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How Affective Polarization Shapes Americans' Political Beliefs: A Study of Response to the COVID-19 Pandemic

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ABSTRACT

Affective polarization—partisans' dislike and distrust of those from the other party—has reached historically high levels in the United States. While numerous studies estimate its effect on apolitical outcomes (e.g., dating, economic transactions), researchers know much less about its effects on political beliefs. The authors argue that those who exhibit high levels of affective polarization politicize ostensibly apolitical issues and actors. An experiment focused on responses to COVID-19 that relies on pre-pandemic, exogenous measures of affective polarization supports their expectations. Partisans who harbor high levels of animus towards the other party do not differentiate the "United States" response to COVID-19 from that of the Trump administration. Less affectively polarized partisans, in contrast, do not politicize evaluations of the country's response. The authors' results provide evidence of how affective polarization, apart from partisanship itself, shapes substantive beliefs. Affective polarization has political consequences and political beliefs stem, in part, from partisan animus.

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A defining feature of 21st century American politics is the rise of affective polarization the tendency of partisans to dislike, distrust, and avoid interacting with those from the other party (Iyengar, Sood, and Lelkes 2012). Today, such partisan discord has reached record high levels (Pew Research Center 2019) and it affects many apolitical aspects of our lives: for example, where we shop, our friendships, and our romantic lives (for a review, see Iyengar et al. 2019). But how does affective polarization affect our politics? Surprisingly, we do not know much about this relationship: "little has been written on this topic [i.e., the political effects], as most studies have focused on the more surprising apolitical ramifications" (Iyengar et al. 2019, 139). Here, we investigate one aspect of that puzzle: how does affective polarization shape our policy beliefs?

Demonstrating this relationship is fundamental to our understanding of how policy preferences develop, particularly in our present political moment. If affective polarization shapes issue beliefs, it would 1) constitute direct evidence that citizen polarization matters for politics, and 2) suggest that policy attitudes stem partially from animus, rather than simply from more substantive rationales (cf. Fowler 2020). The scarcity of work documenting such an effect, however, reflects the extreme difficulty of doing so. Issue positions are endogenous to partisan animus: elite polarization drives both affective polarization (Rogowski and Sutherland 2016, Webster and Abramowitz 2017), as well as issue positions (via cue-taking, see Lenz 2012). Unsurprisingly, those who are more affectively polarized tend to also hold more polarized issue positions (e.g., Bougher 2017), so it is unclear whether the relationship between issue positions

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and affective polarization is a causal one or rather a product of other factors that jointly lead to both outcomes.¹

To unpack these effects, one would need a measure of affective polarization taken prior to the emergence of an issue, something that is impossible to predict and thus difficult to accomplish. The COVID-19 pandemic, however, presents us with a means of doing so. Because the virus and resulting pandemic was completely novel when it emerged in early 2020, partisans did not have prior beliefs about it and their pre-COVID levels of affective polarization cannot be affected by how elites acted during the crisis. A pre-COVID measure of affective polarization, therefore, allows us to determine the relationship between partisan animus and beliefs about the pandemic. This not only enables us to uniquely isolate whether affective polarization shapes policy attitudes, but it also provides essential insight into the COVID-19 crisis. If affective polarization divides the public, it creates hurdles for policymakers as they develop strategies to combat the pandemic now and in the future. It is not simply that there are partial divides on the severity and handling of the crisis (e.g., Gadarian, Goodman, and Pepinsky 2020, McCarthy 2020), but rather that dislike of the opposition, at least in part, drives such gaps. This implies that policymakers and communicators must not only find substantive policies that bridge differing partisan priorities, but they also must find a way to vitiate partisan animus, a much more difficult task.

How Does Affective Polarization Shape Responses to the Crisis?

A long line of political science research suggests that partisanship shapes how people interpret the political world (Bartels 2002), and how they assess credit and blame for

¹ It also is extremely difficult to experimentally manipulate levels of affective polarization due to extensive pretreatment and ceiling effects among the more politically engaged segments of the public (see Pew Research Center 2019).

governments' responses to crises (Malhotra and Kuo 2008). The COVID-19 pandemic has been no exception, with surveys highlighting large partisan gaps in the perceived seriousness of the crisis, actions taken in response to it, and assessments of blame for the outcome (Allcott et al. 2020, Gadarian et al. 2020). Much like other policies, even health pandemics have become partisan issues in the contemporary U.S.

At first blush, it might seem clear that partisan animus would lead to clear divides on political issues. Yet, as we noted above, simply because partisans take different positions on issues does *not* mean that these positions are a function of affective polarization: for example, partisans might hold differential factual beliefs about the world (Gerber and Green 1999, Fowler 2020) or have different underlying values (Goren 2005). In the case of COVID-19, Republicans might see different information about the pandemic, or they might value economic stability more than Democrats do, both of which would lead to partisan differences even in the absence of animus. Given the existing evidence, we cannot conclude that affective polarization drives partisan differences in response to the pandemic.

