



The Differential Effects of Actual and Perceived Polarization

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Abstract

Recent work on the nature of mass polarization has revealed that individuals perceive more polarization than actually exists, meaning they assume that out-party members are farther from them on the liberal-conservative continuum than they actually are according to measures of their personal preferences. But what are the consequences of this biased perception, and how do they differ from the consequences of actual polarization? In this paper, we use American National Election Studies data to estimate actual and perceived polarization at the individual level from 1972–2012. We find that the two types of polarization, while related themselves, are differentially related to other attitudinal and behavioral outcomes of normative interest. Namely, we find that perceived polarization is more strongly related to negative affective evaluations of out-parties and out-party candidates, voting, participation, trust, and efficacy than is actual polarization, which shares much weaker relationships with these constructs.

Keywords Polarization · Identity · Affect · Perceptions of polarization · Voting · Trust

Replication files can be found on the *Political Behavior* Dataverse.

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Introduction

Polarization—the idea that there is a widening gulf on attitudes about various political issues and stimuli between groups in the American mass public—has received great attention in recent decades (Abramowitz and Saunders 2008; DiMaggio et al. 1996; Fiorina and Abrams 2008). Though attitudes about public policy issues served as an intuitive starting point for investigations of mass polarization, recent work has uncovered much sharper divisions between partisans and ideologues along more affective, emotional grounds. Where the level of mass polarization with respect to attitudes about political issues is debatable (Abramowitz and Saunders 2008; Fiorina and Abrams 2008), such evidence with respect to feelings about political candidates, parties, and groups—the central objects of the political world—is indisputable (Iyengar et al. 2012; Iyengar and Westwood 2015; Mason 2015). A presumed source of this affective polarization—a distinct, though related, “layer” of polarization—is peoples’ perceptions about the conceptual distance between the parties and candidates.

Like affective polarization, the perception of polarization between parties and candidates is widespread and growing (Ahler 2014; Westfall et al. 2015). These perceptions need not be—and, indeed, are in actuality not—accurate. Yet, the presumed consequences are great. While Ahler (2014) and Westfall and colleagues (2015) have provided some evidence for the consequences of perceived polarization at the aggregate level, we know very little about the consequences of perceptions of polarization for individuals’ orientations toward the government or other types of polarization. Moreover, it is unclear how the consequences of perceived polarization might differ from those associated with actual polarization. Because perceptions are inherently social, we expect that merely perceiving large differences between the parties, regardless of the true—and to some individuals, unknown—state of affairs, can lead to greater affective or symbolic divides between partisans than “true” polarization might. In this sense, “false” or “misinformed” conceptualizations of polarization may be more consequential than “true” polarization, regardless of whether it exists.

In this paper, we take a first step toward empirically addressing these concerns. Using the American National Election Studies cumulative file data from 1972–2012, we construct unique individual-level measures of perceived and actual polarization that allow for valid comparisons of both constructs across time. We employ these measures to investigate three sets of relationships: (1) the differential individual-level correlates of perceived and actual polarization, (2) the differential consequences of perceived and actual polarization for orientations toward the government and participation in the political process, and (3) the relationship between the two types of polarization and affective evaluations of the parties, candidates, and ideological groups. While perceived polarization has risen more sharply over time than has actual polarization, the effects of these two constructs are fairly similar when it comes to efficacy. Perceived polarization is, however, more strongly related to self-reported voting, participation, trust in government, and the sharp divisions in the affective evaluations of political

objects—a particularly salient finding given the growth, reach, and implications of affective polarization. Taken together, our findings suggest that while perceptions of intense polarization do not disenchant people with the political process so much so that they stop participating or voting, such perceptions are strongly related to the affective reactions to political stimuli that serve as the basis for affective political divides.

Background

Although some debate persists as to whether the American public is polarized on matters of policy (e.g., Abramowitz and Saunders 2008; Fiorina and Abrams 2008), there is relatively broad consensus that individuals and groups are polarized *affectively*. In other words, while there is occasional convergence on issue attitudes across partisan and ideological lines, there is widespread divergence between partisans and ideologues when it comes to affective evaluations of the parties and candidates (e.g., Huddy et al. 2015; Mason 2015; Suhay 2015). In particular, individuals harbor loathsome feelings toward members of the out-group; these attitudes influence judgments as presumably apolitical as one's willingness to offer a counter-partisan employment (Iyengar et al. 2012; Iyengar and Westwood 2015).

Although in-group attachments do not *require* hostility toward out-groups (Allport 1954), group conflict has increased the affective disagreement between those with disparate social identities over time (Iyengar et al. 2012; Mason 2015; Tajfel and Turner 1979). For instance, individuals who identify with a party are likely to hold negative views of members of the other party, such that co-partisans are believed to exhibit positive socio-political traits (e.g., patriotism) while counter-partisans are not (Iyengar et al. 2012). Moreover, in-group peers offer approval when one bucks out-group norms and shames them for conformity (Suhay 2015).

While the impacts of affective polarization are myriad, these inter-group biases are not always based in fact and the extremity with which people hold polarized beliefs—both affective and issue-based—is often a function of “false” perceptions (e.g., Goel et al. 2010; Kenyon 2014). As many social psychologists have demonstrated (e.g., Pronin et al. 2002), people overestimate the extent to which opposing groups disagree. For example, individuals perceive greater dissimilarity on affirmative action preferences than truly exists (Sherman et al. 2003). Simply put, “Americans perceive more polarization...than actually exists” (Levendusky and Malhotra 2016b, p. 378).

Yet, these (false) perceptions are far from harmless; the social world is based on perceptions, and it is these perceptions that individuals act on. More tangibly, there is some evidence that perceptions of polarization are related to participation in campaign activities and issue attitude extremity (Westfall et al. 2015). Beyond these limited findings, we know very little about the effect of perceptions of polarization when it comes to other political behaviors, attitudes, and orientations of normative and empirical interest. It is also not entirely clear what the role of perceived polarization is when simultaneously considering true levels of polarization. Should one high in actual polarization accurately perceive herself to be distant from her out-group,

actual disagreement may motivate certain behaviors and evaluations. Conversely, if one's actual level of disagreement is not in alignment with her perceived level of disagreement, it is not clear which variant of polarization would motivate behaviors and evaluations, or whether their effects would differ to an appreciable degree. Finally, if one is aware of her true level of distance from the out-party, but receives some benefit—perhaps expressive benefits—from communicating or perceiving a greater divide, actual and perceived polarization may relate to activities and orientations of interest in notably different ways.

As Levendusky and Malhotra (2016b) note, “False polarization is the difference between two quantities: (1) the distance between the perceived positions of Group A and Group B; and (2) the distance between the *actual* positions of Group A and Group B.” While Westfall et al. (2015) demonstrate that perceiving greater polarization between Republicans and Democrats and between the parties' presidential candidates influences several behaviors (e.g., voting, donating money, etc.), the second quantity Levendusky and Malhotra (2016b) reference has received fairly little attention, and almost no attention with respect to perceived polarization, specifically. Here, we propose an important variant of the second quantity, one where we estimate the distance between an individual in Group A and the average position of members of Group B. We believe that appropriately accounting for the degree to which one is truly deviant from his or her out-group is an important consideration when investigating the impact—especially the negative impact—of perceptions of distance from one's out-group.

