# Partisanship and Policy on an Emerging Issue: Mass and Elite Responses as the COVID-19 Pandemic Evolved\*

Brandice Canes-Wrone, Jonathan T. Rothwell, and Christos A. Makridis

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#### **Abstract**

A longstanding challenge in assessing the impact of partisanship on individual attitudes is that party affiliation correlates with underlying dispositions. To contribute to this question, we analyze new individual-panel data on the COVID-19 pandemic from 54,216 US adults between March 2020-September 2021. Individual-level fixed effects analysis suggests that the impact of partisanship on reported COVID-19 behaviors varies by their benefits and costs: on actions with high costs such as socially isolating, the impact declines with vaccine availability. However, for lower-cost actions such as masking, the partisanship effect increases post-vaccines. Building on these results, we leverage state-level intertemporal policy variation to examine how a respondent's co-partisanship with the governor and the governor's policy choices are related to individual approval of the state response. This analysis, which incorporates state and date fixed effects, finds an effect of partisanship that is substantially tempered, although not eliminated, by the governor's policy decisions.

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<sup>^</sup> Brandice Canes-Wrone, Stanford University Professor of Political Science and Maurice Greenberg Senior Fellow at the Hoover Institution, bcwrone@stanford.edu. Christos A. Makridis, Arizona State University & Stanford University, christos.a.makridis@gmail.com. Jonathan T. Rothwell, Principal Economist at Gallup, Non-resident Senior Fellow at Brookings Institution, & Visiting Scholar at George Washington University, jonathan\_rothwell@gallup.com.

A vast literature considers the role of partisanship on individual behavior. An enduring perspective, harking back to *The American Voter* (Campbell et al. 1960), views partisanship as not merely an affiliation that correlates with policy preferences but also a psychological attachment or identity that shapes the assessment of new political information. In Campbell et al.'s (1960, 128) seminal account, "party is a supplier of cues by which the individual may evaluate the elements of politics...[and] has a profound influence across the full range of political objects to which the voter responds." Various studies support this assertion, finding partisanship affects individuals' policy positions (e.g., Lenz 2012, Barber and Pope 2019), evaluations of government performance (e.g., Evans and Anderson 2005), use of government services (e.g., Lerman, Sadin, and Trachtman 2017), and even seemingly apolitical behavior such as consumer purchases (Gerber and Huber 2010).

The perspective has faced pushback, however. Fowler (2020) argues that there is "no compelling evidence to support" what he labels partisan intoxication, in which a voter's partisan identity dictates electoral choices (but see Rogers 2020). Other research presents evidence that questions the impact of partisanship on policy preferences (Ansolabehere and Kuriwaki 2021) and consumer purchases (McGrath 2016). A particular methodological challenge highlighted by this work is that partisan identity can be observationally equivalent to the preferences or actions it is hypothesized to influence. For instance, when a Democrat supports high tax rates, the individual may identify as a Democrat in part due to this policy preference or instead favor the policy because of their partisan identity. One-shot surveys compound the inference challenge by providing only a snapshot of partisanship, behaviors, and beliefs at a particular point in time.

The past two years of the COVID-19 pandemic presents an unusual opportunity for wading into this debate. Individuals did not have longstanding beliefs and behaviors pertaining to COVID-19 when it emerged. Moreover, the issue quickly became highly salient, with people across the country experiencing the pandemic first-hand, as well as various policies designed to mitigate it. At

the same time, elite messaging was polarized, with President Trump and many Republican politicians arguing for less restrictive policies than those promoted by Democratic leaders (e.g., Byers and Shay 2022). The context thus encompasses an emergent salient issue, pre-existing partisan identities, a flow of new political information, and polarized elites over a prolonged period of time.

Scholarship has capitalized on this context to examine the ways in which partisanship influenced individual behavior regarding COVID-19. Some of this research highlights its impact on individual attitudes and behavior, although other work pushes back, suggesting that the on-the-ground conditions were at least as or more important (e.g., Bisbee and Da In Lee 2022). As we later discuss, studies vary in terms of time span and coverage of covid-related behaviors. Further, almost all survey analyses do not have observations of the same individual over time, limiting the ability to disentangle preexisting dispositions from the impact of partisanship. The few that do have repeated observations of the same individual (Gadarian, Goodman and Pepinsky 2022; Kaushal et al. 2022) do not extend into the period in which vaccines were widely available, thereby missing a key time during which the perceived personal benefits and costs of behaviors, such as masking and social isolation, changed substantially.

A related line of work considers how partisanship is associated with individual approval of the government's actions. For example, Pickup, Stacula and van der Linden (2020) find Republicans were significantly more supportive of the federal government's initial response to the pandemic, with Democrats more likely to believe the government underreacted. Yet because there is no variation across the federal leadership in the time span, the data cannot disentangle the extent to which support for the government is predicated on partisanship versus the policies themselves.

We bring new data to bear on these and related questions through the analysis of individual-level panel data on behaviors and beliefs from March 2020 through September 2021. The data are from the Gallup Panel, a probability-based sample designed to be representative of the national

population. Our sample consists of 164,327 responses from 54,216 distinct U.S. adults, 31,996 of whom responded three or more times. Because we have repeat observations of the same individual across multiple periods including after the widespread rollout of the vaccines, we can assess whether Democrats' and Republicans' responses evolved differently over the course of the pandemic, holding constant each individual's underlying predispositions. These data include items on mask-wearing, social distancing, concern about the illness, and working remotely, among others.

Moreover, the data include the zip code of the respondent, enabling examination of how on-the-ground health conditions compare with partisanship in terms of predicting behaviors and beliefs.

We also assess the role of an individual's partisanship on approval of their state's response, which was collected for a more limited time frame, between mid-March and early April 2020.

Because of cross-state variation in gubernatorial partisanship and within-state, intertemporal variation in governors' policy actions, this analysis can evaluate the extent to which co-partisanship versus policy predict approval. Finally, we consider the role of partisanship in governors' enactment of policies, including mask mandates, stay-at-home orders, and restrictions on gatherings, comparing the effects of mass opinion and elite party affiliation with on-the-ground pandemic conditions.

Three main findings emerge. First, we find that partisanship has an independent and meaningfully large impact on covid-related responses, but this effect varies according to the perceived personal benefits and costs associated with the behavior. For instance, once the vaccines become widely available, with an associated decreased risk of severe hospitalization and death from contracting the disease, the impact of partisanship declines for the costly activity of socially isolating. However, for the less costly activity of masking, the impact increases substantially post-vaccines. These results, along with ones on remote work, are consistent with the argument that the effects of partisanship on behavior depend on the perceived benefits and costs.

Second, individual approval of the state's handling of COVID-19 is conditioned by partisanship as well as state policy. In particular, individuals are more likely to approve of the state's response when the governor is of the same party, but this effect is tempered by the governor's policy choices. The partisan gap between Democratic and Republican respondents is substantially reduced by gubernatorial policy that counters the national party's position (e.g., when Republican governors enacted restrictive COVID-19 policies). Together, the individual-level findings point to a world in which partisanship shapes, but does not entirely determine, mass behavior and beliefs.

Third and finally, we find that the enactment of state policies is associated with elite partisanship in addition to mass partisanship as captured by the state's previous Trump vote.

Consistent with the argument that the elites separated in their response by party, Democratic governors were more likely to impose mask mandates, restrict social gatherings, and close workplaces. Even beyond elite partisanship, however, restrictive policies were more likely to be enacted the lower the state's previous vote for Trump. Interestingly, the local COVID-19 case count does not have a robust relationship to policy adoptions other than for mask-wearing. These findings further highlight the role of partisanship in shaping political outcomes on an emerging issue such as COVID-19, where ex-ante neither party had established positions at either the mass or elite level.

## Partisanship and COVID-19

Various studies use survey data to analyze the role of partisanship on COVID-19 behaviors and beliefs. These surveys generally involve the period before vaccines were universally available and/or lack repeated observations of the same individual across time. For instance, several pieces find that in the initial months of the pandemic Democrats were more likely than Republicans to report they were socially distancing (e.g., Allcott et al. 2020; Wu and Huber 2021), as well as express concern about the potential consequences of the pandemic (Allott et al. 2020; Pickup, Stecula, and van der Linden 2020). Likewise, Milosh et al. (2021) present evidence from a July 2020 survey that

Democrats were more likely than Republicans to report masking. However, and as many of these articles point out, the design of the surveys allows any partisan differences to be due to underlying dispositions that are correlated with partisan affiliation. Furthermore, other research suggests such dispositions may indeed explain the partisan differences. Clinton et al. (2021) find that once demographic controls and local health conditions are accounted for, Democrats and Republicans report similar levels of social distancing early in the pandemic. Although Clinton et al. suggest a partisan difference emerges in later months, they cannot rule out that the pandemic caused individuals to change their partisan identification. And consistent with this notion, Warshaw, Vavrek and Baxter (2020) show that local COVID-19 fatalities reduced support for Republican candidates.

The few existing panel surveys include Gadarian, Goodman, and Pepinsky (2022) and Kaushal et al. (2022). The former study analyzes a multi-wave panel from March 2020 through early April 2021 and finds a widening gap in isolating and related social distancing behaviors. Because the time span ends right as vaccines become widely available, it cannot analyze the post-vaccine period, nor does it consider the other behaviors and responses we analyze including masking, remote work, and worry about COVID-19 (Figure A.2, p. 296). Kaushal et al. (2022) consists of a two-wave panel in March and August 2020 and establish that the effect of partisanship on covid-related behaviors increases between these periods, especially for social distancing.<sup>1</sup>

Complementing the survey evidence is research that leverages county-level behavioral responses. For instance, several studies show Democratic-leaning counties were more likely to

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<sup>&</sup>lt;sup>1</sup> Druckman et al. (2021) use a measure of affective polarization in August 2019 to analyze the relationship with reported COVID-19 behaviors and attitudes in April 2020. This two-wave panel, which spans the initial outbreak, suggests that affective polarization is positively associated with attitudes and actions towards the pandemic, but less so in areas with more severe outbreaks.

follow stay-at-home orders by reducing visits to points of interests, such as restaurants, than were Republican-leaning counties (e.g., Allcott et al. 2020; Grossman et al. 2020; Barrios and Hochberg 2021). Likewise, Barrios and Hochberg (2021) find counties with a higher Trump vote conducted fewer Google searches about the virus in the early months of the pandemic. These types of findings suggest the self-reported behavioral responses are not merely cheap talk, but instead match revealed behaviors. Yet notwithstanding the advantages of these data, the studies are not designed to assess variation in individual-level responses across the pandemic.

A related strand of the literature considers individual approval of the government's or a specific politician's response to COVID-19. Pickup, Stecula, and van der Linden (2020) present survey evidence that in the first two months of the pandemic, Democrats were more likely to report believing that the federal government had underreacted. One might reasonably speculate that this reaction reflected Democrats' high disapproval of Trump as president.<sup>2</sup> Such an explanation comports with evidence that in the outbreak of Ebola under President Obama and avian flu under President George W. Bush, out-party members were less confident of the government's handling of the disease than in-party ones (Nyhan 2014).<sup>3</sup> However, Gadarian, Goodman, and Pepinsky (2021) provide experimental evidence that individuals' support for government actors' response to the

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<sup>&</sup>lt;sup>2</sup> Although the authors also find that in Canada, liberal respondents were more likely to believe the federal government had underreacted, and the Prime Minister was a member of the Liberal Party.

<sup>3</sup> Likewise, Graham and Singh (forthcoming) find effects of partisanship related to evaluations of presidential competence, and Hegland et al. (2022) find partisan reactions are associated with trust in health institutions. Neither study, however, evaluates how the effects of partisanship compare with those of government actors' policy choices, as our analysis of state approval does.

pandemic does not depend on partisan endorsements.<sup>4</sup> Our analysis adds to this literature by leveraging state-level variation in policy and gubernatorial party along with across-time policy variation to assess how approval of the state response depends on shared partisanship with the governor versus the policies enacted. As such, we can evaluate the impact of partisanship under conditions where governors countered versus followed the positions of national party elites.

Finally, some scholarship examines the role of elite partisanship on governors' enactment of covid-related restrictions. Adolph et al. (2021) analyze the initial adoption of school closures, stay-at-home orders, and restrictions on public gatherings in February-March 2020 and find Republican governors took two days longer than Democratic governors to enact these policies. By examining a much longer time span of the pandemic, we can consider both when policies were adopted and terminated. Moreover, this time span, combined with our data on pandemic-related attitudes, enables accounting for prior mass attitudes as a predictor of the policies.