But there is reason to think that affective polarization, apart from partisan identification itself, can influence individuals' policy beliefs. Specifically, affective polarization, perhaps ironically, will not affect *politicized* aspects of the issue. Rather, political divisions in these areas manifest regardless of the level of polarization. When issues are already politicized, even those with low levels of affective polarization see them through a partisan lens. Affective polarization rather politicizes ostensibly neutral targets, leading affectively polarized individuals to see apolitical topics through the prism of partisanship.

We focus here on how Americans evaluate the country's national COVID-19 response. A unified response to this pandemic is central to ensuring collective success in defeating it. If

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affective polarization divides Democrats from Republicans, then it becomes more difficult to move forward with a coherent policy to address the crisis. Prior work on attributions shows that partisan labels shape evaluations of government actors: individuals express greater confidence in, and more positive evaluations of, co-partisans (e.g., Malhotra and Kuo 2008, Healy et al. 2014). This should straightforwardly apply to COVID-19. Here we compare beliefs about "President Trump's" response to the pandemic to beliefs about the "United States" response to it. The former clearly invokes a highly politicized (and polarizing) individual. The latter is a more neutral entity; also, using the nation as a whole primes national identity, which should mute the effects of partisanship (Levendusky 2018). Further, evaluations of how one's country is handling the crisis are important as they tell us about cross-national assessments of governmental response to COVID-19 (Dryhurst et al. 2020). While we expect there to be a partisan split in response to President Trump's handling of the crisis, it should not be driven by affective polarization, as all citizens will divide along party lines in response to such a politicized figure. Asking about the country, however, need not evoke a partisan response—there is no reason for Democrats overall to evaluate the United States' response poorly whereas there is a clear partisan reason for them to evaluate Trump's response poorly (and similarly for Republicans in terms of no need to politicize the U.S. response). This leads to our first hypothesis.

H1: Democrats (Republicans) will be less (more) critical of the United States' response to COVID-19, relative to Trump's response to COVID-19, all else constant.

We expect that affectively polarized partisans will politicize references to the country, seeing the national response through a partisan lens. This will lead them to equate the "United States" with the federal government—and hence President Trump—similarly to how affectively polarized citizens politicize trust in the government as a whole (Hetherington and Rudolph

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2015). For affectively polarized individuals, partisanship is chronically accessible and shapes their views of ostensibly neutral, or even potentially unifying, targets. They will see the "United States" as synonymous with, or at least similar to, "President Trump," thereby politicizing it.

H2: As affective polarization increases, Democrats (Republicans) will be more (less) critical of the United States' response to COVID-19, all else constant.

A consequence of H2 is that the treatment effect predicted in H1 will decrease or disappear among affectively polarized individuals since they view all targets politically (*corollary 1*).² If this proves to be the case, then it would suggest that affective polarization shapes policy beliefs and also would accentuate a substantial hurdle for uniting the country during a time of crisis.

Experimental Design

Issues of endogeneity make it difficult to determine whether affective polarization shapes responses to COVID-19 or any other issue. A correlation between contemporaneous affective polarization and COVID-19 opinions could stem from polarization causing beliefs about COVID-19, or from elite debates about COVID-19 heightening affective polarization. We need data that measure affective polarization *before* people form issue opinions—in this case, prior to the outbreak of COVID-19.

To circumvent this problem, we rely on a survey of a representative sample of 3,345 participants conducted in the summer of 2019 (from July 9 to July 25, 2019), prior to the emergence of COVID-19 as an issue (see Supplementary Information (SI) 1 for more details on this original study). The survey included four canonical measures of affective polarization (Druckman and Levendusky 2019): feeling thermometer ratings toward the parties (i.e., a scale where 0 indicates very cold feelings and 100 indicates very warm feelings), the degree to which

² We pre-registered our hypotheses at https://aspredicted.org/blind.php?x=gk9s8a.

respondents trust out-partisans versus in-partisans, trait ratings of opposing partisans (i.e., asking how well adjectives like patriotic, open-minded, etc. apply to out-partisans), and social distance measures that ask people how comfortable they would be to have a friend or neighbor from the other party, or how happy they would be if they had a child who married someone from the other party. We aggregate these items to form a measure of affective polarization (α =0.88), looking specifically at out-party animus (e.g., Lau et al. 2017). We scale this measure to lie between 0 and 1, with higher values indicating greater animosity for the other party. Due to the timing of our measure of affective polarization, we can be confident that it is unrelated to the politics surrounding COVID-19, thereby allowing us to draw causal inferences about its effects on COVID-19 beliefs.

We re-interviewed these same respondents in the spring of 2020 (from April 4 to April 16, 2020), measuring their assessments of the handling of the COVID-19 crisis to isolate the causal impact of affective polarization. A total of 2,482 participants completed the re-interview for a re-contact rate of 74% (see SI 1 for more details on the sample demographics). The re-interview survey included one measure of affective polarization—the feeling thermometer item—and we find, consistent with prior work (Alwin 1997, Beam et al. 2018), that it is relatively stable over time: there is a correlation of .76 between the original and re-interview outparty thermometer evaluation. This gives us confidence that the affective polarization measures from the pre-COVID-19 surveys serve as valid and reliable measures of exogenous affective polarization.