Individual-Level Polarization

Rather than attempting to determine which components are true or false with respect to any type of polarization, we consider two types of individual orientations toward members of the out-party: one perceptual and one based on differences between an individual's preference and the out-group's preference. By measuring individual perceived and actual polarization, we are able to gain a tighter grip on where individuals fit themselves into the ill-defined conceptual space in which perceived and actual positions of political objects are arrayed. While it is important to note whether individuals perceive great distances between the parties and candidates, it is even more revealing if they consider *themselves* to be substantially distant from the out-party and its representatives. This is an important development over previous research on perceived polarization. Where other work assumes that the perceived distance between the two parties may translate into individual-level outcomes (or, lack thereof), such outcomes can actually be tested with respect to the individuals' perceived distance between their self and members of the out-party. Since individuals are revealing where they reside along the ideological dimension, and then orienting the out-party along the same dimension *after* they have anchored themselves, we know this distance is innately meaningful in some sense. Indeed, this measure of polarization has the benefit of necessarily being “true”—it is indicative not only of how the individual has structured the political world for herself, but how she fits herself into that world.

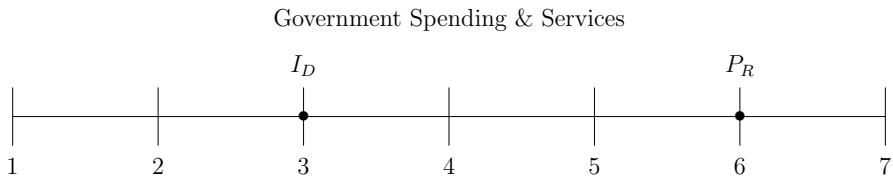


Fig. 1 Government spending and services policy space with a democratic respondent's personal policy preference and their perception of the republican party's policy preference

Similarly, the foundation of any measure of actual polarization should be the individual. How different are the conceptual positions of individual Democrats vis-à-vis Republicans, and vice versa? Using the leverage gained by anchoring measures of both types of polarization to the individual, we are able to construct individual-level measures of polarization. And, these measures are comparable and capable of revealing the differential effects of individual's orientations toward different objects in the political world on their orientations toward the government, involvement in politics, and affective evaluations of political candidates, parties, and groups. It is to formalizing these measures to which we turn in the following section.

Data and Analytical Strategy

In order to explore the differential effects of perceived and actual polarization, we require data containing both individuals' personal preferences and attitudes, and the preferences of the out-party as perceived by those same individuals. The ANES Cumulative File, particularly the data collected from 1972 to 2012, is suitable for this purpose. We rely primarily on seven-point issue attitude questions since respondents were asked to place themselves and the Democratic and Republican Party on a scale ranging from the most conservative policy preferences to the most liberal ones. To construct our measure of perceived polarization, we first calculated the absolute value of the difference between an individual's placement along the issue attitude scale and their placement of the party with which they do not affiliate. Consider Fig. 1 for an example.

The policy space is defined by attitudes—along a single seven-point liberal-conservative continuum—about the preferred level of government spending and services. A “1” denotes the most liberal position one could take, a “7” denotes the most conservative position one could take, and a “4” denotes a moderate position. Individual I , who happens to identify with the Democratic Party (hence the D subscript), places herself at a moderately liberal position on the government spending and services scale, 3. The same Individual I_D places the Republican Party, P_R , at a very conservative position on the scale, 6. The absolute value of the difference between individual I_D 's position and her perception of the Republican Party's position, P_R , is $|3 - 6| = 3$. This operation is repeated for issues scales probing respondents'

attitudes about aid to blacks and other minorities, government guaranteed jobs and standard of living, defense spending, and party and candidate positions along the liberal-conservative ideological continuum.¹ All issue questions allow for seven response options and all are balanced. The least amount of polarization one could perceive is none at all. This would be reflected in a perceived polarization score for that issue of 0—the respondent places herself at the exact same position as she places the out-party. The maximum polarization one could perceive would result in a score of 6. In this instance, the respondent would need to place herself and the out-party and completely opposite poles along the scale.

After carrying this operation out over all four policy questions and the ideological self-identification items (for out-party and out-candidate), the items were combined to form a measure of average perceived polarization across all issue domains and ideology. Though our measure of perceived polarization follows that developed by Westfall and colleagues (2015) in some ways, it is distinct in two important ways. First, we measure *individual-level* perceptions. Perceived polarization is determined by individuals' own orientation to the perceived orientation of the out-party, rather than the perceived difference between the parties. In other words, our measure captures perceived distance between the individual and the out-party, whereas Westfall et al. only capture perceived differences between the parties and party candidates. Though both approaches tell us something about how individuals perceive the parties with respect to the current political landscape, our measure emphasizes individuals' orientations toward groups who differ from them when it comes to partisanship and ideology, rather than a more abstract perception of the orientation of the parties with respect to each other.

We also take a different approach to combining these individual measures of perceived polarization into a single, more reliable measure. Rather than merely summing these values as Westfall et al. (2015) do, we factor analyze them such that contribution of the perceived polarization scores for a given item were allowed to vary by policy. In other words, where Westfall et al. (2015) create their perceived polarization scale by averaging across issues, we created a *weighted* sum where the weights were determined using a confirmatory factor analysis model. This approach also allows us to constrain the individual perceived polarization items to a single scale across time.²

Coincidentally, the exploratory factor analyses conducted before the confirmatory ones were estimated confirmed the unidimensionality of the perceived polarization scale, a property only assumed in previous work. This property is rather important

¹ We use these issues because they are available in each year of our analysis.

² Because a latent variable lacks an inherent metric, one of the observed variables must be used to scale the latent variables. Since the perceived and actual ideological identification items were available across all surveys, we use those items to scale the perceived and actual polarization latent variables. That is, we constrain those factor loadings to equal 1 across all years. We also constrained the constants for the ideological identification items across years to the 1972 constants for those items. The combination of these two constraints allows for estimation of the perceived and actual polarization scales on the same metric across years. In other words, loadings of observed variables and levels of the latent variables—perceived and actual polarization—can both be compared across time.

to the validity of our measurement strategy, since our measure of perceived polarization is anchored to the individual. That variance across the individual-oriented indicators of perceived polarization is so cleanly explained by a single latent factor suggests that individuals orient themselves and the parties along a single conceptual continuum in very similar ways. This is particularly striking given the large number of individuals and years across which this analysis was conducted. We would expect, especially given low levels of interest in and knowledge about politics, that these indicators might occupy a higher dimensional space. Rather, it appears that people do, in fact, orient a substantial proportion of the political world along a single left-right dimension.³

