A Tale of Two Pandemics: The Enduring Partisan Differences in Actions, Attitudes, and Beliefs during the Coronavirus Pandemic*

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Abstract

Early in the new coronavirus disease (COVID-19) pandemic, scholars and journalists noted partisan differences in behaviors, attitudes, and beliefs. Based on location data from a large sample of smartphones, as well as 13,334 responses to a proprietary survey spanning 10 months from April 1, 2020 to February 15, 2021, we document that the partisan gap has persisted over time and that the lack of convergence occurs even among individuals who were at heightened risk of death. Our results point to the existence and persistence of the interaction of partisanship and information acquisition.

1 Introduction

Early in the pandemic, information about the effectiveness of different risk-mitigating strategies was scarce, ambiguous and confusing. For example, the Centers for Disease Control (CDC) initially did not recommend masks, many people were wiping down groceries. At the same time, partisan rhetoric was beginning to form about the seriousness of the pandemic.

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In this era, several studies documented partisan gaps in self-reported precautionary behaviors and observed social mobility (e.g., Allcott, Boxell, Conway, Gentzkow, Thaler and Yang 2020, Andersen 2020, Barrios and Hochberg 2020, Fan, Orhun and Turjeman 2020, Painter and Qiu 2020, Gadarian, Goodman and Pepinsky 2021). These scholars called for uniform public health messaging, in the hopes of eliminating the partisan gap through accurate and increased information dissemination.

Over time, more information about the virus and effective strategies to curb its spread became available. Given the high stakes the pandemic presented, standard economics models would predict partisan differences in beliefs and behaviors to diminish over time. However, given the importance of initial beliefs (see Benjamin 2019 for a review) and the role of partisan identity in belief revisions (e.g., Taber and Lodge 2006, Van Bavel and Pereira 2018), whether partisan gaps in beliefs and behaviors narrowed in the long run is an open question.

In this paper, we document partisan gaps in behaviors, attitudes, and beliefs regarding the COVID-19 pandemic across a time span from the beginning of the pandemic to February 2021. Our analyses rely primarily on an original and nationally representative survey conducted between April 1, 2020 and February 15, 2021 covering 13,334 respondents. We also analyze geo-location data from a large sample of smartphones provided by SafeGraph to examine differences in mobility due to work and non-work trips.

We present three main findings. First, we show economically significant and persistent partisan gaps that emerge early in the pandemic and do not decrease over time. Using smartphone geolocation data, we document a remarkably stable gap in mobility across counties with more Democrats versus more Republicans from the beginning of the pandemic to February 2021. This gap is mainly driven by differences in discretionary (non-work) mobility. Using our survey data, we examine self-reported behaviors related to discretionary mobility, as well as other precautionary behaviors, attitudes towards economic activities, and beliefs regarding individual and systemic risks. We find that the difference between Democrats and Republicans in their likelihood of avoiding large gatherings or limiting seeing friends, as well as in feeling comfortable with engaging in economic activities (e.g., eat at a restaurant, go shopping) largely remains the same throughout the 10-months of our study, even as general
engagement with these activities fluctuate. Democrats are more worried about the health and the economic well-being of themselves and those around them, and increasingly so over time. Democrats are also persistently more pessimistic than Republicans in their predictions regarding their own health risks and the future death toll of the pandemic in the U.S. over time. Consistent with these findings, we also find an association between individual risk perceptions and behaviors, except during periods of mandates in which partisan gaps in behaviors were reduced while partisan gaps in beliefs persisted.

Second, we document that partisan gaps are large and persistent even among individuals who are objectively at a heightened risk of severe health outcomes (65 years or older, or have pre-existing health conditions that put them in the high-risk category). For this high-risk population, the returns to acquiring more accurate information are expected to be higher. However, we find that although for some measures the partisan gap among the high-risk population is somewhat smaller than that among the low-risk population during some periods, the gaps among the high-risk population across all measures (on protective behaviors, comfort with economic activities, and beliefs) are still substantial and do not decrease over time.

Third, the partisan gaps are largely nonexistent among individuals who choose to follow a variety of news outlets spanning the political spectrum and are also greatly reduced among individuals who report paying more attention to information about the pandemic from a variety of formal and informal sources. This finding points to an interaction between partisanship and demand for information about the pandemic. The previously documented persistent partisan gaps are mainly driven by individuals who are exposed to news outlets within a narrower political spectrum and those who choose not to pay much attention to information about the pandemic.

These results imply that partisan gaps in beliefs and behaviors did not narrow in the long run, even for individuals with greater costs of being misinformed or guided by political ideology. Furthermore, partisan gaps are mainly driven by individuals who are exposed to news outlets within a narrower political spectrum and those who choose not to pay much attention to information about the pandemic. Combined with our finding that partisan gaps in actions were absent only under mandates, during which partisan gaps in worries and
beliefs still remained, these results suggest that policy intervention may be warranted above and beyond providing more acute information.

This paper contributes to three strands of literature. First, this paper adds to a large literature on partisan gaps or partisan bias in economics. Examples include Leigh (2008) on the effect of gubernatorial partisanship on local policies and economic outcomes, Larcinese, Puglisi and Snyder (2011) on political bias in newspaper coverage of economic issues, Herrwitz and Theilen (2014) on the effect of partisan ideology on public healthcare expenditure, Bradley, Pantzalis and Yuan (2016) on partisan bias in the investment and the performance of state pension funds, and Mian, Sufi and Khoshkhou (2021) on partisan bias in economic expectations and household spending. We contribute to this literature by documenting persistent partisan gaps in individuals’ actions, attitudes, and beliefs related to the pandemic.

Second, this paper contributes to a nascent literature providing field evidence of persistent belief biases. Although experimental studies have shown that initial beliefs and partisan identity influence individuals’ learning process, it is unclear whether the systematic biases discussed in this literature persist in the long run and exist in high-stakes contexts – a question that by its nature needs to be examined in the field. Several field studies have shown evidence of biased beliefs in contexts where individuals presumably observe signals that should challenge their beliefs. For example, Park and Santos-Pinto (2010), Hoffman and Burks (2020), and Huffman, Raymond and Shvets (2021) document persistent overconfidence among chess players chess players, truckers, and managers. We contribute to this literature by examining the extent to which partisan belief differences evolve over a long period of time in an information-rich environment where mistakes can have life or death consequences.

Finally, this paper is related to the recent literature studying individual behaviors and beliefs during the COVID-19 pandemic. Examples include Allcott et al. (2020), Andersen (2020), Painter and Qiu (2020), Bundorf et al. (2021), Gadarian, Goodman and Pepinsky (2021), and Heffetz and Ishai (2021). We contribute to the literature by documenting partisan gaps in a large set of measures on actions, attitudes, worries, and beliefs. We also show that despite more acute information over time, these gaps are stable and significant even among the most vulnerable individuals.

The rest of the paper proceeds as follows. We document partisan gaps over time in
the observed mobility in Section 2. In Section 3, we show persistent partisan gaps in self-reported behaviors, attitudes, and beliefs and discuss the correlation between beliefs and behaviors/attitudes. We also show that the partisan gaps are stable even for the high-risk population, but do not exist for individuals who follow news outlets across the political spectrum or pay a lot of attention to pandemic-related information. Section 4 concludes.

2 Observed Mobility Differences: SafeGraph Data Results

In this section, we present partisan differences in mobility and how such differences persist over time as a starting point for our investigation. The data come from SafeGraph, which is a data company that aggregates anonymized location data from numerous smartphone applications to provide insights about physical places (www.safegraph.com). Using geo-location data obtained from the activity of more than 35 million smartphones, SafeGraph provides an aggregated dataset (Social Distancing Metrics) to researchers. For each census block on a given day, the Social Distancing Metrics data report the total number of devices, the number of devices exhibiting full-time work behavior (spending more than 6 hours between 8 a.m. and 6 p.m. in one location outside the home), devices exhibiting part-time work behavior (spending more than 3 but less than 6 hours between 8 a.m. and 6 p.m. in one location outside the home), and devices that stay home all day.\(^1\) We merge election results from the 2016 presidential election, demographic information, daily local COVID-19 cases and deaths, and daily minimum and maximum temperature, precipitation, and wind speed data after aggregating these data to the county level.\(^2\)

We examine how the shares of devices that left home for various reasons (for any reason, for full-time work, for part-time work, and for non-work reasons) vary with county

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\(^1\)SafeGraph determines the home of a device by its common nighttime location over a 6-week period.

\(^2\)We exclude Alaska and territories of the U.S. Moreover, following SafeGraph notifications, we drop two dates (2/25/2020 and 1/27/2021) known to have missingness. To enhance privacy, SafeGraph excludes a census block group if it has fewer than five devices observed in a month. We obtain county election results from the 2016 presidential election (from MIT Election Data and Science Lab (2018)), county COVID-19 case and death numbers from The New York Times (2020), demographic information from Killeen et al. (2020), and weather data on temperature, precipitation, and wind speed from gridMET maintained by Abatzoglou (2013).
demographics between February 2, 2020 and February 7, 2021. Our main specification is:

\[ s_{ct} = P_c \beta_{w(t)} + Z_{ct} \gamma_{w(t)} + \zeta_c + \eta_{s(c)t} + \varepsilon_{ct}, \]  

where \( s_{ct} \) is the share of devices in county \( c \) on day \( t \) exhibiting a particular behavior and \( P_c \) is the percent voting for Clinton in the 2016 election (termed “Democrats” in the discussion of results). The coefficients of interest, \( \beta_{w(t)} \), are allowed to vary by week \( w(t) \). The control variables \( Z_{ct} \) are also allowed to vary weekly in their influence. They include demographic and socioeconomic controls, daily weather controls, and variables to capture differences in COVID-19 risks across counties.\(^3\) We include county fixed-effects (\( \zeta_c \)) to control for cross-sectional differences and state-date fixed effects (\( \eta_{s(c)t} \)) to control for state-wide changes in social-distancing policies. Because each observation is a share in a county, we weight observations by the total number of devices in each county. We also cluster errors at the county level.