In sum, although a variety of excellent research presents important evidence about relationships involving partisanship and covid-related outcomes, the scope and time frame of previous work leaves a number of questions unanswered. How much did partisanship shape individual behavior and beliefs as the pandemic unfolded, particularly after vaccines became widely available, and did these effects vary across behaviors? How much did the policies enacted by governors shape approval of the state government response? And to what extent did policy decisions themselves respond to the public's attitudes versus elite-level partisanship? Our panel and other data enable us to probe these questions and consequently provide novel insight into the role of partisanship on a new, highly salient issue as it matures.

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<sup>&</sup>lt;sup>4</sup> Likewise, Rothwell et al. (2022) randomize information about COVID-19 and find the policy preferences of subjects from both parties are highly responsive to short, fact-based statements.

#### Data and measurement

Our individual survey data are from Gallup's COVID Tracking Survey. Gallup fielded the survey on March 13, 2020 and collected roughly 1000 responses per day until April 26<sup>th</sup>, when the sample declined to roughly 500 responses per day. Our data extend through September 16<sup>th</sup>, 2021, thereby covering approximately a year and a half of the pandemic. The sample is a subset of the Gallup Panel, which is designed to be representative of the U.S. national adult population and contains 100,000 members who are originally contacted via random-digit dialing before completing the survey on-line. Gallup designed each daily COVID survey to be nationally representative—using the Census Bureau's American Community Survey as the target population—while simultaneously taking care not to create survey fatigue by asking the same respondent to answer multiple covid-related surveys within a short time span. In total we have 164,327 responses from 54,216 unique individuals. Even though the data are designed to be nationally representative, we use the Gallup sample weights, which are based on region, race, Hispanic ethnicity, age, gender, and education in order to ensure as close a representation as possible to the target national population.

A substantial advantage of the survey instrument is that it contains panel data on individuals. Over 40,000 individuals responded at least twice, over 30,000 individuals responded at least three times, and almost 20,000 responded 4 or more times. Table S1 in the supplemental materials provides the complete distribution of the number of survey responses. This panel structure allows us to not only include individual fixed effects as a way of mitigating omitted variables bias but also trace out the response of individuals over key periods of the pandemic, including when the vaccines became widely available. As the supplemental materials show (Figure S17), between February-May 2021 the rate of fully vaccinated individuals rises from less than 10 percent regardless of party to

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<sup>&</sup>lt;sup>5</sup> We obtained these data directly from Gallup.

approximately 80 percent for Democrats and 40 percent for Republicans, making spring 2021 the critical period for the vaccine rollout.

The key covid-related items include whether the respondent has recently worn a mask, mostly isolated themselves from non-household members, visited their place of work, and whether they are worried about contracting COVID-19. In particular, the items capture whether the respondent has "worn a mask on [their] face" in the past 7 days outside their home; has "completely" or "mostly" isolated themselves, having "no" or "very little contact with people outside [their] household" in the past 24 hours; visited their "place of work" in the past 24 hours; and whether the respondent is "very worried" that they "will get coronavirus (COVID-19)." The online supplemental materials (S2) provide the complete wording on the questions and responses. We include a mix of behaviors to capture variation in the extent to which actions may carry different perceived costs and benefits. For instance, for many individuals, refusing to go into the office carried the cost of termination, even at the height of the pandemic. Likewise, for most people, socially isolating is more costly than wearing a mask.

The online supplemental materials (Table S3) present descriptive statistics for these covid-related responses, as well as all variables across the entire sample. For the covid-related items, summary statistics by party are also provided in Table S4. Among the responses, 42% are from Democrats, 30% from Republicans, and 28% from Independents who do not identify with either of the major parties but still give a response to the party identification items. As expected, stark

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<sup>&</sup>lt;sup>6</sup> This coding incorporates those who identified as Independents or a third party. We have also categorized Independents as only those who explicitly declare themselves Independents, and the results are substantively similar. In the main analysis, we code party identification at the time of the survey. However, we have also conducted analyses excluding party switchers and, separately, with

partisan differences emerge in average COVID-19 attitudes and behaviors. For instance, whereas 66% of Republicans report wearing a mask in the past week, 92% of Democrats do. Of course, this type of across-time average says nothing about the extent to which partisans initially differed in their attitudes towards COVID-19 versus how their attitudes polarized over the course of the pandemic. Moreover, because differences-in-means do not control for other factors, they may simply reflect correlations with demographic and geographic characteristics.

Figure 1 delves into the over-time partisan variation between Democrats and Republicans, ignoring for the moment the confounding nature of other factors correlated with partisanship. With each item, a partisan gap exists for a substantial portion of the pandemic, but the size of the gap varies by item across the period, particularly in relation to the rollout of vaccines. The Democrat-Republican gap on mask-wearing ranges from 14-29 percentage points before March 2021 and then widens to 42-50 percentage points by summer. By comparison, the partisan gap for socially isolating declines from over 30 percentage points in February 2021 to less than half that by the summer, due to Democrats becoming substantially less likely to engage in this activity. Worry over COVID-19 follows a similar (if not more) dramatic pattern with worry declining precipitously for Democrats throughout the spring. Finally, the partisan gap in working remotely closes somewhat after vaccines become widely available but otherwise remains relatively consistent throughout the period of study.

This variation across behaviors is consistent with the argument that partisanship is associated with the costs and benefits of a response at a particular point in time. Prior to vaccines, the higher risk of hospitalization and death from COVID-19 made preventative measures more appealing.

Then with the vaccine rollout, Republicans—who were always less likely to wear masks than

party measured by the first response in the panel. These results, which are shown in the supplemental materials (Figures S7 and S8, respectively) support the conclusions in the text.

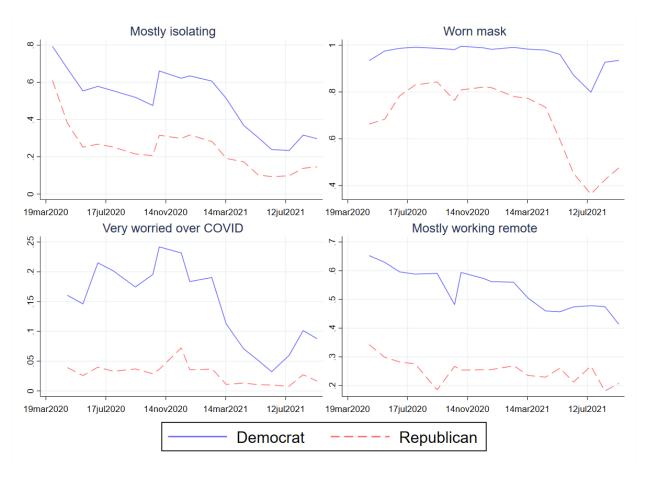


Figure 1. Evolution of COVID-19 Reponses, by Political Affiliation

Notes: The figure plots the share of respondents reporting that they are very worried about COVID-19, that they mostly or always self-isolate, are wearing a mask, have worked remotely over the past month by political affiliation for Democratic and Republican respondents.

Democrats—become considerably less likely to do so even though Democrats only become somewhat less likely. For the more costly activity of isolating, by contrast, Democrats' willingness to engage in this behavior declines significantly once vaccines reduce the health risks from contracting COVID-19. Furthermore, for working remotely, the activity over which many individuals have no control unless they incur the costs of losing their job or foregoing compensation, the gap between the parties changes more minimally across the pandemic.

Of course, Figure 1 does not hold the individual's disposition constant or account for confounding factors, making these conclusions quite tentative. Our subsequent analyses proceed to

assess the extent to which these partisan gaps reflect underlying dispositions, characteristics that are correlated with partisan affiliation, and external factors related to the pandemic. The analyses accordingly control for demographic characteristics, local pandemic conditions, and state-level policies in addition to including fixed effects for the survey date, county, and individual. The demographic factors are from the survey, including: age, race, ethnicity, gender, employment, education, income, and whether the respondent is living with children. We also conduct analyses that control for vaccination status. Details on the specific measurement of these factors and descriptive statistics are given in the supplemental materials (Table S3). In the analyses with individual-level fixed effects, many of the demographic controls naturally drop out given that they do not change over time, although those that do change are included.

To capture the local pandemic conditions, we use daily data on newly confirmed COVID-19 cases per capita in the county from USAFacts, which pulls the original data from state health departments. Presumably, on-the-ground health conditions should shape individual responses, although some earlier work suggests regional variation in the pandemic conditions plays less of a role than might be expected (e.g., Clinton et al. 2021). We have alternatively used the death rate per capita and the results are substantively similar (see Tables S14-S16 in the supplemental materials). We focus on the case rate in the text because of the prominence of the case rate in the media.

The state policies are from Oxford University's COVID-19 Government Response Tracker, as adapted to the United States by Hallas et al. (2020). For each day since the start of the pandemic, the database codes various policies by their level of stringency for each state and the District of Columbia. Given the content of the covid-related survey responses, we focus on the policies of stay-at-home orders, restrictions on social gatherings, mask mandates, and workplace closings. For each, a binary variable indicates whether a restriction is mandated at a specific point in time.

The analysis of approval of the state response continues to use the Gallup COVID Tracking Survey. Specifically, the survey item asks whether the respondent approves or disapproves of the way the state government is "handling the response to the coronavirus in the U.S." (See online supplemental materials S2 for the complete wording.) Unlike the earlier covid-related items, the approval item is only asked through April 2, 2020. We therefore cannot employ individual-level fixed effects in this analysis. Still, identification is facilitated by within-state variation in respondent partisanship and in policies—the data capture periods before and after policies were adopted—as well as by cross-state variation in policies and gubernatorial party. As before, we control for individual-level demographics and the number of new county-level COVID cases.

Finally, the analysis of the enactment of state-level policies moves from individual to state-level data. In addition to the governor's partisanship, we account for the percentage of the state's 2016 presidential vote for Trump, given that the state-level conservatism/liberalism may affect gubernatorial policy decisions (e.g., Caughey and Warshaw 2018). Likewise, we control for lagged covid-related behaviors and beliefs. The responses are aggregated to the state level and lagged by 30 days to allow for the fact that governors' policy decisions may respond to mass attitudes about the pandemic. By using the lag, we remove some of the contemporaneous factors that could otherwise create endogeneity. Controls include the number of new COVID-19 cases per capita in the state in the past seven days along with state-level demographics from the 2019 American Community Survey and the US Department of Labor. These demographic controls are discussed alongside the analysis, and the supplemental materials (Table S5) provide descriptive statistics and details.

## Individual COVID-19 behaviors and attitudes

To analyze the determinants of individual behaviors and beliefs about COVID-19, we estimate regressions of the following form:

$$y_{ict} = \xi(P_{ict} \times Month_t) + \gamma P_{ict} + \zeta COVID_{ct} + \phi D_{it} + \kappa R_{st} + \eta_c + \lambda_t + \nu_i + \epsilon_{it} \tag{1}$$

where y denote individual i's survey response in county c and survey date t for each of the four covid-related responses in Figure 1; P denotes partisan affiliation as reflected by indicators for Democrats, Republicans, and Independents (with Republicans as the base category); Month reflects the month in which the survey was conducted; COVID denotes the logged number of new COVID-19 cases per capita in the county; D denotes a vector of demographic controls; R reflects pandemic-related policies in state s on date t; and  $\eta$ ,  $\lambda$ , and  $\nu$  denote fixed effects for county, survey date, and individual, respectively. The key coefficients are those on the interactions between the party and month variables, as they capture how any partisan gap evolves over the pandemic, relative to the base month of the survey. We estimate linear probability models to allow for the fixed effects. We also cluster standard errors at the county-level to allow for arbitrary degrees of local autocorrelation.

Two variants of Equation (1) are presented: with and without the individual-level fixed effects. The latter case incorporates singletons—individuals who completed the survey/item only once. Accordingly, in the analysis with individual-level fixed effects, our sample sizes are smaller due to the fact the data include over 50,000 singletons. Moreover, we limit the individual-level fixed effects analyses to respondents who answered in the first month in which the item was asked. Even

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<sup>&</sup>lt;sup>7</sup> We have also conducted the analysis with additional fixed effects for the county interacted with survey date for the specification without individual effects, to assess how county-specific trends might alter the findings. These results are substantively similar, as shown in the supplemental materials (Figure S9).

<sup>&</sup>lt;sup>8</sup> For working remotely, May 2020 was the first month the item was regularly asked although a few observations exist for the final four days of April. We group together these observations with May.

with these restrictions, we have over 500 observations per month for all survey items and months, giving us confidence that the sample remains representative.