Although some suggest that individuals may be considering political elites when placing the parties in policy space, which would merely demonstrate that they accurately perceive elites to be polarized and can reflect the “disconnect” between the masses and elites (Fiorina and Levendusky 2006; Levendusky and Malhotra 2016b), we believe this concern can be assuaged. First, Westfall et al. (2012) demonstrate that people are indeed thinking about “parties” in terms of those in the electorate by whom the party is comprised. That is, individuals are thinking of their fellow citizens when asked to place the Republican and Democratic parties. Additionally, Levendusky and Malhotra (2016b) show levels of perceived polarization similar to those demonstrated below when using survey items designed to invoke a “typical” member of the out-party (i.e., a member of the mass party). Thus, we feel comfortable that our measure of perceived polarization reflects how distant one feels from the typical member of her out-party, as opposed to how distant she might feel from the elites in the out-party.⁴

We employ the same items to construct a measure of actual polarization. Rather than calculate the conceptual distance between individuals’ positions along each issue scale and their *perceptions* of the out-party preference, however, we calculate the conceptual distance between individuals’ positions and the average position of out-party identifiers.⁵ Thus, for individual Democratic Party identifier I_D , we take

³ See the Supplemental Appendix for more information about the factor models, such as variable factor loadings and the proportion of variance explained by the first factor.

⁴ Still, we admit that our measure of perceived polarization is a potentially liberal one. If people are thinking of the parties as elites, then we might expect that perceived polarization is higher than it would otherwise be if they were thinking of members of the out-party in the electorate. Yet, there is a great deal of evidence that partisans in the electorate are quite socially (indeed, even physically) “distant” from one another. Members of the two parties live in increasingly more homogenous neighborhoods (Bishop 2009), decreasingly marry across party lines (Alford et al. 2011), discriminate against each other to a greater extent than they do based on race (Iyengar and Westwood 2015), can scarcely agree on where to shop (Chapin 2015), and even smell differences between in- and out-party members (McDermott et al. 2014)! If all of these seemingly politically unrelated, yet sharp, social divides persist among members of the parties in the electorate, we have little reason to believe that the “true” reference group (i.e., party elites, or party members in the electorate) is of any consequence when it comes to our measure of perceived polarization. Our measure of perceived polarization is but a particular operationalization of social polarization, just like the others mentioned above.

⁵ As a result of using the average position of the out-party, true Independents are omitted from our analyses. We also constructed the actual polarization measure using the median, rather than mean, out-party identifier as a robustness check. The correlation between this alternative operationalization and the one we employ below is 0.98, and no substantive results from any analysis differs employing the median measure.

the absolute difference between I_D and the mean position of all respondents who identified as Republicans. As with the perceived polarization measure, we carried this operation out across all available issue scales. Since we do not have access to the “true” positions of the candidates, we cannot calculate actual polarization between individuals and the candidates along the ideological identification scale; it is therefore omitted.⁶ Once again, we employ a confirmatory factor analytic model to provide a weighted sum of these individual actual polarization items, and constrain them to the same scale across time. The scale is unidimensional, and therefore appropriately represented by a single scale variable.

The distributions of the perceived and actual polarization scores, over the entire 1972–2012 period, are represented via kernel density estimates in Fig. 2. They are quite similar in shape with slight positive skews and sharp peaks just below their means. This accords with the modal empirical finding of some, but not overwhelming, mass polarization (Fiorina and Abrams 2008). We take this as additional evidence that the “parties” being considered in the ANES questions are “mass” parties. As Fiorina and Levendusky (2006, p. 58) show, Americans are very aware that there are important differences between the political parties. To find only middling levels of perceived polarization, as we do, would be inconsistent with this awareness if respondents were thinking of elites when placing the parties.

Figure 3 presents our individual-level perceived and actual polarization scores in aggregate from 1972–2012. In the 1970s, the levels of actual polarization were just about equal with perceived. In the 1980s, perceived polarization began to separate from actual, and the disparity has increased markedly since the 1990s. Where actual polarization has—congruent with plenty of research (e.g., Fiorina and Abrams 2008; Levendusky and Pope 2011)—increased only very minimally over the 40 year span, perceived polarization has increased approximately 18%—a substantial increase. Thus, since the 1980s, individuals have increasingly perceived greater distances between themselves and the out-party on important issues of the day than actually existed at any given time point. Though we have only recently considered perceptions of polarization, it appears that they have exacerbated the true state of polarization for much of the past 40 years.

Importantly, our measures prove to be distinct from those employed in other research. Where Westfall et al. (2015, p. 149) show general temporal increases in

⁶ Though we technically employ measures of both symbolic ideological orientations (ideological self-identifications) and operational ideological orientations (issue positions), we have little reason to believe that this influences our actual and perceived polarization measures. First and foremost, we wish to emphasize that the items scale together very well. Additionally, from a measurement perspective, we are not merely utilizing measures of ideological self-identification and issue attitudes. Instead, the individual polarization items are measures of individuals’ orientations toward out-party members. Thus, the major source of variance in the items is no longer symbolic or operational ideological concerns, but conceptual distances along a general ideological dimension. Since these distances are presumably—and, in fact, empirically—similar across items, the items are highly correlated and can, therefore, be explained by a single latent factor. Our modeling strategy implies that the idiosyncrasies of a given item are of no concern; indeed, they are treated as measurement error. Rather, our strategy focuses on capturing the average perceived and actual conceptual distances between individuals and out-party members along the liberal-conservative ideological dimension.

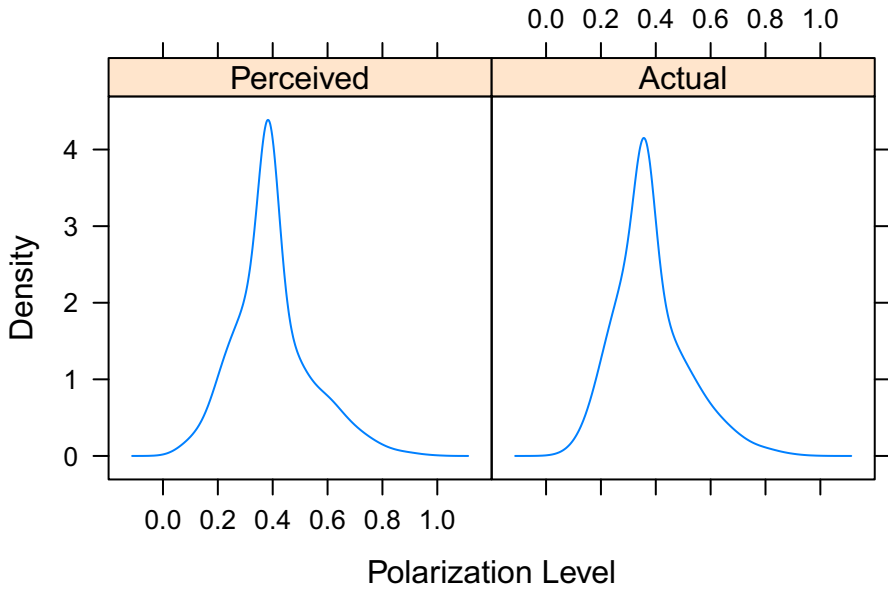


Fig. 2 Distributions of perceived and actual polarization scores, pooled from 1972–2012