The COVID-19 survey included an experiment to test our hypotheses. Specifically, we randomly assigned participants to one of two conditions where they assessed the response to the COVID-19 pandemic. One group was asked about President Trump's response, while the other

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was asked about the United States' response. In each condition, we measured assessments on three items: (1) confidence to address the pandemic (e.g., how confident are you that the Trump administration/United States can limit the impact of the virus), (2), response to the past preparation for the current outbreak (i.e., disagreement or agreement that President Trump/the United States should have done more to prepare for the outbreak), and (3) preparation for potential future outbreaks (i.e., disagreement or agreement that President Trump/the United States should be doing more to prepare for the possibility of a future outbreak).

If the results are consistent with our hypotheses, we should observe the following pattern of results. First, in line with Hypothesis 1, we would observe that participants from different political parties offer differential evaluations of the targets (e.g., Republicans being more favorable about Trump than the United States). Next, we expect to see that affective polarization moderates this relationship with a significant interaction between the U.S. treatment and affective polarization (Hypothesis 2). Finally, we also expect that affectively polarized individuals do not differentiate in their assessments of President Trump and the United States, meaning that we may not observe any treatment effects among those who are most affectively polarized (corollary 1). In short, we expect that those who are not affectively polarized will differentiate evaluations of President Trump and the United States—viewing the superordinate category of the United States as something distinct from partisanship. In contrast, those who are more affectively polarized will politicize that superordinate construct, creating a divide even on an ostensibly apolitical target. The questionnaire for both surveys is provided in SI 2.

Results

We follow prior work and exclude pure Independents from our analyses since we lack clear hypotheses for them with respect to affective polarization (e.g., Druckman and Levendusky

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2019). This leaves 2,124 partisans.³ We also create a scale (ranging from 1-4, with higher values indicating more approval/confidence) from our three evaluation measures ($\alpha = .76$; see SI 3 for results presented separately for each measure).⁴ To test the first hypothesis, we run a model that includes only a variable for treatment assignment ($y_i = \beta_0 + \beta_1 United States_i + \varepsilon_i$), where y_i is respondent *i*'s attitude about the response to the pandemic and *United States_i* is an indicator for whether respondent *i* was asked about the United States' handling of the crisis (versus Trump's). To test our second hypothesis, as well as the corollary, we run the following regression: $y_i = \beta_0 + \beta_1 United States_i + \beta_2 AP_i + \beta_3 United States_i \times AP_i + \varepsilon_i$, where the additional variable, AP_i , is the participant's level of affective polarization (measured in 2019).

In Table 1, we present the results separately for Democrats and Republicans, as we have separate expectations for the parties. We begin with the Democrats and turn first to the test of Hypothesis 1 (Table 1, Model 1). We see that Democrats offer more favorable evaluations of America's response to COVID-19 when asked about the United States' response relative to Trump's response (difference of 0.26, p < 0.001). This follows from Hypothesis 1: when asked about the response in the context of the United States, rather than the President, Democrats are overall more positive.

We next turn to our test of Hypothesis 2 (Table 1, Model 2). Here, we see a significant interaction between affective polarization and treatment assignment. Turning to the substantive effects of this interaction, we see outcomes that are consistent with our predictions. First, increases in affective polarization among Democrats have a significant, negative effect on evaluations of the response to COVID-19 in *both* conditions. When participants are asked about

³ We note, however, that one respondent did not answer any of our main outcome measures.

⁴ The items also scale well if we look the experimental conditions separately ($\alpha = .80$ for the Trump condition and α

^{= .71} for the United States condition), or at the parties separately (α = .68 for Democrats and α = .68 Republicans).

the United States, increases in affective polarization lower evaluations of the country's response by -1.262 (p < 0.001); when participants are asked about Trump, increases in affective polarization lower evaluations by -0.903 (p < 0.001).⁵ This is in line with Hypothesis 2, which posits that as affective polarization increases, Democrats will become more negative toward the American response.

The results for Republicans are nearly identical but in the opposite direction, as expected. First (Table 1, Model 3), Republicans exhibit a lower evaluation of America's response to COVID-19 when the target is the United States as opposed to Trump (-0.30, p < 0.001). This result is in line with Hypothesis 1. Next, we again see a significant interaction between affective polarization and treatment in Table 1, Model 4. Following Hypothesis 2, as affective polarization increases, Republicans become less critical of the American response in the United States (1.800, p < 0.001); they also become less critical of Trump response (1.208, p < 0.001).⁶

[Insert Table 1 About Here]

We next consider another set of results suggested by corollary 1, which we present in Figure 1. In this figure, we plot the predicted values for each party, for each experimental condition at different levels of affective polarization. In the United States treatment, Democrats with low levels of polarization evaluate America's response to COVID-19 at 2.42, substantially surpassing the evaluations in the Trump treatment (1.96). This difference between treatments is significant (+ 0.46, p < 0.001). Yet, the Democratic lines converge as polarization increases such that at the highest level of polarization, the United States and Trump scores are nearly

⁵ The effects of increasing polarization by treatment have overlapping confidence intervals, suggesting they are likely not statistically distinguishable from each other.