Figure 1 presents the estimated coefficient \( \beta_{w(t)} \). Each column of the figure corresponds to a share of devices exhibiting a certain behavior: leaving home for any reason, for non-work reasons, for full-time work, or for part-time work.\(^4\) The coefficients are estimated relative to the first week in our sample – the week of February 2, 2020. For historical context, recall that the first confirmed case in the U.S. was reported on January 21, 2020, travel from China to the U.S. was banned on February 2, travel restrictions were extended to Iran on February 28 and to European nations on March 12, 2020.\(^5\)

From the first column of Figure 1, we can see that while partisan differences in mobility were nonexistent during February 2020, these differences emerge quickly in early March and

\(^3\) Demographic control variables are population share of women, percent living under the poverty line, population shares of whites, blacks, and Asians, percent of adults with a bachelor’s degree, percent of adults without a high-school degree, unemployment rate, and the employed share of the county population. Weather controls include daily minimum and maximum temperature, precipitation, and wind speed. Pandemic risk proxies include the logarithm of one plus the number of COVID-19 cases, logarithm of one plus the number of COVID-19 deaths, the logarithm of population density, population share over the age of 65, and a binary variable indicating whether the county is in a metropolitan area.

\(^4\) These shares are computed using the total number of devices in the sample as the denominator and the number of devices exhibiting certain behaviors as the numerators. SafeGraph reports a sampling bias in favor of detecting devices that are moving (SafeGraph 2020). Supplemental Appendix SC.2 shows the robustness of our conclusions to several different adjustment approaches.

\(^5\) https://www.washingtonpost.com/outlook/2020/10/01/debate-early-travel-bans-china/
remained stable until the end of our sample. The estimated $\beta_w(t)$ hovers around -9 throughout the study period. To put this estimate into context, we note that the difference between the 95th and 5th percentiles of Democratic vote share across counties is 0.5. Therefore, an estimated value of -9 for the coefficient $\beta_w(t)$ implies that going from a county with the 5th to the 95th percentile in Democratic vote share is associated with a decrease of 4.5 percentage points in the share of devices staying at home. Such a partisan gap is sizable compared to the overall change in mobility. During the first week of the sample, 74.6% of devices left home, while in July and August of 2020, 67.8% of devices left home on average. Therefore, the partisan gap of 4.5 percentage points is equivalent to 66% of the mobility reduction between the first week of the sample to the summer of 2020.

Looking into various reasons why people leave home, we can see that the partisan gap in discretionary (non-work) mobility (the second column of Figure 1) dominates partisan gaps in work-related mobility (the third and fourth columns of Figure 1) and the former drives the persistent partisan gap in the overall mobility. In particular, the partisan gap in social mobility for non-work purposes starts in early March, stabilizes in April, and remains at that level throughout the summer of 2020. Afterwards, when the school year starts and when many workers returned to their workplaces as economic activities resume across the nation, the partisan gaps in non-work mobility becomes smaller but never disappears. Turning to work-related mobility, we find that partisan gaps are much smaller, but also display patterns consistent with Democrats reducing mobility more when they can. Specifically, we find that people in counties with a higher share of Democrats are more likely to leave home for work when the economy is closed (before the end of the summer) and during holidays (Thanksgiving, Christmas), but less likely to do so as a larger part of the population returns to their workplaces (after the summer). While the former pattern is consistent with the possibility of a higher representation of Democrats in front-line professions that require working outside the home (e.g. healthcare, retail, and grocery stores), the contrast between the former and the latter patterns means that barring constraints imposed by workplaces

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6In Supplemental Appendix SC.1, we confirm a positive correlation between the share of most front-line occupations and Democratic vote share in a county, and report results from a specification that includes occupation share controls. Results are presented in Figure SC.1 As expected, the partisan gaps in mobility associated with work trips during the early phase of the pandemic are less pronounced with these controls.
Figure 1: Partisan Gaps in the Shares of Devices Engaging in Different Types of Activity

Notes: This figure plots the estimated coefficient $\beta_w(t)$ in equation (1) and the corresponding 95% confidence interval where the dependent variable is indicated at the top of each panel. The week of February 1, 2020 is taken as the baseline $t = 0$. The y-axis indicates the beginning date of the week for which the coefficients are reported. Observations are weighted by the number of candidate devices in the county, and standard errors are clustered at the county level.

and profession, Democrats seem more likely to reduce mobility for work purposes.

In sum, our results suggest that partisan gaps in overall mobility are economically meaningful and persistent over time. These gaps are mainly driven by non-work-related mobility, which tends to be more discretionary. In the next section, we examine self-reported behaviors related to discretionary mobility, as well as other outcomes of interest.

3 Individual Actions, Attitudes, and Beliefs: Survey Data

Having established a persistent partisan gap in social mobility using the SafeGraph data, we now turn to our survey to examine partisan differences in actions, attitudes, and beliefs that are hard to observe directly. The data comprises 13,334 responses to a nationally
representative (in terms of age, ethnicity, gender, income, and geographic regions) survey of the U.S. adult population. The survey was fielded on Lucid across 5 time periods: early and late April 2020, June 2020, August 2020, and February 2021.\textsuperscript{7} Table SA.1 in Supplemental Appendix SA confirms that our sample indeed tracks well with the U.S. national benchmarks in age, ethnicity, gender, and regions of the U.S., albeit slightly under-sampling whites. We map zip codes to counties and merge them with the external datasets to get local population density, COVID-19 infection and death counts.\textsuperscript{8}

The survey asked respondents about their adoption of behaviors that help to curb the spread of the virus, comfort with engaging in certain activities after stay-at-home mandates were lifted, worries regarding health and economic well-being, and beliefs regarding the impact of the virus. Below, we detail these items. Supplemental Appendix SD presents the entire survey.

**Protective Behaviors** The survey elicited adherence to recommended health precautions by asking “Which of the following changes have you personally made to protect yourself from the coronavirus infection?” for a set of behaviors including: (1) do not meet friends or extended family; (2) avoid large gatherings and public transportation; (3) wash hands more often; and (4) wear a mask when out and about. The first two are social distancing actions that may contribute to the mobility differences documented in Section 2, and the latter two are health precautions individuals were encouraged to take. All four actions are difficult to glean from observational data.

**Comfort with Economic Activities** From June 2020 on, as most of the stay-at-home orders were lifted across the nation, we asked respondents whether they “feel comfortable in

\textsuperscript{7}In particular, we used https://luc.id/theorem/ to target a nationally representative sample. In each period, we fielded waves of the survey on certain dates. Those dates and period sample sizes are as follows: In 2020, Early April (April 1, 8, 15; N=3,483), Late April (April 22, 29; N=2,002), June (June 1, 15; N=2,515), August (August 30; N=2,534) and in 2021, February (February 15, N=2,800). An independent academic study, Coppock and McClellan (2019), examined the validity of Lucid in terms of respondent characteristics and treatment effect estimates and concluded that “subjects recruited from the Lucid platform constitute a sample that is suitable for evaluating many social scientific theories, and can serve as a drop-in replacement for many scholars currently conducting research on Mechanical Turk or other similar platforms.”

\textsuperscript{8}The University of Michigan Institutional Review Board (IRB) reviewed the surveys and determined that they are exempt from ongoing review (HUM00148129, HUM00180582). The IRB has also approved the merge between survey responses and county-level data (HUM00180640).
engaging in” the following activities: (1) eat in a restaurant with indoor seating; (2) eat in a restaurant with outdoor seating; (3) be part of a gathering with more than 10 people; (4) go to a coffee shop; (5) go to a bar; (6) go to a gym; (7) go grocery shopping; and (8) go shopping for non-food items.

**Worries**  The survey also asked how worried respondents felt about their own health, and the health of their partner, kids, extended family, members of their community, and the whole U.S. (on a scale of 1 to 5, 1 being not worried at all, 5 being extremely worried). It also asked how worried they feel about the economic well-being of the same groups of people (using the same scale). In the regressions, we use standardized (z-score) worry measures as dependent variables for ease of comparability.

**Beliefs**  The survey elicited two types of beliefs: (1) Individuals’ predictions on their own health risks, i.e., the chance of becoming infected in the next three months and chance of having no/mild or serious symptoms should they get infected. (2) Their predictions of the number of U.S. deaths by a certain target date assuming the state policies remain the same.\(^9\) Again, we use standardized expectations as dependent variables.

### 3.1 Persistent Partisan Gaps

To study partisan differences across time in these measures of protective behaviors, attitudes towards a variety of economic activity, worries, and beliefs, we use the following regression equation:

\[
Y_{i\tau} = P_i \alpha + X_{i\tau} \lambda + \mu_{s(i)\tau} + \varepsilon_{i\tau},
\]

where \(Y_{i\tau}\) is an outcome variable of interest as explained above for person \(i\) at time \(\tau\). \(P_i\) is a vector of indicator variables representing person \(i\)’s political affiliation (Democrat, Republican, or Independent). We allow the impact of partisanship, captured by \(\alpha\), to vary over time. The control variables \(X_{i\tau}\) include individual-specific covariates as summarized in Table SA.2 in Supplemental Appendix SA. They include demographic controls (categor-\(^9\)The target date was July 1, 2020 in the April waves, September 1, 2020 in the June waves, December 1, 2020 in the August wave, and May 1, 2021 in the February wave.
ical variables for the respondent’s gender, race, age, educational level, annual household income, presence of children) and an indicator for whether the respondent has any of the chronic conditions listed by the CDC as a high-risk factor. Control variables $X_{ir}$ also include geography-specific covariates that proxy for local pandemic severity over time (natural logarithm of one plus the number of cumulative COVID-19 cases in the respondent’s county at the time of the survey, natural logarithm of one plus the number of cumulative deaths in the respondent’s county at the time of the survey, natural logarithm of the population density of the respondent’s zip code). We include state-time fixed effects, $\mu_{s(i)\tau}$, to capture systematic differences across states at the time.