Because both specifications control for the aforementioned demographic differences and the overall rate of infection within a county, the interaction between political affiliation and time is not simply detecting rising COVID-19 cases or differences in demographic factors, such as age and education. Furthermore, the analysis with individual fixed effects rules out that any observed differences in partisanship are due to omitted factors correlated with underlying dispositions. In the supplemental materials, we restrict the analysis to individuals who maintain the same partisan affiliation throughout the panel (Figure S7) and recode partisan affiliation to equal the value the first time the respondent participates in the COVID-19 panel (Figure S8) to eliminate the possibility that party-switchers are driving the findings. These results are consistent with those in the text.

Figure 2 presents the findings on the effects of partisanship as the pandemic evolved by plotting the parameter estimates for each interaction between the month and Democratic partisan affiliation. The dark blue dots and lines depict the estimated coefficient and the 95% confidence interval, respectively, for the analysis with the individual fixed effects and the light blue dots and lines for that without them. Note that these estimated coefficients reflect a different quantity of interest than those in Figure 1 in multiple respects. Most obviously, they are from estimations with the various controls and fixed effects. Moreover, rather than reflecting the total partisan gap in each month, they capture the additional partisan gap between Democrats and Republicans over the baseline gap in the first month of the survey item (the omitted indicator). In other words, a positive value indicates that Democrats are more likely in that month to differentiate themselves from Republicans than they had been at the start of the pandemic (a larger partisan gap).

A few broader findings are worth noting before delving into the specifics of each panel. First, the magnitude of the Democrat-Republican partisan gap varies across time and response.

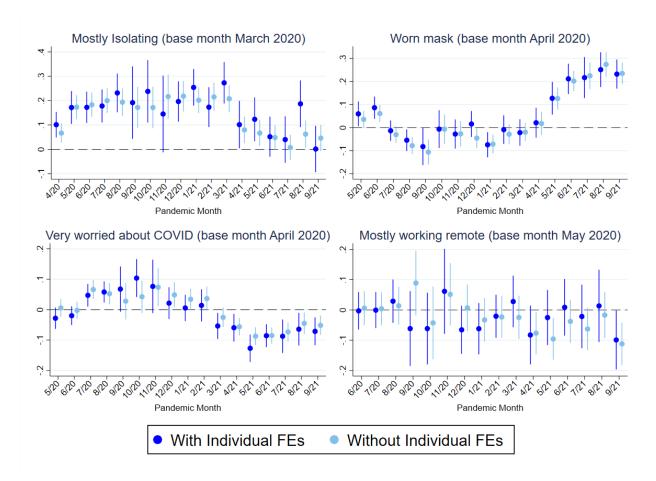


Figure 2. Change in Partisan Gap in COVID-19 Responses

Notes: The figure plots the estimated change in the partisan gap between Democratic and Republican respondents relative to this gap in the base month of the survey item. The dots and lines reflect, respectively, the estimated coefficients and 95% confidence intervals. Controls include the log of new COVID-19 cases per capita in the county, gender, race, employment status, age, education, living with children, annual household income, and state policies. All regressions include fixed effects for the date and county. Standard errors are clustered at the county-level.

Indeed, the dissimilarity across the effects in the post-vaccine period is particularly striking, with the partisan gap increasing for masking, decreasing for isolation and worry, and staying constant for remote work. Second, the coefficients are remarkably stable between the specifications with and without the individual fixed effects. On occasion, the impact is even higher when the individual fixed effects are included. Overall, the coefficients move together across time. Notably, these results

imply that the impact of partisanship is not simply an artifact of individuals selecting into a party, but rather an independent effect on attitudes and behavior.

Consider the top-left panel on isolating. The estimates indicate that the Democrat-Republican gap grows in April-May 2020 from the March baseline, continues at a heightened level through the winter of 2021 and then declines precipitously in April 2021, as the vaccines are rolling out. Table S6 in the supplemental materials gives the precise parameter estimates for these coefficients and all other variables. When the individual fixed effects are not included, the main effect on the Democrat indicator reflects the partisan gap in the first month of the survey, and these estimates suggest it is 6 percentage points. The increased gap in April is 7 percentage points, implying a total gap of 13 percentage points in that month. As Figure 2 depicts, across the months the gap is reasonably similar with and without the fixed effects in that the confidence intervals overlap a good deal. The primary exception is August 2021, but the similarity of the estimates in all of the other months, including September 2021, highlights the robust nature of the findings.<sup>9</sup>

Moving on to the top-right panel, which captures the partisan gap on mask-wearing as the pandemic evolved, the estimates are again remarkedly stable between the two models. Note that for this item, April is the first month in which the survey item was asked. In February and March of 2020, the CDC provided mixed messages about the advisability of masking by the public, and only began consistently recommending it in April (Netburn 2021). Figure 2 suggests that the Democratic-Republican partisan gap grows in May-June 2020, then returns to levels close to or below the baseline month before increasing substantially in the spring of 2021. Indeed, by August, the partisan gap is more than 25 points higher than it was initially. Supplemental Table S6 reports an estimated

constrained to be identical in each.

<sup>&</sup>lt;sup>9</sup> Even in August 2021, the results are similar across the specifications if the observations are

baseline gap of 17 percentage points, suggesting Democrats are at least 42 percentage points more likely than Republicans to wear a mask in August 2021. It is notable that the gap more than doubles after the vaccine, in stark contrast to the trend for socially isolating.

The results on worry about catching COVID, in the bottom-left panel, imply a similar pattern to isolating although the partisan gap is even lower than in the baseline month by the end of the time period. In April 2020, the initial gap is 11 percentage points according to Supplemental Table S6. It then increases in the fall of 2020, but once vaccines become widely available it declines such that by April-September 2021 it is 6-13 percentage points lower than in April 2020.

Given the importance of the roll-out of the vaccines in multiple Figure 2 panels, we assessed whether adding a variable for whether an individual is vaccinated would alter the findings. This variable becomes available in the Gallup panel in January 2021, and we impute a 0 for all other months, as described in the supplemental materials (Figure S10). Notably, this analysis shows that even accounting for an individual's vaccination status, the substantive results remain.

Finally, in the bottom-right panel of Figure 2, the partisan gap for working remotely—the item over which individuals have the least control--fluctuates less than the other items. For the analysis with individual-level fixed effects, the partisan gap does not vary significantly across any month other than September 2021, where it declines. Without the individual-level fixed effects, the main story is still one of small changes in the magnitude of any gap alongside large confidence intervals, although in addition to September the effects in April and May 2021 reach conventional significance levels. The initial gap, shown in Supplemental Table S6, suggests Democrats are 14 percentage points more likely to work remotely at the time the survey item was first asked. Although this result indicates that working remotely is correlated with partisan identification, Figure 2 shows that beyond this baseline association there is not much of an independent impact of partisanship as

the pandemic evolves.<sup>10</sup> This stability is consistent with a world in which working remotely is not entirely within the discretion of many respondents who wish to keep their jobs and compensation.

For space reasons, we do not delve into the results on Independents, which are presented in the supplemental materials (Table S6), but note that as expected, they commonly fall between the two major parties in terms of responses. Likewise, the estimates on the controls largely correspond with expectations. The local case count is positively associated with isolating, the wearing of masks, and worry about catching the illness. Mask ordinances are associated with higher rates of wearing masks. Moreover, in the analyses that replace the individual-level fixed effects with demographic controls, several of these factors have a significant association with the responses. Males are significantly less likely to isolate, wear a mask, worry about the illness, and work remotely. Education is positively associated with socially isolating, mask-wearing, and working remotely, although only to a minimal degree with worry about the illness. The effects on race are somewhat mixed, with Blacks and Asians being more likely to wear masks, Blacks less likely to socially isolate, and Hispanics and Multiracial respondents more likely to worry about the illness (all else equal). When the individual-level fixed effects are excluded, income is positively associated with isolating and working remotely, and negatively associated with worry about the illness. Interestingly, there is no association between income and mask-wearing, at least with the other demographic controls included.

Figure 2 highlights that even accounting for all of these confounding factors, a significant effect of partisanship emerges. Moreover, for the responses that involve actions, this effect varies

4.

<sup>&</sup>lt;sup>10</sup> The survey data contain information about industry only into September 2020. We have conducted the analysis with industry fixed effects that impute an individual's industry in future dates based on earlier responses. Figure S11 in the supplemental materials shows that these results are substantively similar to those in the text, including for the analysis of working remotely.

across time and behaviors in ways that correspond to the benefits and costs of the action. For socially isolating, a costly activity, the rollout of vaccines reduces the partisan gap considerably. For the less costly activity of masking, however, the impact of partisanship increases after the rollout. Finally, for working remotely, where many respondents had little control unless they were willing to switch jobs, the impact remains fairly constant even after vaccines become available. The fact that these results hold with individual-level fixed effects highlights that they go beyond mere selection into a party, and instead reflect an independent impact of partisanship.

## Partisanship, policy, and state government approval

Building on the findings regarding health-related responses, we exploit state-level and intertemporal variation to study how partisan affiliation is related to an individual's approval of their state government's response, allowing for effects to vary based on their governor's party and the policy actions taken. In all 50 states, emergency declarations enabled governors to quickly enact policies including stay-at-home orders and restrictions on gatherings. The governor was therefore the primary policy actor in the state's policy response. Furthermore, in many states, governors were the literal and figurative face of public communications, routinely giving press conferences and speeches (e.g., Doerr 2021). We accordingly expect that if partisanship influences individual approval of the state government response, approval will be higher when an individual's party matches that of the governor, regardless of the policy actions taken.

To test this hypothesized effect, we run regressions of the form:

 $APPROVE_{it} = \gamma P_{it} + \xi(P_{it} \times G_{st}) + \tau G_{st} + \kappa R_{st} + \zeta COVID_{ct} + \phi D_{it} + \eta_s + \lambda_t + \epsilon_{it}$  (2) where now the dependent variable is an indicator for approval of the state response, G is a state-level indicator reflecting whether the state has a Republican or Democrat governor, and R represents the policies in place, including stay-at-home orders (SAHO) and restrictions on gatherings. Recall that the Gallup data on approval of the state response extend only through April

2, 2020, and by that time no state had enacted a mask ordinance. However, during that period many states enacted SAHOs and gatherings restrictions, enabling a comparison pre and post the enactment of the policies. *P* again reflects respondent ?s party, but in this case, the baseline category is Independents so that we can examine how co-partisans (i.e., Democratic respondents in a state with a Democratic governor and Republican respondents in a state with a Republican governor) differ from other respondents. *D* represents the same set of demographic controls. State-level fixed effects account for geographic factors not otherwise accounted for, and date fixed effects for national-level trends. As before, because of the fixed effects, we estimate a linear probability model.

One might expect the effects of policies on approval to vary by respondent partisanship, particularly given our earlier findings regarding the impact of partisanship on health-related responses. We therefore anticipate Democratic respondents will be more likely to approve of covid-related restrictions than Republican respondents. At the same time, research on partisanship suggests these effects may depend on co-partisanship with the governor, with individuals favoring policies endorsed by co-partisan elites (e.g., Lenz 2012; Barber and Pope 2019). We accordingly anticipate that the party of the governor will have an independent effect on whether a respondent approves of the state response.

To analyze these additional effects of partisanship, we run regressions of the following specification for respondent *i* on date *t*, first for states with a Democratic governor and then those with a Republican one:

$$APPROVE_{it} = \gamma P_{it} + \xi (P_{it} \times R_{st}) + \kappa R_{st} + \zeta COVID_{ct} + \phi D_{it} + \eta_c + \lambda_t + \epsilon_{it}$$
 (3)

where the interaction between R, representing the policies, and individual partisanship P, allows the relationship between approval and the policies to vary by an individual's partisan affiliation. Because the party of the governor is held constant in these regressions, G is dropped. An alternative specification would be to include three-way interaction terms among P, G, and R, along with all two-

way interactions and main effects; here we separate the analyses by party of governor given that it is exogenous during the timespan of these data and to ease interpretation of the findings.

Table 1 documents these results. Columns 1 and 2 show the findings for Equation (2), which pools together all states. Regardless of whether the demographic controls are excluded (Column 1) or included (Column 2), co-partisanship with the governor has a significant effect on approval, as indicated by the estimates on the interactions *Democrat respondent* × *Democrat governor* and *Republican respondent* × *Republican governor*. Interestingly, these effects are similar in magnitude between the parties, as well as with or without the control variables. In each specification, an individual is 26-27 percentage points more likely to approve of the state response if the governor is in their party.

The effects of the policy variables in Column 2 are mixed. On the one hand, there is a marginally significant positive effect of gatherings restrictions (p<0.1, two-tailed). On the other hand, the sign of the effect on stay-at-home orders is not at all significant and even negative. Of course, these estimates group together all respondents, thereby implicitly assuming partisanship does not influence a respondent's policy views.

