It's their fault: Partisan attribution bias and its association with voting intentions

Ethan Zell,[1] ⓘ Christopher A. Stockus[1]
and Michael J. Bernstein[2]

Abstract

This research examined how people explain major outcomes of political consequence (e.g., economic growth, rising inequality). We argue that people attribute positive outcomes more and negative outcomes less to their own political party than to an opposing party. We conducted two studies, one before the 2016 U.S. presidential election ($N = 244$) and another before the 2020 election ($N = 249$ registered voters), that examined attributions across a wide array of outcomes. As predicted, a robust partisan attribution bias emerged in both studies. Although the bias was largely equivalent among Democrats and Republicans, it was magnified among those with more extreme political ideology. Further, the bias predicted unique variance in voting intentions and significantly mediated the link between political ideology and voting. In sum, these data suggest that partisan allegiances systemically bias attributions in a group-favoring direction. We discuss implications of these findings for emerging research on political social cognition.

Keywords

attribution, bias, motivation, politics, voting

As naïve psychologists, people seek to explain the causes of events in their daily life and in the world at large. For example, people may contemplate why positive and negative events occurred to them personally (e.g., a promotion at work or a social rejection) as well as why positive and negative events have occurred in society more broadly (e.g., an economic upswing or a public health crisis). Critically, these attributions may be systemically biased and ultimately result in explanations that reflect favorably upon the self and important group identities. In the present research, we

explore the degree to which people attribute major outcomes in society to their own political party and to a rival political party. We argue that these attributions are substantially biased, such

[1]University of North Carolina at Greensboro, USA
[2]Pennsylvania State University Abington, USA

Corresponding author:
Ethan Zell, Department of Psychology, University of North Carolina at Greensboro, PO Box 26170, Greensboro, NC 27402, USA.
Email: e_zell@uncg.edu

that people more strongly attribute positive outcomes to the actions of their own political party than to those of a rival party ("we cause good things"), and more strongly attribute negative outcomes to the actions of a rival party than to those of their own party ("they cause bad things"). Moreover, we argue that these biased attributions have important implications for voting decisions and may be a key mechanism underlying the relation between ideology and voting.

For over 70 years, psychologists have examined the topic of attribution or lay judgments regarding the causes of events (Heider, 1958; Malle, 2011; Weiner, 2018). Early theory and research focused primarily on attributions for the actions of a specific person, for example, by examining whether people attribute positive and negative outcomes internally to the actor or externally to the surrounding environment. Although initial theories assumed that attributions unfold via a logical and effortful process (Kelley, 1967), later work identified that attributions are often made heuristically and reflect biased processing (Fiske & Taylor, 2017; Lieberman et al., 2002). Specifically, people disproportionately attribute other people's actions to dispositions rather than situations (i.e., the fundamental attribution error; Ross, 1977, 2018). Further, attributions are often biased by self-esteem maintenance concerns, such that people credit themselves for successes but blame other people or the environment for failures (i.e., self-serving attribution; Campbell & Sedikides, 1999; Mezulis et al., 2004). Finally, attributions are biased by group allegiances, such that people more often credit success to the actor and failure to the environment when evaluating an ingroup member than an outgroup member (i.e., ultimate attribution error; Islam & Hewstone, 1993; Pettigrew, 1979).

The vast majority of studies in this literature have focused on attributions for individuals, but some work has noted that people also make attributions for the actions of larger social aggregates, such as sports teams (Allen et al., 2020), nations (Rosenberg & Wolfsfeld, 1977), and racial-ethnic (O'Laughlin & Malle, 2002) and socioeconomic groups (Cozzarelli et al., 2001). We propose that,

in societies characterized by deeply polarized and tribal politics such as the United States (Clark et al., 2019), political parties may loom large in the attribution process. In divided governments, where dueling political parties must cooperate to enact major legislation, it is often difficult to isolate whether and to what extent positive and negative developments in society can be attributed to the actions of one party versus another. Nonetheless, we argue that across a broad array of positive and negative outcomes, people systemically attribute positive outcomes more and negative outcomes less to their own party than to the opposing party. We refer to this proposed phenomenon as the partisan attribution bias.

To our knowledge, no research has systematically explored whether attributions for positive and negative outcomes in society are biased by partisan allegiances. However, emerging research suggests that identification with a political party results in motivated reasoning in favor of that party. More specifically, people evaluate scientific information more favorably when it yields conclusions consistent with their political views (Ditto et al., 2019), actively seek information sources that support their political views and avoid information sources that contradict them (Hart et al., 2009), perceive their own political views as more correct than opposing views (Toner et al., 2013), and are more likely to believe in objectively false claims when those claims are consistent with their political views (Bullock & Lenz, 2019). Although there are well-documented differences across liberals and conservatives (e.g., need for order, structure, and closure; Jost, 2017; Jost et al., 2018), the tendency to exhibit motivated reasoning in favor of one's political party appears to be largely equivalent across liberals and conservatives (Brandt & Crawford, 2020; Washburn & Skitka, 2018).

In the present research, we significantly advance literatures on motivated reasoning and attribution to assess whether Democrats and Republicans exhibit partisan biases in their explanations of a broad array of societal events. On the one hand, membership in a political party is permeable and concealable, which may reduce the strength of group identification (see Brewer,

2019). On the other hand, membership in a political party is chosen and based on a foundation of attitudes and beliefs, which may increase the strength of group identification. Thus, it remains unclear whether and to what extent biases found in groups previously studied in the attribution literature (e.g., nations, racial-ethnic groups) extend to political parties. People selectively attend to information that supports their political worldview (Garrett & Stroud, 2014; Hall & Raimi, 2018), which may reinforce positive attitudes about the political ingroup and negative attitudes about the political outgroup. Thus, we anticipated that attribution biases would be highly robust when examined in a political context.

Four central aims guided our research. First, we sought to develop a comprehensive test of the partisan attribution bias. We propose that political attributions can be deconstructed into four constituent judgments: the perceived responsibility of Democrats for (a) positive and (b) negative outcomes, as well as the perceived responsibility of Republicans for (c) positive and (d) negative outcomes. Political surveys have assessed one of these judgment types for a single outcome (e.g., how much people blame politicians for economic conditions; see Bartels, 2002; Rico & Liñeira, 2018; Rudolph, 2016). For the first time, however, we simultaneously obtained measures of each judgment type across a wide array of outcomes. This allowed us to systematically explore the degree to which partisan biases occur for each judgment type and to develop a comprehensive estimate of the partisan attribution bias that linearly combines the four judgments into an overall estimate.

Second, we examined whether there are ideological differences in the partisan attribution bias. Given the pervasive tendency for people to exhibit motivated reasoning in favor of their political group (Clark et al., 2019; Ditto et al., 2019), and to exhibit self-serving and group-serving biases more broadly (Brandt & Crawford, 2020; Zell et al., 2020), we anticipated that the partisan attribution bias would obtain and be similar in size across liberals and conservatives. Beyond examining differences by whether people identify as liberal or conservative (dichotomous variable), we also tested whether the strength of ideology (continuous variable) is associated with the partisan attribution bias. Versus those with a weaker ideology, people who identify as very liberal or conservative are more confident in the accuracy of their beliefs (Brandt et al., 2015; Toner et al., 2013), overestimate the amount of political polarization in their country (Westfall et al., 2015), and perceive ingroups as motivated by love and outgroups as motivated by hate (Waytz et al., 2014). More generally, people with extreme ideologies are characterized by an inflexible cognitive style that leads them to view the world in simplistic terms (van Prooijen & Krouwel, 2019; Zmigrod et al., 2020). Thus, we anticipated that strength of ideology would exacerbate the partisan attribution bias.