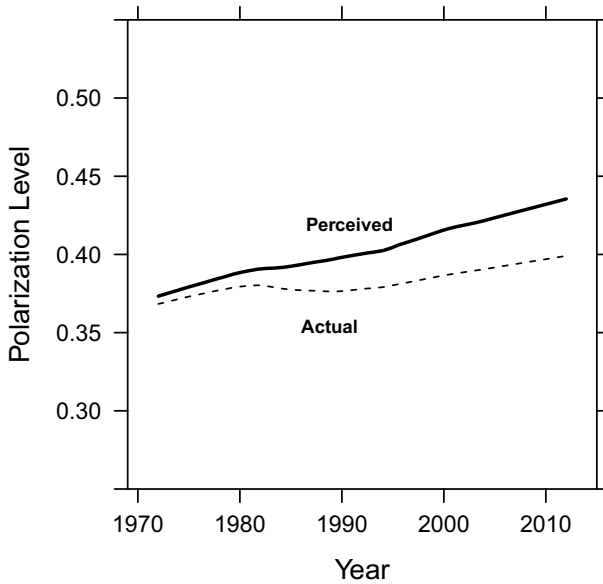


Fig. 3 Aggregate perceived and actual polarization over time, 1972–2012

perceived and actual polarization that track one another, our measurement strategy shows this to be true only until about 1990, when actual polarization remained relatively static and perceived polarization continued to increase. We argue that this divergence from previous measures is due to using individuals as anchors in the polarization space. That is, we are measuring the difference between one's perception of the out-party and oneself, which allows us to conceptually bridge across the two measures of polarization.

With operationalizations of our key constructs of interest, we turn to an empirical analysis that proceeds in three steps. First, we consider the differential correlates of perceived and actual polarization. In particular we consider which, and to what extent, fundamental individual characteristics and structural factors such as the strength of partisan and ideological orientations, interest in and knowledge of politics, and elite polarization are differentially related to the two types of polarization. Second, we consider the potential consequences of perceived and actual polarization for individuals' orientations toward the government and politics. We operationalize general orientations in several ways, including participation in campaign activities, voting, efficacy, and generalized trust in government. Finally, we consider the relationship between issue-based perceived and actual polarization and the affective polarization that has come to most strongly characterize mass political behavior.

Though fairly little is known about the *individual-level* correlates or effects of perceived or actual polarization since polarization is most often considered at the aggregate level (exceptions include: Abramowitz and Saunders 2008; Rogowski and Sutherland 2016; Westfall et al. 2015), we do have some specific expectations regarding the direction and magnitude of relationships. If traditional theories of polarization hold, actual polarization should be negatively related to trust, efficacy, participation, and voting. We have no reason to expect anything different with respect to perceived polarization. We are, however, agnostic about the relative strength of the effects of perceived and actual polarization. Whereas perceptions strongly influence our conscious orientations, the more subconscious actual polarization presumably does just the same. The linkages between perceptions and emotions lead us to expect a positive relationship between perceived polarization and the differential affective evaluations of the two major parties, the two major party candidates in a given year, and liberals and conservatives. In this case, we expect perceived polarization to be more strongly related to affective evaluations than actual polarization, though both presumably play some role in such evaluations.

A Note on Causality

Before moving on to our empirical results, we believe it is important to briefly comment on causality. First and foremost, cross-sectional data are insufficient for determining causality. The strength of our analysis is that it allows us to use nationally representative data spanning 40 years to demonstrate the relationship between the two types of polarization and other important attitudes, predispositions, and behaviors. Inasmuch as we believe there is a causal direction, we believe that actual and perceived polarization influence one another and that they individually influence a

host of political behaviors and orientations. Yet, polarization is a state of the world; it is both *reinforced* and *reinforcing*. Engagement in the political process may exacerbate polarization, and those who are polarized may be motivated to engage (e.g., Abramowitz 2010).

Therefore, we believe it is inappropriate, and of limited substantive utility, to attempt to determine the direction of causality experimentally. Although some researchers have successfully manipulated perceived polarization by revealing the true policy positions of the political out-group (e.g., Ahler 2014; Ahler and Sood 2018), we wish to exploit existing misperceptions. As a great deal of evidence suggests, the average American does not have accurate perceptions of the out-party, its composition, or its policy positions. Our goal is to uncover which important political behaviors are connected to these misperceptions. Additionally, given that our analysis extends to 1972, we are reluctant to conclude that an experiment conducted in an era where polarization is at the political forefront can speak to the direction of relationships in, for example, 1980.

Finally, we believe the work that precedes our own that does manipulate perceptions of the other party offers empirical grounding for our suspected causal direction. Indeed, Ahler (2014) and Ahler and Sood (2018) demonstrate that experimental alterations to perceived polarization can influence a host of attitudes. Specifically, they show that misperceptions can influence one's own positions vis-à-vis the out-party. Here, we offer evidence in a similar vein, but extend the correlates of out-party misperception to actionable behaviors (i.e., participation and vote intention), more abstract orientations toward government (i.e., efficacy and trust), and affective divisions (i.e., evaluations of parties, candidates, and ideological groups). As public focus on polarization grows, and its effects on the public become clearer (e.g., Levendusky and Malhotra 2016a), those things to which it is related become of increasing normative and empirical interest.

Empirical Results

We begin our analysis with a consideration of the correlates of individual perceived and actual polarization. Even though these measures track each other to some degree in the aggregate, they are only moderately correlated at the individual level with a Pearson product-moment correlation coefficient of 0.54. This is only a moderate linear relationship, especially considering the high reliability (or, conversely, low measurement error) of our measures, which are constructed of multiple items (Ansolabehere et al. 2008). Thus, we have another piece of evidence that perceived and actual individual level polarization are distinct constructs.

In order to further understand the characteristics of perceived and actual polarization, we estimated a *multivariate* (rather than “multiple”) regression model whereby two equations—one with perceived polarization as the dependent variable, and one with actual polarization as the dependent variable—are simultaneously estimated on identical samples. The benefit of this approach over estimating two separate OLS regression models is that the simultaneous estimation allows us to perform

statistical tests across equations so that we can understand the differential relationships between the two types of polarization and their correlates. We include strength of partisan and ideological identifications, political sophistication,⁷ education, age, income, gender, race, residence in the political South, and elite polarization⁸ in the models. Thus, we have four categories of independent variables: strength of attachments to the major groupings of the political world, sophistication in reasoning about and interacting with politics, socio-demographic characteristics, and the impact of elite political behavior. The precise coding and question wording of these variables can be found in the Supplemental Appendix. All variables—including the two polarization measures—have been rescaled to range from 0 to 1 so that effects can be compared within equations, as well as across.

The results of this model⁹ are presented in Fig. 4. Each circle represents a coefficient estimate from the actual polarization equation for the corresponding independent variable along the y-axis; triangles represent the same from the perceived polarization equation. Horizontal bars represent 95% confidence intervals around those estimates. Confidence intervals that intersect the dashed vertical line are not statistically distinguishable from 0; in other words, they are not statistically significant at the $p < 0.05$ level. We are also interested in when the probability value associated with the multivariate analysis of variance (MANOVA) F -tests of the statistical difference in magnitudes of the coefficients across equations is equal to or less than 0.05. In other words, we are interested in when we can be 95% confident that the *difference* between coefficient values—our estimates of the controlled relationships between each variable and the two types of polarization—across equations is greater than 0.