In Columns 3 through 8, we relax this assumption, allowing the effects of policies to vary by respondent partisanship. Columns 3-5 present the results for Republican governors, first for just restrictions on gatherings, then for stay-at-home orders, and finally for both types of policies jointly with the controls. In each specification, the estimates on the main effects of Democratic and Republican respondents, which reflect the circumstance in which no restrictions were enacted, significantly differ from each other. For instance, in the analysis with full controls (Column 5), Republicans are 36 percentage points more likely to approve of the state response than Democrats are (0.044 - [-0.314]). Similarly, the likelihood that a Democratic respondent approves of the state response is 31 percentage points lower than Independents, the omitted indicator.

Table 1. Individual Approval of State Response

	Outcome = Approval of State Response								
	All s	states	Rep	Republican governors			Democratic governors		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Republican respondent ×	0.271***	0.264***							
Republican governor	(0.060)	(0.060)							
Democrat respondent X	0.267***	0.267***							
Democrat governor	(0.049)	(0.049)							
Republican respondent	-0.086**	-0.096***	0.106***	0.137***	0.044	0.013	-0.055	-0.034	
	(0.033)	(0.034)	(0.037)	(0.047)	(0.052)	(0.040)	(0.048)	(0.055)	
Democrat respondent	-0.097**	-0.118**	-0.314***	-0.082	-0.314***	0.274***	0.144***	0.227***	
	(0.045)	(0.047)	(0.066)	(0.064)	(0.065)	(0.060)	(0.042)	(0.059)	
Rep respondent ×			0.106		0.107	-0.104**		-0.007	
Gatherings restrict			(0.068)		(0.068)	(0.051)		(0.091)	
Dem respondent ×			0.268***		0.281***	-0.111		-0.137	
Gatherings restrict			(0.074)		(0.058)	(0.066)		(0.082)	
Gatherings restrict		$0.077^{*}$	-0.165**		-0.105*	0.175**		0.195***	
		(0.044)	(0.060)		(0.060)	(0.068)		(0.053)	
Rep respondent × SAHO				0.105	0.082		-0.056	-0.066	
				(0.073)	(0.075)		(0.067)	(0.080)	
Dem respondent × SAHO				-0.026	-0.035		0.040	0.062	
				(0.090)	(0.076)		(0.060)	(0.069)	
Stay-at-home order (SAHO)		-0.047		-0.097	-0.067		-0.018	-0.059	
		(0.041)		(0.068)	(0.074)		(0.066)	(0.067)	
Log Per capita COVID cases		-0.001		, ,	-0.029**		, ,	0.016	
		(0.008)			(0.012)			(0.010)	
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Demographic Controls	No	Yes	No	No	Yes	No	No	Yes	
Observations	10029	9244	4607	4607	4230	5422	5422	5013	
Adjusted R-squared	0.112	0.132	0.125	0.122	0.165	0.108	0.109	0.135	

Notes: Standard errors clustered by state below coefficients. Controls include the log of new COVID-19 cases per capita in the county, gender, race, employment status, age, education, living with children, and annual household income. Estimates on controls are provided in the supplemental materials (Table S12). \*\*\* p<0.01, \*\* p<0.05, \* p<0.1, two-tailed.

Moreover, partisan differences emerge in how a governors' enactment of restrictions relates to approval, as indicated by the estimates on the interaction terms between respondent partisan affiliation and the policy items. When the governor is a Republican, Democrats' approval of the state response is higher when the governor restricts gatherings. In particular, this policy action is associated with higher approval of 27-28 percentage points by Democratic respondents across the specifications (Columns 3 and 5). Republicans, on the other hand, neither reward nor punish a Republican governor for enacting restrictions on gatherings. The significantly negative coefficients

on the main effect of restrictions reflect the omitted category, Independents, and suggest they are less likely (11-17 percentage points) to approve of the state response when a Republican governor enacts the gatherings restrictions. For stay-at-home requirements, the effects are not significant for Republican, Democratic, or Independent respondents, suggesting more muted partisan differences with respect to this policy. One possible reason is that in states with Republican governors, almost all stay-at-home orders were enacted in conjunction with gatherings restrictions. While the results suggest there is no additional impact of this further restriction, they can say little about the impact of this policy being enacted in isolation.

For states with Democratic governors, the estimates (Columns 6-8) again suggest a significant partisan approval gap in the baseline condition of no restrictions, as indicated by the difference between the main effects on Democratic and Republican respondents (e.g., 0.261 = 0.227 – [-0.034] in the analysis with full controls). Additionally, partisan differences emerge regarding the relationship between policies and state approval. In Column 6, Republicans are less likely to approve of the state response if their Democratic governor enacts restrictions on gatherings. While this effect is no longer significant when the full battery of controls is included (Column 8), the sign of the coefficient remains negative. Separately, the estimates on the main effects of gatherings restrictions indicate Independents are more likely to approve of the state response given this policy enactment. Although we can only speculate about why the effects of gathering restrictions for Independents differ between states with Democratic versus Republican governors, one possibility is that Republican governors who enacted the restrictions were going against their national party's position while Democratic governors were not. Finally, as before, the coefficients on the variables involving stay-at-home orders are not at all significant.

Overall, Table 1 suggests that individual approval of the state's COVID-19 response was conditioned by partisanship as well as policy. The findings on co-partisanship are consistent with

research on presidential approval (e.g., Nyhan 2014; Pickup, Stecula, and van der Linden 2020) although here, state-level variation enables comparing same-party individuals across a variety of Democratic and Republican governors. More importantly, there is evidence governors were able to reduce the partisan approval gap through their policy actions. The inclusion of state fixed effects, which isolates within-state comparisons pre and post the enactment of the policies, strengthens the identification of this and the other findings, removing all other time-invariant heterogeneity across states. In sum, the results suggest that individual partisanship is a strong driver of government approval, but that this effect can be tempered by the policies the government chooses.

## Policy enactments

An open question is how the effects of partisanship observed at the level of the mass public compare with those at the elite level over the course of the pandemic. As already discussed, some research suggests a role for elite-level partisanship in the adoption of state policies, with Republican governors taking on average two days longer than Democrats to enact restrictions in March 2020 (Adolph et al. 2021). Here, we leverage the larger time span of our dataset along with its inclusion of mass covid-related attitudes to assess how the imposition of state restrictions is associated with gubernatorial partisanship and prior public attitudes. To do so, we move to a state-level dataset for each state *s* and day *t* from March 13, 2020 through September 16, 2021.

In particular, we analyze:

$$STPOL_{st} = \tau G_{st} + \gamma TRUMP_s + \kappa LgY_{st} + \zeta COVID_{st} + gD_{st} + \lambda_t + \epsilon_{st}$$
 (4)

where the dependent variable *STPOL* denotes an indicator reflecting whether a policy is in effect in state *s* on date *t*. As counterparts to the mass responses we have already considered, we analyze the policies of restrictions on gatherings, stay-at-home orders, face mask ordinances, and workplace closures. The independent variables include two political factors: *G*, which as before is an indicator

for whether the governor is a Democrat or Republican; and *TRUMP*, which denotes the 2016 share of voters within a state that voted for Trump. The presidential vote variable reflects that governors within the same party represent states with a range of mass ideology; for instance, in 2020 Massachusetts had a Republican governor, while Kansas had a Democratic one. To the extent governors' partisanship itself influences policymaking, we would expect restrictions to be more likely with Democratic governors. At the same time, if governors are responsive to the ideological leanings of the electorate, then a higher vote for Trump should be associated with fewer restrictions.

The other independent variables include LgY, which captures the Gallup covid-related responses aggregated to the state-level for the four weeks preceding time t; COVID, which as before denotes the logged number of new infections over the past 7 days; and a range of state-level demographics denoted by D. For the Gallup covid-related responses, we include in all specifications worry about the illness as well as the behavior most closely related to the enactment (e.g., masking for the enactment of mask ordinances, isolating for the enactment of restrictions on gatherings). Even though these variables are lagged by 30 days, we present the results with and without these factors because of concerns about potential endogeneity. The demographic controls capture population density at the census-tract level, the percentage of elderly, and the percentage of civilian workers employed in hospitality, retail, and transportation. The percentage of elderly and population density account for the deadlier impact of the disease on older individuals and its contagiousness in crowded settings, respectively, while the employment factors comprise industries that were particularly affected by COVID-19 restrictions (e.g., Aharon et al. 2021). As noted earlier, the supplemental materials (Table S5) provide details and descriptive statistics on these variables.

The controls help mitigate against concerns about the cross-sectional variation, but we nonetheless caution against a causal interpretation: our goal is simply to quantify the relationship between political affiliation and state policy. Moreover, because the demographics are strong

predictors of the Trump vote, we present the results with and without these controls. Finally,  $\lambda$  reflects dates fixed effects to account for factors that may affect all states on a particular date (e.g., national pandemic or political activity). State-level fixed effects cannot be included because only one state, Montana, experiences a shift in the partisanship of the governor during this period.

Table 2 describes these results. Columns 1-4 show the results without the controls for demographics or mass attitudes and Columns 5-8 with them. Without the controls, the estimates suggest both the governor's party and mass state partisanship are significantly associated with gatherings restrictions, face mask ordinances, and workplace closings. With controls, some of these effects are only marginally significant (p<0.1, two-tailed), but the substantive findings remain. Moreover, in each case the magnitudes of the effects are meaningful.

Across specifications, a 10 percentage point increase in the Trump vote decreases the likelihood of gatherings restrictions by 7-9 percentage points, mask mandates by 7-8 percentage points, and workplace closings by 10 percentage points. Likewise, Democratic governors are associated with between a 17 to 21 percentage point increase in the likelihood of gatherings restrictions, an 11 percentage point increase the likelihood of mask mandates, and a 14 percentage point increase in workplace closings. Neither political variable has a significant relationship with stay-at-home orders without the controls, although with them, the Trump vote has a significantly negative effect. As the descriptive statistics indicate (Table S5), stay-at-home orders were less frequent than other policies, particularly as the pandemic developed. The substitution of other restrictions for this relatively drastic measure, even in states with Democratic governors and low Trump support, likely contributes to the lack of robust findings for this policy.

In terms of the controls, we find little evidence that lagged state-level attitudes and behaviors predict the enactment or maintenance of policies. Furthermore, the COVID-19 case count is only significant for the mask ordinance regressions. This latter result is consistent with the fact that many

Table 2. Determinants of State Policies

	Gatherings	SAHO	Mask	Workplace	Gatherings	SAHO	Mask	Workplace
	restriction		mandate	closing	restriction		mandate	closing
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
% Trump vote 2016	-0.721**	-0.270	-0.772***	-1.020***	-0.904**	-0.450*	-0.891**	-0.939***
_	(0.286)	(0.262)	(0.265)	(0.302)	(0.400)	(0.225)	(0.335)	(0.313)
Democratic governor	0.183***	0.023	0.113*	0.150**	0.205***	-0.004	$0.108^*$	0.142*
	(0.050)	(0.054)	(0.060)	(0.067)	(0.053)	(0.048)	(0.062)	(0.071)
Log per capita COVID	0.016	-0.012	0.069***	-0.006	0.017	-0.002	0.089***	0.012
cases	(0.018)	(0.028)	(0.019)	(0.023)	(0.021)	(0.020)	(0.022)	(0.024)
Lagged % very worried					0.120	-0.220	-0.065	0.269
about COVID					(0.189)	(0.159)	(0.204)	(0.204)
Lagged % socially isolating					0.157	0.019		
					(0.095)	(0.060)		
Lagged % wearing mask							0.048	
							(0.121)	
Lagged % working remote								0.076
								(0.081)
Demographic controls	No	No	No	No	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	27,650	27,650	27,642	27,650	25.200	25,200	25,192	25,139
Adjusted R-squared	0.476	0.300	0.448	0.406	0.503	0.223	0.448	0.368

Notes: Standard errors clustered by state below coefficients. State-level demographic controls include population density, % elderly, % in hospitality, % in retail, and % in transportation. Estimates on controls are available in the supplemental materials (Table S13). \*\*\*\* p<0.01, \*\*\* p<0.05, \* p<0.1, two-tailed.

Republican governors in states with high Trump support, such as DeSantis in Florida and Abbott in Texas, were not supportive of restrictions even in the face of rising case counts. Together with the results on the partisanship of the governor and Trump vote, these findings suggest that elite partisanship and mass ideology, more than covid-related factors, predicted state policies as the pandemic evolved and are not simply a remnant of unobserved heterogeneity in tastes.

