

**(Mis-)Estimating Affective Polarization**

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## ABSTRACT

Affective polarization—the tendency of ordinary partisans to dislike and distrust those from the other party—is a defining feature of contemporary American politics. High levels of out-party animus stem, in part, from misperceptions of the other party’s voters. Specifically, individuals misestimate the ideological extremity and political engagement of typical out-partisans. When partisans are asked about “Democrats” or “The Republican Party,” they bring to mind stereotypes of engaged ideologues, and hence express contempt for the other party. The reality, however, is that such individuals are the exception rather than the norm. The researchers show that when partisans learn that reality, partisan animus falls sharply; partisans do not have much animus toward the typical member of the other party. Their results suggest antidotes for vitiating affective polarization, but also complicate understandings of good citizenship.

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Hyper-partisan polarization defines 21<sup>st</sup> century American politics. Democrats and Republicans dislike and distrust one another, a phenomenon known as affective polarization (Iyengar et al. 2019, Pew Research Center 2019a). Emphasis on this inter-party animus in both popular commentary and academic discussions (e.g., Badger and Chokshi 2017, Iyengar, Sood, and Lelkes 2012) has motivated scholars to investigate its causes and consequences (Iyengar et al. 2019, Mason 2018). Much of this scholarship—as well as media coverage of it—assumes that Democrats and Republicans automatically dislike one another simply because they belong to different political parties. We argue that this may not be the case. Rather, in many cases, affective polarization is a function of the types of partisans that come to mind when people answer survey questions about the other party. We show that affective polarization—when it comes to evaluations of other citizens—is significantly more localized than often assumed. Many individuals express indifference, rather than hostility, once they are asked to evaluate the typical member of the other party. The types of partisans who inspire the strongest animus actually constitute only a small minority of both parties.

The standard measures of affective polarization ask respondents to evaluate, for example, “Democrats” or “The Republican Party.” In answering, respondents draw on stereotypes and media exemplars of ideologically extreme and politically engaged partisans (Druckman and Levendusky 2019). These are precisely the types of out-partisans whom both Democrats and Republicans dislike and, thus, they report high levels of animus. To be clear, this animus is real insofar as people *believe* they are evaluating the typical out-partisan. But it is also an illusion, because people *assume*—incorrectly—that ideologically-extreme and politically-engaged partisans comprise the majority of the other party.

Even more importantly, we find that when people assess moderate members of the other party who are less politically engaged—and who, in fact, resemble the typical member of both parties whom Americans actually encounter in their day-to-day lives— affective polarization declines dramatically. We establish three key findings. First, Americans misestimate the ideological extremity and political engagement of the opposing party’s voters. Second, when answering the standard affective polarization measures, partisans rely on these misperceptions, particularly concerning political engagement, leading them to express high levels of animus. Consequently, when scholars, pundits, and journalists use these measures to characterize affective polarization, they inadvertently reinforce an inaccurate image of extreme differences between members of the two parties. Third, and perhaps most importantly, our findings suggest an antidote to high levels of partisan animus: correcting citizens’ misperceptions about the other side (also see Ahler and Sood 2018). Such corrections have important implications for how we understand the social consequences of affective polarization, as well as how we assess “good” citizenship.<sup>1</sup>

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<sup>1</sup> Our focus is on affective polarization between citizens, rather than towards elites. These are distinct constructs (e.g., animus towards the other party’s voters as opposed to the other party’s elected officials), with varying consequences (Druckman and Levendusky 2019). For example, animus towards out-party voters has social consequences such as impacting how much time we spend with our families, where we want to work and shop, and who we want to date (Iyengar et al. 2019). In contrast, animus towards the other party’s elites may have political consequences such as nationalizing vote choice (Abramowitz and Webster 2016) and undermining trust in government (Hetherington and Rudolph 2015). Much of the prior work focuses on the social

## What Do Affective Polarization Measures Measure?

Affective polarization refers to the tendency of partisans to like members of their own party and dislike those from the opposition (Iyengar et al. 2012). Scholars employ various measures to study affective polarization: feeling thermometer ratings toward the parties (i.e., a 0-100 scale where 0 indicates very cold feelings and 100 indicates very warm feelings), the degree to which respondents trust out-partisans versus in-partisans, and trait ratings of opposing partisans (i.e., asking how well adjectives like patriotic, open-minded, etc. apply to out-partisans; see Druckman and Levendusky 2019).<sup>2</sup> Alternatively, some use 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 (Klar, Krupnikov, and Ryan 2018). All of these measures invariably show high levels of out-party dislike, which suggests a divided nation.

In employing each of these measures, scholars consistently rely on abstract partisan targets: for example, asking respondents to evaluate “Republicans” or “the Democratic Party.”

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consequences of affective polarization (Iyengar et al. 2019) which motivates our interest. We acknowledge that our findings have less to say about animus towards elites, and we encourage scholars to take up those consequences in future work.

<sup>2</sup> We focus on self-reported measures of affective polarization. A few scholars have looked at implicit measures of partisan animus to circumvent problems of self-censoring (i.e., Iyengar and Westwood 2015), but such efforts are beyond our scope. This is not a serious limitation, as unlike the case of racial animus, implicit and explicit measures here correlate highly (Iyengar and Westwood 2015).

These choices matter because no one can know “the Democratic Party” in total. Consequently, citizens are apt to substitute the part they know best: the part they see discussed in the media. Because many individuals interact mostly (but not entirely) with those from their own party (Mutz 2006), media stereotypes are the most accessible image they have of the other party.

Yet, media coverage of politics can systematically distort individuals’ views of the opposition. Stories about politics skew toward conflict and focus on those who are most passionate about politics—for example, activists who are deeply committed to their cause (Levendusky and Malhotra 2016a). This is true of the mainstream media, and even more so of partisan outlets that play an increasingly important role in the media ecosystem (Levendusky 2013, Peterson and Kagalwala 2019). Social media can also bias partisan perceptions. Most Americans eschew political discussions on social media, but when they do nonetheless encounter them, it is likely to be from the most engaged partisans who produce the most political content on social media (Settle 2018).

There is a similar pattern when it comes to ideology. While some evidence suggests that ideological polarization among the public has increased (Abramowitz and Saunders 2008, Gramlich 2016; c.f., Lelkes 2016), those who receive coverage in the media or post about politics on social media are likely to be much more extreme than the typical partisan (Cohn and Quealy 2019). Indeed, much of the political content on social media is created by people who are both more engaged in politics and more ideological than the average person (Hughes 2019). The result is that when individuals think of those from the other party, what comes to mind, via the availability heuristic, are very engaged ideologues. They remember fervent partisans pleading their cases, rather than their neighbors or colleagues who happen to be from the other party but rarely discuss politics.

In sum, precisely because they know those from the other party less well, citizens assume the pictures they see on mass media and on social media reflect reality, and thus assume that out-partisans are extremists deeply committed to politics (i.e., the out-group homogeneity effect, see Quattrone and Jones 1980). As Levendusky and Malhotra (2016a) show, for example, media coverage of polarization increases citizens' beliefs that the electorate is polarized. Moreover, journalists often reify this effect by using social media as evidence of what "the public" thinks, despite the fact that it does not represent mass opinion (McGregor 2019). Even politically disengaged individuals cannot escape caricatured images of partisans, thanks to the preponderance of media coverage of political conflict (Robison and Mullinix 2016) and discussions with more politically engaged friends and family members (Druckman, Levendusky, and McLain 2018). The result is an informational context that over-represents partisan conflict (Klar and Krupnikov 2016). If political reality is just "images in our heads" (Lippmann 1922), then the images of political parties are representations of their most extreme and vocal members.

These expectations about reliance on the stereotypes lead us to our first hypothesis:

*Hypothesis 1: When asked to assess the ideology and political engagement of out-partisans, individuals will significantly overestimate both quantities, all else constant.*<sup>3</sup>

The possibility that people over-estimate both the ideological extremity and the level of political engagement of out-partisans has significant implications for the measurement of affective polarization. If survey responses reflect top-of-the-head considerations (Zaller 1992), then when asked to rate "Republicans" or "the Democratic Party," citizens bring to mind stereotypes of the most engaged partisans. Fiorina (2017: 61) captures this logic in noting that

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<sup>3</sup> All of our hypotheses were pre-registered at aspredicted.org: <https://aspredicted.org/7rk7p.pdf>.

when Democrats imagine a Republican, they think of “an evolution-denying homophobe,” and likewise Republicans thinking of a Democrat envision “an American-hating atheist,” though neither one is accurate.<sup>4</sup> These mis-estimations can then affect overall measures of affective polarization.