Third, we examined whether the partisan attribution bias is symmetrical across positive and negative outcomes. Prior research outside the political realm suggests that attribution biases are generally symmetrical, in that people attribute positive outcomes more to ingroup members and negative outcomes more to outgroup members or the environment (Allen et al., 2020; Islam & Hewstone, 1993). Nonetheless, it is possible that asymmetrical biases occur in a political context. Although Democrats and Republicans selectively expose themselves to information that supports their political views (Hall & Raimi, 2018), Republicans are more likely to avoid information that contradicts their views (e.g., criticizes their party) and Democrats are more likely to approach information that supports them (e.g., praises their party; Garrett & Stroud, 2014). These data suggest that partisan attribution biases may be stronger for negative events when examining Republicans, and stronger for positive events when examining Democrats.

Fourth, inspired by theory and research suggesting that a key purpose of attribution is to motivate action (Weiner, 2018), we explore the connection between the partisan attribution bias and voting decisions. Ideology, which is typically measured via a single item asking people to rate how strongly they identify as liberal or conservative, is a well-established and robust correlate of voting (Jost, 2006; Levitin & Miller, 1979). One

view of this relation is that ideology is based on a foundation of attitudes (e.g., taxation, abortion, gun control) and that people vote for candidates who are compatible with their attitudes (Jacoby, 1991; Rudolph & Evans, 2005). However, research indicates that ideology sometimes conflicts with attitudes (Kalmoe, 2020; Zell & Bernstein, 2014), and that people flexibly shift attitudes in order to match the current policies of their party (Barber & Pope, 2019; Cohen, 2003), which suggests that ideology is more than merely a collection of attitude positions. We argue that ideology predisposes people to make partisan attributions ("we cause good things"; "they cause bad things"), and that these attributions partly explain the association between ideology and voting. Thus, we propose that the partisan attribution bias is a correlate of voting, and perhaps more importantly, is a mediator of the well-established association between political ideology and voting.

In short, we conducted two studies evaluating the partisan attribution bias, its association with political ideology, and whether it mediates the association between political ideology and voting intentions. Study 1 was conducted before the 2016 United States presidential election and Study 2 was conducted before the 2020 election. This allowed us to test the partisan attribution bias in two different, high-stakes election cycles separated by 4 years. We predicted that the partisan attribution bias would obtain both overall and in each of the four constituent judgments. Further, we anticipated that the partisan attribution bias would be consistent across liberal and conservative participants but would increase with ideological extremity. Finally, we predicted that the partisan attribution bias would be a robust correlate of presidential voting intentions and would significantly mediate the association between ideology and voting.

Study 1

In Study 1, we conducted the first test of the partisan attribution bias in the months prior to the 2016 election. Self-identified Democratic and

Republican participants made responsibility judgments for the Democratic and Republican parties for a series of positive and negative outcomes. We explored whether these judgments conformed to a pattern predicted by the partisan attribution bias as well as the association of this bias with ideology and voting intentions. Materials and data for this research are publicly available at the Open Science Framework (https://osf.io/u9p5k/?view_only=935dced60d2440579954f1196c3d47d7).

Method

Participants. The study was conducted on 2 days (July 26 and July 28), which occurred 3.5 months before the 2016 United States presidential election. Data were collected until we exceeded a predetermined goal of at least 80 Democrats and Republicans, after exclusions, in order to obtain at least 88% power to detect a medium effect ($d = 0.50$). Specifically, data were collected from 464 American adults on MTurk in exchange for a small payment. Data were excluded from 186 participants who did not identify with either the Democratic or Republican Party, since they were not relevant to our hypotheses. In addition, data were excluded from 34 participants who failed one or more attention checks; results were very similar when these participants were retained. These exclusions resulted in a final sample size of 244 participants (163 Democrat, 81 Republican; see Table 1).

Procedures. Participants first completed a 20-item attribution questionnaire that measured perceptions of responsibility for eight positive outcomes (e.g., "The U.S. economy has added over 14 million jobs since 2009") and 12 negative outcomes (e.g., "The 2008 financial crisis that led millions of Americans to lose their jobs and homes"). The 20 outcomes, which were obtained via a search of prominent news outlets, were presented in a randomized order. Negative outcomes were covered more frequently in news sources than positive outcomes, which explains their greater representation. For each outcome,

Table 1. Characteristics of the final samples: Studies 1–2.

Variable	Study 1	Study 2
N	244	249
Year	2016	2020
Gender		
Male	133	137
Female	109	111
Other	2	1
Mean (*SD*) Age	36.8 (11.5)	38.7 (12.1)
Race/ethnicity		
African American	17	40
Asian American	15	29
European American	189	143
Latino	15	23
Other	8	14
Political party		
Democrat	163	135
Republican	81	114
Political ideology		
1 (very liberal)	52	29
2	60	45
3	34	37
4	17	19
5	31	38
6	34	47
7 (very conservative)	16	34
Voting intentions		
Clinton/Biden	141	126
Trump	72	113
Other	31	10

participants made two responsibility judgments (i.e., "How much have Republican [i.e., conservative] policies contributed to this outcome?" and "How much have Democratic [i.e., liberal] policies contributed to this outcome?") using 7-point scales (1 = *not at all*, 7 = *very much*). To maintain consistency across items, we used a set order in which participants first made a responsibility judgment for the Republican Party and then a responsibility judgment for the Democratic Party. Two attention checks appeared randomly during the attribution questionnaire ("Please click *very much* [*not at all*] to show that you are paying attention").

Next, participants indicated their political ideology on a 7-point scale (1 = *very liberal*, 7 = *very conservative*), the political party they identified with (*Democratic Party, Republican Party, Independent, Other*), and whom they intended to vote for in the 2016 presidential election (i.e., *Hillary Clinton, Donald Trump, another candidate, I will not vote*). For exploratory purposes, participants also completed a one-item measure of support for political compromise. Finally, participants completed demographic questions.

Attribution questionnaire scoring. Responses on the attribution questionnaire were averaged to create separate indices of how responsible participants thought Democrats (α = .88) and Republicans (α = .84) were for the eight positive outcomes, and separate indices of how responsible participants thought Democrats (α = .90) and Republicans (α = .90) were for the 12 negative outcomes (see Table 2 for correlations). To form an overall index of the partisan attribution bias, we subtracted the perceived responsibility of Republicans for negative events and of Democrats for positive events from the perceived responsibility of Republicans for positive events and of Democrats for negative events (see Figure 1). Values above zero on this summary index indicate a partisan bias in favor of the Republican Party, such that people perceive Republican policies as more responsible for positive events and less responsible for negative events than Democratic policies. Conversely, negative values on this summary index indicate a partisan bias in favor of the Democratic Party. Values near zero indicate no partisan attribution bias.
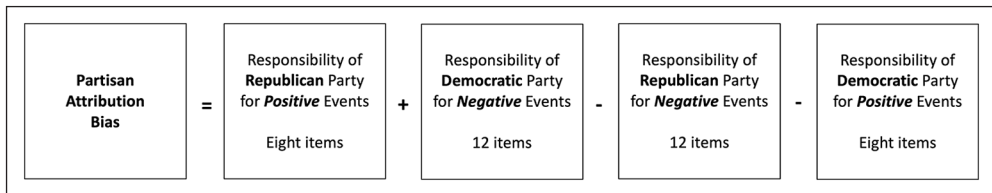
Results

Partisan attribution bias. We conducted a 2 (participant political party: Democrat, Republican) x 2 (perceived responsibility for positive outcomes: Democratic policies, Republican policies) x 2 (perceived responsibility for negative outcomes: Democratic policies, Republican policies) ANOVA with political party entered as a between-subjects factor, and perceived responsibility for positive

Table 2. Zero-order correlations among measures: Studies 1–2.