### Conclusion

This paper presents new evidence about the independent effects of partisanship and policy on attitudes regarding COVID-19. Although the argument that partisanship "matters" for attitudes is obviously not new, our analyses offer novel findings about the conditions under which it is more versus less influential, and by extension the circumstances under which it is likely to shape views on issues other than the pandemic. First, examining 18 months of individual-level panel data, we find that the impact varies across time and behavioral response in ways that correspond with the personal

costs and benefits of the activity. Pre-vaccines, when COVID-19 carried a higher risk of hospitalization or death, partisanship has effects on mask-wearing and socially isolating, but these effects diverge after vaccines become widely available. For the more costly activity of socially isolating, the partisan gap declines, with only a small effect remaining by the summer of 2021. By contrast, for the less costly activity of mask-wearing, the Democrat-Republican gap more than doubles between the spring and fall of 2021.

Second, we find that the impact of partisanship on attitudes about the state response are conditioned by elite policy behavior. In particular, the partisan gap regarding approval of the state response substantially declines when a governor enacts policy that counters their national party, and this effect is driven by out-partisans: when a Republican governor enacted restrictions on gatherings, or a Democratic governor did not enact them, out-partisan approval of the state response increased substantially while in-partisan approval remained constant. Notably, this analysis is identified by approval ratings pre- and post- any enactment of a restriction, holding constant the state (and by extension, the governor) and date, ensuring the results are not driven by factors specific to a state/governor or by national pandemic trends. These findings suggest that at least on a salient issue such as COVID-19, the role of partisanship in shaping views of government performance can be tempered substantially by elites' policy choices.

Finally, we show the effects of partisanship extend beyond the mass public to the elite level, even holding constant prior mass attitudes. Governors' policy actions are associated with their own partisanship in addition to mass ideology/partisanship, as captured by prior presidential vote. By comparison, for most policies, local health conditions are not significant predictors. Together with the other findings, these results suggest that on a new, salient issue such as COVID-19, partisanship can quickly and substantially alter the ways both elites and the public respond.

This analysis contains several advantages in terms of contributing to the broader literature on partisanship. The individual-level panel data allow holding constant dispositions that correlate with party in the context of an issue where elites' stances are evolving in real time. Moreover, the large authority granted to governors to enact policies unilaterally, combined with the variation in gubernatorial partisanship and policy decisions, enable comparing the effects of partisanship versus policy on approval ratings. And unlike many policy issues, where one could reasonably question whether individuals are paying attention to leaders' decisions or positions, COVID-19 remains highly salient across the breadth of the data. All these features contribute to better identified estimates than are commonly feasible.

Still, these advantages require some contextualization in terms of how the results extrapolate to different issues. COVID-19 has been a salient and "complex" or "hard" issue in that when the pandemic emerged, the country had no recent firsthand experience with the consequences of the various policy actions being proposed. As such, the impact of partisanship on individual attitudes may be higher than on issues over which people have a greater understanding of the likely policy effects. Interestingly, however, at least on mask-wearing, our results indicate that the impact grew even as personal experience and information increased, indicating the effect extends beyond only the newest and most complex issues. At the same time, the evidence on gubernatorial policy actions suggests that the impact of partisanship on government approval is substantially tempered by the choices political leaders make. These results imply that the way partisanship shapes mass attitudes is conditional on elites' choices, and that out-partisan approval is feasible and malleable even in a highly polarized political world.

#### REFERENCES

- Adolph, Christopher, Kenya Amano, Bree Bang-Jensen, Nancy Fullman, and John Wilkerson. 2021. "Pandemic Politics: Timing State-Level Social Distancing Responses to COVID-19." *Journal of Health Politics, Policy, and Law* 46(2):211–233.
- Aharon, David Yechiam, Arie Jacobi, Eli Cohen, Joseph Tzur and Mahmoud Qadan. 2021. "COVID-19, Government Measures, and Hospitality Industry Performance." *PLOS One* https://doi.org/10.1371/journal.pone.0255819.
- Allcott, Hunt, Boxell, Levi, Conway, Jacob, Gentzkow, Matthew, Thaler, Michael, and Yang, David Y. 2020. "Polarization and Public Health: Partisan Differences in Social Distancing during the Coronavirus Pandemic." *Journal of Public Economics* 191(2020):1-10.
- Ansolabehere, Stephen, and Shiro Kuriwaki. 2022. "Congressional Representation: Accountability from the Constituent's Perspective." *American Journal of Political Science* 66(1):123-139.
- Barber, Michael, and Jeremy C. Pope. 2019. "Does Party Trump Ideology? Disentangling Party and Ideology in America." *American Political Science Review* 113(1):38-54.
- Barrios, John M., and Yael V. Hochberg. 2021. "Risk Perceptions and Politics: Evidence from the COVID-19 Pandemic." *Journal of Financial Economics* 142(2):862-879.
- Bisbee, James, and Diana Da In Lee. 2022. "Objective Facts and Elite Cues: Partisan Responses to COVID-19." *Journal of Politics* 84(3): 1278-1291.
- Byers, Jason S., and Laine P. Shay. 2022. "We Have It Totally Under Control? Exploring the Effects of Ideology and Knowing Someone Diagnosed With COVID-19 on Evaluations of President Trump's Leadership on the Pandemic." *American Politics Research* 50(1):83-96.
- Campbell, Angus, Philip Converse, Warren Miller, and Donald Stokes. 1960. *The American Voter*. New York: John Wiley and Sons.

- Caughey, Devin, and Christopher Warshaw. 2018. "Policy Preferences and Policy Change: Dynamic Responsiveness in the American States 1936-2014." *American Political Science Review* 112(2):249-266.
- Clinton, Josh, Jon Cohen, John S. Lapinski, and Marc Trussler. 2021. "Partisan Pandemic: How Partisanship and Public Health Concerns Affect Individuals' Social Mobility During COVID-19." *AAAS/Science Advances* 7(2):1-7.
- Druckman, James N., Samara Klar, Yanna Krupnikov, Matthew Levendusky, and John Barry Ryan. 2021. "Affective Polarization, Local Contexts, and Public Opinion in America." *Nature Human Behavior* 5: 28-38.
- Evans, Geoffrey, and Robert Andersen. 2006. "The Political Conditioning of Economic Perceptions." *Journal of Politics* 68(1):194–207.
- Fowler, Anthony. 2020. "Partisan Intoxication or Policy Voting?" *Quarterly Journal of Political Science* 15(2):141-179.
- Gadarian, Shana Kushner, Sara Wallace Goodman, and Thomas B. Pepinsky. 2021. "Partisan Endorsement Experiments Do Not Affect Mass Opinion on COVID-19." *Journal of Elections, Public Opinion and Parties*. 31(S1):122-131.
- Gadarian, Shana Kushner, Sara Wallace Goodman, and Thomas B. Pepinsky. 2022. *Pandemic Politics*.

  Princeton University Press.
- Gerber, Alan S., and Gregory A. Huber. 2010. "Partisanship, Political Control, and Economic Assessments." *American Journal of Political Science* 54(1):153–173.
- Graham, Matthew H., and Shikhar Singh. Forthcoming. "Partisan Selectivity in Blame Attribution: Evidence from the COVID-19 Pandemic." *American Political Science Review*.

- Grossman, Guy, Soojong Kim, Jonah M. Rexer, and Harsha Thirumurphy. 2020. "Political Partisanship Influences Behavioral Responses to Governors' Recommendations for COVID-19 Prevention in the United States." *PNAS* 117(39):24144-24153.
- Hallas, Laura, Ariq Hatibie, Saptarshi Majumdar, Monika Pyarali, Rachelle Koch, Andrew Wood and Thomas Hale. 2020. [Variation in US states' responses to COVID-19\_3.0]

  (https://www.bsg.ox.ac.uk/research/publications/variation-us-states-responses-COVID-19).

  Blavatnik School of Government.
- Hegland, Austin, Annie Li Zhang, Brianna Zichettella, and Josh Pasek. 2022. "A Partisan Pandemic: How COVID-19 Was Primed for Polarization." *Annals of the American Academy of Political and Social Sciences* 700(1): 55-72.
- Kaushal, Neeraj, Yao Lu, Robert Y. Shapiro, and Jennifer So. 2022. "American Attitudes Towards COVID-19: More Trumpism than Partisanship." *American Politics Research* 50(1):67–82.
- Lenz, Gabriel S. 2012. Follow the Leader? How Voters Respond to Politicians' Policies and Performance.

  Chicago: University of Chicago Press.
- Lerman, Amy E., Meredith L. Sadin, and Samuel Trachtman. 2017. "Policy Uptake as Political Behavior: Evidence from the Affordable Care Act." *American Political Science Review* 111(4):755-770.
- McGrath, Mary C. "Economic Behavior and the Partisan Perceptual Screen." *Quarterly Journal of Political Science* 11(4):363–383.
- Milosh, Maria, Marcus Painter, Konstantin Sonin, David Van Dijcke, and Austin L. Wright. 2021. "Unmasking Partisanship: Polarization Undermines Public Response to Collective Risk." *Journal of Public Economics* 204(2021):1-8.

- Netburn, Deborah. 2021. "A Timeline of the CDC's Advice on Face Masks." *Los Angeles Times* 27 July 2021. <a href="https://www.latimes.com/science/story/2021-07-27/timeline-cdc-mask-guidance-during-COVID-19-pandemic">https://www.latimes.com/science/story/2021-07-27/timeline-cdc-mask-guidance-during-COVID-19-pandemic</a> (accessed March 28, 2022).
- Nyhan, Brendan. 2014. "The Partisan Divide on Ebola Preparedness." New York Times 16 October 2014 <a href="https://www.nytimes.com/2014/10/17/upshot/the-partisan-divide-on-ebola-preparedness.html">https://www.nytimes.com/2014/10/17/upshot/the-partisan-divide-on-ebola-preparedness.html</a> (accessed March 28, 2022).
- Pickup, Mark, Dominik Stecula, and Clifton van der Linden. 2020. "Novel Coronavirus, Old Partisanship: COVID-19 Attitudes and Behaviours in the United States and Canada." *Canadian Journal of Political Science* 53(2):357–364.
- Rogers, Steven. 2020. "Sobering up after 'Partisan Intoxication or Policy Voting?" *Quarterly Journal of Political Science* 15(2):181-212.
- Rothwell, Jonathan T., Christos Makridis, Christina Ramirez, and Sonal Desai. 2022. "COVID-19 Information Treatments Shift Policy Preferences and Plans for Consumer Behavior." SSRN Working Paper. https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3859751
- Warshaw, Christopher, Lynn Vavreck, and Ryan Baxter King. 2020. "Fatalities from COVID-19 are Reducing Americans' Support for Republicans at Every Level of Federal Office." *Science Advances* 6(44):1-4.
- Wu, Jennifer D., and Gregory A. Huber. 2021. "Partisan Differences in Social Distancing May Originate in Norms and Beliefs: Results from Novel Data." *Social Science Quarterly* 102(5):2251-2265.

## Supplemental Materials

S1. Distribution of Survey Participation by Number of Responses per Individual1
S2. Question Wording and Responses for COVID-19 Items 2
S3. Descriptive Statistics for Individual-level Data 3
S4. Descriptive Statistics of Individual-level COVID-19 Responses by Party 4
S5. Descriptive Statistics for State-level Data 5
S6. Parameter Estimates for Figure 2
S7. Change in Partisan Gap in COVID-19 Responses, Excluding Party-Switchers9
S8. Change in Partisan Gap in COVID-19 Responses, Initial Party Identification 10
S9. Change in Partisan Gap in COVID-19 Responses, with Fixed Effects for Date × County 11
S10. Change in Partisan Gap in COVID-19 Responses, Controlling for Vaccination Status 12
S11. Change in Partisan Gap in COVID-19 Responses, with Industry Fixed Effects 13
S12. Control Variable Estimates for Table 1, Individual Approval of State Response 14
S14. Change in Partisan Gap in COVID-19 Responses, Controlling for COVID-19 Death Rate 16
S15. Individual Approval of State Response, Controlling for COVID-19 Death Rate 17
S16. Determinants of State Policies, Controlling for COVID-19 Death Rate 18
S17. Vaccination Status by Party Identification across Time 19

S1. Distribution of Survey Participation by Number of Responses per Individual

Number of responses	Observations	Percent
1	11,954	7.27
2	20,532	12.49
3	37,209	22.64
4	40,664	24.75
5	26,290	16
6	14,394	8.76
7	7,616	4.63
8	4,008	2.44
9	1,377	0.84
10	<b>25</b> 0	0.15
11	33	0.02
Total	164,327	100

### S2. Question Wording and Responses for COVID-19 Items

Mostly isolating: "Next, thinking about everything you've done in the past 24 hours, which of the following comes closest to describing your in-person contact with people outside your household?" =1 for responses "Completely isolated yourself, having no contact with people outside your household" or "Mostly isolated yourself, having very little contact with people outside your household"; =0 for responses "Partially isolated yourself, having some contact with people outside your household", "Isolated yourself a little, still having a fair amount of contact with people outside your household", or "Did not make any attempt to isolate yourself from people outside your household."