This is true of all pairs of coefficients, save for residence in the South. This indicates that the correlates between actual polarization and perceived polarization are statistically different in magnitude for 10 of the 11 variables. For instance, ideological strength is a statistically significant predictor of both types of polarization, but is more strongly associated with perceived polarization than actual polarization, given its larger coefficient. But, the magnitude of the *difference* between the estimate of ideological strength for perceived polarization and the estimate of ideological strength for actual polarization is itself statistically distinct from 0. Furthermore, education has a directionally opposite effect on the two types of polarization; it is negatively related to actual polarization and positively related to perceived polarization. For some variables, such as income, female, and age, the effect is statistically significant for one variant of polarization but not the other.

⁷ To create the political sophistication variable, we estimated an exploratory factor analysis of interest in politics, knowledge as ascertained by the interviewer, and an index of participation in campaign activities and predicted individual scores along the first factor. A single factor accounts for 98% of the variance across the three indicators.

⁸ We measure elite polarization as the difference in party median DW-Nominate scores in the House for each congressional term.

⁹ The sample on which the full model was estimated included 13,320 individuals. The R^2 values are 0.239 and 0.171 for the perceived polarization and actual polarization equations, respectively.

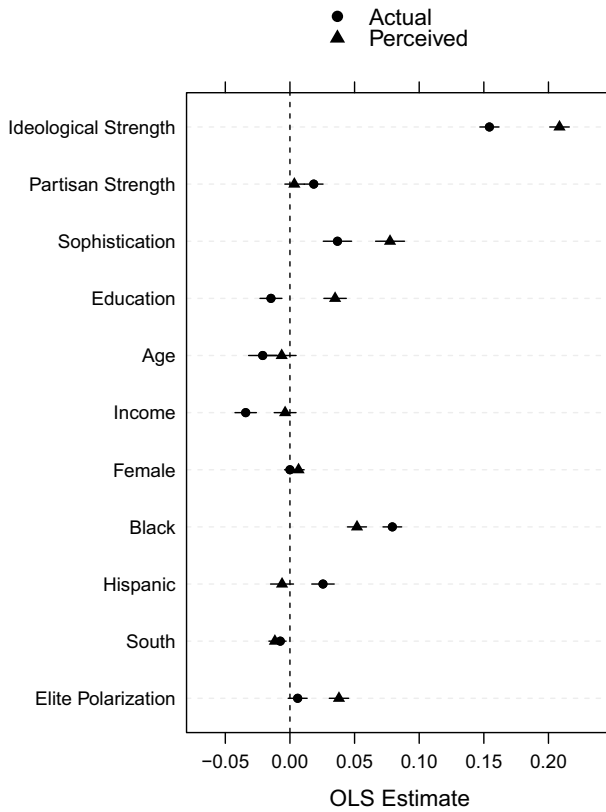


Fig. 4 Coefficient plot of multivariate regression model of perceived and actual polarization on theoretically related correlates. Circular and triangular plotting symbols depict OLS estimates of effects of independent variables on actual and perceived polarization, respectively. Solid lines represent 95% confidence intervals

While actual polarization is more strongly related to certain predictors—such as age and identifying as black or Hispanic—most correlates are more strongly related to perceived polarization. This suggests that how individuals view the out-party with respect to themselves is more strongly related to other orientations, especially strength of ideological identification, political sophistication, and education. The more engaged individuals are with the political world and the groups that occupy it, the greater distance they perceive between themselves and out-groups. Perceived polarization is also affected by elite polarization, where actual polarization is not. That is, individuals’ understanding of the terms of political debate as established by elites intensifies their own perceptions of the parties in conceptual space as divergent from their personal positions in the same space. These relationships suggest somewhat of a normative paradox: where we generally think of participation in and engagement with the political process as normatively desirable, it appears that such interactions are related to, and perhaps even cause, individuals to perceive

the political landscape as more divided than it actually is. The implications of these findings are also particularly important in the context of the relationships between perceived polarization and affective evaluations of political objects, which are discussed in greater detail below.

Polarization and Orientations Toward the Government

Next, we consider how perceived and actual polarization differentially influence several important political behaviors and orientations toward the government and politics. These are important tests for several reasons. Most importantly, they can guide us in determining whether perceived polarization has substantively different effects than actual polarization while controlling for potential confounders. That is, while many have pointed to the negative effects of perceived polarization (e.g., Levendusky and Malhotra 2016b; Westfall et al. 2015), it is not clear whether or not such effects are a result of *actual* levels of polarization. Negative behaviors and orientations—such as a lack of efficacy and avoiding the voting booth—may be due to being actually, but not perceptually, polarized. We believe this may be the case, in part, because one may gain some expressive benefits from placing themselves distant from the out-party (Ahler and Sood 2018). That is, it may be some badge of honor to perceive oneself to be—or to merely express oneself to be—far from members of the other party. Because actual polarization is not based on such perceptions and is not subject to expressive benefits, it is possible that actual polarization reflects some operational—that is, non-symbolic—deviation from the out-group.

In order to test this proposition, we estimate models where behaviors and orientations are regressed onto perceived polarization, actual polarization, and the group of relevant control variables described above.¹⁰ We operationalized orientations toward the government in several different ways. To capture the engagement element of peoples' orientations toward politics, we employ (1) an index of campaign activities in which individuals engaged and (2) a dummy variable denoting whether or not they voted in the most recent presidential election. More general attitudinal orientations toward the government were operationalized via feelings about individual external efficacy and trust in the government.¹¹ We selected these orientations and outcomes because polarization has been shown to relate to each. Regarding voting, some of the consequences of polarization—such as increased awareness of differences between the parties and decreased indifference—lead to increased certainty for whom one may choose to vote (Davis 2015; Smidt 2017; Thornton 2013). Likewise, Westfall et al. (2015) connect perceived polarization to voting. Similarly, Hetherington (2008) connects polarization to political engagement, efficacy, and trust. However, these studies investigate polarization in the contexts of elite and

¹⁰ We also include dummy variables for all but one year so that we can control for any potential effects of time, or idiosyncrasies of a given year, in the model. This is true of all models presented. These estimates are not depicted in the table as they add no substantive value to our analysis.

¹¹ The full question wording and coding details for these variables appears in the Supplemental Appendix. Each of the variables was rescaled to range from 0 to 1.