⁶ The effects of increasing polarization by treatment have overlapping confidence intervals, suggesting they are not statistically distinguishable from each other. In SI 3, we show the results are robust to the inclusion of a host of control variables. We also assess whether replacing affective polarization with partian social identity (Huddy et al. 2015) produces the same results; it does not.

indistinguishable, respectively at 1.16 and 1.05 (+0.103, p=0.174). In sum, highly polarized Democrats evaluate "the United States" response the same as they evaluate the "Trump" response. They politicize the potentially superordinate target.

We see similar dynamics among Republicans. Republicans with low levels of affective polarization report higher evaluations of the American response in the Trump condition, than in the United States condition (1.94 versus 1.31, difference of -0.626, p < 0.001). Yet the evaluations of the targets converge for Republicans who are high in affective polarization (respectively, to 3.14 and 3.11, difference of -0.035, p=0.820).⁷ The figure makes clear that affective polarization has a causal impact on political assessments, leading partisans to politicize evaluations even in cases with an, ostensibly, neutral target. This is concerning insofar as affective polarization leads partisans to split when evaluating the country overall, undermining confidence in the national response which ideally would connect all citizens.

[Insert Figure 1 About Here]

Conclusion

The rise in affective polarization has captured the attention of scholars, pundits, and citizens, yet we know little about its political effects and especially its effect on political issues. Our study is the first to use a clearly exogenous measure of affective polarization to show how partisan animus shapes respondents' beliefs about a political issue. Specifically, we show that affective polarization has little effect on already politicized issues, but it politicizes ostensibly neutral or apolitical ones. This makes clear that affective polarization or "political tribalism" is much more than mere reflections of policy preferences (Fowler 2020). It also highlights the

⁷ One intriguing finding is the least polarized Democrats evaluate the response in the Trump condition at virtually the same level as the least polarized Republicans, perhaps reflecting a low levels of partisan reasoning. Also, the least polarized Republicans have much less favorable evaluations of the United States than the least polarized Democrats

reciprocal relationship between affective and ideological polarization, and it suggests that the two are quite intimately linked.

Our study also has implications for the ongoing response to the COVID-19 pandemic. Even ostensibly neutral communications become politicized by those who are highly polarized, thereby necessitating additional techniques to de-polarize them (e.g., bi-partisan endorsements; see Bolsen et al. 2014). In particular, it suggests that super-ordinate appeals to the nation (Van Bavel et al. 2020) are ineffective for those who are most polarized, and hence policymakers need to craft strategies to appeal directly to them and work on de-polarization strategies rather than appeals to a shared identity.

Beyond this particular pandemic, our results speak more to the power of affective polarization to politicize novel issues and ongoing political debates. Partisans who are more affectively polarized—who are also more politically engaged—politicize neutral issues and will polarize on most topics with only weak elite cues. Our findings constitute the first evidence that affective polarization has clear policy implications as it divides opinion on those political issues that appear non-partisan or even apolitical. It highlights the importance of efforts to de-polarize partisans, as it may be the only route to coherent policy agendas.

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| | Democi | ats | Reput | olicans |
|-------------------------|----------|-----------|-----------|-----------|
| | Model 1 | Model 2 | Model 3 | Model 4 |
| U.S. Condition | 0.257*** | 0.463*** | -0.301*** | -0.626*** |
| | (0.032) | (0.100) | (0.054) | (0.167) |
| Aff. Pol. | | -0.903*** | | 1.208*** |
| | | (0.115) | | (0.214) |
| U.S. \times Aff. Pol. | | -0.359** | | 0.592** |
| | | (0.164) | | (0.301) |
| Constant | 1.437*** | 1.957*** | 2.566*** | 1.936*** |
| | (0.023) | (0.070) | (0.039) | (0.118) |
| Observations | 1,431 | 1,389 | 757 | 734 |
| R-squared | 0.043 | 0.151 | 0.039 | 0.160 |

Table 1: Evaluations by Party by Experimental Condition

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1





Shaded area represents 95% confidence interval.

Supplementary Information 1: Sample

The survey was conducted using Bovitz Inc. (<u>http://bovitzinc.com/index.php</u>). They provide an online panel of approximately one million respondents recruited through random digit dialing and empanelment of those with internet access. As with most internet survey samples, respondents participate in multiple surveys over time and receive compensation for their participation. A particular sample is drawn using a matching algorithm (based on likely response rates) to ensure that those screened to qualify for the survey constitute an unweighted sample that demographically represents the United States. Bovitz Inc. has been used extensively in other political science research (e.g., Howat 2019, Druckman and Levendusky 2019) including pilot data collection for the American National Election Studies.

The initial survey that included basic demographics and our affective polarization measures took from 9 July 2019 to 25 July 2019. The total number who completed the survey, answering the affective polarization measures was 3,345.⁸ We re-contacted these individuals in April, 2020 to answer the COVID-19 items. A total of 2,482 responded, for a re-contact rate of 74%. Of these, 360 are pure Independents and thus excluded from our main analyses, as noted. This leaves 2,124 partisans for analyses, although one respondent did not answer any of the experimental outcome variables, leaving 2,123 for analysis.