Indeed, other work reveals that distinct misperceptions can impact affective polarization. For example, Ahler and Sood (2018) show that citizens hold skewed assumptions about the parties’ demographic make-ups. For example, Republicans estimate that 43.5 percent of Democrats belong to a labor union when in reality it is 10.5 percent, and Democrats estimate that 44.1 percent of Republicans earn over \$250,000 per year when it is 2.2 percent (Ahler and Sood 2018: 968). These inaccurate assumptions help to drive partisan animus, and correcting them ameliorates such sentiments (Ahler and Sood 2018). Similarly, Democrats and Republicans both think that the other party dislikes them more than they actually do, and correcting this misinformation reduces inter-party discord (Lees and Cikara 2020, Moore-Berg et al. 2020).

This research is telling—and suggests that correcting misperceptions can also vitiate affective polarization—yet an important lacuna remains in that no one has investigated how misperceptions about the parties’ ideological makeup and levels of political engagement (a la hypothesis 1) shape affective polarization. While these are not the only relevant dimensions to consider (e.g., Orr and Huber 2020), they hold a special place when it comes to stimulating out-

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<sup>4</sup> Certainly, thinking of oneself as a partisan will lead to perceptions that the other side is distant and disliked other (Hogg 2006). While true, our point is that media attention to the political extremity and engagement of individuals exacerbates these underlying tendencies.

party animus: they signal that the other party holds very different views and is committed to expressing them. These dimensions capture the contours of political competition and difference.

*How Perceptions of Ideological Positions Shape Affective Polarization*

Although ideological divides between the two parties may have increased (Webster and Abramowitz 2017), people nevertheless overstate the ideological extremity of the other party (Levendusky and Malhotra 2016b) and, as we hypothesize, will overestimate the extent to which the opposing party members are ideological (hypothesis 1). In turn, these perceptions about the ideological distribution of the opposing party will fuel greater affective polarization (Bougher 2017, Rogowski and Sutherland 2016). But there is a subtler and more pernicious effect of mis-estimating ideological extremity. This form of mis-estimation not only increases the perception of irreconcilable differences between the parties (Rogowski and Sutherland 2016), but it also fuels the belief that the other party will have antipathy toward anyone with different political positions (Levendusky and Malhotra 2016a,b).<sup>5</sup>

Thus, if when asked to rate “Republicans” or “Democrats” survey respondents think of the most extreme exemplars of the other side, they will be more likely to report high levels of animosity toward the other party. If, on the other hand, people imagine that they are being asked about more ordinary partisans, they would imagine them to both be closer to their own positions

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<sup>5</sup> Such perceptions might vary depending on what those positions are: people might have different (mis-)perceptions of what liberal and conservative are, for example (Ellis and Stimson 2012). Nevertheless, these perceptual differences lead to the same place—the belief that someone who is more extreme will be more different and more devoted to their political position.

as well as less devoted to them, and, consequently, would feel more positively toward them (O’Keefe 2016: 201) leading to lower levels of affective polarization.

*Hypothesis 2: Out-party animus will be higher when out-party targets are ideologically extreme, relative to when they are ideologically moderate, all else constant.*

#### *How Perceptions of Political Engagement Shape Affective Polarization*

Much like ideology, the degree to which members of the other party are engaged in politics will shape animus toward them. While political engagement has many manifestations, the most visible—and common—involves political discussion. Fewer than 5% of Americans have volunteered for a campaign and only 14% have donated money to one, but most people talk about politics at least occasionally (Pew Research Center 2018). Indeed, while many Americans do not know someone who engages in political protests, nearly everyone knows someone who at least occasionally, and possibly frequently, discusses politics, especially in the age of social media.<sup>6</sup> This is why we operationalize engagement in terms of discussion frequency.

We hypothesize that people will over-estimate the extent to which out-party members discuss politics (hypothesis 1), which in turn produces affective polarization. Klar and Krupnikov (2016: 63) report that 40% of individuals express “discontent at the thought of working with [a] politically inclined colleague—even though the hypothetical colleague *agrees* with them!” (italics in original; see also Klar et al. 2018). This aversion will be particularly acute when it comes to talking to people with whom one disagrees: people do not even want to discuss

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<sup>6</sup> These various manifestations of political engagement are highly correlated; for example, in our data described below, political interest correlates with political discussion at .66 ( $p < .01$ ) while political discussion correlates with participation in political activities at .40 ( $p < .01$ ).

*apolitical* topics with those from the other party (Settle and Carlson 2019), precisely because they think that they have nothing in common with them and the conversation will be unpleasant (Pew Research Center 2019b). Indeed, affective polarization reflects not only animus toward the other party, but also a desire to avoid political discussions altogether (Klar et al. 2018). Much like a mis-estimation of ideology may inflate affective polarization, so too would a mis-estimation of political engagement.

*Hypothesis 3: Out-party animus will be higher when out-party targets are more politically engaged, relative to when they are politically unengaged, all else constant.*

#### *Perceptions of the “Other”*

Hypotheses 2 and 3 make clear how variations in how Americans perceive out-partisans shape their evaluations. Ideological extremity and political engagement are especially potent stimuli for generating animus. Ideological extremity signals that the other party holds very distant views and potentially different values (Tetlock 2000). Political engagement signals a desire to put them into action (or at least express them), so they represent a threat to the respondent. Taken together, someone from the other party who is both extreme and engaged is especially dislikable. These two factors are crucial to amplifying partisan animus in the mass public. Moreover, as explained, we predict people mis-estimate ideological extremity and political engagement. Thus, when asked the canonical affective polarization measures—with “Democrats” and “Republicans” or “The Democratic Party” and “The Republican Party” as their target—individuals report relatively high levels of animus since they think of extreme and engaged out-partisans.

*Hypothesis 4: When out-party targets are undefined in terms of ideology and political engagement (i.e., the common measures), out-party animus will:*

- *be significantly higher than when out-party targets are ideologically moderate and politically unengaged, all else constant.*
- *not be significantly different from when out-party targets are ideologically extreme and politically engaged, all else constant.*

Taken together, our hypotheses imply an antidote to high levels of out-party animus—specifically, correcting misperceptions about typical ideological extremity and political engagement. As we discuss below, our results suggest correction that could viably be pursued at scale.

### **An Experimental Test**

To test our hypotheses, we conducted a three-wave online survey experiment with Bovitz, Inc. in the summer of 2019 (details are in SI1). Bovitz maintains an online panel of approximately one million respondents recruited through random digit dialing and empanelment of Americans with Internet access. Samples are drawn such that the demographics of the sample match those of the U.S. population. Our sample therefore closely tracks Census figures for age, race, gender, and so forth (see SI1 in the online Supplementary Information for more details and comparisons).<sup>7</sup>

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<sup>7</sup> Members of the Bovitz panel participate in multiple surveys over time and receive compensation for their participation. This makes our data similar to data from firms such as YouGov or Lucid. Data from Bovitz have been used in numerous published studies in the social sciences (e.g., Bolsen, Druckman and Cook 2014, Druckman and Levendusky 2019, Howat 2019). Also, our interest ultimately lies in comparisons across experimental conditions and thus the use of a non-probability sample is not problematic (Druckman and Kam 2011). That said,

In the first wave (N=5,191), participants (all adult Americans) answered a series of questions about their political predispositions, including their partisan identities, political knowledge, and demographic characteristics. The second wave (N=4,076) included our experimental manipulation, which we describe in detail below. The main items in this second wave asked participants versions of the aforementioned affective polarization measures: (1) feeling thermometer scales, (2) trait ratings, (3) trust measures, and (4) social distance measures. Each measure asked about both parties, with the out-party always coming first. In every condition, we specifically told respondents that they were evaluating ordinary people because our interest lies in levels of affective polarization among voters rather than between voters and elites (c.f., Druckman and Levendusky 2019; see SI2 for question wordings). In the third wave (N=4,048), we asked respondents to classify themselves in terms of ideology and political engagement. This provides the *actual* distribution of these characteristics among our sample. To avoid spillover, we allowed roughly a week between each wave.

