Opinion Polls in Context: Partisan Embeddedness, Source Confusion, and the Effects of Socially Transmitted Polls

MIN-HSIN SU
DOUGLAS M. MCLEOD
University of Wisconsin–Madison, USA

The digital media environment has transformed the ways information about “collective preference” is communicated. Using 2 survey experiments, this study examines how embedded context may condition the processing and influence of an opinion poll in a multicue, source-confusion environment. Our results suggest that, in general, opinion polls are evaluated more negatively when the results are embedded in a politician’s tweet. Consistent with motivated reasoning, congruent polls that support one’s side tend to be perceived as more credible, which in turn leads to a more polarized issue position via poll-aligned opinion climate perception. This self-serving perception may be heightened by politician repurposing of polling outcomes, especially in the lack of pollster brand names. Importantly, there is partisan asymmetry in how contextual information may alter the processing of polling results. Above and beyond an average effect, politician uptake of polling data undermines a poll’s perceived credibility to a greater extent among Democrats than Republicans.

Keywords: opinion poll, motivated reasoning, credibility judgment, source confusion, partisan asymmetry

Since the broadcast era, communication scholars have long been interested in how “thinking of others” may affect one’s own perception, attitude, and behaviors. The impersonal influence hypothesis, for instance, contends that mass media has an influence on individuals primarily through offering a snapshot of mass collectives (Mutz, 1998). This impersonal influence has taken on new relevance in today’s media environment with the ubiquity of survey data, polling reports, and aggregate ratings constantly attempting to inform us of others’ preferences.

Among all possible ways to obtain this knowledge about mass collectives, opinion polls perhaps are the most straightforward one. While polling has been a focal area of research, recent studies have begun to investigate the use of polling data in various contexts, and how, if any, it enriches debates in the public sphere. For instance, studies have found that while referencing statistics overall reflects journalists’ attempt...
to maintain objectivity, such "evidence" is predominantly supplied and interpreted by political elites and used in an imprecise and patchy way (Cushion, Lewis, & Callaghan, 2017).

Against this backdrop of society's broader movement toward using statistical information across various communication contexts, this study aims to understand how a poll's embedded context may transform public reception of its findings. This question is important in several regards. On one hand, polling results are a distinct form of political information, designed (at least in principle) to deliver "statistical facts" with quantifiable uncertainty, striving for accuracy rather than partisan cheerleading. It is unclear whether using polling data outside its original context to persuade or express may affect the audience's processing strategies.

On the other hand, the question also bears practical importance. Increasingly, politicians like to cite opinion polls or make subjective judgments about opinion distribution to show that the public is "with them" or to activate populist sentiment (Peter, 2020). Especially on social media, a poll's influence may be contingent more on the person citing the result, rather than the source that originally supplies the content (Jang, 2021; Lee, Kim, & Cho, 2018). This signals a change in communicating polling results from news mediation and professional gatekeeping (Toff, 2018) to a convergence between mass- and interpersonal influence (O'Sullivan & Carr, 2018), calling for an expanded framework to fully understand polling effects on democratic processes.

Drawing on multiple streams of thoughts, primarily motivated reasoning (Taber & Lodge, 2006), source confusion (Pearson, 2020), and ideological asymmetry (Jost, 2017), we conduct two online survey experiments across two controversial issues—the construction of the U.S.–Mexico border wall and the Affordable Care Act—and vary the context in which poll results are embedded. The goal of this study is mainly threefold. We seek to understand (a) how partisan bias in credibility judgment may be enhanced or mitigated by a poll's embedded context, (b) how such biases affect a poll’s ability to shape opinion climate perception as well as personal opinion, and (c) whether there is heterogeneity in Republicans and Democrats’ reaction to a socially transmitted poll. In doing so, we aim to contribute to the current scholarship by broadening the embedded context of opinion polls and discussing partisan asymmetry that tends to be obscured in previous studies.