Measure	2	3	4	5	6	7	8
Study 1							
1. Republican—positive	−.32**	−.03	.57**	.63**	.39**	−.34**	.34**
2. Republican—negative		.57**	−.36**	−.77**	−.61**	.51**	−.56**
3. Democrat—positive			−.43**	−.71**	−.55**	.45**	−.50**
4. Democrat—negative				.80**	.62**	−.49**	.56**
5. Partisan bias					.74**	−.61**	.67**
6. Political ideology						−.73**	.74**
7. Vote Clinton							−.76**
8. Vote Trump							
Study 2							
1. Republican—positive	−.06	−.06	.58**	.64**	.64**	−.53**	.55**
2. Republican—negative		.59**	−.20*	−.73**	−.25**	.29**	−.32**
3. Democrat—positive			.14*	−.61**	−.17*	.22**	−.22*
4. Democrat—negative				.61**	.53**	−.48**	.50**
5. Partisan bias					.60**	−.58**	.60**
6. Political ideology						−.63**	.67**
7. Vote Biden							−.92**
8. Vote Trump							

Note. Measures 1–4 reflect judgments of responsibility for the Republican and Democratic parties for positive and negative outcomes. Political ideology was measured on a self-report scale (1 = *very liberal*, 7 = *very conservative*).
*$p < .05$. **$p < .001$.

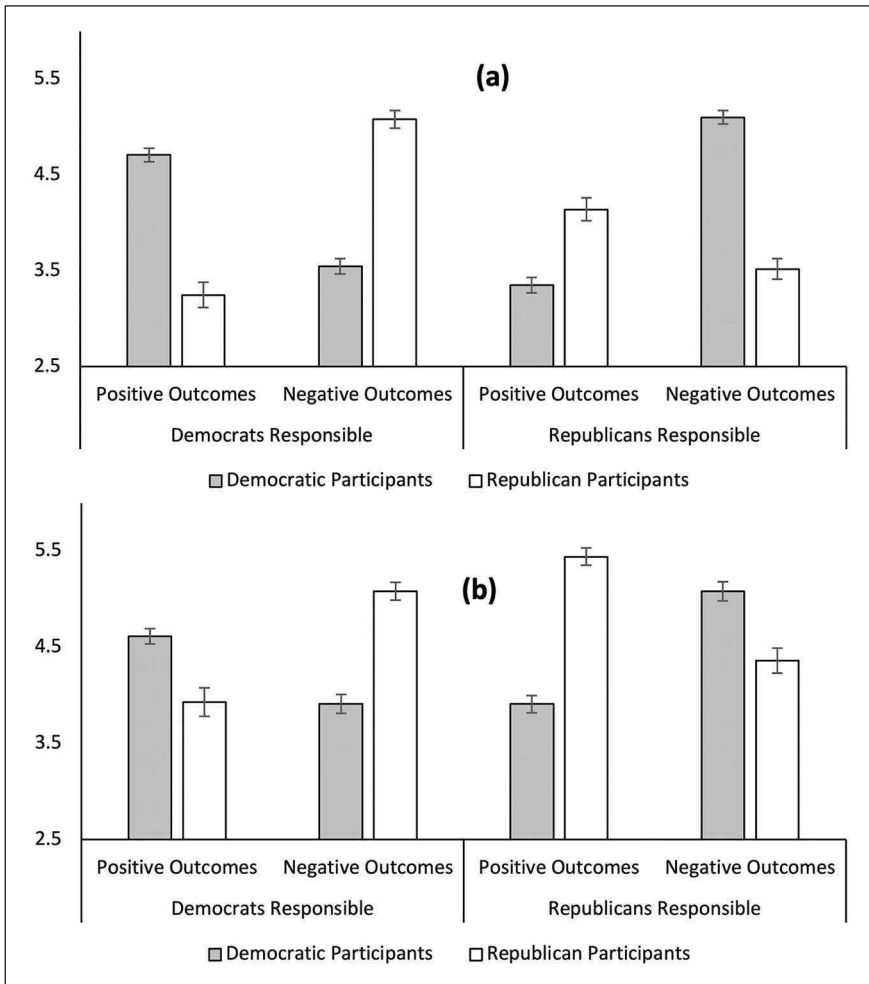**Figure 1.** Calculation of the partisan attribution bias.

Note. Total scores below zero indicate bias in favor of the Democratic Party and scores above zero indicate bias in favor of the Republican Party.

and negative outcomes entered as within-subjects factors. This analysis yielded the expected Political Party Identification x Positive Outcomes x Negative Outcomes three-way interaction, $F(1, 242) = 288.25$, $p < .001$, $\eta_p^2 = .54$ (see Figure 2a).

We decomposed the interaction with separate analyses on positive and negative outcomes. When examining positive outcomes, the 2 (participant political party) x 2 (perceived responsibility) interaction was highly robust, $F(1, 242) = 173.61$, $p < .001$, $\eta_p^2 = .42$. Democratic participants attributed

positive events significantly more to the policies of the Democratic Party than Republican participants, $t(242) = 10.88$, $p < .001$, $d = 1.42$. In addition, Democratic participants attributed positive events significantly less to the policies of the Republican Party than did Republican participants, $t(242) = 5.67$, $p < .001$, $d = 0.76$.

The 2 (participant political party) x 2 (perceived responsibility) interaction was also highly robust when examining negative outcomes, $F(1, 242) = 261.55$, $p < .001$, $\eta_p^2 = .56$. Whereas Democratic

Figure 2. Responsibility judgments in Study 1 (a) and Study 2 (b).

Note. Perceived responsibility of Democrats and Republicans for positive and negative outcomes as a function of political party identification. Error bars are ±1 *SEM.*

participants attributed negative events significantly less to the policies of the Democratic Party than Republican participants, $t(242) = 12.01$, $p < .001$, $d = 1.68$, Democratic participants attributed negative events significantly more to the policies of the Republican Party than did Republican participants, $t(242) = 12.21$, $p < .001$, $d = 1.65$.

Additional tests were conducted to compare attributions of responsibility within each participant group. As expected, Democratic and Republican participants attributed positive events more to the policies of their own political party than of the opposing party, $t(162) = 13.55$, $p < .001$, $d = 1.05$ and $t(80) = 6.65$, $p < .001$, $d = 0.74$, respectively. Along the same lines, Democratic and Republican participants attributed negative outcomes less to the policies of their own political party than of the opposing party, $t(162) = 14.69$, $p < .001$, $d = 1.16$ and $t(80) = 11.35$, $p < .001$, $d = 1.26$, respectively. In sum, these data provide strong support for the partisan attribution bias across both positive and negative events.