Figure 2 plots the estimated $\alpha_{r}$’s. Panel A depicts the estimated differences between Democrats and Republicans in the probability of taking protective actions. From this panel, we can see that although in the early days of the pandemic partisan gaps in social distancing and washing hands are negligible, they quickly grow to a substantial level by the end of April 2020 and remain high even by February 2021. The absence of partisan gaps in social distancing early in the pandemic correspond with stay-at-home mandates many states had in place. As these restrictions are lifted, partisan gaps emerge because although both Democrats and Republicans became more likely to socialize with family and friends, the increase is more pronounced for Republicans, as can be seen from the raw response patterns documented by Figure A in the Appendix. Regarding mask-wearing, the partisan gaps are already present early in the pandemic, grow larger during the summer of 2020, and cease to exist by February 2021. By 2021, most businesses and local governments had mandated masks indoors.

Overall, these results show that partisan gaps in protective behaviors are relatively small in the beginning, increase to substantial levels quickly and remain persistent throughout the pandemic, even as the public health officials repeatedly confirm that these protective actions are highly effective. Notable exceptions are times in which certain behaviors are restricted under mandates. The fact that the partisan differences are eroded during times of mandates is consistent with previous findings that government-imposed social distancing

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10 Throughout the paper, we report the Republican vs. Democrat differences for ease of exposition. Differences between Republicans and Independents are more muted overall, and are reported in Figure SA.1 in Supplemental Appendix SA.

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measures reduced the spread of COVID-19 (see, for example, Courtemanche et al. 2020).

Panel B of Figure 2 presents partisan differences in comfort with a variety of economic activities. Democrats are less likely to feel comfortable with engaging in economic activities overall. Except in the case of grocery shopping, the partisan gap is consistently between 10% and 20% across these activities, and stably so over time. These partisan gaps are substantial in magnitude. For example, over time, the overall share of respondents reporting feeling comfortable with dining indoors increased from 29% in June 2020 to above 42% in February 2021 (see Figure A). A partisan gap of 20% is, therefore, equivalent to about half of the overall change in comfort with indoor dining over time.

As Panel C of Figure 2 shows, from the beginning of the pandemic to the last period of our survey, Democrats report being more worried than Republicans about health and economic well-being, ranging from their own health or economic well-being to their partner’s, local community’s, and the whole nation’s. The partisan gap in health worries varies between around 20-40% of a standard deviation, and increases over time. The partisan gap in economic well-being worries is generally positive, though smaller in magnitude compared to the gap in health worries.

Finally, Panel D of Figure 2 presents partisan gaps in predictions regarding own or systemic health risks. From the figure, we can see that while the magnitude of the gaps varies over time, the gaps are almost always present: Democrats are consistently more pessimistic than Republicans. For example, despite being more likely to take precautionary actions, Democrats’ prediction of their chance of becoming infected in the next three months from the time of the survey is, on average, 0.1 to 0.2 standard deviations higher than that of Republicans. Their predictions about their chance of getting serious symptoms conditional on getting infected are also 0.1 to 0.2 standard deviations higher. In terms of systemic risks, Democrats on average predict more deaths due to COVID-19 than Republicans by around 0.1 standard deviations.

Overall, the above results show that throughout the 10-month period, Democrats were consistently more worried about the health and economic impact of the pandemic, more

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11The partisan difference in the comfort with grocery shopping is small, perhaps because this is a necessary economic activity for most people. Indeed, a large proportion (80% or more) reported comfort with this activity, with little room for partisan variation.
Figure 2: Partisan Gaps in Actions, Attitudes, Worries, Beliefs

Notes: This figure plots the estimated Democrat - Republican partisan gaps obtained from the estimates of $\alpha_\tau$ in equation (2) and the corresponding 95% confidence intervals. The x-axis indicates the period $\tau$. In Panel A, a positive estimate means that, ceteris paribus, Democratic respondents are more likely than Republican respondents to have taken an action indicated in the legend. The actions studied are “Wash Hands”–wash hands more often; “Wear Mask”– wear a mask when out and about; “Not See Friends”– do not meet any friends or extended family; “Avoid Gatherings”– avoid public transportation and large gatherings. In Panel B, a positive estimate means that, ceteris paribus, Democratic respondents are more likely than Republican respondents to feel comfortable with an activity indicated in the legend. Activities studied are “Restaurant, In”– eat in a restaurant with indoor seating; “Restaurant, Out”– eat in a restaurant with outdoor seating; “10+ ppl”– be part of a gathering with more than 10 people; “Cafe”– go to a coffee shop; “Bar”– go to a bar; “Gym”– go to a gym; “Shopping”– go shopping for non-grocery items; “Grocery”– go grocery shopping. In Panel C, a positive estimate means that, ceteris paribus, Democratic respondents worry more about the health well-being (in the left graph) or the economic well-being (in the right graph) of the group of people indicated in the legend. The groups of people are “Self”– respondent herself; “Partner”– respondent’s partner; “Children”– respondent’s kids; “Ext. Family”– respondent’s extended family; “Comm.”– members of the respondent’s community; “U.S.”– all people in the U.S. In Panel D, a positive estimate means that, ceteris paribus, Democratic respondents predict a larger number on the outcomes indicated in the legend. Outcomes over which expectations are elicited are “U.S. Deaths”– total number of deaths in the U.S. by a target date; “Chance of Infection”– chances that the respondent will get infected with the coronavirus in the next three months; “Chance of Serious Illness”– chances that the respondent will have serious symptoms should she get infected. All measures in Panels C and D are z-scores.
cautious about engaging in economic activities, and congruently more likely to take social distancing and preventive actions.

These findings are consistent with significant and stable associations between individuals’ individual risk beliefs and their actions and attitudes. We find a positive association between beliefs regarding the severity of disease and whether or not a person engages in a given protective behavior and a negative correlation between disease severity beliefs and feeling comfortable engaging in economic activity (Figure SA.2 in Supplemental Appendix SA). For example, we find that one standard deviation increase in the perceived chance of serious illness is associated with a 2.9% - 8.5% increase in self-reported refrain from seeing friends across the 10-month span, and a 5%-7.6% decrease in whether the individual is comfortable with dining indoors. Moreover, the associations between risk perceptions and protective behaviors and comfort with economic activities are stable over time. An exception is the correlation between beliefs and wearing masks. In the early periods of the pandemic, the correlation is substantial, but as mask mandates are instituted, this behavior-belief correlation disappears.

Earlier work has also documented correlations between beliefs and attitudes. In particular, Bundorf et al. (2021) document an association between infection risk beliefs and economic activity at the beginning of the pandemic. Allcott et al. (2020) document a positive correlation between death toll expectations and self-reported social distancing. Here, we focus on severity beliefs instead of infection risks beliefs because the latter may be a result of individual actions (e.g., one thinks they are less likely to be infected because one avoids socialization). We also present evidence of a sustained association over time. Therefore, our results should be interpreted as extending prior evidence both temporally, and using a different risk belief that is both individually relevant and less susceptible to reverse causation. While we refrain from a causal interpretation, we note that a sustained association between behaviors and beliefs over a 10-month span is suggestive of the possibility that the lack of convergence in risk assessments is at least partially responsible for the lack of convergence in behaviors across the partisan line.

12Supplemental Appendix SA also reports correlations of actions and attitudes with infection risk beliefs and with death toll expectations in Figure SA.3 and Figure SA.4, respectively.
The association between individuals’ expectations of severe health outcomes and their behaviors naturally leads to a question of whether partisan gaps are reduced among individuals with conditions that put them at a high risk for complications. We explore this question in the next section.

3.2 Partisan Gaps Among At-Risk Population

Having established stable partisan gaps over time, we now examine whether the gap and its persistence vary by health risks. Since the potential downsides of being misinformed or guided by political ideology are greater for high-risk individuals, one would expect high-risk individuals to have more incentives to respond to risks rather than ideology. Therefore, partisan gaps are expected to be smaller among the high-risk individuals. In addition, because information about the asymmetric impact of the virus on high-risk individuals became more wide-spread over time, one might also expect the partisan gap to shrink over time for the high-risk group.

We consider an individual to be a higher risk \( (HiRisk_i = 1) \) if they are either 65 years or older, or have at least one high-risk health condition. The CDC noted age as a risk factor. The CDC also published a list of health conditions that are associated with more severe health outcomes.\(^ {13} \) According to this definition, 57\% of our respondents are considered high risk. We run the following regression to evaluate the heterogeneity in partisan gaps:

\[
Y_{i\tau} = \alpha_\tau P_i + \beta_\tau HiRisk_i + \gamma_\tau (P_i \cdot HiRisk_i) + X_{i\tau} \lambda_\tau + \mu_{s(i)\tau} + \varepsilon_{i\tau},
\]

where \( Y_{i\tau} \) (the outcome variable of interest), \( P_i \) (the political affiliation dummy variables), and \( \mu_{s(i)\tau} \) (the state-period fixed effects) are the same as those in equation (2). The control variables \( X_{i\tau} \) are also the same as those in equation (2), except that we now separate out \( HiRisk_i \) from the vector \( X_{i\tau} \) and interact \( HiRisk_i \) with the individual’s political affiliation.

\(^ {13}\)The list of diseases were obtained from the CDC website on March 30, 2020: Moderate to severe asthma; COPD or other chronic lung diseases; Serious heart conditions; Diabetes; Conditions that can cause a person to be immuno-compromised including cancer treatment, smoking, bone marrow or organ transplantation, immune deficiencies, poorly controlled HIV or AIDS, and prolonged use of corticosteroids and other immune weakening medications; Severe obesity (BMI of 40 or higher); Chronic kidney disease and currently undergoing dialysis; Liver disease.
Therefore, while the coefficient $\alpha_t$ gives the partisan gaps for low-risk individuals, the sum $\alpha_t + \gamma_t$ measures that for high-risk individuals.