In each experimental condition in wave 2, we varied two factors in describing the partisans being rated: (1) their ideological profiles and (2) their political engagement, which we describe in terms of frequency of political discussion, as explained above. Along the ideological factor, we randomly assigned participants to one of three groups: the first group received no information about the partisans' ideology, the second group were told that the partisans are

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samples such as ours tend to include those with more political interest (Malhotra and Krosnick 2007), which may lead to an overstatement of affective polarization. Given our argument, this sample feature works *against* our expectations, thereby providing a conservative test of our theory.

moderate, and the third group were told the partisans are ideological (with Democratic partisans being described as liberal, and Republican partisans being described as conservative). On the political engagement factor, we assigned participants to one of four groups: they received no information about the partisans' frequency of discussion, or they learned that the partisans discuss politics rarely, occasionally, or frequently.<sup>8</sup>

**[Insert Table 1 About Here]**

This led to 12 randomly assigned conditions, which we display in Table 1. For example, those in Condition 1 received no information about ideology and no information about discussion frequency. They were asked to rate “Republicans” and “Democrats,” making this item akin to the conventional affective polarization items used in previous studies. The other conditions introduce variation; for example, in condition 12, respondents were asked about “Conservative Republicans who frequently talk about politics” and “Liberal Democrats who frequently talk about politics,” and so forth. We test hypotheses 2 and 3 by exploring how between-condition variations in ideological extremity and political engagement change the level of affective polarization. Hypothesis 4 suggests that affective polarization in condition 1 (the conventional formulation) should be significantly greater than in condition 6 (moderate partisans who rarely talk about politics) and not significantly different from condition 12 (ideologically extreme partisans who frequently talk about politics).

Finally, we included a 13<sup>th</sup> randomly assigned condition in which respondents did not complete any affective polarization measures but rather reported their perceptions of partisans (N

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<sup>8</sup> In a pre-test (see SI2), we verified that subjects perceived “rarely,” “occasionally,” and “frequently” to correspond to significantly different frequencies of political discussion.

= 550). We asked participants in this condition to categorize the ideology and frequency of political discussion of the “typical” Republican and Democrat. To test hypothesis 1 regarding misperceptions of the out-party, we can compare the frequencies reported in this condition to the actual distributions from wave 3.

## **Results**

### *Do Individuals Over-Estimate the Extremity and Political Engagement of the Other Party?*

Our first hypothesis suggests that individuals systematically misperceive the other party by over-estimating the extremity and political engagement of the modal partisan. We formally test H1 with condition 13, where participants reported their perceptions of the ideological extremity and frequency of political discussion for the “typical” member of the out-party. We compare these perceptions (from condition 13) to our third wave data, which measured the actual pattern of these behaviors among respondents. We report the results in Figure 1.<sup>9</sup> Given our focus on perceptions of out-party members, we restrict our analysis to partisans (including independent leaners), consistent with other studies of affective polarization (i.e., Druckman and Levendusky 2019).

### **[Insert Figure 1 About Here]**

Even though ideological polarization has substantially increased over-time (Abramowitz and Saunders 2008, Gramlich 2016), individuals still over-estimate its extent. Specifically, we find respondents estimated that 69 percent of partisans are ideologically sorted (i.e., are liberal Democrats or conservative Republicans), but in reality, only 38 percent of the respondents in our

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<sup>9</sup> In Figure 1, we present all partisans, even though our discussion focuses on out-party perceptions. In SI3, we show that this same relationship holds separately for each party.

study were actually sorted; this means, participants over-estimate that quantity by 78 percent! Likewise, participants under-estimate the percentage of moderates by 77 percent (estimating that 22 percent of partisans are moderates, when in reality it is 51 percent).

While these results, in some sense, echo prior work on false issue polarization (e.g., Levendusky and Malhotra 2016b), our results concerning political engagement are entirely novel and just as striking.<sup>10</sup> Participants, we show, over-estimate the fraction of out-partisans who frequently discuss politics by more than a factor of 2 (they assume that 64 percent of out-partisans frequently talk about politics, when the reality is closer to 27 percent), and they under-estimate the fraction who rarely talk about politics by a factor of nearly 5 (they assume it is 5 percent, when it is 23 percent). When the categories are combined, we see that 49 percent of respondents perceive that out-partisans are both extreme and frequently discuss politics; this is in sharp contrast to the actual distribution, which shows that 14 percent of partisans behave that way. Put slightly differently, partisans overestimate the frequency of out-party partisans who are ideologues and frequently discuss politics by a factor of 3.5.

These results are in line with our first hypothesis: people systematically over-estimate the ideological extremity and political engagement of opposing partisans. We next turn to the consequences of these misperceptions for affective polarization as well as an exploration of how correction could reduce it.

### *Partisan Bias and Perceptions of the Out-Party*

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<sup>10</sup> In addition to research on false issue polarization, there is other work on misperceptions about the demographics and preferences of the opposing party (Ahler and Sood 2018; also see Lees and Cikara 2020, Peterson and Kagalwala 2019).

To examine whether perceptions of out-partisans as ideological and engaged generate animus, we now turn to an analysis of our experimental conditions, in which participants were randomly assigned to one of twelve different descriptions of partisans (Table 1). In SI4, we provide details on a manipulation check that shows respondents were thinking of voters (rather than elites) as we intended. We also show, in SI4, that the level of affective polarization found in condition 1—where we use the conventional versions of the items from the previous literature—replicates the results found in earlier studies.<sup>11</sup>

To consider animus toward the out-party, we scale and aggregate the four different rating types (thermometer, trait ratings, trust ratings, and social distance measures) into one measure of out-party affect ( $\alpha=0.88$ ).<sup>12</sup> While this aggregate approach is consistent with previous studies on partisan animosity (e.g., Boxell, Gentzkow and Shapiro 2017), we present the results for each of our measures individually in SI7; these measure-specific results are substantively the same as the results we present below. This combined aggregate measure is scaled 0 to 1, with higher values indicating *more positive affect* for the out-party and lower values indicating greater animosity toward the out-party. To test hypothesis 2 and 3, we regress the aggregate measure of out-party affect on the engagement and ideology treatments. This allows us to see if variations in perceived

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<sup>11</sup> As mentioned, we exclude pure independents in our analyses. Even so, in SI5, we analyze the results for pure independents and find that their results closely mirror those we report below.

<sup>12</sup> Some scholars measure affective polarization by taking the difference between out-party and in-party ratings (Lelkes and Westwood 2017). Our results are robust to using this approach (except the “frequently” condition also lowers affective polarization compared to the no discussion descriptor condition (see SI6).

engagement and ideology of the out-party drive affective polarization. We present the results in Table 2.

**[Insert Table 2 About Here]**

Consistent with hypothesis 2, we see that the ideological extremity of the target affects affective polarization; ratings for moderate out-partisans are higher than for liberal/conservative out-partisans by 3 percent of our scale. Further, there is no significant difference between the control (no ideological information) and the ideologically sorted conditions (liberal Democrat/conservative Republican), which suggests that ideological partisans are seen as the default, as suggested by hypothesis 4 (see SI9 for more on condition-by-condition comparisons).

Our most striking results come from considering how the target’s level of political engagement affects out-party animus (hypothesis 3). As predicted, we see that relative to receiving no information about a partisan’s level of political engagement, participants rate the out-party significantly more positively when they are told that the out-partisan “rarely” or “occasionally” talks about politics. The effect is especially large in the “rarely” condition—this is the single largest shift in our data, representing a 25 percent decrease in animosity relative to the baseline category. To make this more concrete, for the feeling thermometer item, we find the “rarely” condition increases ratings by 19 degrees relative to the baseline condition (no information about political discussion)—an extremely large shift. Those who “frequently”

discuss politics are rated more negatively, though this effect is more modest, representing only about a 5 percent relative increase in animosity.<sup>13</sup>

Our results suggest that subjects assume—in the absence of additional information—that those described by the baseline questions talk about politics quite frequently (consistent with hypothesis 4). Overall, then, our findings point to the idea that animosity toward the out-party is not simply a function of partisan identity: partisans who are ideologically moderate and/or who engage in little political discussion are rated much more positively than others. And, the differences, particularly regarding engagement, are large.