Next, we examined whether partisan biases varied in size across positive and negative outcomes. For both Democrats and Republicans, partisan attribution biases were more pronounced when examining negative events than positive events, $t(162) = 2.31$, $p = .022$, $d = 0.18$ and $t(80) = 5.02$, $p < .001$, $d = 0.56$, respectively. These results suggest that partisan attribution biases were asymmetrical, in that the tendency to attribute negative events more to a political outgroup than ingroup was somewhat stronger than the tendency to attribute positive events more to the political ingroup than outgroup.
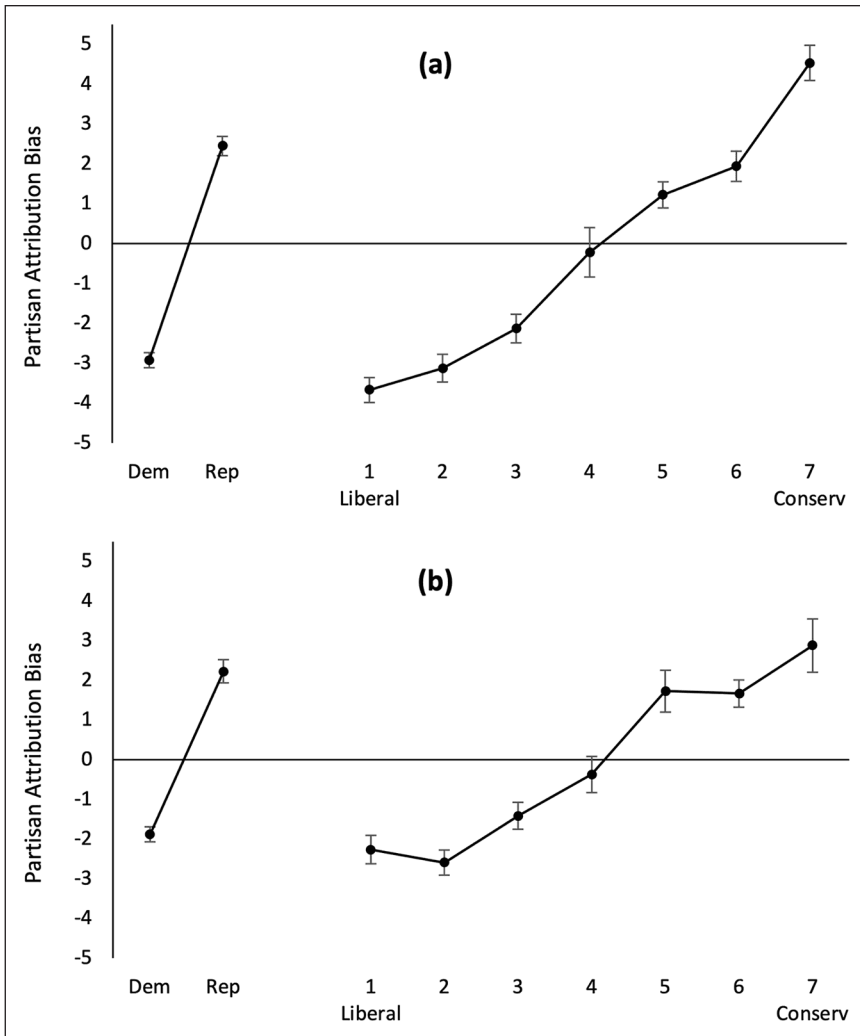
Finally, we examined whether partisan attribution biases varied across ratings of ingroups and outgroups. For both Democrats and Republicans, the tendency to perceive the outgroup as more responsible for negative events than positive events was more pronounced than the tendency to perceive the ingroup as more responsible for positive events than negative events, $t(162) = 5.21$, $p < .001$, $d = 0.41$ and $t(80) = 4.52$, $p < .001$, $d = 0.50$, respectively. Therefore, although partisan attribution biases were observed in ratings of both the ingroup and the outgroup, they were more pronounced in ratings of the outgroup.

Overall index of bias. When examining our summary index of partisan bias that combined judgments across the four category types, there was a statistically significant bias in both political groups. Specifically, one-sample t tests that compared overall bias scores to a neutral midpoint (zero) found a strong partisan attribution bias among both Democratic and Republican participants, $t(162) = 15.46$, $p < .001$, $d = 1.21$ and $t(80) = 10.29$, $p < .001$, $d = 1.14$ (see Figure 3a). Both effects were in the predicted direction, such that Democrats evidenced an attribution bias in favor of the Democratic Party and Republicans evidenced an attribution bias in favor of the Republican Party. Moreover, the partisan attribution bias was similar in size when comparing Democrats to Republicans, $t(242) = 1.50$, $p = .134$, $d = 0.21$. Finally, and as expected, there was a very strong linear relation between political ideology and the partisan attribution bias ($r = .74$). Specifically, increasing liberalism predicted a stronger attribution bias in favor of the Democratic Party, and increasing conservatism predicted a stronger attribution bias in favor of the Republican Party.

Voting intentions. The next set of analyses examined whether partisan attribution biases predicted voting intentions. Intention to vote for Clinton and Trump were analyzed separately by creating dummy-coded variables that categorized voting for the target candidate as 1, and voting for the other candidate, a third party, or not voting as 0. In separate logistic regression analyses, we predicted voting for each of the major candidates from political ideology (entered at Step 1), and the overall index of partisan attribution bias (entered at Step 2). Results showed that intention to vote for Hillary Clinton was significantly associated with both political ideology and the partisan attribution bias, with the latter increasing the variance explained by 1.3% (see Table 3). Similarly, intention to vote for Donald Trump was significantly associated with both predictors, with the partisan attribution bias increasing the variance explained by 5.0%. Thus, the partisan attribution bias significantly predicted voting intentions after adjustment for political ideology. These results remained largely unchanged after adjustment for age, race-ethnicity, and gender, and in a model that removed participants who intended to vote for another candidate or not vote.

Mediation analyses were also conducted using PROCESS Model 4 (Hayes, 2013; number of bootstrap samples = 5,000) to examine whether the association between political ideology and voting intentions was statistically mediated by the partisan attribution bias. When examining both the intention to vote for Hillary Clinton and the intention to vote for Donald Trump, the indirect effect of political ideology on voting intentions through the partisan attribution bias was statistically significant, as indicated by 95% confidence intervals that excluded zero (see Figure 4a). These data suggest

Figure 3. Responsibility judgments by political party and ideology: Study 1 (a) and Study 2 (b).

Note. Values on the y-axis reflect partisan attribution biases in favor of the Democratic Party (below zero) and Republican Party (above zero). Labels on the x-axis reflect political party (Dem = Democrat, Rep = Republican) and ideology (1 = *very liberal*, 7 = *very conservative*). Error bars are ±1 *SEM*.

that the partisan attribution bias may be a mechanism that partly explains the association between political ideology and voting decisions.

Study 2

Study 1 provided robust support for our contention that the partisan attribution bias occurs, is associated with political ideology, and mediates the relation between ideology and voting. In Study 2, we examined whether the pattern of results obtained in Study 1 would replicate during the next presidential election cycle. A preregistration for Study 2 as well as materials and data are publicly available at the link provided before.