Figure 3 plots the estimated Democrat - Republican partisan gap for low-risk individuals with hollow markers, and the gap for high-risk individuals with solid markers. The estimates reveal two patterns: first, across all variables of interests (precautionary actions, attitude towards economic activities, worries, and beliefs), the partisan gap among high-risk individuals is mostly statistically the same as (and sometimes smaller than) the partisan gap among low-risk individuals. Second, partisan gaps among high-risk individuals are substantial and, more importantly, stable over time. For example, high-risk Democrats are more likely to avoid seeing friends than high-risk Republicans by 10 percentage points (Panel A) and less likely to feel comfortable with a gathering with more than ten people by more than 10 percentage points (Panel B) throughout the sample. They are also more worried (Panel C) and hold more pessimistic beliefs (Panel D) than their Republican counterparts. These results are alarming as they indicate that as information about the disease becomes more accurate and widespread, partisan gaps remained strong even for the most vulnerable individuals.

### 3.3 Role of Information

Could the persistent partisan gaps in behaviors and beliefs be related to partisan gaps in information demand? Do the partisan gaps differ across individuals with different attention levels to pandemic-related information and different scopes of news exposure? In this section, we address these questions. In doing so, we shed some light on the interaction between partisanship and information demand.

Our survey asked individuals to indicate the top news outlets they regularly consume. The survey also asked respondents about the amount of attention they pay to various information sources spanning from scientists/researchers to friends and family members regarding the pandemic specifically. The respondents rated their attention level on a 5-point scale ranging from 1 “not at all” to 5 “very much so.” Summary statistics can be found in Table SB.1 in Supplemental Appendix SB. As expected, there are partisan differences in choices of news
Figure 3: Partisan Gap Heterogeneity Across High-risk and Low-Risk Individuals

Notes: This figure plots the estimated Democrat - Republican partisan gaps for low-risk and high-risk respondents. In each panel, a hollow marker gives the estimated $\alpha_\tau$ in equation (3), which is the partisan gap among low-risk respondents, and a solid marker gives the estimated $\alpha_\tau + \gamma_\tau$, which is the partisan gap among high-risk respondents. The segments give the corresponding 95% confidence intervals. The x-axis indicates the period $\tau$. The legends are the same as those in Figure 2.

outlets and who people pay more attention to when it comes to the pandemic.\textsuperscript{14} There are also some similarities. A considerable fraction of people consume news across the partisan line: 46% of Democrats indicate Fox News as a source they regularly watch, and 42% of Republicans consume a more liberal news outlet in addition to Fox News.\textsuperscript{15} Moreover, both Democrats and Republicans vary greatly in the amount of overall attention they pay to others in terms of the pandemic, calculated as the average attention score across all items.

First, we examine partisan gap differences among individuals who consume news across the partisan line versus those who consume a politically narrow scope of news. We use

\textsuperscript{14}Republicans are more likely to consume Fox News, and to pay greater attention to their pastor, people they follow on Facebook or Twitter, and the President. Democrats are more likely to consume any news outlet except Fox News, and to pay greater attention to the CDC, scientists, and their Governor. There are no partisan differences in the level of attention paid to family or friends.

\textsuperscript{15}We consider CNN, NBC/MSNBC, NPR, Huff Post, The New York Times and Washington Post as liberal news outlets, but the results are robust to narrower classifications.
an equation analogous to equation (3) where we replace HiRisk with whether the individual consumes news across the partisan line, and report the estimation results in Figure 4. Throughout the period we study, partisan gaps in precautions taken, comfort with economic activities, health worries, and beliefs among individuals who choose to consume news across the partisan line (indicated by solid markers) are small in magnitude and oftentimes insignificant. In contrast, while partisan gaps in actions and health worries are mostly non-existent in early April, they emerge quickly among individuals who do not consume news across the partisan line (indicated by hallow markers). Moreover, partisan gaps in comfort with economic activities and beliefs are also large and significant in this group. These results, combined with the initial partisan differences being very small in early April, lends support to the role of information. In particular, the willingness to expose oneself to a variety of (potentially conflicting) information seems to play a role in reducing partisan gaps.

Next, we examine whether the willingness to pay attention to information about the pandemic is associated with a lower level of partisan gap. The results in Figure 5 show that among individuals who pay a high level of attention to information from others regarding the pandemic (average attention score greater than 3.5 on a scale of 1 to 5), the partisan gaps in precautions taken, comfort with economic activities, health worries and beliefs are economically small and oftentimes insignificant. In contrast, individuals who report not paying much attention overall to others as a source of information about the pandemic show substantial partisan gaps in all metrics.

To summarize, in Section 3.2, we find significant and stable partisan gaps even among high-risk individuals. As argued before, such individuals are expected to have more incentives to acquire accurate information, update their beliefs, and adjust their behaviors. This result indicates these individuals do not necessarily acquire more information or do not acquire enough information to overcome the effect of partisanship. The heterogeneity result in this section suggests that for individuals who do pay attention to pandemic-related information and consume news across the political spectrum or are willing to do so, partisan gaps become narrower or disappear. These results, overall, point to the role of information in partisan gaps.
Figure 4: Partisan Gap Heterogeneity Across Those Who Consume News Across the Political Line vs. Those Who Do Not

Notes: This figure plots the estimated Democrat - Republican partisan gaps for respondents who consume news across the political line and for those who do not. In each panel, a hollow marker gives the estimated $\alpha_\tau$ in equation (3), which is the partisan gap among consumers of narrow news, and a solid marker gives the estimated $\alpha_\tau + \gamma_\tau$, which is the partisan gap among consumers of news across the political line. The segments give the corresponding 95% confidence intervals. The x-axis indicates the period $\tau$. The legends are the same as those in Figure 2.
Figure 5: Partisan Gap Heterogeneity Across Those Who Pay Attention to Other Information Sources vs. Those Who Do Not

Notes: This figure plots the estimated Democrat - Republican partisan gaps for respondents whose average attention score on a 1–5 scale across other information sources (Friends, Family, Scientists, Pastor, Facebook or Twitter, CDC, Governor, President) is greater than 3.5, and those whose average attention score is 3.5 or lower. In each panel, a hollow marker gives the estimated $\alpha_\tau$ in equation (3), which is the partisan gap among those who do not pay a lot of attention to other information sources, and a solid marker gives the estimated $\alpha_\tau + \gamma_\tau$, which is the partisan gap among those who pay high attention overall. The segments give the corresponding 95% confidence intervals. The x-axis indicates the period $\tau$. The legends are the same as those in Figure 2.

4 Conclusion

We find economically significant and persistent partisan gaps in actions, attitudes, worries, and beliefs. The partisan gaps in the propensity to take protective actions (e.g., avoid seeing friends) and feel comfortable with a variety of economic activities (e.g., indoor dining) are persistent over time. Such differences are not only potentially harmful to the individuals themselves, but may also introduce substantial negative spillovers on public health. Moreover, we find that both the partisan gaps and the lack of convergence over time are present even for the high-risk population. However, such gaps are almost non-existent among those who pay attention to others regarding the pandemic and/or consume news from a politically
broad range of outlets.

We document the persistence of systematic differences in a high-stakes context that was characterized by a paucity of information early on, which allowed for initial belief heterogeneity. In such a context, as highly salient and increasingly accurate information becomes available, models of rational information acquisition and updating would predict steep learning and fast convergence. It is, therefore, all the more telling that initial partisan gaps in beliefs and behaviors persist, even among high-risk individuals.

Taken together, our results point towards the need for mandates to align individual behaviors for the public good. Early in the pandemic, researchers (including us) documenting partisan differences in risk assessments and behaviors highlighted the need for consistent public messages about the COVID-19 pandemic to achieve an effective public health response. Yet, even as more accurate information became accessible, partisan gaps remained stable over 10 months. Our results suggest that persistent partisan gaps are driven by individuals who are exposed to news outlets within a narrower political spectrum and individuals who pay less attention to information from others regarding the pandemic. These results suggest a role for information resistance in the persistence of partisan gaps. Therefore, we caution researchers and policy-makers that consistent public messaging and the availability of accurate information are not enough. Along with the well-known political divide in news consumption and the persistent slant in news supply (e.g., Gentzkow and Shapiro (2011) and Bakshy et al. (2015)), these results further underscore the difficulty of relying on free-market news and individual rationality dissemination to eradicate partisan gaps over time. Together with the fact that times in which mask-wearing mandates were common correspond to erosion of partisan gaps in mask-wearing, and times in which social mobility was restricted (early April) correspond to lower levels of partisan gaps in mobility and self-reported socialization suggests that mandates might play an important role in eliminating response differences.

References


SafeGraph (2020), “Safegraph’s data analysis methodology.”