Our final hypothesis (hypothesis 4) suggests that prior work over-states affective polarization because respondents presume they are rating ideological and politically engaged partisans when they receive the conventional items. Our results above offer initial evidence of this; here we offer a direct test by comparing the three key conditions identified by hypothesis 4: the conventional non-descriptor condition (1) against the moderate, rarely discuss condition (6) and the extreme, frequently discuss condition (12). We present the results of our comparison in Figure 2 (full coefficient estimates in SI11).

**[Insert Figure 2 About Here]**

As predicted, ratings in condition 6 toward moderate out-partisans who rarely talk about politics are significantly higher (i.e., less animus) than in condition 1, where no additional descriptors are provided ( $p < 0.001$ ). Moving beyond the statistical significance of the effects, in

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<sup>13</sup> We show that the same pattern of effects holds for in-party ratings as well (see SI10). This suggests that—consistent with Klar, Krupnikov and Ryan (2018)—many people simply dislike *anyone* who discusses politics.

SI12 we compare the effect-sizes to pre-established benchmarks, which demonstrate that the changes in measured out-party animosity due to changes in the descriptions of the out-party are also large and substantively important. Clearly, when asked the conventional question, people are not imagining moderates who rarely talk about politics.<sup>14</sup>

While condition 1 and condition 12—the extremist frequently discuss condition—significantly differ ( $p < 0.01$ ), the difference is minimal, amounting to just .04 units on the 0 to 1 scale. Thus, while not strictly statistically confirming that aspect of hypothesis 4, the small substantive difference (especially relative to the difference between conditions 1 and 6) suggests that the conventional measures of affective polarization measure attitudes toward rather extreme and politically engaged out-partisans. To assume it measures attitudes toward the *modal* out-partisan would be a mistake—respondents are envisioning a prototype that does not match reality.

To consider how these patterns translate into evaluations of affective polarization even more directly, we focus on thermometer ratings alone. As we show in Figure 1, nearly half of our respondents believe out-partisans are extreme and frequently discuss politics. Then, when asked to evaluate these types of out-partisans, our participants place them at just 32 degrees on the feeling thermometer scale. Yet, in reality, the modal partisan is a moderate partisan who only occasionally discusses politics. When our participants rate these types of out-partisans, the average feeling thermometer rating is 47 degrees—nearly 50 percent higher. When it comes to moderates who rarely discuss politics, the average out-party thermometer rating is now 56 degrees – more positive than negative. When assessing the actual modal out-party member

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<sup>14</sup> Condition 6 is also significantly higher than condition 12 ( $p < 0.001$ ).

partisans are more indifferent than hostile – changes in the descriptions of the partisans lead to substantively different conclusions about the state of political animosity in America.

## **Discussion**

Our results suggest a rather different view of affective polarization in the mass public than we would get from the conventional measures. The conventional measures, we demonstrate, capture people’s ratings of the most extreme and the most engaged partisans. Certainly, these ratings are appropriate if the goal is to estimate how people feel about these specific types of partisans, but the ratings are less informative if the goal is to estimate how people feel about the typical partisan. Our results, then, raise two questions. The first is about the implications of misperceptions for interpersonal interactions; the second turns to the possibility of a correction.

### *Interpersonal Interactions*

If people rely on stereotypes of the most extreme and engaged partisans when making evaluations during surveys, could similar misperceptions be guiding their interpersonal interactions as well? Research suggests that is less likely to be the case. First, partisanship is a relatively low salience identity for most Americans (Druckman and Levendusky 2019; see also the discussion in Hersh 2020). Second, interpersonal interactions likely involve much more contextual information than surveys; indeed, political discussions often occur within the confines of non-political discussions (Eveland and Hutchens 2013). When subjects find themselves in research studies where they are asked to evaluate an abstract entity, they draw on media stereotypes. But in inter-personal interactions, people have actual behavioral political information about others—they do not have to assume whether a partisan frequently discusses politics, because they have actual evidence whether that partisan does or does not (Eveland and

Hutchens 2013).<sup>15</sup> While learning someone is from the other-party early in a typical interaction may halt the conversation, in most cases, by the time partisanship comes up it is likely dwarfed by other information.

### *Possibility of a Correction?*

In highlighting the role of misperceptions, our results suggest a correction that could potentially address misperceptions. If people dislike extreme partisans who frequently discuss politics, then clarifying the characteristics of the modal partisan is an important step in addressing animus. It is, of course, possible that some people may ignore the correction and instead focus their evaluations on “the worst” partisans (even if those partisans constitute a minority). Yet there is reason to believe that people will be responsive. Partisans, research shows, are responsive to corrections about the demographic make-up of the out-party (Ahler and Sood 2018) and corrections about the extent of the out-party’s disagreement with their positions (Lees and Cikara 2020). Indeed, although some people harbor unconditional animus toward any member of the out-party, most people seem to be able to distinguish between different types of partisans (Kingzette 2020).

There are at least two ways of doing this. First, as we suggest above, we could encourage people to draw more on their actual inter-personal experiences. While social networks tend to be homogeneous with respect with partisanship, most people have friends, family, and neighbors

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<sup>15</sup> It is possible that some people would turn to stereotypes even during interpersonal interactions and assume the worst even of people who do not appear extreme or highly engaged.

Extrapolating research on political interactions would suggest that the people who are most likely to do so are themselves highly engaged (Eveland and Hutchens 2013).

from the other party (Pew Research Center 2017). If encouraged to think about these individuals—who come closer to the modal partisan—then individuals will likely feel less animus toward the opposition.

Second, although our focus is on survey measurement, scholars could also work with journalists to offer more representative, or at least more varied portraits of partisan interactions. The idea is to induce individuals to view the reality that the typical out-partisan is not as distinctive as what first comes to mind. Active interventions such as these seem feasible and are important given the obvious persistence of available, but inaccurate, information.<sup>16</sup> An important next step is to assess whether such corrections actually mitigate animus (or is more needed, such as if people over-weight the impact of extreme ideologues).

## **Conclusion**

What is the scope of affective polarization in America? We argue that when people are asked to evaluate the other party, they draw on stereotypes and bring to mind an unrepresentative member of it: an ideologue who is extremely engaged in politics. As a result, they express considerable animus toward the other party. But when asked to evaluate someone who actually looks like the modal member of the other party—someone more moderate, who is largely indifferent to politics—animus falls markedly. Americans dislike the ideologues from the other party who appear on television and those that they see on social media, but they are more indifferent than hateful of the modal member of the other party. Affective polarization is, in part,

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<sup>16</sup> A related approach would be to work with social media companies to implement nudges about politics when it comes highly politicized news content that may distort perceptions (e.g., Pennycook et al. 2020).

driven by inaccurate stereotypes individuals hold about those from the other side of the political aisle. More broadly, this measurement issue also highlights questions of over-time comparability in levels of affective polarization. If traditional measures of affective polarization are capturing the images of out-partisans that are at the top of people's minds, then over-time shifts in partisan animus may be as much a reflection of shifts in media coverage of politics (and the emergence of social media) as changes in the level of animosity toward the other side.

Our results show that the frequency of political discussion holds particular importance for how individuals' rate those from the other party: people have much less animosity toward an out-party member who rarely discusses politics than one who frequently discusses politics. While people also have less animosity toward moderate, rather than sorted, out-partisans, these effects of ideology are smaller than those of discussion. This adds a twist to thinking about inter-group relations: although ideological differences do fuel animus, thinking about political discussion may even further exacerbate antipathy toward the out-party.<sup>17</sup> This likely stems from the frequency of discussion being easier to visualize, or discussion tendencies being more bothersome. The patterns we observe are consistent with evidence that many Americans want to avoid most political discussions (Hibbing and Theiss-Morse 2001, Klar et al. 2018).

One could critique our approach on two levels. First, ordinary citizens can do little to correct media stereotypes and they invariably will fall back to generalizations that come to mind, so perhaps our findings are for naught. We disagree sharply with this sort of assessment. As we

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<sup>17</sup> An intriguing extension would be to assess whether asking respondents about particular issue positions would have a stronger effect than what we find for ideology (e.g., Orr and Huber 2020).

noted above, individuals can—and do—interact, at least somewhat, with those from the other party (Sinclair 2012). Even in an era of polarization, more than 80% of Americans have at least some friendships that cross party lines (Pew Research Center 2017). Scholarly work should highlight that part of the measured partisan animus comes from the fact that citizens use stereotypes—rather than these inter-personal interactions—to evaluate those from the other party (see also the discussion in Klein 2020).