The below tables present the demographics of our COVID-19 sample (of 2,482) to 2018 benchmarks from the U.S. Census Bureau, via the American Community Survey.⁹

| Age Category | Our Sample (%) | Census Benchmark |
|--------------|----------------|------------------|
| 18-24 | 8.26 | 12.08 |
| 25-34 | 18.41 | 17.87 |
| 35-50 | 35.37 | 24.54 |
| 51-65 | 26.63 | 24.88 |
| Over 65 | 11.32 | 20.65 |

Age

Gender Identity

| Gender Identity | Our Sample (%) | Census Benchmark |
|-----------------|----------------|------------------|
| Female | 51.07 | 50.8 |
| Male | 48.05 | 49.2 |

⁸ In this initial survey, 546 respondents were randomly assigned to a condition that did not measure affective polarization. Another 151 did not answer the affective polarization measure. These respondents were thus not relevant for the follow-up experiment. (Thus, the total in that survey was 4,042.) Also, this survey itself consisted of three distinct waves for reasons unrelated to this project. Also, the affective polarization measures in the survey varied the target such that some answered the conventional items asking about the Democratic and Republican parties, while others were asked about partisans who varied in terms of the amount they discussed politics (rarely, occasionally, frequently) and/or their ideology (liberal, moderate, conservative). These variations do not affect the results we present here. That is, when we include variables for the experimental conditions they do not change our findings.

⁹ Response to the COVID-19 wave is correlated with various respondent characteristics (e.g., higher income, older age, political interest) but we maintain considerable variance on those characteristics and thus are confident in our experimental in inferences.

|--|

Primary Racial Group*

| Primary Race | Our Sample (%) | Census Benchmark |
|--------------------|----------------|------------------|
| Caucasian (White) | 70.79 | 72.2 |
| African-American | 13.78 | 12.7 |
| Hispanic or Latino | 9.02 | 18.3 |
| Asian-American | 3.99 | 5.6 |
| Native American | .85 | < 1 |
| Other | 1.57 | 5 |

*The Census asks about ethnicity (Hispanic/Latino) separately from race, whereas we combine them into one question and ask respondents to report their "primary" group. As a result, our estimates for Hispanic/Latino citizens are measuring a different construct from the Census benchmark.

Annual Family Income before Taxes*

| Income Category | Our Sample (%) | Census Benchmark (%) |
|-----------------------|----------------|----------------------|
| \$30,000 or less | 26.85 | 29.4 |
| \$30,000 - \$69,999 | 38.06 | 30.3 |
| \$70,000 - \$99,999 | 17.38 | 12.5 |
| \$100,000 - \$200,000 | 15.28 | 20.9 |
| Above \$200,000 | 2.42 | 6.9 |

* The Census categories for income are slightly different than the ones we use. They record income as: \$34,999 or below, \$35,00 - \$74,999, \$75,000 - \$99,999, \$100,000 - \$199,999, and \$200,0000 or greater.

Education Level

| Educational Attainment | Our Sample (%) | Census Benchmark (%) |
|------------------------------|----------------|----------------------|
| Did not complete high school | 2.01 | 12 |
| High school graduate | 20.39 | 27.1 |
| Associates Degree/Some | 41.18 | 28.9 |
| College | | |
| Bachelor's Degree | 26.71 | 19.7 |
| Advanced Degree | 9.71 | 12.3 |

Across categories, our sample matches the Census benchmarks fairly well. Our biggest discrepancies are that (1) we under-estimate senior citizens and over-estimate 35-50 year olds, (2) we possibly under-estimate Latinos (although that may stem from our question format, as noted), (3) we under-estimate the top quarter of the income distribute, and (4) we under-estimate the least well-educated (and over-estimate those with some college or a bachelor's degree). These are well-known limitations of any survey sampling procedure, not just our own—problems #1 and #3 are linked in that those populations are not online, and those with high

¹⁰ The U.S. Census Bureau does not currently ask about transgender identity, so there is no government-provided benchmark for that quantity. Flores et al. (2016) estimate that less than 1 percent of Americans identify as transgender, consistent with our estimates here; see <u>http://bit.ly/2Nj5DZE</u> for more details.

incomes are also typically under-represented across all survey modes. Overall, however, our sample sufficiently matches the Census benchmarks across these different categories for the purposes of our experiment (in which we have no expectation of moderating effects of demographics).

Supplementary Information 2: Measures

2019 Items:¹¹

We are going to ask you some questions about your general attitudes and opinions.

Generally speaking, do you usually think of yourself as a Democrat, a Republican, an Independent, or what?