Worn mask: "There are some things people may do because of their concern about the coronavirus. For each one of the following, please indicate if this is something you have done, are considering doing or have not considered in the past 7 days...Worn a mask on your face when outside your home?" =1 for response "Have done"; =0 for responses "Considering doing" and "Have not considered."

**Very worried about COVID**: "How worried are you that you will get the coronavirus (COVID-19)?" = 1 for response "Very worried"; = 0 for responses "Somewhat worried", "Not too worried", and "Not worried at all".

**Mostly working remote**: "In the past 24 hours have you visited...your place of work?" = 1 if checked that have done so; = 0 if seen but did not check. Sample for this item includes only respondents who are employed.

**Approve of state response**: "Do you approve or disapprove of the way each of the following is handling the response to the coronavirus in the U.S. ...your state government?" =1 "Approve" and =0 "Disapprove."

S3. Descriptive Statistics for Individual-level Data

	N	Mean	Std dev	Additional notes
Mostly isolating	158,437	0.50	0.50	
Worn mask	133,820	0.80	0.40	
Very worried about COVID-19	129,104	0.10	0.30	
Working mostly remote	55,861	0.44	0.50	
Democrat	155,263	0.42	0.49	
Republican	155,263	0.30	0.46	
Independent (or third party)	155,263	0.28	0.45	
Log weekly per capita county COVID-19 cases	163,916	3.95	1.65	Log (weekly covid cases per million population + 1)
Employed last week	163,460	0.60	0.49	Binary indicator (0,1)
Not in workforce	158,204	0.33	0.47	Binary indicator (0,1)
Lives with children	164,327	0.51	0.50	Binary indicator (0,1)
Personal income	156,584	5.92	2.22	Categorical variable from 1-10: <\$12K; \$12-\$23.999K; \$24- \$35.999K; \$36-\$47,999K; \$48- \$59.999K; \$60-\$89.999K; \$90- \$119.999K; \$120-\$179.999K;
				\$180-\$239.999K; ≥\$240K
Male	164,327	0.48	0.50	Binary indicator (0,1)
Age/10	164,327	5.04	1.65	
65 and older	164,326	0.24	0.43	Binary indicator (0,1)
Some college or Associate's degree	162,556	0.30	0.46	Binary indicator (0,1)
Bachelor's degree	162,556	0.15	0.36	Binary indicator (0,1)
Graduate degree	162,556	0.18	0.38	Binary indicator (0,1)
Black	163,732	0.11	0.32	Binary indicator (0,1)
Hispanic	163,732	0.15	0.36	Binary indicator (0,1)
Asian	163,732	0.01	0.07	Binary indicator (0,1)
American Indian	163,732	0.00	0.06	Binary indicator (0,1)
Multiracial	163,732	0.02	0.14	Binary indicator (0,1)
Mask requirements	163,636	0.39	0.49	Binary indicator (0,1)
Restrictions on social gathering	163,648	0.82	0.39	Binary indicator (0,1)
Stay-at-home-order	163,648	0.36	0.48	Binary indicator (0,1)
Workplace closing	163,648	0.67	0.47	Binary indicator (0,1)
Vaccination status	164,063	0.11	0.31	Binary indicator (0,1)

Note: As described in the text, Gallup collected approximately 1000 responses per day until April 26<sup>th</sup> 2020, after which point the sample declined to roughly 500 responses per day. In the analyses, we account for this issue by including fixed effects for the survey date. The raw means and descriptive statistics will, however, be imbalanced towards the earlier part of the survey. The number of observations is slightly smaller for mask requirements than other policies in the original Oxford-Hallas et al. (2020) data, and as noted in the text, we follow their coding.

# S4. Descriptive Statistics of Individual-level COVID-19 Responses by Party

		Democrats			Republicans			Independents		
	N	Mean	Std dev	N	Mean	Std dev	N	Mean	Std dev	
Mostly isolated	64,469	0.61	0.48	49,312	0.37	0.49	41176	0.48	0.37	
Wore mask	55,266	0.92	0.25	41,666	0.66	0.45	35912	0.78	0.66	
Very worried about COVID-19	53,264	0.16	0.36	40,039	0.04	0.18	34854	0.09	0.04	
Mostly working remote (employed only)	22,804	0.57	0.49	15,929	0.28	0.48	16763	0.39	0.28	
Approve state response	4195	0.81	0.39	3403	0.77	0.42	2486	0.72	0.77	

# S5. Descriptive Statistics for State-level Data

	N	Mean	Std dev	Additional notes
Mask requirement	29,522	0.71	0.45	
Restrictions on social gatherings	29,529	0.65	0.48	
Stay-at-home order	29,529	0.14	0.35	
Workplace closing	29,529	0.37	0.48	
Trump share of 2016 vote	29,529	0.48	0.12	
Democratic governor	28,950	0.45	0.50	
Log per capita weekly covid cases	29,478	4.32	1.79	Log (weekly covid cases per million population + 1)
% mostly isolating, lagged 30 days	26,010	0.41	0.19	
% wearing mask, lagged 30 days	24,429	0.82	0.15	
% very worried about illness, lagged 30 days	24,429	0.09	0.09	
% mostly working remote, lagged 30 days	24,368	0.39	0.20	
Population density of average census tract in state	29,529	3.577	4.484	(in 1,000s)
Old age dependency ratio	29,529	27.74	3.64	(Population 65+/ Population 16-64) $\times$ 100
Accommodation and food services share of jobs	29,529	0.05	0.02	
Retail share of jobs	29,529	0.09	0.01	
Transportation sector share of jobs	29,529	0.05	0.01	

S6. Parameter Estimates for Figure 2

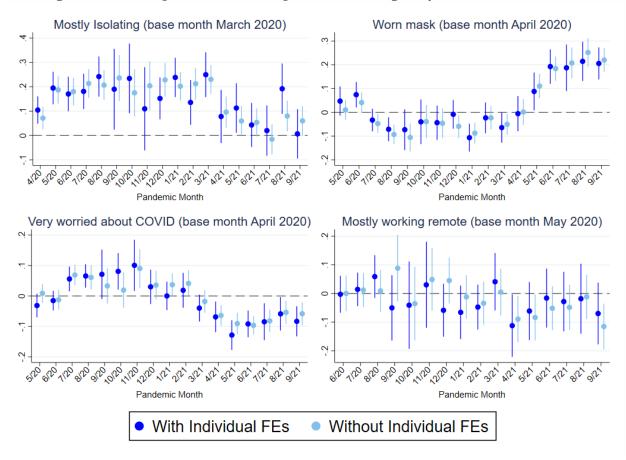
	Mostly	isolated	Worn	mask	Very v	vorried	Mostly v	_
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
April 2020 x Democrat	0.067***	0.101***						
	(0.020)	(0.027)						
May 2020 x Democrat	0.173***	0.172***	0.035*	0.059**	0.006	-0.028		
	(0.025)	(0.034)	(0.019)	(0.027)	(0.015)	(0.018)		
June 2020 x Democrat	0.183***	0.172***	0.061***	0.086***	-0.002	-0.020	0.006	-0.003
	(0.025)	(0.033)	(0.019)	(0.025)	(0.014)	(0.016)	(0.029)	(0.032)
July 2020 x Democrat	0.200***	0.178***	-0.031*	-0.014	0.066***	0.047**	0.004	-0.001
	(0.026)	(0.035)	(0.018)	(0.023)	(0.016)	(0.019)	(0.027)	(0.030)
Aug 2020 x Democrat	0.194***	0.232***	-0.078***	-0.055**	0.052***	0.058***	0.014	0.029
	(0.029)	(0.041)	(0.019)	(0.024)	(0.018)	(0.018)	(0.032)	(0.036)
Sept 2020 x Democrat	0.172***	0.192**	-0.106***	-0.083**	0.028	0.068*	0.089	-0.062
	(0.043)	(0.076)	(0.028)	(0.041)	(0.031)	(0.038)	(0.054)	(0.063)
Oct 2020 x Democrat	0.172***	0.238***	-0.007	-0.007	0.042	0.104***	-0.043	-0.062
	(0.043)	(0.065)	(0.032)	(0.042)	(0.027)	(0.032)	(0.061)	(0.060)
Nov 2020 x Democrat	0.217***	0.145*	-0.027	-0.028	0.074**	0.076*	0.051	0.062
	(0.046)	(0.080)	(0.028)	(0.032)	(0.032)	(0.045)	(0.053)	(0.072)
Dec 2020 x Democrat	0.218***	0.196***	-0.046**	0.015	0.049**	0.021	0.007	-0.066
	(0.032)	(0.042)	(0.022)	(0.029)	(0.021)	(0.027)	(0.039)	(0.040)
Jan 2021 x Democrat	0.202***	0.254***	-0.072***	-0.075***	0.034*	0.006	-0.033	-0.062
	(0.027)	(0.039)	(0.021)	(0.028)	(0.018)	(0.022)	(0.037)	(0.043)
Feb 2021 x Democrat	0.215***	0.173***	-0.029	-0.009	0.036*	0.014	-0.023	-0.021
	(0.029)	(0.042)	(0.022)	(0.032)	(0.020)	(0.027)	(0.035)	(0.036)
March 2021 x Democrat	0.208***	0.273***	-0.020	-0.022	-0.025	-0.054**	-0.025	0.028
	(0.028)	(0.044)	(0.020)	(0.029)	(0.016)	(0.022)	(0.037)	(0.043)
April 2021 x Democrat	0.080***	0.101**	0.017	0.021	-0.056***	-0.059**	-0.077**	-0.083*
1	(0.028)	(0.050)	(0.025)	(0.033)	(0.014)	(0.023)	(0.036)	(0.050)
May 2021 x Democrat	0.067**	0.123***	0.126***	0.127***	-0.087***	-0.127***	-0.096***	-0.025
•	(0.027)	(0.046)	(0.024)	(0.036)	(0.015)	(0.023)	(0.035)	(0.046)
June 2021 x Democrat	0.048*	0.052	0.202***	0.211***	-0.085***	-0.086***	-0.038	0.009
,	(0.026)	(0.042)	(0.022)	(0.034)	(0.014)	(0.019)	(0.036)	(0.048)
July 2021 x Democrat	0.007	0.040	0.225***	0.217***	-0.073***	-0.087***	-0.063*	-0.022
	(0.027)	(0.049)	(0.029)	(0.045)	(0.016)	(0.028)	(0.036)	(0.053)
Aug 2021 x Democrat	0.062**	0.187***	0.274***	0.251***	-0.045**	-0.064**	-0.017	0.013
0	(0.028)	(0.049)	(0.028)	(0.038)	(0.018)	(0.027)	(0.039)	(0.061)
Sept 2021 x Democrat	0.046*	0.001	0.235***	0.232***	-0.051***	-0.071***	-0.112***	-0.099**
1	(0.027)	(0.049)	(0.024)	(0.032)	(0.016)	(0.023)	(0.036)	(0.050)
Democrat (w/o individual	0.062***	( )	0.170***	( )	0.106***	( )	0.140***	( )
FEs, reflects base month)	(0.019)		(0.014)		(0.012)		(0.021)	
Democrat (w/ individual	(* * * /	-0.157***	(* * *)	-0.072***	( )	0.026	(	0.018
FEs, reflects switch to Dem)		(0.032)		(0.027)		(0.017)		(0.032)
Independent (w/o individual	0.041*	( /	0.083***	()	0.038***		0.078***	()
FEs, reflects base month)	(0.021)		(0.016)		(0.012)		(0.022)	
Independent (w/ individual	(0.021)	-0.135***	(0.010)	-0.075***	(0.012)	-0.020*	(0.022)	0.011
macpenaem (w/ manyidaa		-0.133		-0.075		-0.020		0.011
FEs, reflects switch to Ind)		(0.027)		(0.025)		(0.012)		(0.027)