Second, we recognize our findings do little to change how individuals feel toward political elites (see footnote 1), and as a result, are unlikely to reduce high levels of party-line voting (Abramowitz and Webster 2016). But this underscores an important dimension to debates over affective polarization: attitudes toward elites and voters are related but distinct (Druckman and Levendusky 2019), and arguments about “affective polarization” need to clearly specify their scope conditions. To this end, as we noted above, our findings speak to the apolitical consequences of affective polarization, and we save these political ramifications for future studies.

Although voting is important, the social consequences of affective polarization are also profound. Scholars have documented a number of ways in which affective polarization has changed our personal lives beyond politics: it shapes where we want to live, work, and shop (Iyengar et al. 2019). For example, individuals do not want to talk to those from the other party because they fear that they have nothing in common with them (Pew Research Center 2019b). But this is based, in part, on misperceptions. If people realized that the other party is more similar to them than they believed, they would likely be more willing to interact with them, and in turn, this might ameliorate inter-party animus even more. This could also affect their willingness to compromise with those from the other party, which would in turn perhaps even

increase elite support for bipartisanship and consensus (Harbridge and Malhotra 2011). While testing these possibilities is beyond the scope of our argument here, our results suggest that correcting these misperceptions would ameliorate the broader sociological consequences of affective polarization.

Even more broadly, our results highlight a theoretical irony. The out-partisans that people dislike—those who are deeply politically engaged and ideological—are the “ideal voters” in many political science theories. Dating back to Converse’s (1964) pioneering work, scholars have searched for ideological consistency because of its crucial role to understanding politics, and for holding politicians to account for their decisions. Political interest and engagement are no less important, as it is the key to joining what Prior (2019: 1-2) calls the “self-governing class”: the part of the public who decides how the country is run. Our results suggest that these idealized citizens provoke animosity and hence fuel affective polarization. Not only that, these citizens often are the ones harboring the most animosity. In the control group, respondents who said they were very or extremely interested in politics (in wave 1) gave lower out-party ratings (in wave 2) than all other respondents.<sup>18</sup>

This underscores a point Almond and Verba (1965) made more than 50 years ago—democracy requires a mix of different types of citizens, and an excess of engaged and informed individuals is just as bad as too many apathetic ones. Indeed, as our results highlight, reminding

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<sup>18</sup> The mean out-party rating for respondents who said they were extremely or very interested in politics was .382 (s.e.=0.013), while the mean out-party for all other respondents was .453 (s.e.=0.011).

citizens that most of their peers are not “idealized” citizens would help improve our democracy by lowering levels of partisan animosity.

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**Table 1: Experimental Conditions**

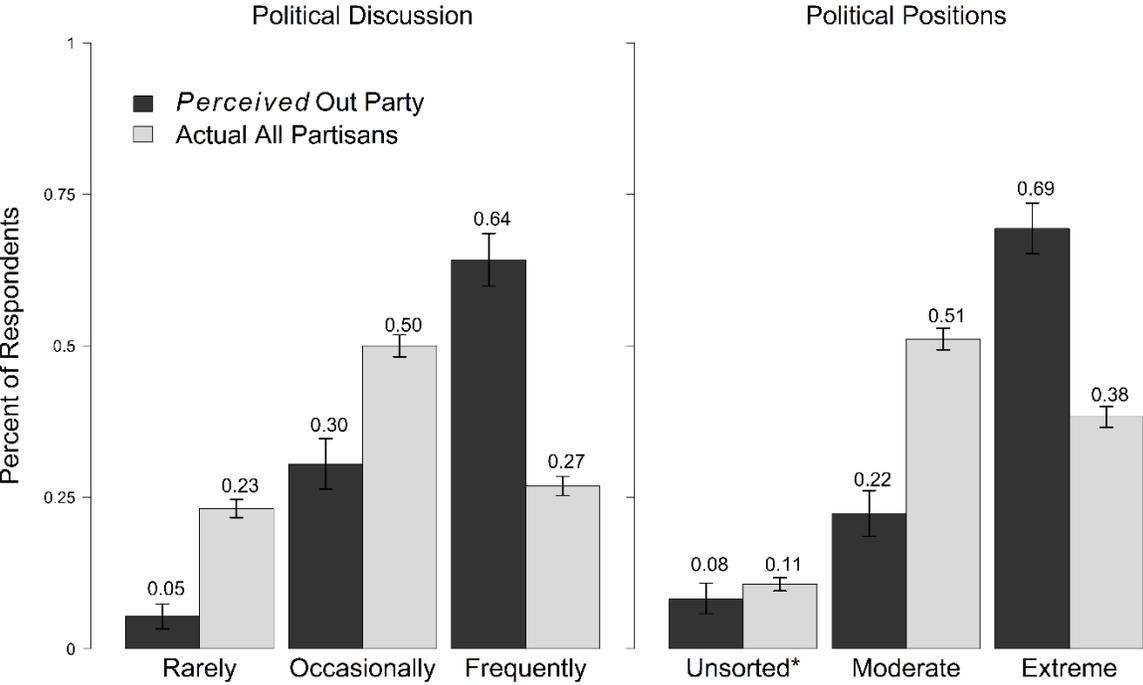
	No Discussion Descriptor	Rare Discussion	Occasional Discussion	Frequent Discussion
No Ideology Descriptor	Condition 1 (N=538)	Condition 2 (N=271)	Condition 3 (N=269)	Condition 4 (N=272)
Moderate Ideology	Condition 5 (N=270)	Condition 6 (N=273)	Condition 7 (N=275)	Condition 8 (N=273)
Extreme Ideology (Conservative/Liberal)	Condition 9 (N=272)	Condition 10 (N=270)	Condition 11 (N=276)	Condition 12 (N=261)

**Table 2: Effect of Treatments on Out-Party Affect**

	Coef.	Std. Err.
<i>Discussion Conditions</i>		
Rarely	0.101	0.009
Occasionally	0.020	0.009
Frequently	-0.024	0.009
<i>Ideology Conditions</i>		
Moderate	0.030	0.008
Extreme	-0.012	0.008
Constant	0.416	0.007
N	2,887	
R <sup>2</sup>	0.072	