**Opinion Poll and Motivated Reasoning**

Public opinions are the foundation of representative democracy. As a vital channel for political communication, polls allow citizens to express their preferences, creating opportunities to "offer the mass public equal voice" (Moy & Rinke, 2012, p. 225). On the other hand, politicians and elected officials often rely on polling outcomes to adapt policy agendas and communication strategies, responding to the wish of their constituents (Rossini, Hemsley, Tanupabrunsgun, Zhang, & Stromer-Galley, 2018). Polls are important also because they may profoundly shape how citizens come to understand political reality (Moy & Rinke, 2012), shifting perceptions and personal opinions (Kuru, Pasek, & Traugott, 2017; Sonck & Loosveldt, 2010).
In principle, opinion polls are supposed to deliver a snapshot of collective sentiment based on rigorous procedures and to be evaluated with the same kind of objectivity. However, this democratic ideal is often far from reality. Studies have suggested that the public generally lacks sufficient knowledge to assess poll quality based on statistical principles (Kennedy et al., 2018) and has to rely on numerous information shortcuts, such as the nature of sponsorship (Salwen, 1987) or delivery channels (Chia & Chang, 2017; Kim, Weaver, & Willnat, 2000). With the abundance of conflicting polling data, coupled with well-publicized polling failures and elite rhetoric about “fake polls,” this task has only become more challenging, leading to widespread public distrust (The Hill/HarrisX, 2018).

Even worse, the distrust seems not to apply across the board. Research has documented people’s tendency to trust polls that favor their party while negatively evaluating those whose findings are unfavorable (Madson & Hillygus, 2020). This biased evaluative process has been explained through several mechanisms, including network homophily leading to false consensus (Gunther & Chia, 2001) and social conformity (Baek, Jeong, & Rhee, 2015), but mostly based on insights from motivated reasoning (Kunda, 1990). At its core, the theory suggests that political information tends not to be processed in an even-handed manner. Especially in the context of high-stakes politics, people are often motivated to prioritize directional goals over accuracy goals (Kunda, 1990). Since opinion polls proclaim which party enjoys majority support, they often accentuate interparty conflict and promote group-serving processing (Taber & Lodge, 2006). Based on the above, we propose the following hypothesis:

**H1:** Congruent polls that favor one’s party will be perceived as more credible than incongruent polls.

### Partisan Embedded Context

Beyond poll content favorability, it is also important to attend to the context where polls are encountered. Unlike the broadcast era, opinion polls now are not conducted and communicated solely by reputable pollsters and legacy media (Madson & Hillygus, 2020). Opt-in surveys or those from highly partisan outlets are now presented as “hard data” alongside their more rigorous counterparts (Kennedy et al., 2018). The decentralized transmission also invites engagement from citizens and political actors alike, through forwarding, endorsing, or commenting (Ampofo, Anstead, & O’Loughlin, 2011).

One common scenario is when opinion polls are cited by political actors to uphold personal views or gain legitimacy. For instance, former President Trump tweeted on January 5, 2019, during the government shutdown: “AP-NORC POLL: ‘Immigration among the top concerns in 2019.’ People want to stop drugs and criminals at the Border” (Donald J. Trump, 2019). Repurposing polling data in one’s political expression not only passes down the information but also offers an interpretive framework for the audience to make sense of the cited content. In this case, by embedding polling outcome in his tweet, Trump was able to motivate an interpretation of the results through a partisan lens. Similarly, drawing on cognitive response perspective (Mutz, 1998), Cutler, Matthews, and Pickup (2013) argue that the embedded context of a poll may facilitate or hinder poll effects, depending on what kinds of cognitive responses are induced by the context.
Politicians’ use of polling information has been studied primarily in the context of poll–policy relationships and government responsiveness (Eisinger, 2008). One focal area of debate is whether, and to what extent, politicians pander to polling results, or are polls typically used to promote their preferred objectives, not to change policy toward majority opinion (Jacobs & Shapiro, 2000). This tension has been well illustrated in George W. Bush’s frequent remarks that he governed “based upon principle and not polls” (Green, 2002, p. 11). While politician invocation of public opinion in parliamentary debates or policymaking is not new, this line of research has been relatively silent with respect to public reactions as well as how the changing media environment transforms the implications of poll use.

With the advent of social media, this practice has taken on different meanings. For one thing, social media has inflicted a pivotal role in political actors’ ability to directly engage with the electorate, often through highly personalized messages. This means polling data can play a much more fundamental role in their “crafted talk” to show responsiveness than ever before (Jacobs & Shapiro, 2000, p. 27). Moreover, social media has several unique features, creating additional layers of challenges in citizens’ sense-making of social reality based on polling information. In particular, the increasing blurring of boundaries between content types has led to source confusion, boosting the centrality of contextual information in the processing of digital content.

For instance, research has found that stories embedded in a commercial magazine were perceived as less credible compared with when the same messages appeared in a nonbranded editorial magazine (Cole & Greer, 2013). Studies on covert persuasion also reveal that embedded context (e.g., native advertising embedded in soft versus hard news) may affect information trust and subsequent engagement (Amazeen, 2020). To understand the effects of socially transmitted polls outside news context, it is thus crucial to consider how political elites are able to “recontextualize” polling evidence to alter public reaction. In our case, when opinion polls are embedded in a social media post and linked to a particular position, the surrounding contextual cues may highlight the sharer’s persuasive intent, induce psychological reactance, and undermine a sense of objectivity that news format would have conferred.