Appendix

Figure A: Summary Statistics of Dependent Variables: Survey

Notes: This figure plots average responses by political affiliations over time. The solid markers indicate Democrats while the hallow ones Republicans. The x-axis indicates the period. In Panel A, the y-axis gives the fraction of respondents who have taken an action indicated in the legend. The actions are “Wash Hands”—wash hands more often; “Wear Mask”—wear a mask when out and about; “Not See Friends”—do not meet any friends or extended family; “Avoid Gatherings”—avoid public transportation and large gatherings. In Panel B, the y-axis gives the fraction of respondents who feel comfortable with an activity indicated in the legend. The activities are “Restaurant, In”—eat in a restaurant with indoor seating; “Restaurant, Out”—eat in a restaurant with outdoor seating; “10+ ppl”—be part of a gathering with more than 10 people; “Cafe”—go to a coffee shop; “Bar”—go to a bar; “Gym”—go to the gym; “Shopping”—go shopping for non-grocery items; “Grocery”—go grocery shopping. In Panel C, the y-axis is how much respondents worry (on a scale of 1 to 5, larger numbers corresponding to more worry) about the health or economic well-being of people indicated in the legend. The groups of people are “Self”—respondent herself; “Partner”—respondent’s partner; “Children”—respondent’s kids; “Ext. Family”—respondent’s extended family; “Community”—members of the respondent’s community; “U.S.”—all people in the U.S. In Panel D, the y-axis is respondents’ prediction on the outcomes indicated in the legend. Outcomes over which expectations are elicited are “U.S. Deaths”—total number of deaths in the U.S. by a target date (in thousands); “Chance of Infection”—chances that the respondent will get infected with the coronavirus in the next three month (in %); “Chance of Serious Illness”—chances that the respondent will have serious symptoms should she get infected (in %).
Table SA.1: Representativeness of Survey Respondents

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>National Mean(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>0.51</td>
<td>0.51</td>
</tr>
<tr>
<td>Age: 18-24</td>
<td>0.13</td>
<td>0.12</td>
</tr>
<tr>
<td>Age: 25-34</td>
<td>0.18</td>
<td>0.18</td>
</tr>
<tr>
<td>Age: 35-44</td>
<td>0.19</td>
<td>0.16</td>
</tr>
<tr>
<td>Age: 45-54</td>
<td>0.15</td>
<td>0.16</td>
</tr>
<tr>
<td>Age: 55-64</td>
<td>0.19</td>
<td>0.17</td>
</tr>
<tr>
<td>Age: 65+</td>
<td>0.17</td>
<td>0.21</td>
</tr>
<tr>
<td>Asian</td>
<td>0.05</td>
<td>0.06</td>
</tr>
<tr>
<td>Black</td>
<td>0.10</td>
<td>0.13</td>
</tr>
<tr>
<td>White</td>
<td>0.70</td>
<td>0.77</td>
</tr>
<tr>
<td>Region - Midwest</td>
<td>0.21</td>
<td>0.21</td>
</tr>
<tr>
<td>Region - Northeast</td>
<td>0.19</td>
<td>0.17</td>
</tr>
<tr>
<td>Region - South</td>
<td>0.38</td>
<td>0.38</td>
</tr>
<tr>
<td>Region - West</td>
<td>0.22</td>
<td>0.24</td>
</tr>
</tbody>
</table>

\(^a\)Share of persons age 18+ years.

Lucid provided demographic variables of respondents. Table SA.1 compares the shares of respondents with a certain gender, age, race, or live in a certain region with the corresponding national shares and shows that our survey sample is representative. Table SA.2 reports the summary statistics of the categorical control variables we construct and employ in our regressions. We indicate an individual as a Democrat (Republican) if they chose of the following responses to the political affiliation question: “Strong Democrat (Republican),” “Not very strong Democrat (Republican),” “Independent Democrat (Republican)” or “Other - leaning Democrat (Republican).” We indicate an individual as Independent if they chose of the following responses to the political affiliation question: “Independent - neither” or “Other - neither.” Alternative specifications of this variable do not substantively change our results.
Table SA.2: Summary Statistics on Demographics of Survey Respondents (N=13,334)

<table>
<thead>
<tr>
<th>Category</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>0.51</td>
<td>0.50</td>
</tr>
<tr>
<td>Age: 18-24</td>
<td>0.13</td>
<td>0.33</td>
</tr>
<tr>
<td>Age: 25-34</td>
<td>0.18</td>
<td>0.38</td>
</tr>
<tr>
<td>Age: 35-44</td>
<td>0.19</td>
<td>0.36</td>
</tr>
<tr>
<td>Age: 45-54</td>
<td>0.15</td>
<td>0.39</td>
</tr>
<tr>
<td>Age: 55-64</td>
<td>0.19</td>
<td>0.38</td>
</tr>
<tr>
<td>Age: 65+</td>
<td>0.17</td>
<td>0.33</td>
</tr>
<tr>
<td>Asian</td>
<td>0.05</td>
<td>0.21</td>
</tr>
<tr>
<td>Black</td>
<td>0.10</td>
<td>0.30</td>
</tr>
<tr>
<td>White</td>
<td>0.70</td>
<td>0.46</td>
</tr>
<tr>
<td>Other non-white</td>
<td>0.16</td>
<td>0.36</td>
</tr>
<tr>
<td>Democrat</td>
<td>0.46</td>
<td>0.50</td>
</tr>
<tr>
<td>Republican</td>
<td>0.39</td>
<td>0.49</td>
</tr>
<tr>
<td>Independent</td>
<td>0.15</td>
<td>0.36</td>
</tr>
<tr>
<td>High school degree</td>
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<td>0.41</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>0.34</td>
<td>0.47</td>
</tr>
<tr>
<td>Post-graduate degree</td>
<td>0.18</td>
<td>0.38</td>
</tr>
<tr>
<td>Education level missing</td>
<td>0.005</td>
<td>0.07</td>
</tr>
<tr>
<td>Household income &lt; 30k</td>
<td>0.33</td>
<td>0.47</td>
</tr>
<tr>
<td>Household income ∈ [30k, 75k)</td>
<td>0.35</td>
<td>0.48</td>
</tr>
<tr>
<td>Household income ≥ 75k</td>
<td>0.28</td>
<td>0.45</td>
</tr>
<tr>
<td>Household income missing</td>
<td>0.05</td>
<td>0.21</td>
</tr>
<tr>
<td>ln(1+ population density)</td>
<td>7.02</td>
<td>1.89</td>
</tr>
<tr>
<td>ln(1+ COVID-19 cases)</td>
<td>0.02</td>
<td>0.03</td>
</tr>
<tr>
<td>ln(1+ COVID-19 related deaths)</td>
<td>.0005</td>
<td>.0007</td>
</tr>
</tbody>
</table>
Figure SA.1: Partisan Gaps in Actions, Attitudes, Worries, Beliefs: Independents vs. Republicans

Notes: This figure plots the estimated Independent - Republican partisan gaps obtained from the estimates of $\alpha_\tau$ in equation (2) and the corresponding 95% confidence intervals. The x-axis indicates the period $\tau$. In Panel A, a positive estimate means that, ceteris paribus, independent respondents are more likely than Republican respondents to have taken an action indicated in the legend. The actions studied are “Wash Hands”–wash hands more often; “Wear Mask”– wear a mask when out and about; “Not See Friends”– do not meet any friends or extended family; “Avoid Gatherings”– avoid public transportation and large gatherings.

In Panel B, a positive estimate means that, ceteris paribus, independent respondents are more likely than Republican respondents to feel comfortable with an activity indicated in the legend. Activities studied are “Restaurant, In”– eat in a restaurant with indoor seating; “Restaurant, Out”– eat in a restaurant with outdoor seating; “10+ ppl”– be part of a gathering with more than 10 people; “Cafe”– go to a coffee shop; “Bar”– go to a bar; “Gym”– go to a gym; “Shopping”– go shopping for non-grocery items; “Grocery”– go grocery shopping. In Panel C, a positive estimate means that, ceteris paribus, independent respondents worry more about the health well-being (in the left graph) or the economic well-being (in the right graph) of the group of people indicated in the legend. The groups of people are “Self”– respondent herself; “Partner”– respondent’s partner; “Children”– respondent’s kids; “Ext. Family”– respondent’s extended family; “Comm.”– members of the respondent’s community; “U.S.”– all people in the U.S. In Panel D, a positive estimate means that, ceteris paribus, independent respondents predict a larger number on the outcomes indicated in the legend. Outcomes over which expectations are elicited are “U.S. Deaths”– total number of deaths in the U.S. by a target date; “Chance of Infection”– chances that the respondent will get infected with the coronavirus in the next three months; “Chance of Serious Illness”– chances that the respondent will have serious symptoms should she get infected. All measures in Panels C and D are z-scores.
Figure SA.2: Correlation between Outcome Severity Beliefs and Protective Behaviors and Attitudes towards Economic Activity

Notes: This figure plots the correlation between an individual's belief about her chance of getting serious symptoms should she gets infected and her likelihood of taking a certain protective action (in the upper panel) and feeling comfortable with a certain economic activity (in the lower panel). The x-axis indicates the period. In the upper panel, the actions studied are “Wash Hands”—wash hands more often; “Wear Mask”—wear a mask when out and about; “Not See Friends”—do not meet any of friends or extended family; “Avoid Gatherings”—avoid public transportation and large gatherings. In the lower panel, activities studied are “Restaurant, In”—eat in a restaurant with indoor seating; “Restaurant, Out”—eat in a restaurant with outdoor seating; “10+ ppl”—be part of a gathering with more than 10 people; “Cafe”—go to a coffee shop; “Bar”—go to a bar; “Gym”—go to a gym; “Shopping”—go shopping for non-grocery items; “Grocery”—go grocery shopping.
Figure SA.3: Correlation between Infection Risk Beliefs and Protective Behaviors and Attitudes towards Economic Activity

Notes: This figure plots the correlation between an individual’s belief about her chance of getting infected in the next three months and her likelihood of taking a certain protective action (in the upper panel) and feeling comfortable with a certain economic activity (in the lower panel). The x-axis indicates the period. In the upper panel, the actions studied are “Wash Hands”–wash hands more often; “Wear Mask”–wear a mask when out and about; “Not See Friends”–do not meet any of friends or extended family; “Avoid Gatherings”–avoid public transportation and large gatherings. In the lower panel, activities studied are “Restaurant, In”–eat in a restaurant with indoor seating; “Restaurant, Out”–eat in a restaurant with outdoor seating; “10+ ppl”–be part of a gathering with more than 10 people; “Cafe”–go to a coffee shop; “Bar”–go to a bar; “Gym”–go to a gym; “Shopping”–go shopping for non-grocery items; “Grocery”–go grocery shopping.
Figure SA.4: Correlation between U.S Total Deaths and Protective Behaviors and Attitudes towards Economic Activity