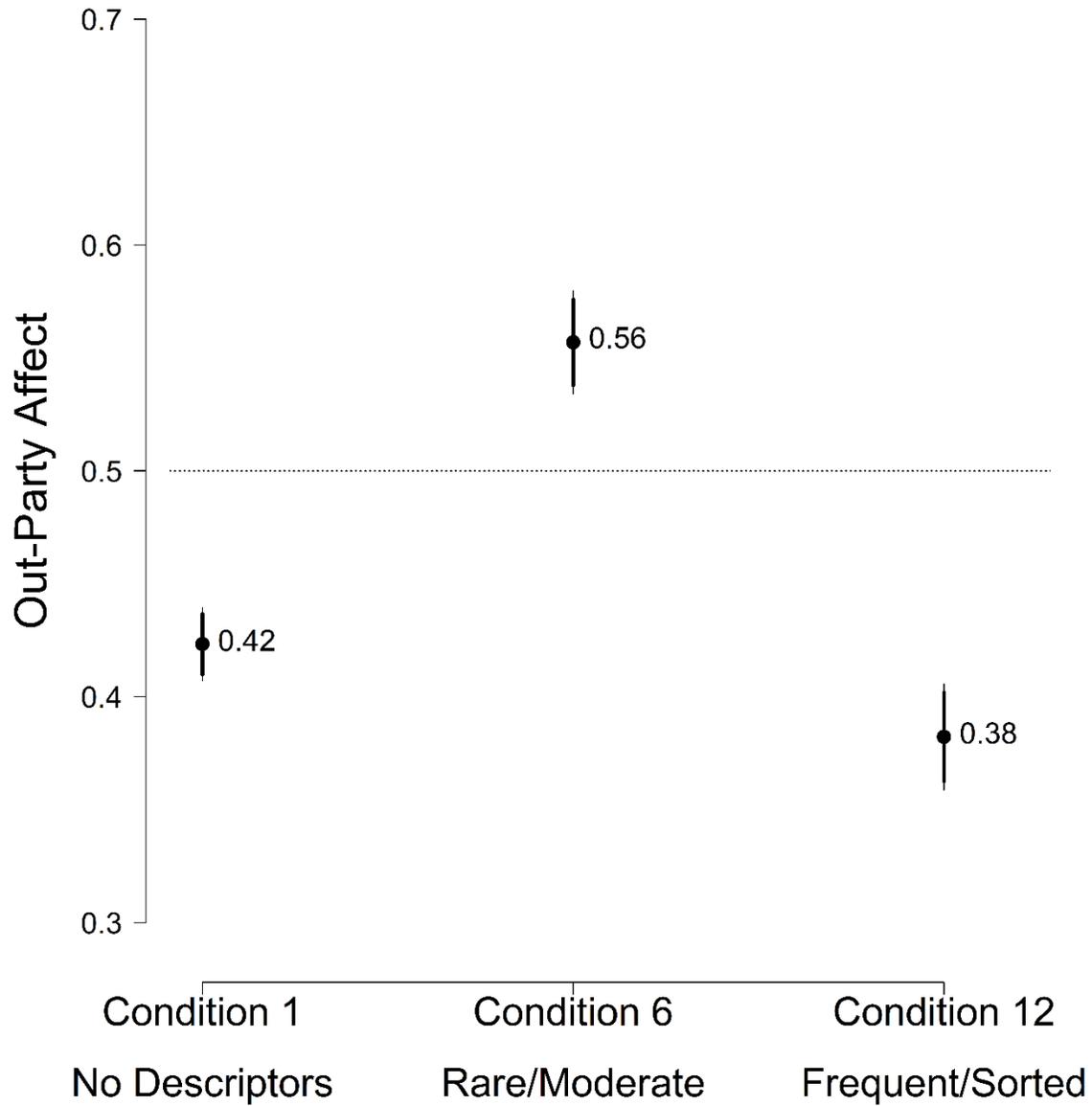
*O.L.S. regression; dependent variable is scaled 0 to 1, with higher values indicating more positive affect. The analysis excludes pure Independents (see SI5 for patterns among pure independents). The excluded category for each of our factors is the “No Additional Descriptor.” A model with controls is shown in SI8.*

**Figure 1. Perceptions of Out-Party Compared to Actual Partisans**



\*Unsorted refers to liberal Republicans and conservative Democrats. Perceptions are from condition 13 participants only, while actual partisan values are estimated using all wave 3 participants.

**Figure 2: Comparison Across Three Conditions**



Y-axis represents out-party aggregate measure ranging from 0 (entirely negative affect, e.g., animosity) to 1 (entirely positive affect). Results based on OLS model that considers each condition separately (see SI11).

## Supplementary Information for “(Mis-)Estimating Affective Polarization”

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## Supplementary Information 1: Details of Three Wave Survey

The survey was conducted using Bovitz Inc. (<http://bovitzinc.com/index.php>). 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.

The survey took place over three waves. All participants who completed the first wave were invited to participate in the other two waves (i.e., they could participate in the third wave even if they skipped the second wave). In the first wave (N=5,191), we asked participants about their demographics, political positions, and political engagement. The second wave (N=4,076) contains our experiment as we asked participants the measures in our main analyses. The third wave (N=4,048) contains our questions about our perceptions.

All waves took place during the summer of 2019, with at least 1 week in between each wave (the break was to ensure that there were no spillover effects across waves). Wave 1 took place from July 9, 2019 to July 17, 2019, wave 2 took place from July 16, 2019 to July 25, 2019, and wave 3 took place from July 26, 2019 to August 2, 2019. Importantly, respondents were only invited to do a subsequent wave when at least six days had passed from their completion of the prior wave.

The tables below present demographics based on their wave 1 answers, and compares them to 2018 benchmarks from the U.S. Census Bureau, via the American Community Survey.

### Age

Age Category	Our Sample (%)	Census Benchmark
18-24	9.72	12.08
25-34	19.79	17.87
35-50	33.74	24.54
51-65	25.02	24.88
Over 65	11.74	20.65

### Gender Identity

Gender Identity	Our Sample (%)	Census Benchmark
Female	50.16	50.8
Male	48.88	49.2
Transgender/None	< 1	-- <sup>19</sup>

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<sup>19</sup> 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 <http://bit.ly/2Nj5DZE> for more details.

### Primary Racial Group

Primary Race	Our Sample (%)	Census Benchmark
Caucasian (White)	69.3	72.2
African-American	14.55	12.7
Hispanic or Latino	9.2	18.3
Asian-American	4.01	5.6
Native American	< 1	< 1
Other	2.06	5

### Annual Family Income before Taxes

Income Category	Our Sample (%)	Census Benchmark (%) <sup>20</sup>
\$30,000 or less	29.57	29.4
\$30,000 - \$69,999	37.39	30.3
\$70,000 - \$99,999	16.58	12.5
\$100,000 - \$200,000	14.36	20.9
Above \$200,000	2.10	6.9

### Education Level

Educational Attainment	Our Sample (%)	Census Benchmark (%)
Did not complete high school	2.98	12
High school graduate	21.73	27.1
Associates Degree/Some College	42.07	28.9
Bachelor's Degree	24.35	19.7
Advanced Degree	8.87	12.3

Across categories, our sample closely matches the Census benchmarks. Our biggest discrepancies are that (1) we under-estimate senior citizens, (2) we we under-estimate the least well-educated (and over-estimate those with some college or a bachelor's degree), and (3) under-estimate the top quarter of the income distribute. These are well-known limitations of any survey sampling procedure, not just our own—problems #1 and #2 are linked in that those populations are not online, and those with high incomes are also typically under-represented across all survey modes.

The other significant gap is that we under-estimate the fraction of the population that is Hispanic or Latino, but this is in part a methodological difference. The Census asks about ethnicity (Hispanic/Latino) separately from race, whereas we combine them into one question. As a result, our estimates for Hispanic/Latino citizens are measuring a different construct from the Census benchmark.

Overall, however, our sample closely matches the Census benchmarks across these different categories.

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<sup>20</sup> 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.

## Supplementary Information 2: Full question wordings for measures

Participants read the following introduction prior to answering the affective polarization questions. “We are next going to ask you a set of questions about ordinary people (e.g., voters) who are [Republicans and Democrats / Democrats and Republicans]. Please take your time, and do your best to answer the questions about these people.”

The participants were then asked the following questions. Where the word “[CONDITION]” currently is placed, the participants saw one of the following options depending on which treatment group they were placed in.

1. [Republicans/Democrats]
2. [Republicans/Democrats] who rarely talk about politics.
3. [Republicans/Democrats] who occasionally talk about politics.
4. [Republicans/Democrats] who frequently talk about politics.
5. Moderate [Republicans/Democrats]
6. Moderate [Republicans/Democrats] who rarely talk about politics.
7. Moderate [Republicans/Democrats] who occasionally talk about politics.
8. Moderate [Republicans/Democrats] who occasionally talk about politics.
9. [Conservative Republicans/Liberal Democrats]
10. [Conservative Republicans/Liberal Democrats] who rarely talk about politics.
11. [Conservative Republicans/Liberal Democrats] who occasionally talk about politics.
12. [Conservative Republicans/Liberal Democrats] who frequently talk about politics.

### *Feeling Thermometer*

We’d like you to rate how you feel towards [CONDITION] 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 or candidates.

### *Trait Questions*

We’d like to know more about what you think about [CONDITION]. Below, we’ve given a list of words that some people might use to describe them. For each item, please indicate how well you think it applies to [CONDITION]: not at all well; not too well; somewhat well; very well; or extremely well.

Terms: Patriotic, Intelligent, Honest, Open-minded, Generous, Hypocritical Selfish Mean  
Response Options: Not at all well, Not too well, Somewhat well, Very well, Extremely well

### *Trust*

How much of the time do you think you can trust [CONDITION] to do what is right for the country?

Response Options: Almost never, Once in a while, About half the time, Most of the time, Almost always

### *Social Distance*

How comfortable are you having close personal friends who are [CONDITION]?

Response Options: Not at all comfortable, not too comfortable, somewhat comfortable, extremely comfortable.

How comfortable are you having neighbors on your street who are [CONDITION]?

Response Options: Not at all comfortable, not too comfortable, somewhat comfortable, extremely comfortable.