Democrat Republican Independent Some other party

[IF D/R:]

Would you call yourself a strong [Democrat / Republican] or a not very strong [Democrat / Republican]?

| Strong | |
|--------|--|
| Suong | |

Not very strong

[IF I/O:]

If you had to choose, do you think of yourself as closer to the Democratic Party or the Republican Party?

| Closer to | Closer to | Neither |
|------------------|------------------|---------|
| Democratic Party | Republican Party | |

Which point on the scale below best describes your political views?

| Very | Mostly | Somewhat | Moderate | Somewhat | Mostly | Very |
|---------|---------|----------|----------|--------------|--------------|--------------|
| liberal | liberal | liberal | | conservative | conservative | conservative |
| | | | | | | |

What is the highest level of education you have completed?

| Less than | High | Some | 4 year college | Advanced |
|-------------|-----------------|---------|----------------|----------|
| High school | school graduate | college | degree | degree |

What is your estimate of your family's annual household income (before taxes)?

| < \$30,000 | \$30,000 - \$69,999 | \$70,000-\$99,999 | \$100,000-\$200,000 | >\$200,000 |
|------------|---------------------|-------------------|---------------------|------------|

Which of the following do you consider to be your primary racial or ethnic group?

 White
 African American
 Asian American
 Hispanic or Latino
 Native American
 Other

¹¹ We have a variety of other outcomes variables in our original data, but here we focus on the core set of items for our study, which are the items measuring affective polarization.

Which of the following best describes your gender identity?

| Male | Female | Transgender | None of the c | ategories offered | |
|------------|---------|-------------|---------------|-------------------|---------|
| What is yo | ur age? | | | | |
| Under 18 | 18-24 | 25-34 | 35-50 | 51-65 | Over 65 |

Many people don't know the answers to these questions, so if there are any you don't know, just check "don't know."

How much of a majority is required for the U.S. Senate and House to override a Presidential veto?

 Cannot
 1/3
 1/2
 2/3
 3/4
 Don't know

 override

Do you happen to know which party currently has the most members in the House of Representatives in Washington, D.C.?

| Democrats | Republicans | Tie | Don't know |
|-----------|-------------|-----|------------|

Whose responsibility is it to determine if a law is constitutional?

| President | Congress | Supreme Court | Don't know |
|-----------|----------|---------------|------------|

Who is the current U.S. Vice President?

| Rex Tillerson J | ames Mattis | Mike Pence | Paul Ryan | Don't know |
|-----------------|-------------|------------|-----------|------------|

Would you say that one of the major parties is more conservative than the other at the national level? If so, which party is more conservative?

 The Democratic Party
 The Republican Party
 Neither
 Don't know

We are now going to ask a few more questions about your partisanship.

How important is being a **\$PARTY** to you?

| Not at all | Not very | Somewhat | Very | Extremely |
|------------|-----------|-----------|-----------|-----------|
| important | important | important | important | important |

How well does the term **\$PARTY** describe you?

| Not at all | Not very | Somewhat | Very | Extremely |
|------------|----------|----------|------|-----------|
| well | well | well | well | well |

When talking about \$PARTYs, how often do you use "we" instead of "they"?

| Never | Rarely | Some of | Most of | All of |
|-------|--------|----------|----------|----------|
| | | the time | the time | the time |

To what extent do you think of yourself as being a **\$PARTY**?

| Not at all | Not too much | Somewhat | A good deal | A great deal |
|------------|--------------|----------|-------------|--------------|

We'd like you to rate how you feel towards **\$OUTGROUP** on a scale of 0 to 100, which we call a "feeling thermometer." On this feeling thermometer scale, ratings between 0 and 49 degrees mean that you feel unfavorable and cold (with 0 being the most unfavorable/coldest). Ratings between 51 and 100 degrees mean that you feel favorable and warm (with 100 being the most favorable/warmest). A rating of 50 means you have no feelings one way or the other. How would you rate your feeling toward these groups? Remember we are asking you to rate ordinary people (e.g., voters) and *not* elected officials, candidates, media personalities, etc.

\$OUTGROUP¹²

We'd like to know more about what you think about **\$OUTGROUP**. Below, we've given a list of words that some people might use to describe them.

| For each item, please in | idicate how well you thin | nk it applies to \$OUT | GROUP: not at all | well; not |
|--------------------------|-----------------------------|-------------------------------|-------------------|-----------|
| too well; somewhat we | ll; very well; or extremely | y well. | | |

| | Not at all well | Not too well | Somewhat well | Very well | Extremely well |
|--------------|-----------------|--------------|------------------|-----------|----------------|
| Patriotic | | | | | |
| Intelligent | | | | | |
| Honest | | | | | |
| Open-minded | | | | | |
| Generous | | | | | |
| Hypocritical | | | | | |
| Selfish | | | | | |
| Mean | | | | | |

¹² Here, \$OUTGROUP corresponds to the other party. Here, we combine all of the affective polarization items asked here—feeling thermometer ratings, trait ratings, trust, and social distance measures—into an aggregate scale ($\alpha = 0.88$). We use out-party ratings because those capture the core of affective polarization (Druckman and Levendusky 2019). In the 2019 wave, we included an experiment that varied how the parties were described in terms of their ideology and political interest (more details are available from the authors). Here, we ignore that variation, as it only adds noise to our data. We can also control for it to ensure that it does not bias our results.