H2: Partisan embeddedness negatively affects perceived credibility of polling results.

Additionally, we also expect partisan embeddedness to heighten the degree to which individuals rely on poll result favorability to make credibility judgments. When presented as statistical information, unfavorable polls can be harder to discount compared with outright opinionated pieces, unless one is able to generate counterarguments (Kunda, 1990). However, the situation is different when polling outcomes are cited by politicians on social media. For one thing, since social media promotes blended content category (Pearson, 2020), people likely process polling data as part of partisan claim-making, not statistical facts (Housholder & LaMarre, 2014). For another, social media provide a vehicle for politicians to selectively highlight certain conclusions without supplying background details or hyperlinks. This “streamlined version” creates greater room for hostile audience to resist the influence of unfavorable polls as politically motivated and not an accurate depiction of reality. Furthermore, partisan embeddedness may set in motion a social learning process where individuals learn how to react to a piece of information either by following their party leaders or distancing themselves from out-group figures. In this sense, when redistributing polling outcomes, political elites act as opinion leaders, helping networked others make sense of polling results in
a two-step-flow communication manner (Lazarsfeld, Berelson, & Gaudet, 1948). Finally, and consistent with the exemplification theory, partisan embeddedness likely adds a human face to the "numbers," which remain abstract until concrete exemplars render the results more "vivid" and emotionally involving (Zillmann, 1999). All these suggest that biased processing may be more pronounced when polls are embedded in a partisan context.

These perspectives dovetail well with a robust literature on partisan source effects, which suggests that partisan sources can be powerful heuristics in judging the veracity and value of a message (Arpan & Raney, 2003)—even stronger than content alignment (Cohen, 2003). Empirical research has provided some support for this. One study found that Republicans were more likely to believe information when attributed to Trump (Swire, Berinsky, Lewandowsky, & Ecker, 2017). Recent studies also found that information recirculated by a like-minded television host tended to be more trusted (Landrevile & Niles, 2019), whereas news articles shared by out-group social media users appeared more biased and inaccurate (Lee et al., 2018). Collectively, these studies suggest that favorable polls may become even more credible when cited by a like-minded politician (Cohen, 2003).

Given the above, compared with plain statistical information, we expect that partisan embeddedness activates stronger group identity, heightens "us versus them" contrast, and is more likely to be tinted with motivated reasoning, thereby leading to more polarized credibility judgments:

H3: The evaluative bias based on poll result congruence will be more pronounced in the partisan embedded context compared with its verbatim text version (control condition).

**Pollster Source Reference**

Importantly, with social media’s cue-rich environment (Lee & Lim, 2014), it is probable that other available cues may mitigate partisan motivated processing induced by a poll’s content favorability or embedded context. Studies on competing information shortcuts have suggested that partisan cue-taking does not always overwhelm other credibility heuristics (Bullock, 2020). Such countervailing effects may come in the form of popularity ratings (Messing & Westwood, 2014) or subtle frame choices (Jang & Hart, 2015). Given this, scholars have cautioned against studying partisan cue effect "in a contextless vacuum" (Ozer, 2020, p. 16).

Following this school of thought, this study investigates pollster attribution (as a counteracting cue) and its interplay with partisan embeddedness. Studies have shown that the inclusion of methodological details or sponsorship information may shape the reception of a poll (Kuru et al., 2017; Salwen, 1987). This suggests that when politicians cite polling outcomes, it matters whether original source information is provided. According to classic persuasion theories (Hovland & Weiss, 1951) and more recent work on brand-name effects (Urban & Schweiger, 2014), mentioning a specific pollster as the original information provider may increase perceived credibility. Krebs (2017), for instance, found that people hold a set of subjective perceptions toward the name of news organizations and often evaluate individual stories based on brand perceptions. Following this line of reasoning, when the quoted polls are attributed to specific pollsters with established reputations, people should be less susceptible to partisan motivated influence.
However, studies from the theory of prominence interpretation (Fogg, 2003) and multisource competition (Jang, 2021; Turcotte, York, Irving, Scholl, & Pingree, 2015) suggest another alternative hypothesis. According to this view, on social media, the influence of proximal sources tends to surpass that of the distal ones, as the former is often presented in a more visible and responsive way. Supporting this, survey data show that less than half of the people can recall the news brand of a socially curated story (Kalogeropoulos & Newman, 2017). Along similar lines, Turcotte and colleagues (2015) found that trust in the sharers of a news story may transfer to trust in the content, even benefiting the original content supplier. Comparing different platforms and news influence, Jang (2021) found that the relevance of news outlet reputation decreases when the story was shared on social media rather than being posted on the news website (in which news outlets continue to exert a strong influence as the most proximal source). Based on the above, pollster brand names may fail to narrow the gap in perceived credibility between hostile and friendly audiences. To explore the potential multisource interaction, an important yet understudied area for partisan motivated judgments, additional hypotheses were proposed. Figure 1 presents the conceptual model summarizing all hypotheses in Study 1.