Suppose a son or daughter of yours was getting married. How would you feel if he or she married someone who is a [CONDITION]?

Response Options: Not all all upset, Not too upset, Somewhat upset, Extremely upset

### *Perceptions of Out-Partisans (Condition 13)*

To measure the perceptions of out-party members, the following questions were asked.

Which point on the scale below, best politically describes the typical [Republican/Democrat]

Response Options: Liberal, Moderate, Conservative

How often do you think [Republicans/Democrats] talk about politics?

Response Options: Rarely, Occasionally, Frequently

### *Pre-Test*

We pre-tested the words in our treatments to ensure that the participants viewed the words as we hoped they would. The pre-test was conducted on Amazon's Mechanical Turk (N=660).

Pre-test participants were first asked about the frequency words—participants were randomly assigned to one word, as follows.

“Imagine that you were going to have dinner with someone who [rarely/occasionally/some times/frequently] talks about politics. In a 2-hour dinner, what percentage of the time do you think this person would spend talking about politics?”

The percent of time spent discussing politics looked like this:

Means: Rarely: 18%, Occasionally: 32%, Sometimes: 33%, Frequently 52%

Medians: Rarely: 5%, Occasionally: 20%, Sometimes: 22%, Frequently 52%

The less frequent discussion means are skewed by a few people stating they would talk about politics the entire time possibly because they would want to talk about politics.

They were then asked about the ideology measures—participants were randomly assigned to one type of person, as follows.

“Imagine now that you are having dinner with a different person, and this person describes him/herself as a [Democrat who is moderate/Republican who is moderate/ Democrat who is liberal/Republican who is conservative]. Where on the scale below would you think he/she falls in terms of overall ideology?”

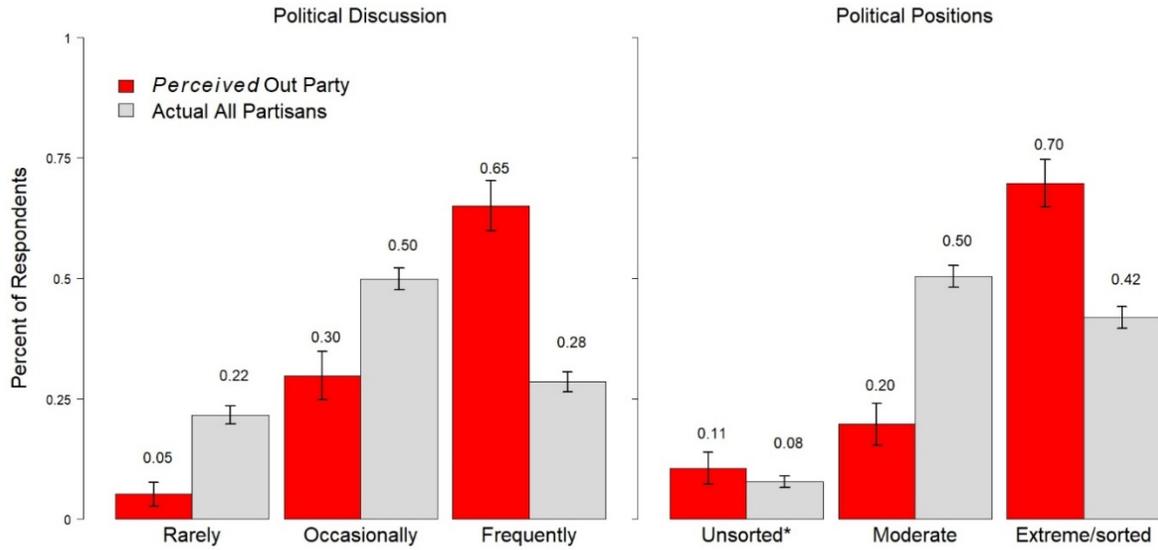
Response Options: (1) Very liberal, (2) Mostly liberal, (3) Somewhat liberal, (4) Moderate, (5) Somewhat conservative, (6) Mostly conservative, (7) Very conservative

The table presents the means for all respondents and then by the party of the respondent.

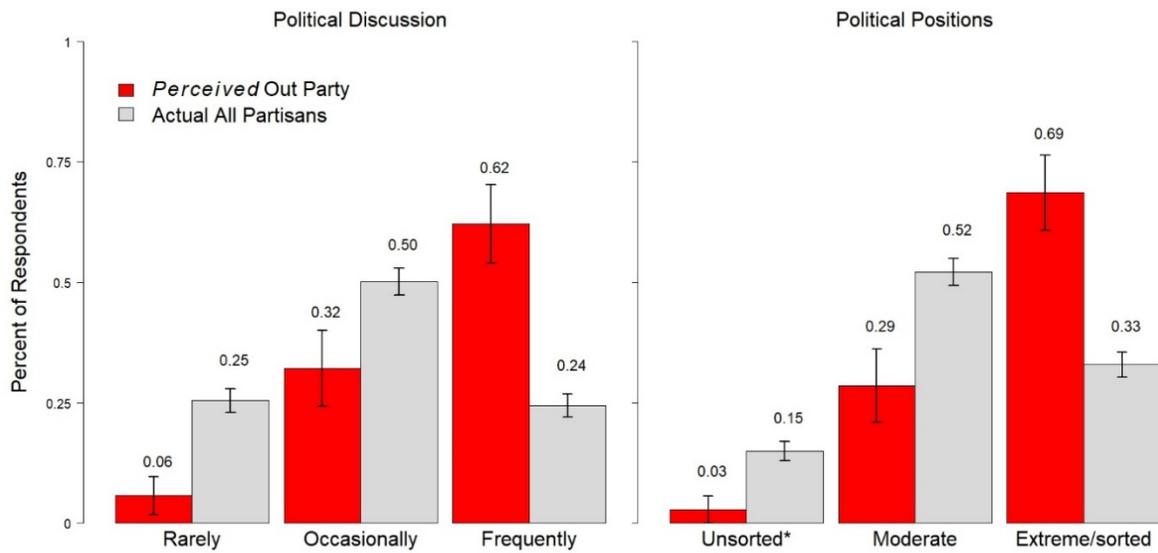
	Liberal Democrat	Moderate Democrat	Moderate Republican	Conservative Republican
All respondents	2.6	3.4	5.0	5.8
Democrats	2.6	3.3	5.0	5.9
Independents	2.2	3.3	5.1	6.0
Republicans	2.9	3.8	4.9	5.6

## Supplementary Information 3: Perceptions and actual levels for Democrats and Republicans

### A. Democrats (as perceived by Republicans and actual Democratic levels)



### B. Republicans (as perceived by Democrats and actual Republican levels)



#### Supplementary Information 4: Manipulation Check and Benchmarking

We conducted two checks to ensure the validity of our data. The first is a manipulation check to ensure that our participants heeded our instructions to focus on ordinary voters—rather than elites—when rating partisans. Relying on a post-treatment measure that asks participants who they were thinking about when they rated partisans, we see strong evidence that participants were focusing on ordinary voters, suggesting that our results can speak directly to patterns of affective polarization in the electorate. Specifically, pooling conditions 1 and 12, we find that 88% of participants report that they thought of voters when rating the out-group and 89% report that they thought of voters when rating the in-group. The correlation between in-group and out-group categorizations is .82, suggesting most participants were keeping the same categories in mind as they rated them. Given that condition 13 is somewhat different from the other conditions, we consider it independently and again find that clearly respondents were thinking of voters rather than elites: 86% report that they were thinking of voters when rating the out-group and 85% report the same for the in-group; the correlation is again high, at .76. We also conducted a multinomial logit to consider whether categorizations differed significantly by condition; we find no evidence that individuals in a particular condition were more or less likely to categorize the targets differently.

Our second check focuses on benchmarking. Since our goal is to offer a re-interpretation of extant data collections, it is important that the patterns in condition 1—the condition that reflects traditional measurement practices—are similar to existing data. We compare the condition 1 ratings to Druckman and Levendusky (2019), which include similar measures. Our data reflect comparable levels of ratings (and also match other work on particular measures which cohered with Druckman and Levendusky's ratings). Specifically, Druckman and Levendusky (2019) report the following means for out-party *voter* conditions: thermometer: 28.79; traits: 2.33; trust: 1.89; and social distance: 3.22. The means in our condition 1 are thermometer: 30.29 (SD = 24.04; N=456); traits: 2.49 (SD = 0.81; N=452); trust: 1.94 (SD = 0.89; N=454); and social distance: 2.99 (SD = 0.76; N=454). They are thus similar albeit it a bit higher for the thermometer, traits, and trust.