Notes: This figure plots the correlation between an individual’s prediction about the future death toll of the pandemic in the U.S. and her likelihood of taking a certain protective action (in the upper panel) and feeling comfortable with a certain economic activity (in the lower panel). The x-axis indicates the period. In the upper panel, the actions studied are “Wash Hands”–wash hands more often; “Wear Mask”– wear a mask when out and about; “Not See Friends”– do not meet any of friends or extended family; “Avoid Gatherings”– avoid public transportation and large gatherings. In the lower panel, activities studied are “Restaurant, In”– eat in a restaurant with indoor seating; “Restaurant, Out”– eat in a restaurant with outdoor seating; “10+ ppl”– be part of a gathering with more than 10 people; “Cafe”– go to a coffee shop; “Bar”– go to a bar; “Gym”– go to a gym; “Shopping”– go shopping for non-grocery items; “Grocery”– go grocery shopping.
### SB News and Information Sources

#### Table SB.1: Summary Statistics of News Exposure and Attention

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Democrats</th>
<th>Other</th>
<th>Republicans</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Generally consume</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABC</td>
<td>.36</td>
<td>.42</td>
<td>.28</td>
<td>.31</td>
</tr>
<tr>
<td>CNN</td>
<td>.38</td>
<td>.53</td>
<td>.27</td>
<td>.24</td>
</tr>
<tr>
<td>Fox News</td>
<td>.50</td>
<td>.46</td>
<td>.34</td>
<td>.59</td>
</tr>
<tr>
<td>HuffPost</td>
<td>.07</td>
<td>.10</td>
<td>.03</td>
<td>.04</td>
</tr>
<tr>
<td>NBC/MSNBC</td>
<td>.30</td>
<td>.40</td>
<td>.21</td>
<td>.21</td>
</tr>
<tr>
<td>NYT</td>
<td>.2</td>
<td>.27</td>
<td>.11</td>
<td>.14</td>
</tr>
<tr>
<td>NPR</td>
<td>.11</td>
<td>.16</td>
<td>.06</td>
<td>.07</td>
</tr>
<tr>
<td>Wall Street Journal</td>
<td>.11</td>
<td>.12</td>
<td>.07</td>
<td>.11</td>
</tr>
<tr>
<td>Washington Post</td>
<td>.14</td>
<td>.20</td>
<td>.08</td>
<td>.09</td>
</tr>
</tbody>
</table>

| **Regarding the pandemic, pay attention to** |           |           |            |             |
| Friends                   | 2.87      | 2.88      | 2.75       | 2.88        |
|                          | (12,215)  | (5,665)   | (1,768)    | (4,782)     |
| Family                   | 3.19      | 3.20      | 3.06       | 3.23        |
|                          | (12,353)  | (5,714)   | (1,826)    | (4,813)     |
| Twitter                  | 1.97      | 1.99      | 1.68       | 2.06        |
|                          | (7,383)   | (3,361)   | (1,048)    | (2,974)     |
| Facebook                 | 2.07      | 2.02      | 1.86       | 2.21        |
|                          | (8,468)   | (3,798)   | (1,211)    | (3,459)     |
| Twitter or Facebook      | 2.22      | 2.50      | 1.91       | 1.92        |
|                          | (2,465)   | (1,278)   | (345)      | (842)       |
| Pastor                   | 2.47      | 2.38      | 2.23       | 2.64        |
|                          | (9,822)   | (4,396)   | (1,352)    | (4,074)     |
| CDC                      | 3.69      | 4.02      | 3.28       | 3.45        |
|                          | (12,415)  | (5,772)   | (1,812)    | (4,831)     |
| Scientists               | 3.72      | 4.04      | 3.27       | 3.50        |
|                          | (12,345)  | (5,724)   | (1,809)    | (4,821)     |
| Governor                 | 3.13      | 3.26      | 2.66       | 3.15        |
|                          | (12,442)  | (5,771)   | (1,810)    | (4,861)     |
| President                | 2.76      | 2.36      | 2.43       | 3.35        |
|                          | (12,387)  | (5,735)   | (1,799)    | (4,853)     |

Notes: The upper panel reports the percentage (among all 13,334) of respondents who consume a particular news outlet. The bottom panel reports the average rating of the degree of attention individuals pay to different sources of information (ranging from 1 – Not at all to 5 – Very much so), if they have indicated that source as applicable. The number of individuals who indicate the source as applicable is reported in parentheses. The attention question was not included in the first wave, therefore 12,852 respondents received this question.
SC  Robustness: SafeGraph Data Analyses

We conduct two sets of robustness analyses to show how our results in Section 2 vary with different adjustment methods and control variables.

SC.1 Adding Occupational Controls

We noted in the main manuscript that the representation of Democrats and Republicans may systematically differ across occupations. Since workers in some occupations, most notably front-line ones, may have less flexibility to work from home, such differences may contribute to the partisan gaps we observe in mobility for work purposes, especially early on in the pandemic. To fully account for these differences, we would need individual-level data, which is not possible given the anonymity of Safegraph data. Therefore, we obtain county-level occupational share data from the United States Census Bureau’s American Community Survey 5-year Estimates (5-year ACS) for 2016-2019. Table SC.1 provides average shares of occupations across the 3,110 counties in our data, and the raw correlation between the shares of these occupations and the Democratic vote share in a county.

Table SC.1: County-level Occupation Shares and Correlation with Democratic Voter Shares

<table>
<thead>
<tr>
<th>Occupations</th>
<th>Average Share</th>
<th>Corr. with Democrat Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management, Business, And Financial</td>
<td>.16</td>
<td>.003 (.006)</td>
</tr>
<tr>
<td>Computer, Engineering, And Science</td>
<td>.04</td>
<td>.064 (.002)</td>
</tr>
<tr>
<td>Education, Legal, Community Svc., Arts, And Media</td>
<td>.09</td>
<td>.056 (.003)</td>
</tr>
<tr>
<td>Healthcare Practitioners And Technical</td>
<td>.06</td>
<td>.007 (.002)</td>
</tr>
<tr>
<td>Healthcare Support</td>
<td>.02</td>
<td>.005 (.001)</td>
</tr>
<tr>
<td>Protective Service</td>
<td>.03</td>
<td>.017 (.002)</td>
</tr>
<tr>
<td>Food Preparation And Serving Related</td>
<td>.03</td>
<td>.023 (.002)</td>
</tr>
<tr>
<td>Personal Care And Service</td>
<td>.03</td>
<td>.016 (.002)</td>
</tr>
<tr>
<td>Building And Grounds Cleaning And Maintenance</td>
<td>.02</td>
<td>.012 (.001)</td>
</tr>
<tr>
<td>Sales And Office</td>
<td>.21</td>
<td>.035 (.004)</td>
</tr>
<tr>
<td>Natural Resources, Construction, And Maintenance</td>
<td>.17</td>
<td>-.143 (.005)</td>
</tr>
<tr>
<td>Production, Transportation, And Material Moving</td>
<td>.14</td>
<td>-.095 (.008)</td>
</tr>
</tbody>
</table>

Notes: The first column reports the average share of each occupation type across counties. The second column reports coefficients (and associated standard errors in parantheses) obtained from regressing the county occupation shares onto county democratic voter shares.
Figure SC.1: Mobility Differences, SafeGraph Data, Controlling for Occupation Shares in Each County

Notes: This figure plots the estimated coefficient $\beta_w(t)$ in equation (1) and the corresponding 95% confidence interval where the dependent variable is indicated at the top of each panel, and additional occupation share controls are included in the regression. The week of February 1, 2020 is taken as the baseline $t = 0$. The y-axis markers indicate the beginning date of the week for which the coefficients are reported. Observations are weighted by the number of candidate devices in the county, and standard errors clustered at the county level.

We re-estimate regression equation (1), including time-varying impact of county shares of occupations in various categories as listed in Table SC.1. The results are plotted in Figure SC.1. The partisan gaps in mobility associated with work during the early phase of the pandemic are attenuated, as expected from the conjecture that there might be an over-representation of Democrats in front-line occupations. All general trends remain the same.

### SC.2 Different Adjustment Methods

SafeGraph reports the number of devices that “ pinged” during a given day (active device count). In the main text, we measure the share of devices that remain at home as the
Supplemental Appendices

unadjusted share $s_{\text{at-home}} = 100 \times (\text{completely-at-home devices/active devices})$. Safegraph notes that the number of completely-at-home devices could be under-reported due to a sampling bias. SafeGraph (2020) reports: “GPS data from smartphones is often subject to a sampling bias in favor of devices that are changing locations (i.e., moving). Collecting GPS data is battery-intensive, and software applications sometimes implement GPS data collection methods that depend on the movement of the device, rather than a fixed time interval. This represents a sampling bias in favor of detecting devices that are moving.” SafeGraph therefore also reports the number of all devices in its sample during a month, regardless of whether it saw any activity for them on a specific day within the month (candidate device count). However, it is not clear whether this number reflects the number of devices that could have been reporting on a given day, since Safegraph’s sample of phones dynamically evolves over time.

We explore the robustness of our results to the following two alternative approaches of calculating shares of devices showing different types of activity:

1. **Using the maximum number of devices that pinged in a week as the denominator and basis for adjustment.** In this approach, we calculate the largest number of active devices each week for each county (“max active device”), assume it to be the latent true number of active devices for that week. As a result, the number of at-home devices are adjusted by the difference (max active devices - active devices) to account for potentially latent at-home devices that did not ping. We define the dependent variables as: $s_{\text{part-time}} = 100 \times (\frac{\text{part-time work devices}}{\text{max active devices}})$, $s_{\text{full-time}} = 100 \times (\frac{\text{full-time work devices}}{\text{max active devices}})$, $s_{\text{at-home}} = 100 \times (\frac{\text{completely-at-home devices} + (\text{max active devices - active devices})}{\text{max active devices}})$, $s_{\text{leave-home}} = 100 - s_{\text{at-home}}$, and $s_{\text{not-work}} = 100 - s_{\text{at-home}} - s_{\text{part-time}} - s_{\text{full-time}}$. The upper part of Figure SC.2 reports the estimates.