Method

Participants. The study was conducted on 1 day (July 28), which occurred 3.5 months before the

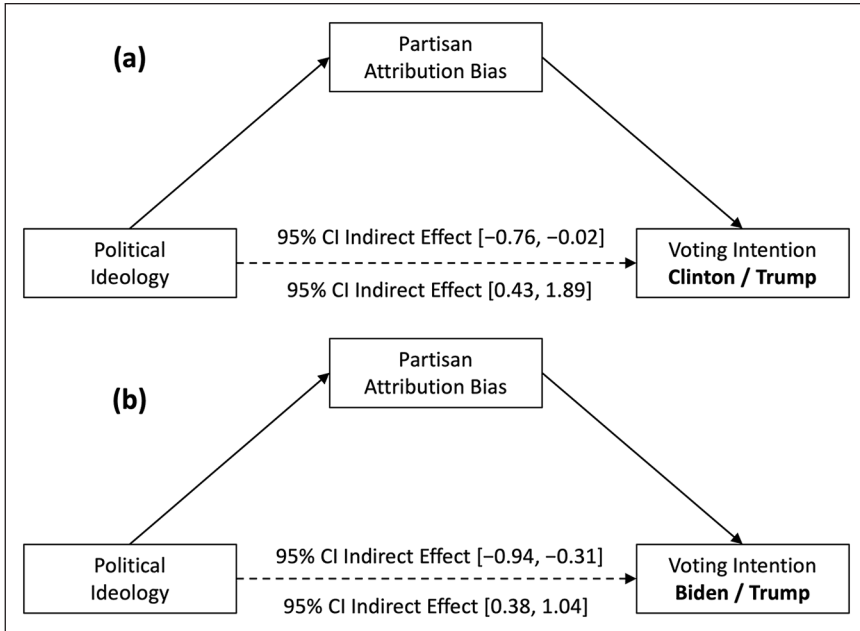**Table 3.** Logistic regression models for voting intentions: Study 1.

Predictor	Voting intention Clinton	Voting intention Trump
Primary model		
Step 1		
Political ideology	$B = -1.16$, $SE = 0.13$, $p < .001$	$B = 1.30$, $SE = 0.16$, $p < .001$
R^2	.471	.472
Step 2		
Political ideology	$B = -0.89$, $SE = 0.16$, $p < .001$	$B = 0.70$, $SE = 0.20$, $p < .001$
Partisan attribution bias	$B = -0.24$, $SE = 0.10$, $p = .020$	$B = 0.71$, $SE = 0.18$, $p < .001$
ΔR^2	.013	.050
Adjusted model		
Step 1		
Political ideology	$B = -1.21$, $SE = 0.14$, $p < .001$	$B = 1.27$, $SE = 0.16$, $p < .001$
R^2	.481	.479
Step 2		
Political ideology	$B = -0.93$, $SE = 0.17$, $p < .001$	$B = 0.61$, $SE = 0.20$, $p = .002$
Partisan attribution bias	$B = -0.25$, $SE = 0.10$, $p = .015$	$B = 0.76$, $SE = 0.19$, $p < .001$
ΔR^2	.015	.052
Secondary model		
Step 1		
Political ideology	$B = -1.68$, $SE = 0.22$, $p < .001$	–
R^2	.573	–
Step 2		–
Political ideology	$B = -1.14$, $SE = 0.25$, $p < .001$	–
Partisan attribution bias	$B = -0.54$, $SE = 0.19$, $p = .003$	–
ΔR^2	.023	–

Note. For partisan attribution bias, higher values indicate greater bias in favor of the Republican Party and lower values indicate greater bias in favor of the Democratic Party. Adjusted models entered age, gender (1 = men, 0 = women/other), and race (1 = European American, 0 = other) as predictors in Step 1. The secondary model removed participants who intended to vote for another candidate or not vote (1 = Clinton, 0 = Trump).

2020 United States presidential election. Data were collected until we exceeded a preregistered goal of at least 105 Democrats and Republicans, after exclusions, in order to obtain at least 95% power to detect a medium effect ($d = 0.50$). Participation was restricted to registered voters in the United States who identified with either the Democratic or Republican Party. Furthermore, in an attempt to bolster data quality, we restricted participation to workers with at least 100 prior approved hits and a 95% or higher approval rate. Data were collected from a total of 331 American adults on MTurk who met these criteria. Data were excluded from 82 participants who failed an attention check; results

were very similar when these participants were retained. These exclusions resulted in a final sample of 249 eligible participants (135 Democrat, 114 Republican).

Procedures. As in Study 1, participants first completed a 20-item attribution questionnaire where they indicated how much Republican (i.e., conservative) and Democratic (i.e., liberal) policies contributed to eight positive and 12 negative outcomes. Several items were slightly modified to reflect changes since 2016, and two items were replaced with those reflecting major issues at the time of the study (i.e., the COVID-19 pandemic and civil unrest following the death of George Floyd). The

Figure 4. Mediation analyses: Study 1 (a) and Study 2 (b).

Note. Political ideology was measured on a 7-point scale (1 = *very liberal*, 7 = *very conservative*). Confidence intervals depict the indirect effect of political ideology on voting intentions through the partisan attribution bias. Confidence intervals above (below) the line are for intention to vote for Clinton/Biden (Trump).

20 outcomes were presented in a randomized order. Further, the order of responsibility judgments (Republican Party then Democratic Party or Democratic Party then Republican Party) was counterbalanced across participants. Responses were averaged to create separate indices of how responsible participants thought Democrats (α = .92) and Republicans (α = .89) were for the eight positive outcomes, and indices of how responsible participants thought Democrats (α = .91) and Republicans (α = .93) were for the 12 negative outcomes.

Next, participants indicated their political ideology on the same scale as Study 1, and whom they intended to vote for in the 2020 presidential election (*Joe Biden, Donald Trump, Other*). For exploratory purposes, participants also completed one-item measures of support for political compromise, attribution of malevolence, and acceptance of political violence. Finally, participants completed demographic questions and an attention check ("Please click the second circle from the right in the scale below").

Results

Partisan attribution bias. Results on the attribution questionnaire were very similar to those obtained in Study 1. Specifically, a 2 (participant political party) x 2 (perceived responsibility for positive outcomes) x 2 (perceived responsibility for negative outcomes) mixed-model ANOVA once again yielded the predicted three-way interaction, $F(1, 247) = 151.55, p < .001, \eta_p^2 = .38$ (see Figure 2b).

When examining positive outcomes, the 2 (participant political party) x 2 (perceived responsibility) interaction was highly robust, $F(1, 247) = 126.84, p < .001, \eta_p^2 = .34$. Democratic participants attributed positive events significantly more to the policies of the Democratic Party than Republican participants did, $t(247) = 4.09$,

$p < .001$, $d = 0.50$. In addition, Democratic participants attributed positive events significantly less to the policies of the Republican Party than did Republican participants, $t(247) = 12.07$, $p < .001$, $d = 1.54$.

The 2 (participant political party) x 2 (perceived responsibility) interaction was also highly robust when examining negative outcomes, $F(1, 247) = 74.91$, $p < .001$, $\eta_p^2 = .23$. Whereas Democratic participants attributed negative events significantly less to the policies of the Democratic Party than Republican participants did, $t(247) = 8.66$, $p < .001$, $d = 1.11$, Democratic participants attributed negative events significantly more to the policies of the Republican Party than did Republican participants, $t(242) = 4.48$, $p < .001$, $d = 0.56$.

Additional tests were conducted to compare attributions of responsibility within each participant group. As expected, Democratic and Republican participants attributed positive events more to the policies of their own political party than to those of the opposing party, $t(134) = 6.50$, $p < .001$, $d = 0.56$ and $t(113) = 8.81$, $p < .001$, $d = 0.65$, respectively. Similarly, Democratic and Republican participants attributed negative outcomes less to the policies of their own political party than to those of the opposing party, $t(134) = 7.55$, $p < .001$, $d = 0.65$ and $t(113) = 4.77$, $p < .001$, $d = 0.44$, respectively.

Next, we compared attributions across positive versus negative outcomes and across judgments of the ingroup versus the outgroup. Among Democrats, partisan attribution biases were more pronounced for negative events than positive events, $t(134) = 2.50$, $p = .014$, $d = 0.22$. Among Republicans, however, they were more pronounced for positive events than negative events, $t(113) = 5.23$, $p < .001$, $d = 0.49$. Moreover, among Democrats, partisan attributions were more pronounced in ratings of the outgroup than the ingroup, $t(134) = 4.39$, $p < .001$, $d = 0.38$. Among Republicans, however, partisan attributions did not significantly differ across ratings of the outgroup versus the ingroup, $t(113) = 0.65$, $p = .515$, $d = 0.06$. Both of these findings are inconsistent with Study 1 and are revisited in the General Discussion.