Table 1 Regressions of measures of participation and orientations toward the government on perceived and actual polarization, and controls

	Participation	Vote	Efficacy	Trust
Perceived polarization	0.116* (0.015)	1.190* (0.207)	- 0.121* (0.031)	- 0.210* (0.015)
Actual polarization	0.028 (0.015)	- 1.170* (0.207)	- 0.149* (0.032)	- 0.004 (0.016)
Ideological strength	0.018* (0.006)	0.047 (0.086)	0.017 (0.013)	
Partisan strength	0.065* (0.006)	0.968* (0.076)	0.084* (0.012)	
Interest	0.142* (0.005)	1.707* (0.068)		
Education	0.086* (0.007)	1.724* (0.094)	0.288* (0.014)	0.043* (0.007)
Age	- 0.009 (0.009)	2.494* (0.122)	- 0.061* (0.018)	- 0.014 (0.009)
Income	0.044* (0.006)	1.090* (0.087)	0.092* (0.013)	- 0.002 (0.007)
Female	- 0.013* (0.003)	0.052 (0.045)	0.021* (0.007)	- 0.008* (0.003)
Black	0.000 (0.006)	0.157* (0.078)	- 0.032* (0.012)	0.013* (0.007)
Hispanic	- 0.015* (0.007)	- 0.231* (0.087)	- 0.004 (0.015)	0.041* (0.007)
South	- 0.000 (0.004)	- 0.408* (0.047)	- 0.001 (0.007)	- 0.002 (0.004)
Political sophistication			0.236* (0.018)	0.037* (0.009)
Ideology				- 0.012 (0.009)
Partisanship				0.033* (0.006)
Intercept	- 0.061* (0.009)	- 1.898* (0.129)	0.415* (0.019)	0.428* (0.010)
(pseudo-)R ²	0.148	0.204	0.134	0.064
N	13320	13332	12749	15669

Cell entries in columns 1, 3, and 4 are OLS coefficients; logistic coefficients in column 2

Standard errors appear in parentheses

*Denotes $p < 0.05$ for two-tailed test

Fixed effects for year included in each model

party polarization. We seek to investigate these behaviors and orientations in the framework of individual-level perceived and actual polarization. Table 1 displays estimates for the effects of the two types of polarization on each of these dependent variables. As turning out to vote is dichotomous, cell entries in column 2 are logistic regression coefficients; the remaining estimates are OLS coefficients.¹²

We begin by examining perceived and actual polarization across models before turning to relative comparisons. In only two of the models is actual polarization statistically significantly related to political behaviors or orientations toward government. It is negatively related to both one's likelihood of voting and feelings of external efficacy, but has no distinguishable relationship with participation or trust. In other words, as the distance between an individual's position and the average position of out-party identifiers increases, she believes she can influence politics less and claims to turn out less frequently than her less polarized counterparts.

Perceived polarization, on the other hand, is positively related to both participation in campaign activities and voting, but negatively related to both trust in government and external efficacy.¹³ That is, as the distance between an individual's position along the issue scales and her *perception* of the out-party preference increases, she participates more and votes more, but trusts the government less and obtains less efficacy from the political process. These findings, taken together, paint an interesting picture of how the variants of polarization may relate to a citizen's psyche. Those who perceive a great deal of polarization appear motivated to participate in campaigns and vote, perhaps to "save the country" from the evil forces of the out-party, but still derive less external efficacy from the practice and trust the government less than their less perceptually polarized counterparts. Those who are actually polarized, on the other hand, seem to yield less benefit from voting and therefore choose to abstain from the practice at higher rates as actual polarization increases.

Next, we turn to Fig. 5 for graphical representations of the relative effects of perceived and actual polarization on each of the participation and orientation variables. Within each panel, solid black lines represent the predicted value of the dependent variable, varying each type of polarization across its range and holding all other variables constant. Dashed lines are 95% confidence intervals around those predictions. Recall that both variations of polarization are scaled 0–1 so that direct comparisons

¹² Sophistication is not included in the participation and voting models because campaign participation is a component of the composite sophistication measure. Instead, we included interest in politics – a proxy for sophistication that would not bias upward the effect of sophistication in these models. Note also that partisan and ideological self-identifications are employed in the trust model, rather than the mere strength of these orientations. This is because previous work has demonstrated a substantive partisan and ideological component to trust in the government (Hetherington and Rudolph, 2015).

¹³ Though actual and perceived polarization are related to voting in opposite ways, such an inconsistency should be taken with a grain of salt. Voting is an important political behavior to consider, but is grossly over-reported (upwards of 80% in some years) on the ANES and other high quality surveys, such as the General Social Survey. Additionally, we believe the countervailing effects are consistent with the results of the multivariate regression shown above. Specifically, perceived polarization is more strongly related to sophistication and positively related to education; education has the opposite effect on actual polarization. Education and political sophistication are long known correlates of vote behavior (Palfrey and Poole 1987).

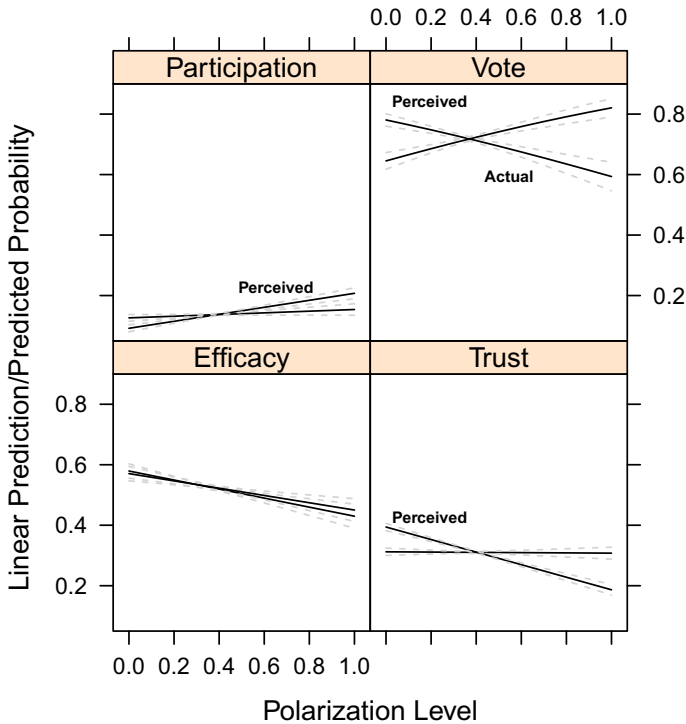


Fig. 5 Predicted value of participation, voting, efficacy, and trust, across values of actual and perceived polarization, holding control variables constant

can be drawn. Again, we are largely interested in whether the effects of perceived polarization appreciably differ from the effects of actual polarization. Although the ills of polarization are well documented, the detrimental effects of viewing the out-group as distant from oneself may simply be a product of actual distance, regardless of perceptual accuracy.

Beginning with participation in the top left, there is a small substantive difference between the effects of perceived and actual polarization, even though there is a statistically significant difference (i.e., actual polarization is not significant). For the highest values of perceived polarization, the predicted value of participation is about 0.21, and for the lowest value of perceived polarization it is 0.09, holding other variables constant. There is no statistical difference in predicted participation across the levels of actual polarization. Although this effect seems small, the median and modal value of the participation variable is 0, and the mean is 0.12. As is well known, most people simply do not engage in campaign activities, whether it

be attending a rally or donating money to a political candidate. In this context, the effect of perceived polarization on participation in campaign activities is substantial.

