of where you live?

-more than 300,000

-100,000-299,999

-50,000-99,999

-25,000-49,999

-10,000-24,999

-5,000-9,999

-less than 4,999

Education level (study 2)

What is your highest level of education?

-No formal education

-High school diploma/GED

-Vocational training

-College degree/Bachelor's degree

-Master's degree

-Professional degree

-Doctorate degree

Income (study 2)

What best represents your household income?

-under \$20,000

-\$20,001-\$40,000

-\$40,001-\$60,000

-\$60,001-\$80,000

-\$80,001-\$100,000

-more than \$100,000