2. **Using candidate devices as the denominator and basis for adjustment.** In this approach, we assume the number of candidate devices to be the latent true number of active devices for each day, and assume that any non-active device was at-home. As a result, the number of at-home devices are adjusted by the difference ($\text{candidatedevices} - \text{activedevices}$) to account for potentially latent at-home de-
vices that did not ping. We define the dependent variables as: 

\[ s_{\text{part-time}} = 100 \times \left( \frac{\text{part-time work devices}}{\text{max active devices}} \right), \]

\[ s_{\text{full-time}} = 100 \times \left( \frac{\text{full-time work devices}}{\text{max active devices}} \right), \]

\[ s_{\text{leave-home}} = 100 - s_{\text{at-home}}, \]

\[ s_{\text{at-home}} = 100 \times \left( \frac{\text{completely-at-home devices} + (\text{candidate devices} - \text{active devices})}{\text{candidate devices}} \right), \]

\[ s_{\text{not-work}} = 100 - s_{\text{at-home}} - s_{\text{part-time}} - s_{\text{full-time}}. \]

The lower part of Figure SC.2 reports the estimates.

Although the results change across specifications, the general message of a persistent partisan gap in social mobility remains the same.
Notes: This figure plots the estimated coefficient $\beta_{w(t)}$ in equation (1) and the corresponding 95% confidence interval where the dependent variable is indicated at the top of each panel. The week of February 1, 2020 is taken as the baseline $t = 0$. The y-axis markers indicate the beginning date of the week for which the coefficients are reported. Observations are weighted by the number of candidate devices in the county, and standard errors clustered at the county level.
Supplemental Appendices

SD Survey: Consent, Questions

SD.1 Survey Consent

The survey starts with the following consent form:

You are invited to participate in a research study about COVID-19. This is a 15-minute long survey that will ask about your perceptions, expectations and feelings about the disease, its effects on you and on our nation. If you agree to be part of the research study, you will be asked to provide your opinions on policies, risks, and will be asked to answer questions related to your current situation. Please pay attention to all questions. We will include several attention checks.

Benefits of the research to the public stem from your participation and honest answers. Using this survey data, we hope to be able to provide guidelines for assessing and responding to differences across communities. Risks and discomforts: Thinking about COVID-19 and its impact may induce negative emotions, like anxiety or fear. These risks and discomforts are minimal for most people.

Participating in this study is completely voluntary. Even if you decide to participate now, you may change your mind and stop at any time. You may choose not to continue with the survey at any time and for any reason.

There is no deception or false information in this survey.

We will protect the confidentiality of your research records by not publishing any information that may identify you. Information collected in this project may be shared with other researchers, and may be connected to other aggregate datasets at the county level. We will not share any information that could identify you. All results will be reported in aggregate.

Principal Investigator: Yesim Orhun, Associate Professor, University of Michigan. If you have questions about this research study, please contact Prof. Yesim Orhun by emailing aorhun@umich.edu. The University of Michigan Institutional Review Board Health Sciences and Behavioral Sciences has determined that this study is exempt from IRB oversight.

By clicking to proceed, you are confirming that you read this page and are providing consent to participate.
SD.2 Survey Questions

In what follows, survey questions are in normal font while our notes are in italic.

Risk Tolerance

- Thinking about yourself, in general, how willing or unwilling are you to take risks? Please use the scale below, ranging from 0 to 10, where 0 means “completely unwilling to take risks” and a 10 means you are “very willing to take risks.” You can also use any number between 0 and 10 to indicate where you fall on the scale. [Scale: 1 to 10, choose one.]

Employment and Economic Impact, Zip code

- What’s your current employment status? [Choose one: Employed full time; Employed part time; Furloughed; Unemployed (before the coronavirus); Unemployed (after the coronavirus); Retired; Student; Prefer not to answer.]

- Please think of everyone in your household who was earning an income before the coronavirus crisis. What was the economic impact of the coronavirus situation on the income of your household? [Choose one: Greatly negative; Very negative; Somewhat negative; No change; Somewhat positive; Very positive; Greatly positive.]

- What is your zip code? [Fill in.]

Personal Experience with COVID-19

- How has the health of the community you live in been impacted by the coronavirus? [Choose one: So far, we don’t have any cases or deaths; We have only a few cases and no deaths; We have a moderate number of cases, but no deaths; We have a moderate number of cases, and at least one death; We have a lot of cases, but no deaths; We have a lot of cases, and at least one death; We have a lot of cases and a lot of deaths.]

- Have you been infected with the coronavirus? [Choose one: Yes, I tested positive; No, I tested negative; Probably yes, but I did not get tested; Probably not, but I did not
• Do you have friends or family members who have been severely ill with the coronavirus? [Choose one: Yes; We suspect it was due to coronavirus, but we don’t know for sure; No.]

• Do you have friends or family members who have been hospitalized or have died due to a coronavirus infection? [Choose one: Yes; We suspect it was due to coronavirus, but we don’t know for sure; No.]

• Do you have any health conditions you know of that put you in the high-risk category for serious complications arising from a coronavirus infection? [Choose one: Definitely yes; Most likely yes; I am not sure; Most likely not; Definitely not.]

Attention Check, Screening

• Please think of everyone in your community who has been affected by the coronavirus crisis. It is important that you pay attention to this survey. Please check greatly positive below. [Choose one: Greatly negative; Very negative; Somewhat negative; No change; Somewhat positive; Very positive; Greatly positive.] Those who failed this attention check were not allowed to proceed with the rest of the survey and their survey responses were not recorded.

Mandates/Restrictions in Place

• (asked only in April) Has your state introduced any social distancing measures? Please click all that apply in your state at this time. [Choose all that apply: No social distancing measures at this time; Schools are closed; Congregating at churches is not allowed; Restaurants/bars closed, except for take-out/delivery; Gyms are closed; Workers cannot travel to work at non-essential businesses; Gatherings of 50+ people are forbidden, less than 50 is ok; Gatherings of 10+ people are forbidden, less than 10 is ok; All social gatherings are forbidden; Stay-at-home order.]
• (asked in June, August, and February) What are the current COVID-19 related measures and restrictions that apply where you live at this time? [No measures at this time; Schools are closed; Congregating at churches is not allowed; Restaurants/bars closed, except for take-out/delivery; Gyms are closed; Many workplaces are not allowed to have employees or customers; Masks are required in most indoor public places; Masks are recommended in most indoor public places, but not required; All social gatherings are forbidden; Gatherings of 50+ people are forbidden, less than 50 is ok; Gatherings of 10+ people are forbidden, less than 10 is ok; Stay-at-home order. ]

Protective Behaviors

• Which of the following changes have you made to protect yourself from the coronavirus infection? Please click all that apply. [Choose all that apply: I did not make any changes; Wash hands more frequently; Canceled travel plans; Avoid large gatherings; Work from home; Wear gloves when I go shopping; Wipe down groceries after I bring them home; Wear a mask when I am out and about; Do not meet any of my friends or extended family in-person; Avoid all public places and self-isolate at home; I made other changes: (fill in).]

Comfort with Economic Activities

• (asked in June, August, and February) At this time, which of the following activities do you feel comfortable engaging in? [Yes/No options were available for the following list of activities: Eat at a restaurant (outside seating); Eat at a restaurant (inside seating); Go into a coffee shop; Go into a bar/pub; Use public restrooms; Go grocery shopping; Go shopping for non-food items (at the mall, hardware store, etc.); Go to the beach; Go to the gym or other sports facility; Be part of a gathering with more than 10 people (church, school, meetings, work, etc.).]

Worries

• How worried are you feeling for the health of the following people? If you don’t have the people mentioned in some statements (partner, kids, extended family), please
click “Not Applicable”. [Groups of people: My own health; My partner’s health; My kids’ health; My extended family’s health; The health of doctors and nurses in my community; The health of other members of my community; The health of people in big cities like New York, Seattle, Detroit, San Francisco; The health of all the people in the US.] [Choose one: Not at all worried, slightly worried, moderately worried, very worried, extremely worried. Also an option: not applicable.]

• How worried are you feeling for the economic well-being of the following people? [Same options and groups as above.]

Beliefs About Infection Risk

As of April 20, 2020, CDC (Centers for Disease Control and Prevention) is reporting 776,093 confirmed coronavirus cases and 41,758 deaths in the U.S. Many cases go undetected. Of course, infection rates depend on the community and the protection measures each person can take. Assuming that the social distancing policies and your personal efforts stay the same, what are the chances that you will get infected with the coronavirus in the next three months? [Choose one: 0% chance; 1-10% chance; 11-20% chance; 21-30% chance; 31-40% chance; 41-50% chance; 51-60% chance; 61-70% chance; 71-80% chance; 81-90% chance; 91-100% chance.]

Beliefs About the Effectiveness of State Restrictions and Own Precautions in Reducing Infection Risk (asked only in April)

The next two questions embedded responses from previous questions. If the respondent indicated that their state has not introduced any social distancing measures, or that they have not taken any precautions, the relevant question was not displayed to the respondent.

• Earlier, the survey asked about the changes you personally made to protect yourself from the coronavirus infection. You indicated that you [all precautions that the respondent indicated as having taken]. Assuming that the state policies stay the same,

\footnote{The date and these two numbers were updated to the applicable information of two days prior to the survey time.}
what do you think your chances of becoming infected with coronavirus in the next three months would be if you did not make these changes? [Choose one: Same chance; 5% higher chance; 10% higher chance; 15% higher chance; 20% higher chance; 25% higher chance; 30% higher chance; 40% higher chance; 50% higher chance; My chance of being infected would increase by more than 50%.