Overall index of bias. Once again, the summary index of partisan attribution bias was statistically different from zero in both Democratic and Republican participants, $t(134) = 9.92$, $p < .001$, $d = 0.85$ and $t(113) = 7.81$, $p < .001$, $d = 0.73$ (see Figure 3b). Both effects were in the predicted direction and were similar in size, $t(247) = 1.06$, $p = .288$, $d = 0.13$. As expected, there was a strong linear relation between political ideology and the partisan attribution bias ($r = .60$).

Voting intentions. Intention to vote for Joe Biden was significantly associated with both political ideology and the partisan attribution bias, with the latter increasing the variance explained by 8.0% (see Table 4). Similarly, intention to vote for Donald Trump was significantly associated with both predictors, with the partisan attribution bias again increasing the variance explained by 8.0%. These results remained largely unchanged after adjustment for demographic covariates and after removing participants who did not intend to vote for Biden or Trump. Finally, as in Study 1, the partisan attribution bias significantly mediated the association between political ideology and voting intentions, both when examining voting intentions for Joe Biden and for Donald Trump (see Figure 4b).

General Discussion

Attribution theory and research have examined how people explain the causes of events, both in their own life and in the world at large (Heider, 1958; Malle, 2011; Weiner, 2018). Prior scholarship has largely focused on attributions for the behavior of individuals, but we propose that people also make attributions for larger aggregates, such as major political parties. Moreover, we propose that partisan allegiances systematically bias these attributions, such that people attribute positive outcomes more to the actions of their own party than to those of an opposing party ("we cause good things"), and negative outcomes more to the actions of an opposing party than to those of their own party ("they cause bad things"). We conducted two studies in the United States—one before the 2016 presidential election

Table 4. Logistic regression models for voting intentions: Study 2.

Predictor	Voting intention Biden	Voting intention Trump
Primary model		
Step 1		
Political ideology	$B = -0.83$, $SE = 0.10$, $p < .001$	$B = 0.96$, $SE = 0.11$, $p < .001$
R^2	.362	.410
Step 2		
Political ideology	$B = -0.51$, $SE = 0.11$, $p < .001$	$B = 0.62$, $SE = 0.12$, $p < .001$
Partisan attribution bias	$B = -0.54$, $SE = 0.12$, $p < .001$	$B = 0.62$, $SE = 0.14$, $p < .001$
ΔR^2	.080	.080
Adjusted model		
Step 1		
Political ideology	$B = -0.83$, $SE = 0.10$, $p < .001$	$B = 0.97$, $SE = 0.11$, $p < .001$
R^2	.366	.415
Step 2		
Political ideology	$B = -0.49$, $SE = 0.11$, $p < .001$	$B = 0.61$, $SE = 0.12$, $p < .001$
Partisan attribution bias	$B = -0.57$, $SE = 0.12$, $p < .001$	$B = 0.65$, $SE = 0.14$, $p < .001$
ΔR^2	.089	.083
Secondary model		
Step 1		
Political ideology	$B = -0.96$, $SE = 0.11$, $p < .001$	–
R^2	.414	–
Step 2		–
Political ideology	$B = -0.61$, $SE = 0.12$, $p < .001$	–
Partisan attribution bias	$B = -0.66$, $SE = 0.15$, $p < .001$	–
ΔR^2	.084	–

Note. For partisan attribution bias, higher values indicate greater bias in favor of the Republican Party and lower values indicate greater bias in favor of the Democratic Party. Adjusted models entered age, gender (1 = men, 0 = women/other), and race (1 = European American, 0 = other) as predictors in Step 1. The secondary model removed participants who did not intend to vote for either candidate (1 = Biden, 0 = Trump).

and the other before the 2020 election—and both provided robust support for this partisan attribution bias. Our results also indicated that the partisan attribution bias was magnified among those with more extreme ideology, was significantly associated with voting intentions after adjustment for ideology, and significantly mediated the link between ideology and voting.

The present findings make several contributions to social psychological theory and research on attribution, as well as emerging research in political psychology on attributions of responsibility. First, we provide evidence for a novel attribution bias that uniquely focuses on how people explain major societal events and indicates that

political partisanship substantially biases these explanations. Moreover, building upon research which examined political attributions for a single outcome or judgment type (Bartels, 2002; Rico & Liñeira, 2018; Rudolph, 2016), we deconstructed the partisan attribution bias to identify four constituent judgments that produce it. Specifically, we identified that partisan biases emerge in attributions of positive outcomes for (a) one's own party and (b) an opposing party, and in attributions of negative outcomes for (c) one's own party and (d) an opposing party. Thus, the present research clarifies the specific judgments underlying the partisan attribution bias and provides a comprehensive measurement approach that may

be adopted in future research that seeks to further explore its nature and consequences. The robust size of the partisan attribution bias across conditions, and the fact that it obtained in two different election cycles separated by 4 years, bodes well for its replicability.

Second, beyond merely documenting the partisan attribution bias, we also explored potential variations in its size as a function of political party and ideology. Consistent with emerging research suggesting that group-favoring biases are similar across liberals and conservatives (Ditto et al., 2019; Washburn & Skitka, 2018; Waytz et al., 2014), the partisan attribution bias was nearly equivalent when comparing Democrats and Republicans in both studies. Thus, although liberals and conservatives differ in terms of personality and cognitive style (Brandt et al., 2015; Jost, 2017; van Prooijen & Krouwel, 2019), the present findings reinforce the notion that motivated reasoning in favor of one's political group is bipartisan. Furthermore, we found that the partisan attribution bias was exacerbated among those who strongly rather than weakly identified as liberal or conservative. These data suggest that extreme ideologies magnify reasoning biases in favor of one's political group (Toner et al., 2013; Westfall et al., 2015). Additional research with larger samples is needed to document with precision how the partisan attribution bias varies as a function of incremental changes in ideology.

Third, the present findings demonstrate that the partisan attribution bias is a significant correlate of voting intentions, even after adjustment for political ideology. Moreover, the present data suggest that the well-established association between political ideology and voting is in part mediated by the partisan attribution bias. Thus, although we caution against causal inferences given the correlational nature of the present studies, our data provide initial support for the position that ideology is associated with group-favoring attributions, which manifest in different voting decisions. Additionally, they suggest that the link between ideology and voting cannot merely be explained by ideology's connection to attitude positions (Barber & Pope, 2019;

Kalmoe, 2020). Alternatively, our data suggest that ideology is associated with the tendency to perceive the political ingroup as a significant cause of positive outcomes, and the tendency to perceive the political outgroup as a significant cause of negative outcomes, which in turn predicts high-stakes voting decisions in favor of ingroup candidates and against outgroup candidates.

Despite the largely consistent pattern of results across the two studies reported herein, there were differences in results across studies that warrant consideration. Specifically, although both studies evidenced a robust partisan attribution bias, the bias was somewhat larger among Democrats and Republicans in Study 1 ($d = 1.21$ and $d = 1.14$) than in Study 2 ($d = 0.85$ and $d = 0.73$). Additionally, although the partisan attribution bias was significantly associated with voting intentions in both studies, this association was considerably stronger in Study 2 (8% unique variance explained) than in Study 1 (1.3% to 5.0% unique variance explained). Minor methodological differences in the attention checks and attribution questionnaires, as well as demographic differences in the samples (e.g., the larger number of ideological conservatives and restriction to registered voters in Study 2), may have contributed to these variations in results across studies. Nonetheless, additional research is needed to clarify the size of the partisan attribution bias and its association with voting intentions across different methods, election cycles, and in different contexts (e.g., nations outside the United States).