### Supplementary Information 5: Pure Independents

	Coef.	Std. Err.
<i>Talk Conditions</i>		
Rarely	0.051	0.018
Occasionally	-0.023	0.018
Frequently	-0.034	0.018
<i>Ideology Conditions</i>		
Moderate	0.016	0.017
Extreme	-0.005	0.015
Constant	0.502	0.013
N		951
R <sup>2</sup>		0.036

*OLS Model. Pure independents rated both parties and the level of analysis is the participant-party—that is, there are 2 cases for each participant. Standard errors are adjusted for 478 participants. Dependent variable is the mean rating for all affective polarization measure for each party. The variable ranges from 0 to 1 with larger values indicating greater positive views of the party's paritsans.*

**Supplementary Information 6: Differences in In-Party and Out-Party Ratings**

	Coef.	Std. Err.
<i>Talk Conditions</i>		
Rarely	-0.128	0.012
Occasionally	-0.048	0.012
Frequently	-0.023	0.012
<i>Ideology Conditions</i>		
Moderate	-0.028	0.011
Extreme	0.011	0.011
Constant	0.285	0.009
N	2,871	
R <sup>2</sup>	0.044	

*OLS Model. Dependent variable is mean the difference between in-party and out-party ratings for all of the affective polarization questions. The variable can range from -1 to 1 with positive values indicating greater in-group preference.*

**Supplementary Information 7: Results for each type of affective polarization measure**

	Feeling Thermometers		Traits		Trust		Social Distance	
	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.
<i>Talk Conditions</i>								
Rarely	0.186	0.012	0.108	0.010	0.122	0.012	0.043	0.013
Occasionally	0.095	0.012	0.034	0.010	0.030	0.012	-0.047	0.013
Frequently	0.019	0.012	-0.004	0.010	-0.017	0.012	-0.098	0.013
<i>Ideology Conditions</i>								
Moderate	0.067	0.011	0.037	0.009	0.048	0.011	-0.004	0.011
Extreme	-0.019	0.011	-0.006	0.009	-0.006	0.011	-0.028	0.011
Constant	0.316	0.009	0.370	0.008	0.238	0.009	0.631	0.010
N	2,954		2907		2928		2925	
R <sup>2</sup>	0.102		0.058		0.056		0.042	

*All variables are coded 0-1. Traits and social distance are means of the answers to all questions of that type. In all cases, larger values indicate less out-group animus. All models are O.L.S. Models.*

**Supplementary Information 8: Reanalyzing Table 2's model with control variables.**

	Coef.	Std. Err.
<i>Talk Conditions</i>		
Rarely	0.102	0.009
Occasionally	0.021	0.009
Frequently	-0.025	0.009
<i>Ideology Conditions</i>		
Moderate	0.030	0.008
Extreme	-0.010	0.008
<i>Control Variables</i>		
Age	-0.017	0.012
Woman	-0.003	0.007
White	0.025	0.014
Black	-0.008	0.016
Hispanic	0.017	0.017
Education	-0.034	0.023
Income	0.058	0.013
Partisan Strength	-0.063	0.008
Constant	0.445	0.019
N		2,852
R <sup>2</sup>		0.109

*OLS model. All variables are coded from 0 to 1.*

### Supplementary Information 9: Condition-by-condition comparisons

The following table provides the results of difference-of-means (t) tests for each pair of treatment conditions. This looks at the full out-party scale of affective polarization measures. In each cell, the top number reports the difference of means with positive values indicating that the column treatment's mean was greater than the row treatment's mean. The p-values are two-tailed p-values.

	1	2	3	4	5	6	7	8	9	10	11	12
Discussion	None	Rare	Occ.	Freq.	None	Rare	Occ.	Freq.	None	Rare	Occ.	Freq.
Ideology	None	None	None	None	Mod.	Mod.	Mod.	Mod.	Sorted	Sorted	Sorted	Sorted
1	XXXX	-0.08 p=0.00	0.00 p=1.00	0.04 p=0.00	0.00 p=0.87	-0.12 p=0.00	-0.04 p=0.01	0.00 p=.80	0.02 p=0.11	-0.07 p=0.00	0.01 p=0.70	0.05 p=0.00
2		XXXX	0.08 p=0.00	0.13 p=0.00	0.09 p=0.00	-0.04 p=0.01	0.05 p=0.00	0.09 p=0.00	0.11 p=0.00	0.02 p=0.28	0.09 p=0.00	0.13 p=0.00
3			XXXX	0.04 p=0.00	0.00 p=0.89	-0.12 p=0.00	-0.04 p=0.02	0.00 p=.83	0.02 p=0.16	-0.07 p=0.00	0.01 p=0.74	0.05 p=0.00
4				XXXX	-0.04 p=0.01	-0.17 p=0.00	-0.08 p=0.00	-0.04 p=0.01	-0.02 p=0.11	-0.11 p=0.00	-0.04 p=0.01	0.00 p=0.95
5					XXXX	-0.13 p=0.00	-0.04 p=0.02	0.00 p=0.95	0.02 p=0.24	-0.07 p=0.00	0.00 p=0.87	0.04 p=0.01
6						XXXX	0.09 p=0.00	0.13 p=0.00	0.14 p=0.00	0.05 p=0.00	0.13 p=0.00	0.17 p=0.00
7							XXXX	0.04 p=0.01	0.06 p=0.00	-0.03 p=0.04	0.04 p=0.00	0.08 p=0.00
8								XXXX	0.02 p=0.23	-0.07 p=0.00	0.00 p=0.91	0.04 p=0.01

9	XXXX	-0.09 p=0.00	-0.02 p=0.27	0.02 p=0.12
10		XXXX	0.07 p=0.00	0.11 p=0.00
11			XXXX	0.04 p=0.01
12				XXXX

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### Supplementary Information 10: In-Party Ratings

	Coef.	Std. Err.
<i>Talk Conditions</i>		
Rarely	-0.025	0.007
Occasionally	-0.028	0.007
Frequently	-0.047	0.007
<i>Ideology Conditions</i>		
Moderate	0.003	0.006
Extreme	-0.001	0.006
Constant	0.700	0.005
N		2,896
R <sup>2</sup>		0.015

*OLS Model. Dependent variable is the mean in-party rating for all affective polarization measure. The variable ranges from 0 to 1 with larger values indicating greater positive views of the in-party.*

**Supplementary Information 11: OLS model for figure 2**

	Coef.	Std. Err.
Condition 6 (Rare/Moderate)	0.134	0.014
Condition 12 (Frequently/Sorted)	-0.041	0.015
Constant	0.423	0.008
N	883	
R <sup>2</sup>	0.13	

*OLS model of full out-party scale of affective polarization measures. Condition 1 (no discussion or ideology information given) is the reference category.*

## Supplementary Information 12: Effect Sizes

	Change due to treatment	Cohen's d	Cohen's d classification
<b><i>Thermometer Scores</i></b>			
No information about frequency of discussion vs. Rarely discuss	19 degrees (p<0.001)	0.77	Medium (Threshold 0.5)
No information about frequency/ideology vs. Rarely/moderate condition	25 degrees (p<0.001)	1.04	Large (Threshold 0.8)
Frequently/sorted vs. Rarely/moderate condition	24 degrees (p<0.001)	0.93	Large (Threshold 0.8)
No information about frequency/ideology vs. Frequently/sorted condition	1.5 degrees (p=0.45)	0.06	Very Small (Threshold 0.02)
<b><i>Full Index (0 to 1 scale)</i></b>			
No information about frequency of discussion vs. Rarely discuss	0.10 (p<0.001)	0.58	Medium (Threshold 0.5)
No information about frequency/ideology vs. Rarely/moderate condition	0.13 (p<0.001)	0.76	Medium (Threshold 0.5)
Frequently/sorted vs. Rarely/moderate condition	0.17 (p<0.001)	1.04	Large (Threshold 0.8)
No information about frequency/ideology vs. Frequently/sorted condition	0.06 (p=0.01)	0.22	Small (Threshold 0.2)