- Imagine that you could still take the same measures you personally took to lower your chances of being infected with coronavirus, but your state had not introduced any social distancing measures. Assuming your personal efforts stay the same, what do you think your chances of becoming infected with coronavirus in the next three months would be if your state did not have social distancing measures? [Choose one: Same chance; 5% higher chance; 10% higher chance; 15% higher chance; 20% higher chance; 25% higher chance; 30% higher chance; 40% higher chance; 50% higher chance; My chance of being infected would increase by more than 50%.

Beliefs About Health Outcomes Conditional on Being Infected

- According to the CDC (Centers for Disease Control and Prevention) report, about 7% of people diagnosed with the coronavirus are hospitalized, but do not need intensive care. About 1.5% of people are hospitalized and need intensive care. It is also suspected that a large percentage of people are symptom-free and/or have mild versions of the disease.

Most importantly, the chances are person-specific. The progression of the disease can be very different based on your age, health, pre-existing condition, living conditions, how much of the virus you are exposed to, etc. Although it's hard to know without data, you probably have a better understanding of your situation than anyone else. Therefore, we ask you to predict how the coronavirus is likely to affect you, should you get infected:

Please make sure numbers add up to 100. Allocate points according to how big you think your chances are for each possibility. [Chances that I will be symptom-free are: (fill in, numerical); Chances that I will have a mild version of the disease are: (fill in,
numeral); Chances that I will have a moderate version (without hospitalization) are: (fill in, numerical); Chances that I will have a severe version that requires hospitalization (but no further interventions) are: (fill in, numerical); Chances that I will have a severe version that requires intensive care at the hospital are: (fill in, numerical).

**Factual Questions About Factors That Influence Health Outcomes**

- Quality of care. Communities differ in how well equipped their hospitals are and how much capacity their hospitals have when it comes to coronavirus infections. If you were to be hospitalized due to coronavirus, what’s your expectation of the quality of care you would receive? [Choose one: Top-notch care, no issues; Good care, as usual; Good care, but hospitals would have bed/equipment shortages; OK care, as usual; OK care, but hospitals would have bed/equipment shortages; Not so good care, as usual; Not so good care, and hospitals would have bed/equipment shortages.]

- Pre-existing health conditions. The CDC (Centers for Disease Control and Prevention) released the list of underlying medical conditions that put people of all ages at higher risk for severe illness resulting from the coronavirus infection. We list them below.

Which of these apply to you? Please click all that apply. [Choose all that apply: Moderate to severe asthma; COPD or other chronic lung disease; Serious heart conditions; Diabetes; Conditions that can cause a person to be immunocompromised, including cancer treatment, smoking, bone marrow or organ transplantation, immune deficiencies, poorly controlled HIV or AIDS, and prolonged use of corticosteroids and other immune weakening medications.; Severe obesity (BMI of 40 or higher); Chronic kidney disease and currently undergoing dialysis; Liver disease; I do not want to answer; None of them apply to me.]

**Beliefs About Systemic Health Risk (Total Number of Deaths in the U.S.)**

- As of April 20, 2020, CDC (Centers for Disease Control and Prevention) is reporting 41,758 deaths in the US.\(^{17}\) Assuming the state policies remain the same, how many

\(^{17}\)The date and the number of deaths were updated to the applicable information of two days prior to the survey time.
people do you think will die from a coronavirus infection in the U.S. by July 1, 2020? [Choose one: less than 25,000; 25,000–50,000; 50,000–75,000; 75,000–100,000; 100,000–125,000; 125,000–150,000; 150,000–175,000; 175,000–200,000; 200,000–225,000; 225,000–250,000; 250,000–275,000; 275,000–300,000; 300,000–350,000; more than 350,000.]

Beliefs About Economic Outcomes (asked only in April)

• The U.S. gross domestic product (GDP) grew about 2.3% in 2019. Assuming the state policies remain the same, how much GDP growth do you expect in 2020? [Choose one: more than 10% growth; 5%–10% growth; 2.5%–5% growth; 0% to -2.5% growth (negative growth means contraction); -2.5% to -5% growth (negative growth means contraction); -5% to -10% growth (negative growth means contraction); -10% to -20% growth (negative growth means contraction); -20% to -30% growth (negative growth means contraction); worse than -30% growth (negative growth means contraction).]

• In the last quarter of 2019, unemployment rate in the U.S. was 3.6%. Assuming the state policies remain the same, how much unemployment do you expect in the U.S. by July 1, 2020? [Choose one: less than 3%; 3-5%; 5-10%; 10-15%; 15-20%; 20-25%; 25-30%; more than 30%.]

Beliefs About the Effectiveness of State Policies in Reducing Total Number of Deaths in the U.S. and Their Impact on Economic Outcomes (asked only in April)

At this time, the majority of states are implementing some measure of social distancing. Assuming there are no changes to these policies, you expect that by July 1st [reminder of their previous death prediction] people in the U.S. will die due to coronavirus infections. You also expect [reminder of their previous unemployment prediction] rate of unemployment by July 1st, and [reminder of their previous GPD growth prediction] in GDP in 2020. How would these predictions change if none of the states implemented any social distancing measures?

• Please select the number of U.S. deaths you would expect by July 1st if there were no so-
cial distancing measures. [Choose one: less than 25,000; 25,000–50,000; 50,000–75,000; 75,000–100,000; 100,000–125,000; 125,000–150,000; 150,000–175,000; 175,000–200,000; 200,000–225,000; 225,000–250,000; 250,000–275,000; 275,000–300,000; 300,000–350,000; more than 350,000.]

• Please select the rate of GDP growth you would expect in 2020 if there were no social distancing measures. [Choose one: more than 10% growth; 5%–10% growth; 2.5%–5% growth; 0–2.5% growth; 0% to -2.5% growth (negative growth means contraction); -2.5% to -5% growth (negative growth means contraction); -5% to -10% growth (negative growth means contraction); -10% to -20% growth (negative growth means contraction); -20% to -30% growth (negative growth means contraction); worse than -30% growth (negative growth means contraction).]

• Please select the rate of unemployment you would expect by July 1st if there were no social distancing measures. [Choose one: less than 3%; 3-5%; 5-10%; 10-15%; 15-20%; 20-25%; 25-30%; more than 30%.]

**Attitudes Towards Policies (asked only in April)**

• Policymakers are debating the effectiveness and pros/cons of many options. We listed some of these options below. Which of them do you most agree/disagree with regarding their sensibility at this time, in your community? [Policy recommendations: Washing hands more often, avoiding handshakes; Keeping kids out of school; Not sending people to work, unless they are essential workers; Forbidding all social gatherings; Requiring people to stay at home.] [Choose one: Strongly disagree; Disagree; Somewhat disagree; Neither agree nor disagree; Somewhat agree; Agree; Strongly agree.]

**Constraints as Main Drivers of Choices**

Everyone has different preferences, risks, constraints in their lives. Earlier in the survey, we asked you what self-protective measures you took, if any. On this page, we ask why you did not choose some of the self-protective actions. These questions are not meant as judgement. They aim to understand what actually drives people’s decisions. Please answer
them honestly. We want to know more about people’s preferences and circumstances. The questions below were asked if the applicable precaution was not taken by the respondent.

- You indicated that working from home was not one of the changes you made. Which of the following best describes why? [Choose one: I am retired/a student/currently not working; I could perhaps work from home, but it’s better not to/I don’t like to; I was not given the option to work from home (essential worker or employer needed me); I cannot work from home; Other: (fill in).]

- You indicated that wearing gloves when you go shopping was not one of the changes you made. Which of the following best describes why? [Choose one: It’s not necessary; I would like to, but cannot find gloves; I don’t shop for anything, including groceries; Other: (fill in).]

- You indicated that wearing masks was not one of the changes you made. Which of the following best describes why? [Choose one: Masks are not useful; I do not like wearing masks; I would like to, but cannot find or afford masks; I do not leave my house even to take a walk; Other: (fill in).]

- You indicated that avoiding all public places and self-isolating was not one of the changes you made. Which of the following best describes why? [Choose one: It’s too much. We need to keep functioning; I would like to, but I have to work outside the home; I would like to, but I have to leave my house regularly for doctor visits; I would like to, but I have to go get food and groceries — I cannot afford to have it delivered; I would like to, but I have to go get food and groceries — I don’t want to have it delivered; I would like to, but I have to go get food and groceries — there are no deliveries available; Other: (fill in).]

- You indicated that canceling travel plans was not one of the changes you made. Which of the following best describes why? [Choose one: I did not have any travel plans to begin with; I really wanted to go on the trip/did not feel like canceling; I could not get a refund and did not want to waste the money; I had to travel because of work obligations; I traveled because of family obligations; Other: (fill in).]
• You indicated that avoiding large gatherings was not one of the changes you made. Which of the following best describes why? [Choose one: It’s too much. We need to keep functioning; I would like to, but I cannot avoid large gatherings because of my work; Other: (fill in).]

Impact of the pandemic on the respondent, general

• Please rate how much trouble you are currently having with the following issues: [Issues: Having enough money for food and housing (rent, mortgage payments); Having enough money for medications; Having enough money for other expenses and/or savings; Finding groceries, even if you have the money to buy them; Finding medications, even if you have the money to buy them; Maintaining a positive outlook and not getting anxious; Mental health overall.] [Choose one: No trouble at all; Small problems; Some difficulties; Many difficulties; Serious trouble.]

News sources

• Which news sources do you usually rely on? [Choose all that apply: ABC News; CNN; Fox News Channel; Local news; NBC / MSNBC; NPR (Public Radio); Huff Post; The New York Times; The Wall Street Journal; Washington Post; Other: (fill in); I don’t follow any news.]

• What other sources of information do you mostly pay attention to regarding the pandemic? [My friends; My family members; My pastor and/or our spiritual community; The President and his administration; Our Governor; Scientists/researchers; CDC (Center for Disease Control); People I follow on Twitter; People I follow on Facebook.] [Choose one: Not at all; A little bit; Somewhat; Mostly; Very much so; Not applicable.]

The study ended with inviting comments, if respondents had any.