Differences in results across studies were also observed in analyses examining the symmetry of the partisan attribution bias. Specifically, whereas both Democrats and Republicans showed a larger partisan attribution bias for negative outcomes than for positive outcomes in Study 1, only Democrats showed this pattern in Study 2. Similarly, whereas both Democrats and Republicans showed a larger partisan attribution bias in judgments of the outgroup than of the ingroup in Study 1, this pattern once again only occurred among Democrats in Study 2. In short, the present research provides robust evidence for

the partisan attribution bias in general, but the degree to which the bias varies across positive and negative outcomes and judgments for ingroup versus outgroup members awaits further testing.

Moreover, although the pattern of results obtained in the present research is consistent with the notion that partisan allegiances systemically bias attributions, it is important to note that bias does not necessarily reflect inaccuracy. Indeed, theory and research in other social judgment domains suggest that bias and accuracy are independent (West & Kenny, 2011). In some contexts, one political party may contribute more to positive outcomes and less to negative outcomes than another party (e.g., when one party is corrupt). In these cases, the partisan attribution bias may increase judgment accuracy for people who affiliate with the productive party, and decrease judgment accuracy for people who affiliate with the destructive party. In most contexts, however, determining how much major political parties have contributed to positive and negative developments in society is a challenging and often subjective task.

Thus, although the present data argue that partisan allegiances bias or slant these attributions in a group-serving direction, we caution against the interpretation that they affect the accuracy of attributions. To further explore the biasing effect of partisan allegiances on attributions, we examined results for participants in Study 1 who did not identify as either a Democrat or a Republican (see the supplemental results on OSF). These participants provided attributions for positive and negative outcomes that were less extreme than those provided by Democrats and Republicans, and overall exhibited only a very small partisan attribution bias in favor of the Democratic party ($d = 0.24$), which was dwarfed by the overall bias obtained among Democrats ($d = 1.21$) and Republicans ($d = 1.14$). These supplemental findings further suggest that aligning oneself with a political party results in biased attributions.

Finally, building upon other research on political social cognition (Ditto et al., 2019), we have argued that the partisan attribution bias reflects a form of motivated reasoning. Nonetheless, it is possible that nonmotivational processes also contribute to this effect. People may know more about their own political group than about an opposing group, and may rely upon this biased information set to conclude that their own group has had a greater positive impact on society than opposing groups (Ahler & Sood, 2018). Additionally, discussions with like-minded others may selectively expose people to group-favoring information that polarizes political attributions (Hart et al., 2009; Weber & Klar, 2019). Thus, although research is needed to examine the contributions of both motivational and nonmotivational processes to the partisan attribution bias, we believe that both likely contribute to its occurrence and robustness across the political aisle.

In addition to obtaining mechanism data, future research is needed to examine whether partisan attribution biases have a causal effect on voting decisions. The present research suggests that the partisan attribution bias partially mediates the association between political ideology and voting. Nonetheless, it is also possible that political ideology mediates the association between the partisan attribution bias and voting (exploratory analyses support this reverse mediation pattern as well as the pattern advanced here). Thus, future work is needed to resolve the temporal ordering of variables examined in the present research. Experimental studies that temporarily heighten or depress the partisan attribution bias may be useful along these lines.

In closing, people attempt to explain the causes of events, including major events in society. The present research found compelling support for the argument that political partisans make more charitable attributions for their own political party than for the opposing party across a wide array of major societal outcomes. The present work also documented constituent judgments that give rise to this partisan attribution bias and its unique association with voting intentions in high-stakes elections. Future research is needed to evaluate the partisan attribution bias across different contexts as well as its implications for voting decisions in different election cycles. Pending replication and extension in

future studies, the partisan attribution bias may stand along other established attribution biases in social psychology and may provide an important linkage between attribution theory and emerging interest in political social cognition.

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ORCID iD

Ethan Zell https://orcid.org/0000-0002-8363-8418

References

Ahler, D. J., & Sood, G. (2018). The parties in our heads: Misperceptions about party composition and their consequences. *Journal of Politics*, *80*, 964–981. https://doi.org/10.1086/697253

Allen, M. S., Robson, D. A., Martin, L. J., & Laborde, S. (2020). Systematic review and meta-analysis of self-serving attribution biases in the competitive context of organized sport. *Personality and Social Psychology Bulletin*, *46*, 1027–1043. https://doi.org/10.1177/0146167219893995

Barber, J., & Pope, J. C. (2019). Does party trump ideology? Disentangling party and ideology in America. *American Political Science Review*, *113*, 38–54. https://doi.org/10.1017/S0003055418000795

Bartels, L. M. (2002). Beyond the running tally: Partisan bias in political perceptions. *Political Behavior*, *24*, 117–150. https://doi.org/10.1023/A:1021226224601

Brandt, M. J., & Crawford, J. T. (2020). Worldview conflict and prejudice. In B. Gawronski (Ed.), *Advances in experimental social psychology* (*Vol. 61*, pp. 1–66). Elsevier Academic Press. https://doi.org/10.1016/bs.aesp.2019.09.002

Brandt, M. J., Evans, A. M., & Crawford, J. T. (2015). The unthinking or confident extremist? Political extremists are more likely than moderates to reject experimenter-generated anchors. *Psychological Science*, *26*, 189–202. https://doi.org/10.1177/0956797614559730

Brewer, M. B. (2019). Intergroup relations. In E. J. Finkel & R. F. Baumeister (Eds.), *Advanced social psychology: The state of the science* (2nd ed., pp. 249–274). Oxford University Press.

Bullock, J. G., & Lenz, G. (2019). Partisan bias in surveys. *Annual Review of Political Science*, *22*, 325–342.

https://doi.org/10.1146/annurev-polisci-051117-050904

Campbell, W. K., & Sedikides, C. (1999). Self-threat magnifies the self-serving bias: A meta-analytic integration. *Review of General Psychology*, *3*, 23–45. https://doi.org/10.1037/1089-2680.3.1.23

Clark, C. J., Liu, B. S., Winegard, B. M., & Ditto, P. H. (2019). Tribalism is human nature. *Current Directions in Psychological Science*, *28*, 587–592. https://doi.org/10.1177/0963721419862289

Cohen, G. L. (2003). Party over policy: The dominating impact of group influence on political beliefs. *Journal of Personality and Social Psychology*, *85*, 808–822. https://doi.org/10.1037/0022-3514.85.5.808

Cozzarelli, C., Wilkinson, A. V., & Tagler, M. J. (2001). Attitudes toward the poor and attributions for poverty. *Journal of Social Issues*, *57*, 207–227. https://doi.org/10.1111/0022-4537.00209

Ditto, P. H., Liu, B. S., Clark, C. J., Wojcik, S. P., Chen, E. E., Grady, R. H., Celniker, J. B., & Zinger, J. F. (2019). At least bias is bipartisan: A meta-analytic comparison of partisan bias in liberals and conservatives. *Perspectives on Psychological Science*, *14*, 273–291. https://doi.org/10.1177/1745691617746796

Fiske, S. T., & Taylor, S. E. (2017). *Social cognition: From brains to culture* (3rd ed.). SAGE Publications.