Moving next to voter turnout in the top right, there are clear counterpoising effects of the two types of polarization.¹⁴ Increases in perceived polarization, controlling for other factors including actual polarization, are associated with an increase in the probability that one will turnout from 0.64 to 0.82, about a 28% increase. On the other hand, across the range of actual polarization the probability of voting decreases from 0.78 to 0.59, about a – 24% change. We interpret these relationships with some caution, given the well-noted propensity for survey respondents to over-report voting. Regardless, it appears that those who perceive themselves to be quite distant from the opposition party's positions act to effect change while those who are, in reality, substantially distant do so to a lesser extent.

Next, we examine the relative effects of polarization on efficacy, in the bottom left panel. Each type of polarization leads to a meaningful decrease in efficacy, but there is no distinguishable difference between the two types. That these effects are similar in magnitude is, perhaps, intuitive. One who perceives a great divide between herself and counter-partisans may not believe she can influence politics. And, if she is actually distant, she may be similarly disaffected by her political lot. Thus, both truly and perceptually polarized individuals seemingly feel the effects of this polarization and translate it to a diminished sense of external efficacy.

Finally, turning to trust in the lower right panel, there is no relationship between actual polarization and trust in government. There is, however, a statistically significant decrease in trust across the range of perceived polarization. Those who perceive a greater degree of polarization tend to trust the government less. Those who actually differ on policy preferences from the out-party do not bring those differences to bear on evaluations of the government. Those who perceive a great divide, however, do. Thus, an important orientation toward the government seems to be influenced more strongly by one's perceptions, irrespective of the truth of the matter. This is sensible. As Hetherington and Rudolph (2015) show, trust in government is influenced by whether one's party is in power.

In sum, we observed several stark differences between the effects of actual and perceived polarization when it comes to participation and orientations toward the government. Where perceived polarization is statistically and substantively related to participation and trust, actual polarization is not. Furthermore, the two polarization types actually have directionally opposite effects on vote turnout. Only when it comes to efficacy do perceived and actual polarization exhibit substantively similar effects. Save for the effect on trust—which can increasingly be treated as a measure of performance satisfaction (Hetherington and Rudolph 2015)—the negative consequences of polarization (i.e., failure to vote or reduced belief that one can effect

¹⁴ These findings deviate from those found in Moral (2017). We believe these discrepancies are of little concern and are likely a result of differences in (a) political contexts and (b) measurement. Moral investigates multiparty systems, where those with moderate preferences are less likely than those in the American two-party system to be entirely disaffected (i.e., parties that represent them may still exist). Further, he measures polarization as the perceived distance between parties, whereas our measures are anchored to the individual.

political change) appear to be driven primarily by actual polarization (or are equally driven by both). While we certainly do not suggest that polarization is desirable, we present evidence that decreases in those behaviors and properties that are a boon to a healthy democracy are driven by differences in actual policy preferences as opposed to mere perceptions of distance between the self and political others.

Perceived Polarization and Affective Polarization

Having determined the relative influences of perceived and actual polarization on certain political orientations and behaviors, we move on to examine the degree to which perceptual differences, relative to actual differences, impact emotional reactions to political individuals and groups. Many scholars show that polarization and its correlates are related to attitudes toward political figures. Iyengar et al. (2012) demonstrate that polarization is perhaps best characterized as an affective concept, as opposed to one related to ideology. Thus, we suspect that perceptions of polarization may be partially responsible for the persistent affective divide in American politics. To test our claim, we estimate models where perceived and actual polarization predict various measures of differential affective evaluations of political groups and figures. We consider whether our estimates of polarization influence three measures of affective polarization. Specifically, our outcomes of interest are the absolute value of the difference in feeling thermometer scores for: (1) the two major party presidential candidates, (2) the two major parties themselves, (3) and liberals and conservatives. We estimate a model for each. If these values are small, individuals have relatively consistent feelings toward these figures and groups, either jointly positive or jointly negative. If, on the other hand, values are large, individuals are exhibiting positive reactions toward one group or figure and negative reactions toward the other, indicating intense dislike or enmity toward the out-group. Once again, these variables have been rescaled to range from 0 (no difference in the affective evaluation of the objects) to 1 (the largest possible difference in the affective evaluation of the objects).¹⁵

The results of these models are presented in Table 2. Before turning to our measures of polarization, we describe the effects of other noteworthy covariates. First, ideological and partisan strength are positively correlated with each of the measures of affective polarization (save for intense ideological strength and affective evaluations of candidates), as is expected (Goel et al. 2010). Additionally, political sophistication is related to evaluations of parties, ideological groups, and politicians; this too is to be expected, as interest and knowledge are related to attitude extremity (Federico 2004).

Despite including these known-predictors of emotional assessments of political stimuli, both perceived and actual polarization also contribute to negative attitudes toward the out-group. And, it is clear to see that perceived polarization has a larger impact than actual polarization on each of the measures of the affective

¹⁵ We also include dummy variables for all but one year so that we can control for any potential effects of time, just as we did in the analyses presented in Table 1.

Table 2 Regressions of measures of affective evaluations on perceived and actual polarization, and controls

	Candidates	Parties	Ideological groups
Perceived polarization	0.412* (0.021)	0.488* (0.018)	0.354* (0.016)
Actual polarization	0.099* (0.023)	0.059* (0.018)	0.057* (0.017)
Ideological strength	- 0.001 (0.010)	0.021* (0.008)	0.183* (0.007)
Partisan strength	0.157* (0.009)	0.306* (0.007)	0.013* (0.006)
Political sophistication	0.246* (0.014)	0.114* (0.011)	0.079* (0.010)
Education	- 0.045* (0.010)	- 0.049* (0.008)	0.040* (0.008)
Age	0.043* (0.013)	0.043* (0.010)	0.085* (0.010)
Income	- 0.016 (0.010)	- 0.026* (0.008)	0.010 (0.007)
Female	0.017* (0.005)	0.012* (0.004)	- 0.002 (0.004)
Black	0.002 (0.009)	0.053* (0.007)	- 0.039* (0.006)
Hispanic	- 0.011 (0.010)	0.033* (0.008)	0.011 (0.007)
South	0.005 (0.005)	- 0.001 (0.004)	0.027* (0.004)
Intercept	0.069* (0.013)	- 0.191* (0.011)	- 0.045* (0.010)
R ²	0.222	0.350	0.219
N	9225	10699	11389

*Denotes $p < 0.05$ for two-tailed test

Standard errors appear in parentheses

Fixed effects for year included in each model

divide. It is sensible that those who feel that their positions are very distinct from the positions of the out-party—irrespective of actual policy disagreement—also feel differently toward the individuals of whom that party is comprised. Indeed, politics and its stimuli are evaluated on emotional, valenced grounds (Huddy et al. 2015; Iyengar and Westwood 2015; Suhay 2015). This is particularly important when considering components of political, social, and moral identity.