	(0.022)	(0.021)						
Mary 2020 vy Indonondont	(0.023) 0.082***	(0.031) 0.131***	0.016	0.066**	0.009	0.022		
May 2020 x Independent								
I 2020 II I	(0.027)	(0.036)	(0.024)	(0.032)	(0.015)	(0.020)	0.000	0.020
June 2020 x Independent	0.094***	0.105***	0.025	0.048*	0.013	0.036**	-0.008	-0.020
1 1 2020 1 1 1 1	(0.027)	(0.036)	(0.023)	(0.027)	(0.014)	(0.017)	(0.034)	(0.035)
July 2020 x Independent	0.106***	0.133***	-0.003	0.029	0.053***	0.060***	-0.023	-0.023
A 2020 T 1	(0.027)	(0.037)	(0.022)	(0.026)	(0.016)	(0.019)	(0.030)	(0.033)
Aug 2020 x Independent	0.118***	0.186***	-0.013	-0.019	0.050***	0.030	0.011	-0.015
	(0.031)	(0.041)	(0.022)	(0.028)	(0.017)	(0.019)	(0.034)	(0.032)
Sept 2020 x Independent	0.104**	0.236***	-0.101***	-0.095**	-0.022	0.030	0.075	-0.098
	(0.048)	(0.079)	(0.038)	(0.046)	(0.025)	(0.033)	(0.056)	(0.067)
Oct 2020 x Independent	0.175***	0.302***	-0.018	-0.023	0.033	0.078**	-0.024	-0.094
	(0.049)	(0.071)	(0.044)	(0.052)	(0.028)	(0.037)	(0.065)	(0.059)
Nov 2020 x Independent	0.068	0.038	-0.010	0.043	0.054*	0.017	-0.009	0.049
	(0.051)	(0.090)	(0.036)	(0.041)	(0.030)	(0.040)	(0.050)	(0.063)
Dec 2020 x Independent	0.166***	0.168***	-0.004	0.097***	0.008	-0.008	-0.035	-0.059
	(0.035)	(0.052)	(0.026)	(0.037)	(0.021)	(0.024)	(0.038)	(0.043)
Jan 2021 x Independent	0.069**	0.165***	-0.028	-0.022	0.015	0.034	-0.089**	-0.053
	(0.032)	(0.040)	(0.025)	(0.030)	(0.017)	(0.022)	(0.035)	(0.048)
Feb 2021 x Independent	0.134***	0.192***	-0.035	0.032	0.026	0.036*	-0.055	-0.034
	(0.032)	(0.045)	(0.027)	(0.037)	(0.019)	(0.022)	(0.037)	(0.043)
March 2021 x Independent	0.115***	0.196***	0.021	0.012	0.007	0.001	-0.020	-0.006
•	(0.030)	(0.052)	(0.024)	(0.033)	(0.014)	(0.018)	(0.036)	(0.044)
April 2021 x Independent	0.096***	0.118**	-0.001	0.046	0.009	0.039*	-0.008	-0.034
-	(0.031)	(0.058)	(0.028)	(0.038)	(0.015)	(0.023)	(0.038)	(0.057)
May 2021 x Independent	0.049*	0.141***	0.059*	0.088**	-0.030**	0.000	-0.131***	0.017
,	(0.028)	(0.047)	(0.031)	(0.042)	(0.014)	(0.023)	(0.038)	(0.055)
June 2021 x Independent	0.048*	0.111***	0.103***	0.067	-0.019	-0.001	0.014	0.017
J I	(0.026)	(0.039)	(0.029)	(0.042)	(0.013)	(0.022)	(0.036)	(0.046)
July 2021 x Independent	0.061**	0.128**	0.098***	0.114**	0.001	0.015	-0.040	0.044
<i>J J</i> 1	(0.030)	(0.054)	(0.034)	(0.051)	(0.016)	(0.022)	(0.042)	(0.054)
Aug 2021 x Independent	0.033	0.192***	0.113***	0.131***	-0.021	0.007	-0.014	0.000
O I	(0.031)	(0.049)	(0.032)	(0.046)	(0.017)	(0.021)	(0.035)	(0.064)
Sept 2021 x Independent	0.050*	0.031	0.116***	0.089**	0.005	0.007	-0.073**	-0.120**
	(0.028)	(0.047)	(0.028)	(0.038)	(0.016)	(0.020)	(0.035)	(0.051)
Log Per capita COVID cases	0.022***	0.022***	0.031***	0.036***	0.012***	0.010***	-0.000	-0.004
Eog 1 et cupiu eo (12 cueco	(0.004)	(0.006)	(0.004)	(0.005)	(0.003)	(0.004)	(0.006)	(0.007)
Employed last week	-0.170***	-0.096***	-0.011	0.019	-0.038***	-0.032	(0.000)	(0.001)
Employed mot week	(0.013)	(0.032)	(0.010)	(0.024)	(0.011)	(0.020)		
Out of workforce	0.015	-0.000	-0.003	0.003	-0.035***	-0.036		
out of workforce	(0.014)	(0.038)	(0.012)	(0.027)	(0.012)	(0.022)		
Lives with children	-0.026***	-0.004	-0.017***	-0.016	0.008	-0.005	-0.030***	-0.008
Lives with emidien	(0.008)	(0.014)	(0.006)	(0.010)	(0.006)	(0.007)	(0.011)	(0.015)
Income	0.004**	-0.003	-0.001	-0.005	-0.006***	-0.002	0.035***	0.000
meome								
Mala	(0.002)	(0.006)	(0.001)	(0.004)	(0.001)	(0.003)	(0.002) -0.099***	(0.007)
Male	-0.045***		-0.048***		-0.041***			
Acc (conting)	(0.006)		(0.005)		(0.005)		(0.010)	
Age (continuous)	-0.017***		0.011***		-0.001		-0.017***	
	(0.003)		(0.003)		(0.002)		(0.004)	

Age 65 and up (indicator)	0.012		0.020**		-0.025***		0.013	
	(0.011)		(0.010)		(0.009)		(0.019)	
Some college	0.021**		0.033***		0.011*		0.052***	
	(0.008)		(0.007)		(0.006)		(0.014)	
Bachelor's degree	0.085***		0.067***		0.000		0.232***	
	(0.011)		(0.008)		(0.007)		(0.017)	
Graduate degree	0.109***		0.075***		0.011		0.244***	
<u> </u>	(0.010)		(0.007)		(0.007)		(0.016)	
American Indian or Native	, ,		,		` ,		, ,	
Hawaiian	-0.027		0.014		0.017		-0.083	
	(0.042)		(0.043)		(0.029)		(0.065)	
Asian	0.014		0.038**		0.026		0.095**	
	(0.029)		(0.017)		(0.029)		(0.047)	
Black	-0.036***		0.017**		-0.008		0.017	
	(0.012)		(0.008)		(0.009)		(0.018)	
Hispanic	0.002		0.005		0.018**		-0.017	
	(0.011)		(0.007)		(0.009)		(0.019)	
Multiracial	-0.022		-0.017		0.023*		-0.057**	
	(0.018)		(0.017)		(0.013)		(0.025)	
Restrictions on social gathering								
in effect	-0.002	0.009			-0.001	-0.003	0.005	-0.020
	(0.009)	(0.015)			(0.007)	(0.011)	(0.012)	(0.017)
Stay-at-home order in effect	0.009	0.009			0.000	0.009	0.005	-0.003
	(0.008)	(0.012)			(0.006)	(0.007)	(0.011)	(0.013)
Mask required outside home			0.014**	0.018*				
			(0.007)	(0.010)				
Workplace closing							0.000	0.007
							(0.009)	(0.012)
Constant	0.541***	0.609***	0.633***	0.831***	0.126***	0.136***	0.168***	0.491***
	(0.023)	(0.053)	(0.018)	(0.038)	(0.017)	(0.027)	(0.031)	(0.052)
Individual fixed effects	No	Yes	No	Yes	No	Yes	No	Yes
County fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Date fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	120 550	EE 022	119,525	65,967	115,339	53,886	52,548	21,565
	139,552	55,032	119,323	03,907	113,339	33,000	32,340	21,505

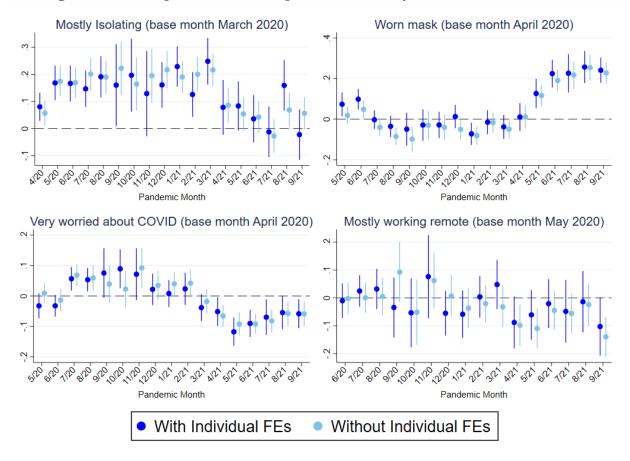
Notes: Cluster-robust standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Columns 7-8 are restricted to those who were employed at the time of the survey. The main effects of party (Democrat, Independent) reflect the difference between that group and the base category of Republicans in the analysis without fixed effects. With fixed effects, these estimates reflect the effect of switching into that partisan affiliation during the panel.

# S7. Change in Partisan Gap in COVID-19 Responses, Excluding Party-Switchers



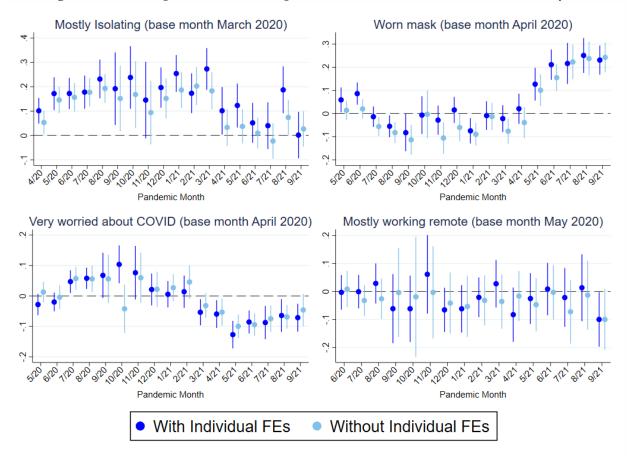
Notes: The figure plots the estimated change in the partisan gap between Democratic and Republican respondents relative to this gap in the base month of the survey item. The dots and lines reflect, respectively, the estimated coefficients and 95% confidence intervals. Controls include the log of new COVID-19 cases per capita in the county, gender, race, employment status, age, education, living with children, annual household income, and state policies. All regressions include fixed effects for the date and county. Standard errors are clustered at the county-level.

#### S8. Change in Partisan Gap in COVID-19 Responses, Initial Party Identification



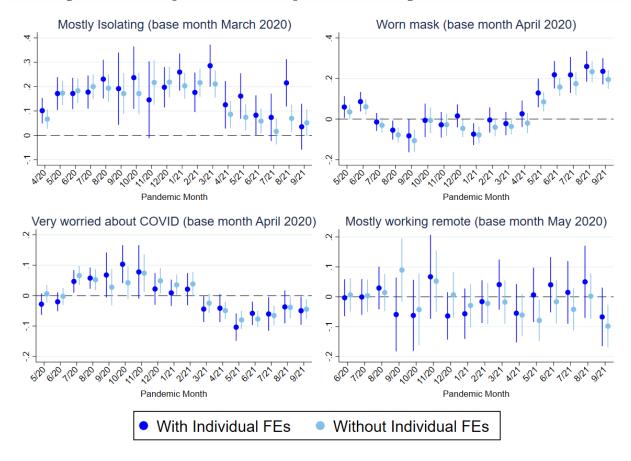
Notes: The figure plots the estimated change in the partisan gap between Democratic and Republican respondents relative to this gap in the base month of the survey item. The dots and lines reflect, respectively, the estimated coefficients and 95% confidence intervals. Controls include the log of new COVID-19 cases per capita in the county, gender, race, employment status, age, education, living with children, annual household income, and state policies. Partisan identification is measured by the response from the first date at which the respondent participates in the COVID-19 panel. All regressions include fixed effects for the date and county. Standard errors are clustered at the county-level.

#### S9. Change in Partisan Gap in COVID-19 Responses, with Fixed Effects for Date × County



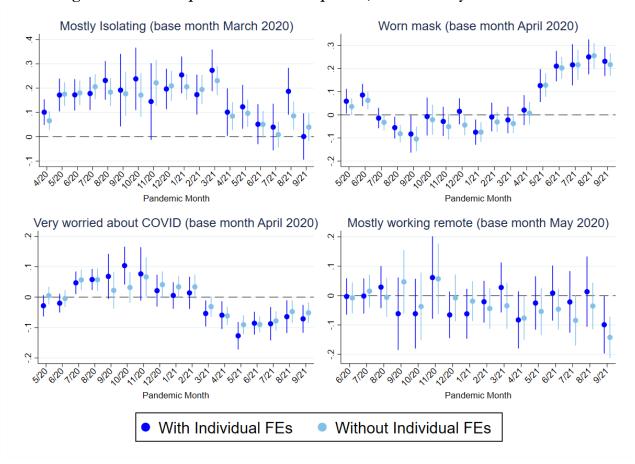
Notes: The figure plots the estimated change in the partisan gap between Democratic and Republican respondents relative to this gap in the base month of the survey item. The dots and lines reflect, respectively, the estimated coefficients and 95% confidence intervals. Controls include the log of new COVID-19 cases per capita in the county, gender, race, employment status, age, education, living with children, annual household income, and state policies. All regressions include fixed effects for the date and county. For the analysis without individual fixed effects, we also include fixed effects for the date interacted with the county. (There are not sufficient degrees of freedom to include these interactive fixed effects in the analysis with individual level ones, and we present the Figure 2 results with the individual fixed effects for comparison purposes.) Standard errors are clustered at the county-level.