Garrett, R. K., & Stroud, N. J. (2014). Partisan paths to exposure diversity: Differences in pro- and counterattitudinal news consumption. *Journal of Communication*, *64*, 680–701. https://doi.org/10.1111/jcom.12105

Hall, M. P., & Raimi, K. T. (2018). Is belief superiority justified by superior knowledge? *Journal of Experimental Social Psychology*, *76*, 290–306. https://doi.org/10.1016/j.jesp.2018.03.001

Hart, W., Albarracín, D., Eagly, A. H., Brechan, I., Lindberg, M. J., & Merrill, L. (2009). Feeling validated versus being correct: A meta-analysis of selective exposure to information. *Psychological Bulletin*, *135*, 555–588. https://doi.org/10.1037/a0015701

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. The Guilford Press.

Heider, F. (1958). *The psychology of interpersonal relations*. Wiley.

Islam, M. R., & Hewstone, M. (1993). Intergroup attributions and affective consequences in majority and minority groups. *Journal of Personality and Social Psychology*, *64*, 936–950. https://doi.org/10.1037/0022-3514.64.6.936

Jacoby, W. G. (1991). Ideological identification and issue attitudes. *American Journal of Political Science*, *35*, 178–205. https://doi.org/10.2307/2111443

Jost, J. T. (2006). The end of the end of ideology. *American Psychologist*, *61*, 651–670. https://doi.org/10.1037/0003-066X.61.7.651

Jost, J. T. (2017). Ideological asymmetries and the essence of political psychology. *Political Psychology*, *38*, 167–208. https://doi.org/10.1111/pops.12407

Jost, J. T., Sterling, J., & Stern, C. (2018). Getting closure on conservatism, or the politics of epistemic and existential motivation. In C. E. Kopetz & A. Fishbach (Eds.), *The motivation–cognition interface: From the lab to the real world: A Festschrift in honor of Arie W. Kruglanski* (pp. 56–87). Routledge.

Kalmoe, N. P. (2020). Uses and abuses of ideology in political psychology. *Political Psychology*, *41*, 771–793. https://doi.org/10.1111/pops.12650

Kelley, H. H. (1967). Attribution theory in social psychology. In D. Levine (Ed.), *Nebraska Symposium on Motivation* (*Vol. 15*, pp. 129–238). University of Nebraska Press.

Levitin, T. E., & Miller, W. E. (1979). Ideological interpretations of presidential elections. *American Political Science Review*, *73*, 751–771. https://doi.org/10.2307/1955402

Lieberman, M. D., Gaunt, R., Gilbert, D. T., & Trope, Y. (2002). Reflexion and reflection: A social cognitive neuroscience approach to attributional inference. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 34, pp. 199–249). Academic Press. https://doi.org/10.1016/S0065-2601(02)80006-5

Malle, B. F. (2011). Attribution theories: How people make sense of behavior. In D. Chadee (Ed.), *Theories in social psychology* (pp. 72–95). Wiley Blackwell.

Mezulis, A. H., Abramson, L. Y., Hyde, J. S., & Hankin, B. L. (2004). Is there a universal positivity bias in attributions? A meta-analytic review of individual, developmental, and cultural differences in the self-serving attributional bias. *Psychological Bulletin*, *130*, 711–747. https://doi.org/10.1037/0033-2909.130.5.711

O'Laughlin, M. J., & Malle, B. F. (2002). How people explain actions performed by groups and individuals. *Journal of Personality and Social Psychology*, *82*, 33–48. https://doi.org/10.1037/0022-3514.82.1.33

Pettigrew, T. F. (1979). The ultimate attribution error: Extending Allport's cognitive analysis of prejudice. *Personality and Social Psychology Bulletin*, *5*, 461–476. https://doi.org/10.1177/014616727900500407

Rico, G., & Liñeira, R. (2018). Pass the buck if you can: How partisan competition triggers attribution bias in multilevel democracies. *Political Behavior*, *40*, 175–196. https://doi.org/10.1007/s11109-017-9409-5

Rosenberg, S. W., & Wolfsfeld, G. (1977). International conflict and the problem of attribution. *Journal of Conflict Resolution*, *21*, 75–103. https://doi.org/10.1177/002200277702100105

Ross, L. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 10, pp. 173–220). Academic Press. https://doi.org/10.1016/S0065-2601(08)60357-3

Ross, L. (2018). From the fundamental attribution error to the truly fundamental attribution error and beyond: My research journey. *Perspectives on Psychological Science*, *13*, 750–769. https://doi.org/10.1177/1745691618769855

Rudolph, T. J. (2016). The meaning and measurement of responsibility attributions. *American Politics Research*, *44*, 106–130. https://doi.org/10.1177/1532673X15595460

Rudolph, T. J., & Evans, J. (2005). Political trust, ideology, and public support for government spending. *American Journal of Political Science*, *49*, 660–671. https://doi.org/10.1111/j.1540-5907.2005.00148.x

Toner, K., Leary, M. R., Asher, M. W., & Jongman-Sereno, K. P. (2013). Feeling superior is a bipartisan issue: Extremity (not direction) of political views predicts perceived belief superiority. *Psychological Science*, *24*, 2454–2462. https://doi.org/10.1177/0956797613494848

Van Prooijen, J.-W., & Krouwel, A. P. M. (2019). Psychological features of extreme political ideologies. *Current Directions in Psychological Science*, *28*, 159–163. https://doi.org/10.1177/0963721418817755

Washburn, A. N., & Skitka, L. J. (2018). Science denial across the political divide: Liberals and conservatives are similarly motivated to deny attitude-inconsistent science. *Social Psychological and Personality Science*, *9*, 972–980. https://doi.org/10.1177/1948550617731500

Waytz, A., Young, L. L., & Ginges, J. (2014). Motive attribution asymmetry for love vs. hate drives intractable conflict. *Proceedings of the National Academy of Sciences of the USA*, *111*, 15687–15692. https://doi.org/10.1073/pnas.1414146111

Weber, C., & Klar, S. (2019). Exploring the psychological foundations of ideological and social sorting. *Political Psychology*, *40*, 215–243. https://doi.org/10.1111/pops.12574

Weiner, B. (2018). The legacy of an attribution approach to motivation and emotion: A no-crisis zone. *Motivation Science*, *4*, 4–14. https://doi.org/10.1037/mot0000082

West, T. V., & Kenny, D. A. (2011). The truth and bias model of judgment. *Psychological Review*, *118*, 357–378. https://doi.org/10.1037/a0022936

Westfall, J., van Boven, L., Chambers, J. R., & Judd, C. M. (2015). Perceiving political polarization in the United States: Party identity strength and attitude extremity exacerbate the perceived partisan divide. *Perspectives on Psychological Science*, *10*, 145–158. https://doi.org/10.1177/1745691615569849

Zell, E., & Bernstein, M. J. (2014). You may think you're right . . . Young adults are more liberal than they realize. *Social Psychological and Personality Science*, *5*, 326–333. https://doi.org/10.1177/1948550613492825

Zell, E., Strickhouser, J. E., Sedikides, C., & Alicke, M. D. (2020). The better-than-average effect in comparative self-evaluation: A comprehensive review and meta-analysis. *Psychological Bulletin*, *146*, 118–149. https://doi.org/10.1037/bul0000218

Zmigrod, L., Rentfrow, P. J., & Robbins, T. W. (2020). The partisan mind: Is extreme political partisanship related to cognitive inflexibility? *Journal of Experimental Psychology: General*, *149*, 407–418. https://doi.org/10.1037/xge0000661