How much of the time do you think you can trust **SOUTGROUP** to do what is right for the country?

| Almost | Once in a | About half | Most of the | Almost |
|--------|-----------|------------|-------------|--------|
| never | while | the time | time | always |

How comfortable are you having close personal friends who are \$OUTGROUP?

| Not at all | Not too | Somewhat | Extremely |
|-------------|-------------|-------------|---------------|
| comfortable | comfortable | comfortable | com for table |

How comfortable are you having neighbors on your street who are \$OUTGROUP?

| Not at all | Not too | Somewhat | Extremely |
|-------------|-------------|-------------|-------------|
| comfortable | comfortable | comfortable | comfortable |

Suppose a son or daughter of yours was getting married. How would you feel if he or she married someone who is a **\$OUTGROUP**?

| Not at all | Not too | Somewhat | Extremely |
|------------|---------|----------|-----------|
| upset | upset | upset | upset |

2020 Wave:

[RANDOMLY ASSIGN SUBJECTS TO SEE EITHER "THE TRUMP ADMINISTRATION" OR "THE UNITED STATES" BELOW. TREATMENT ASSIGNMENT IS HELD CONSTANT ACROSS ITEMS, SO SUBJECTS SEE THE SAME WORDING IN ALL ITEMS.]

How confident are you that the [Trump administration/United States] can limit the impact of the coronavirus in the next month?¹³

- a. Not confident at all
- b. A little confident
- c. Pretty confident
- d. Very confident

Do you disagree or agree that [President Trump/the United States] should have done more to prepare for the coronavirus outbreak we are currently experiencing?

- a. Strongly disagree
- b. Somewhat disagree
- c. Somewhat agree
- d. Strongly agree

¹³ We recognize on this item we use "Trump administration" rather than President Trump as on the other items. We piloted both versions of the question and found the wording makes no difference. We opted for the administration wording on this item as it is more consistent with confidence in institutions items used in other surveys (e.g., the General Social Survey) whereas the other two question are more akin to personal attribution questions that name individuals (e.g., Malhotra and Kuo 2008).

Do you disagree or agree that [President Trump/the United States] should be doing more right now to prepare for the possibility of a new outbreak of the coronavirus in the fall?

- a. Strongly disagree
- b. Somewhat disagree
- c. Somewhat agree
- d. Strongly agree

How often have you relied Fox News for information about the coronavirus outbreak?

- a. Never
- b. Rarely
- c. Sometimes
- d. Frequently
- e. Every Day

Does any of your work currently require you to leave home?

- a. No
- b. Yes, for a little of my work.
- c. Yes, for some of work.
- d. Yes, for all my work.

Do you, or does anyone in your household, work in health care?

- a. No
- b. Yes

Do you have children under 4 years old living with you?

- a. No
- b. Yes

Are you or your spouse currently pregnant?

- a. No
- b. Yes

Do you currently have any health conditions that would make the coronavirus especially risk for you, such as asthma, emphysema, or difficulty breathing?

- a. No
- b. Yes

*We obtained each respondent's county of residence from the data vendor to match for COVID-19 case data (per capita) from The New York Times.

Supplementary Information 3: Additional Analyses

In Tables S3-1-2, we present the results for each outcome variable. The results show that the results are not entirely consistent across outcome variables when broken down in terms of statistical significance, but always in the correct direction. Specifically, for Democrats, the statistical results replicate for past preparation and future preparation, but the interaction falls short of significance for confidence. For Republicans, the statistical results replicate for confidence but the interaction falls short of significance for past preparation and future preparation.

In Table S3-3, we replicate the main results with control variables, showing they are robust.

In Table S3-4, we replicate the main results but use partisanship as a social identity instead of affective polarization. We find the results do not replicate with that construct, suggesting, it is affective polarization at work.

| Table 83-1: Results for Each Outcome Variable | | | | | | |
|---|------------|-------------|-------------|-------------|-----------|-------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| | Democrats | Republicans | Democrats | Republicans | Democrats | Republicans |
| | Confidence | Confidence | Preparation | Preparation | Future | Future |
| | | 0.1.1.1.4.4 | 0.100++++ | | 0.00544 | 0.000++++ |
| US Condition | 0.554*** | -0.141** | 0.120*** | -0.380*** | 0.097** | -0.382*** |
| | (0.044) | (0.064) | (0.040) | (0.073) | (0.039) | (0.071) |
| Constant | 1.558*** | 2.661*** | 1.347*** | 2.553*** | 1.405*** | 2.485*** |
| | (0.031) | (0.046) | (0.028) | (0.052) | (0.028) | (0.051) |
| Observations | 1,431 | 757 | 1,431 | 757 | 1,431 | 757 |
| R-squared | 0.101 | 0.006 | 0.006 | 0.035 | 0.004 | 0.037 |
| Standard errors in parentheses | | | | | | |