## S10. Change in Partisan Gap in COVID-19 Responses, Controlling for Vaccination Status



Notes: The figure plots the estimated change in the partisan gap between Democratic and Republican respondents relative to this gap in the base month of the survey item. The dots and lines reflect, respectively, the estimated coefficients and 95% confidence intervals. Controls include the log of new COVID-19 cases per capita in the county, gender, race, employment status, age, education, living with children, annual household income, state policies, and individual vaccination status. Beginning January 25, 2021, the panel asks respondents whether they are partially or fully vaccinated, and we code vaccination status by whether a respondent is at least partially vaccinated. Prior to that date, we impute a value of 0 for vaccination status. All regressions include fixed effects for the date and county. Standard errors are clustered at the county-level.

#### S11. Change in Partisan Gap in COVID-19 Responses, with Industry Fixed Effects



Notes: The figure plots the estimated change in the partisan gap between Democratic and Republican respondents relative to this gap in the base month of the survey item. The dots and lines reflect, respectively, the estimated coefficients and 95% confidence intervals. Controls include the log of new COVID-19 cases per capita in the county, gender, race, employment status, age, education, living with children, annual household income, and state policies. Regressions include industry fixed effects, which are available in the survey data through July 3, 2020. For future dates, we impute the values from earlier responses. Industry categories include Agriculture, Forestry, Fishing, and Hunting; Arts/Design/Entertainment/Sports/Media; College or University; Community/Social Services; Construction; Finance; Government or Public Policy; Health Care; Hospitality; Insurance; K-12 Education; Law; Manufacturing; Mining, Quarrying, Oil, and Gas Extract; Professional Services; Real Estate; Retail; Technological/Information Systems/Compu; Training or Library; Transportation; Utilities; Warehousing/Logistics; Other. Regressions also include fixed effects for the date and county. Standard errors are clustered at the county-level.

S12. Control Variable Estimates for Table 1, Individual Approval of State Response

	Alls	tates	Rep	ublican gove	rnors	Der	nocratic gove	rnors
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Employed last week		0.053			0.100			0.009
		(0.052)			(0.094)			(0.045)
Out of workforce		0.079			0.119			0.046
		(0.054)			(0.094)			(0.055)
Male		-0.041***			-0.028			-0.064***
		(0.015)			(0.021)			(0.020)
Black		0.040			0.106**			0.005
		(0.030)			(0.047)			(0.051)
Hispanic		0.043*			0.049*			0.035
-		(0.022)			(0.026)			(0.035)
Asian		0.228***			0.377***			0.159***
		(0.064)			(0.126)			(0.032)
American Indian or Native		-0.064			-0.265			0.141
Hawaiian		(0.134)			(0.163)			(0.082)
Multiracial		-0.049			-0.060			-0.040
		(0.062)			(0.102)			(0.062)
Age		0.034***			0.044***			0.024*
		(0.008)			(0.008)			(0.013)
Age 65 and up (indicator)		-0.025			-0.066**			0.001
		(0.033)			(0.028)			(0.056)
Some college		0.017			0.001			0.038
		(0.024)			(0.031)			(0.039)
Bachelor's degree		0.023			-0.020			0.056*
		(0.022)			(0.043)			(0.027)
Graduate degree		0.046*			-0.027			0.110***
		(0.026)			(0.036)			(0.033)
Lives with children		-0.010			-0.014			-0.006
		(0.013)			(0.019)			(0.017)
Income		-0.004			-0.009			0.000
		(0.005)			(0.008)			(0.006)
Constant	0.718***	0.486***	0.837***	0.754***	0.664***	0.563***	0.738***	0.422***
	(0.016)	(0.073)	(0.049)	(0.042)	(0.080)	(0.063)	(0.039)	(0.098)

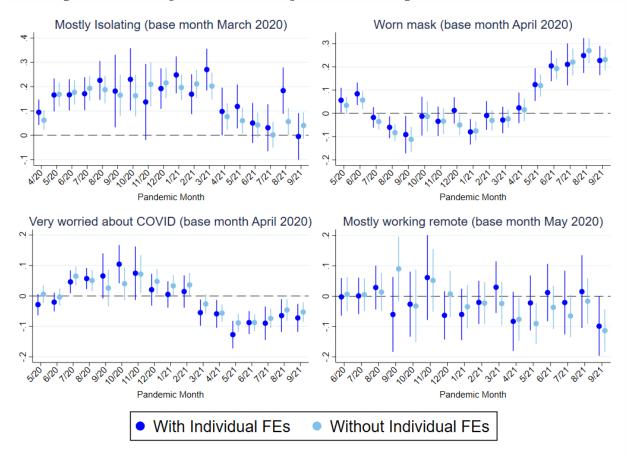
Notes: Standard errors clustered by county in parentheses. Analysis includes country and date fixed effects. \*\*\*p<0.01, \*\*p<0.05, \*p<0.1.

S13. Control Variable Estimates for Table 2, Determinants of State Policies

	Gatherings restriction (1)	SAHO (2)	Mask mandate (3)	Workplace closing (4)	Gatherings restriction (5)	SAHO (6)	Mask mandate (7)	Workplace closing (8)
	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			· /
Population density					-0.007	-0.001	0.008*	-0.008
•					(0.005)	(0.004)	(0.005)	(0.010)
Old age dependency ratio					-0.002	0.014*	0.013	-0.008
					(0.008)	(0.008)	(0.009)	(0.010)
Accommodation & food					0.233	1.913	0.829	2.319
services share of jobs					(1.331)	(2.266)	(1.160)	(1.577)
Retail share of jobs					1.725	2.884	3.828	5.172
					(4.361)	(3.200)	(2.791)	(3.888)
Transportation share of jobs					6.132*	6.082*	7.080*	-3.923
-					(3.141)	(3.150)	(4.118)	(3.196)
Constant	0.879***	0.332	0.504***	0.852***	0.470	0.701*	-0.656*	0.405
	(0.166)	(0.213)	(0.155)	(0.208)	(0.380)	(0.358)	(0.361)	(0.425)

Notes: Standard errors clustered by state in parentheses. Analysis includes date fixed effects. \*\*\*p<0.01, \*\*p<0.05, \*p<0.1, two-tailed.

## S14. Change in Partisan Gap in COVID-19 Responses, Controlling for COVID-19 Death Rate



Notes: The figure plots the estimated change in the partisan gap between Democratic and Republican respondents relative to this gap in the base month of the survey item. The dots and lines reflect, respectively, the estimated coefficients and 95% confidence intervals. Controls include the log of new COVID-19 deaths per capita in the county, gender, race, employment status, age, education, living with children, annual household income, and state policies. All regressions include fixed effects for the date and county. Standard errors are clustered at the county-level.

S15. Individual Approval of State Response, Controlling for COVID-19 Death Rate

	Outcome = Approval of State Response									
	All s	states	Rep	ublican gove	rnors	Den	nocratic gover	rnors		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
Republican respondent ×	0.271***	0.263***								
Republican governor	(0.060)	(0.059)								
Democrat respondent X	0.267***	0.267***								
Democrat governor	(0.049)	(0.049)								
Republican respondent	-0.086**	-0.096***	0.106**	0.137***	0.039	0.013	-0.055	-0.038		
Republican respondent	(0.033)	(0.033)	(0.037)	(0.047)	(0.054)	(0.040)	(0.048)	(0.052)		
Domonust room and out	-0.097**	-0.118**	-0.314***	-0.082	-0.313***	0.274***	0.144***	0.226***		
Democrat respondent	(0.045)	(0.047)	(0.066)	(0.064)	(0.065)	(0.060)	(0.042)	(0.057)		
Rep respondent ×			0.106		0.108	-0.104**		-0.006		
Gatherings restrict			(0.068)		(0.069)	(0.051)		(0.090)		
Dem respondent ×			0.268***		0.277***	-0.111		-0.134		
Gatherings restrict			(0.074)		(0.059)	(0.066)		(0.082)		
		$0.078^{*}$	-0.165**		-0.169*	0.175**		0.174***		
Gatherings restrict		(0.045)	(0.060)		(0.049)	(0.068)		(0.087)		
D. 1 . M.CAHO				0.105	0.090		-0.056	-0.067		
Rep respondent × SAHO				(0.073)	(0.074)		(0.067)	(0.090)		
D. 1 . WCAHO				-0.026	-0.033		0.040	0.059		
Dem respondent × SAHO				(0.090)	(0.076)		(0.060)	(0.071)		
C 1 1 (CALIO)		-0.048		-0.097	-0.066		-0.018	-0.054		
Stay-at-home order (SAHO)		(0.042)		(0.068)	(0.074)		(0.066)	(0.067)		
Log Per capita COVID		0.009			-0.063			0.015		
deaths		(0.032)			(0.068)			(0.042)		
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Demographic Controls	No	Yes	No	No	Yes	No	No	Yes		
Observations	10029	9244	4607	4607	4230	5422	5422	5013		
Adjusted R-squared	0.112	0.132	0.125	0.122	0.165	0.108	0.109	0.135		

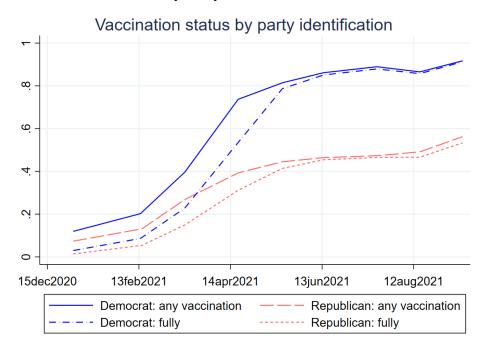
Notes: Standard errors clustered by state below coefficients. Controls include the log of new COVID-19 deaths per capita in the county, gender, race, employment status, age, education, living with children, and annual household income. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1, two-tailed.

S16. Determinants of State Policies, Controlling for COVID-19 Death Rate

	Gatherings	SAHO	Mask	Workplace	Gatherings	SAHO	Mask	Workplace
	restriction		mandate	closing	restriction		mandate	closing
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
% Trump vote 2016	-0.699**	-0.309	-0.741***	-1.063***	-0.880**	-0.482**	-0.854**	-1.001***
_	(0.284)	(0.274)	(0.250)	(0.296)	(0.400)	(0.226)	(0.332)	(0.298)
Democratic governor	0.183***	0.021	$0.112^*$	0.148**	0.206***	-0.004	0.112*	0.143**
_	(0.050)	(0.054)	(0.059)	(0.065)	(0.053)	(0.048)	(0.060)	(0.069)
Log per capita COVID	0.008	0.025	0.096***	0.042	0.011	0.020	0.106***	0.068**
deaths	(0.029)	(0.034)	(0.028)	(0.029)	(0.030)	(0.025)	(0.029)	(0.028)
Lagged % wearing mask							-0.005	
							(0.115)	
Lagged % very worried					0.125	-0.238	-0.077	0.222
about COVID					(0.185)	(0.161)	(0.206)	(0.207)
Lagged % socially isolating					0.151	0.019		
					(0.098)	(0.062)		
Lagged % working remote								0.075
								(0.083)
Demographic controls	No	No	No	No	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	27,617	27,617	27,609	27,617	25.168	25,168	25,160	25,107
Adjusted R-squared	0.475	0.301	0.449	0.408	0.503	0.225	0.445	0.374

Notes: Standard errors clustered by state below coefficients. State-level demographic controls include population density, % elderly, % in hospitality, % in retail, and % in transportation. The number of observations differs slightly from the analysis with COVID-19 cases because a few states reported negative COVID-19 deaths due to adjustments in the death rate and the intricacies in evaluating whether deaths are attributed to COVID-19; these state-month years are not included, although setting these values to 0 does not alter the findings. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1, two-tailed.

# S17. Vaccination Status by Party Identification across Time



Notes: The figure plots the estimated percentage of Democrats and Republicans who are partially and fully vaccinated. Beginning January 25, 2021, the Galup COVID panel asks respondents whether they are "fully vaccinated," "partially vaccinated," or not vaccinated at all.