We turn to Fig. 6 to further explore the relative effects of perceived and actual polarization on affective differences in esteem toward political parties and figures. Each panel presents estimated effects of both types of polarization at low levels and

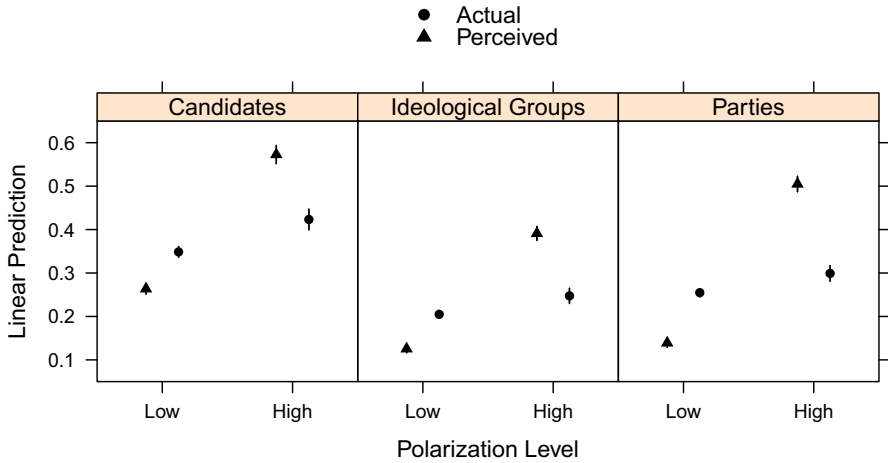


Fig. 6 Predicted value of affective evaluation measures across levels of actual and perceived polarization, holding control variables constant

high levels for the measure of affective reaction listed atop the panel. Specifically, “low” levels are those who register a value of 0.25 or lower along the 0–1 polarization scale, and “high” levels are those who registered a 0.75 or greater on the scale.¹⁶ In other words, Figure 6 shows the degree to which each type of polarization relates to affective assessments of candidates, parties, and ideological groups for the least polarized and the most polarized. Circles denote the predicted value of the affective evaluation variable for a given level of actual polarization, and triangles denote the same with respect to perceived polarization; vertical bars are 95% confidence intervals around those estimates.

First and foremost, there is a positive relationship between both types of polarization and the absolute difference in feeling thermometer scores for the two major party candidates, democrats and republicans, and liberals and conservatives. The predicted absolute difference in affective evaluations of candidates, parties, and ideological groups is larger for those higher in perceived and actual polarization than those lower in either type of polarization, controlling for other factors. Furthermore, the influence of perceived polarization is, across the board, noticeably larger than that of actual polarization. At low levels of perceived polarization, the predicted value of the 0–1 standardized absolute difference in candidate evaluations is 0.26; at high levels it is 0.57. At low levels of actual polarization, the predicted value of the 0–1 standardized absolute difference in candidate evaluations is 0.35; at high levels it is 0.42. The difference in predicted affective polarization moving from low to high levels of perceived polarization is larger than the difference moving from low to high actual polarization. This is also the case for evaluations of ideological groups and political parties.

¹⁶ Alterations in the cutoffs for “low” and “high” do not alter substantive results.

These findings are sensible. Perceiving oneself to be far removed from the views of the party working against one's beliefs—whether or not this is actually the case—increases animus toward that group and its candidates. Conversely, those who do not perceive much polarization—again, irrespective of the “truth”—are more even-handed in their evaluations of the parties at large, ideological groups, and candidates. At such low levels, actual policy disagreements—that is, actual polarization—appear to drive emotional responses to these political stimuli.¹⁷

That perceived polarization is more strongly related to differential affective evaluations of parties, candidates, and ideological groups at higher levels of polarization is worthy of our attention. Recall the particularly strong positive relationship between elite polarization and perceived polarization. If perceived polarization can be exacerbated by elite behavior, which is the causal pathway we would expect given previous research on the effects of elite polarization (e.g., Druckman et al. 2013; Hetherington 2011; Layman and Carsey 2002), then elite behavior is theoretically capable of indirectly enhancing affective polarization. This process strikes us as even more likely in a time where political campaign messages increasingly contain conspiracy theories and misinformation about, and ad hominem attacks on the integrity and motives of, competing candidates. Regardless of this speculation, however, the perception of increasingly distant enemies is related to increasingly divergent emotional reactions to members of the in- and out-group. Thus, the cooperation and basic respect on which democratic participation relies are eroded by perceptions of greater polarization.

Conclusion

In this paper, we corroborated the existence of perceived polarization (Levendusky and Malhotra 2016b; Westfall et al. 2015), and empirically clarified the differences between perceived and actual polarization. Importantly, we did so using measures anchored to the individual, meaning we were able to appropriately account for objective policy disagreement when considering subjective distances between the self and members of the out-party. Though many individual-level factors are related to the two types of polarization in substantively similar ways, we observed directionally opposite effects for education and stronger relationships between elite polarization, sophistication, and ideological strength and perceived—rather than actual—polarization.

Additionally, when evaluating the impact of actual and perceived polarization on political behaviors (i.e., campaign activities and voting) and orientations toward government (i.e., efficacy and trust), we again observed striking differences. Though the effects of perceived polarization relative to actual are small when it comes to

¹⁷ We are careful not to suggest that those low in actual polarization are low in perceived polarization, or vice versa. Indeed, the modest linear relationship between these two constructs suggests this is not necessarily the case. Instead, we highlight the effects of each when controlling for the other relevant type of polarization, which deviates from previous studies.

efficacy, effects are statistically and substantively different in regard to participation, vote turnout, and trust in government. Perceived polarization is strongly positively related to voting and participation, and strongly negatively related to trust in government. Actual polarization is unrelated to campaign participation or trust, and negatively related to voting. Furthermore, when it comes to affective polarization—the type that is most agreed upon and, perhaps, most insidious given the intensity of emotional connections in political judgments—the effects are clear: perceived polarization has a discernible impact on differential affective reactions to in- and out-group stimuli.

Simply put: polarization—especially *perceived* polarization—matters. Rather than some innocuous perceptual bias that only uninterested or politically unsophisticated individuals engage in, perceived polarization is widespread and consequential. The greater the distance individuals perceive between themselves and the out-party, the more loathsome they feel toward out-party members and their representatives. And, the perceptual gulf between the self and others increases with sophistication, strength of attachments to parties, education, and elite polarization. Since some of these variables, such as elite polarization, are seeming fixtures of the political world, and others, such as sophistication and education, are usually considered normatively desirable individual level characteristics that should be promoted, more theoretical work must be done to understand the place and consequences of the perceptions of increasing polarization among members of the American mass public.

Though cross-sectional observational data are incapable of fully testing causality, the mere association between perceived polarization and affective divides is still worthy of further consideration. If perceived polarization is related to affective divides and sharper emotional reactions to the political candidates and parties, it follows that perceived polarization would exacerbate actual polarization, particularly of the affective sort. Emotional responses to central political stimuli—anger, fear, and disgust—each carry with them different implications about what ordinary individuals choose to learn about politics (Clifford and Jerit 2018), and how and when they interact with individuals who do not share the same political predispositions as them.

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