*** p<0.01, ** p<0.05, * p<0.1

| | (1) | (2) | (3) | (4) | (5) | (6) |
|----------------|------------|-------------|-----------|-------------|-----------|-------------|
| | Democrats | Republicans | Democrats | Republicans | Democrats | Republicans |
| | Confidence | Confidence | Past | Past | Future | Future |
| | | | | | | |
| U.S. Condition | 0.650*** | -0.838*** | 0.449*** | -0.538** | 0.290** | -0.503** |
| | (0.138) | (0.200) | (0.126) | (0.230) | (0.124) | (0.226) |
| Aff. Pol. | -1.196*** | 0.723*** | -0.789*** | 1.505*** | -0.724*** | 1.397*** |
| | (0.159) | (0.256) | (0.145) | (0.296) | (0.143) | (0.290) |
| U.S.*Aff. Pol. | -0.165 | 1.323*** | -0.563*** | 0.256 | -0.350* | 0.195 |
| | (0.227) | (0.360) | (0.208) | (0.416) | (0.205) | (0.407) |
| Constant | 2.244*** | 2.282*** | 1.802*** | 1.769*** | 1.826*** | 1.756*** |
| | (0.096) | (0.141) | (0.088) | (0.163) | (0.087) | (0.160) |
| Observations | 1 389 | 734 | 1 389 | 734 | 1 389 | 734 |
| R-squared | 0.176 | 0.097 | 0.081 | 0.113 | 0.057 | 0.105 |

 Table S3-2: Results for Each Outcome Variable (Interaction)

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

| | (1) | (2) | (3) | (4) |
|------------------------|---------------|------------------|---------------|---------------|
| | Democrats | Democrats | Republican | Republicans |
| U.S. Condition | 0 252*** | 0 /51*** | -0 300*** | -0 638*** |
| 0.5. Condition | (0.030) | (0.095) | (0.052) | (0.166) |
| Aff Pol | (0.050) | -0 760*** | (0.052) | 0.899*** |
| | | (0.112) | | (0.216) |
| US X Aff Pol | | -0 342** | | 0.607** |
| 0.5. × 7 | | (0.156) | | (0.300) |
| County Cases Per | 5 370 | 2 410 | -38 420*** | -33 673*** |
| Capita | (6.370) | (6.124) | (12 668) | (12, 244) |
| Health Vulnerability | (0.570) | (0.12+) | -0.054 | (12.244) |
| | (0.032) | (0.031) | (0.054) | (0.054) |
| Work Out of Home | 0.006 | (0.031) | (0.034) | (0.054) |
| WOIK Out OI HOIIIC | (0.035) | (0.021) | (0.013) | (0.057) |
| African American | (0.033) | (0.034) | (0.038) | (0.037) |
| Amenican | (0.031) | (0.000) | (0.1/3) | (0.1/2) |
| Latino | (0.039) | (0.039) | (0.143) | (0.142) |
| Latino | (0.052) | (0.050) | (0.111) | (0.100) |
| Asian Amorican | (0.032) | (0.031) | (0.111) | (0.109) |
| Asiali-Allici Icali | (0.072) | -0.049 | -0.380^{-0} | -0.300^{-1} |
| Esmala | (0.072) | (0.071) | (0.144) | (0.142) |
| remaie | -0.033 | -0.034° | (0.050) | (0.000) |
| Companyation | (0.051) | (0.030) | (0.034) | (0.034) |
| Conservative | 0.053^{***} | 0.032^{***} | 0.151^{***} | 0.106^{***} |
| | (0.013) | (0.012) | (0.022) | (0.022) |
| Age | -0.044*** | -0.048*** | 0.049* | 0.046* |
| | (0.015) | (0.014) | (0.026) | (0.026) |
| Education | -0.039** | -0.035** | -0.010 | 0.005 |
| N 11 1 1 11 1 1 | (0.018) | (0.018) | (0.032) | (0.031) |
| Political Knowledge | -0.090*** | -0.084*** | 0.012 | 0.021 |
| _ | (0.013) | (0.012) | (0.027) | (0.022) |
| Income | 0.015 | 0.005 | -0.004 | 0.013 |
| | (0.015) | (0.015) | (0.027) | (0.027) |
| Watch Fox | -0.168*** | -0.111*** | -0.262*** | -0.222*** |
| | (0.034) | (0.033) | (0.053) | (0.053) |
| Constant | 2.017*** | 2.473*** | 1.771*** | 1.400*** |
| | (0.098) | (0.119) | (0.172) | (0.196) |
| Observations | 1,390 | 1,349 | 724 | 703 |
| R-squared | 0.181 | 0.253 | 0.181 | 0.252 |

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

| | (1) | (2) | |
|--------------------------------|------------------------|-------------|--|
| | Democrats | Republicans | |
| U.S. Condition | 0 338*** | -0.156 | |
| e.s. condition | (0.106) | (0.171) | |
| Aff. Pol. | -0.033 | 0.185*** | |
| | (0.022) | (0.040) | |
| U.S.×Aff. Pol. | -0.026 | -0.050 | |
| | (0.032) | (0.056) | |
| Constant | 1.545*** | 2.029*** | |
| | (0.076) | (0.122) | |
| Observations | 1,430 | 757 | |
| R-squared | 0.049 | 0.080 | |
| Standard errors in parentheses | | | |
| *** p<0. | 01, ** p<0.05, * p<0.1 | | |

| Table S3-4: Results With Partisanship as a Socia | l Identity |
|--|------------|

Supplementary Information References

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- Malhotra, Neil and Alexander Kuo. 2008. "Attributing Blame: The Public's Response to Hurricane Katrina." *Journal of Politics* 70(1): 120-135.