**H4a:** Pollster reference will increase perceived credibility of polling results.

**H4b:** Pollster reference will moderate partisan bias in credibility judgment.

![Figure 1. Conceptual model for Study 1.](image)

**Study 1. Method**

**Experiment Design and Stimuli**

Study 1 examines how (a) poll result congruence, (b) pollster brand names, and (c) partisan embedded context affect people’s evaluative judgment of poll quality. Partisan embeddedness was operationalized in this study as politician uptakes of opinion polls. Using an online experiment, respondents were randomly assigned to one of the four conditions in which they read a fictitious polling outcome, manipulated along two dimensions in a 2 (embedded context: control versus partisan) × 2 (pollster reference: present versus absent) between-subjects design (more details below). After reading the assigned message, participants answered a battery of posttest questions, including perceived poll quality, followed by demographics questions before they were debriefed and thanked.
The stimuli message was constructed by the researchers to resemble a summary headline that participants would come across in their everyday life. In all conditions, the poll concludes “Numbers of Americans supporting substantive expansion of the wall along the U.S.–Mexico border are going up fast, more than 50%,” except for the manipulated aspects. For pollster reference manipulation, the poll was either attributed to the Gallup Poll (the pollster-present condition) or loosely attributed to “a recent poll” (the pollster-absent condition). For embedded context manipulation, the poll was presented either as a standalone message (the control condition) or embedded in former President Trump’s tweet (the partisan condition; see Appendix 1 for example stimuli).

For the issue context, we choose the debate about border security. The construction of the U.S.–Mexico border wall was central to former President Trump’s campaign rhetoric in the 2016 election and has remained one of the major political battlegrounds throughout his presidency, motivating narratives about immigration and isolationist strategies (Orsini, Canessa, Gonzaga Martínez del Campo, & Ballantine Pereira, 2019). Several political elites have referenced polling results on social media to show that the public was on their side. Public sentiment has also grown increasingly divided along party lines. This partisan tension was felt perhaps most strongly during the partial shutdown of the federal government—one of the longest in the American history, with Republican support for the wall at record high while Democratic support reaching a new low (Pew Research Center, 2019). The contested nature of the issue provides an ideal context to study the effects of political polls and politician recontextualizing.

**Participants**

Participants were recruited from a large midwestern university to take the experiment embedded survey in exchange for course extra credit. In our sample, 65.96% were female, slightly leaned toward the liberal side \( M = 3.18, \ SD = 1.38 \) on a 7-point liberal–conservative scale, where 4 = independent. The average age was 21.30 (SD = 1.75); 79.4% were White, 1.4% were African American, 14.2% were Asian, and 6.4% were of other ethnicities. The sample median annual household income (combining all household members) was between $120,000 and $200,000. After removing those who did not pass the manipulation check or did not follow the instructions \( n = 27 \), the resulting sample size was 141 completed responses.

**Measures**

**Party Identification**

Participants reported their party identification on a 7-point scale using a standard measure (1 = strong Democrat to 7 = strong Republican; \( M = 3.18, \ SD = 1.38 \)). Since this study did not manipulate the direction of polling outcome, all participants read a majority-support poll. Higher score indicates that the person shared the position of the reported majority.
Poll Quality Evaluation

Following previous research (Kuru et al., 2017), poll quality evaluation was measured by averaging participants’ ratings on a 7-point scale on four dimensions: accuracy, credibility, believability, and trustworthiness ($M = 3.30$, $SD = 1.50$, $\alpha = .96$).

Controls

Besides demographics (age, gender, education, income, and ethnicity), we also controlled for several predisposition variables that may affect participants’ processing and reactions. Issue knowledge was measured by asking participants their self-reported familiarity with the issue before the experiment ($1 = \text{none at all} \text{ to } 7 = \text{a great deal}; M = 3.94$, $SD = 1.40$), whereas issue involvement was measured by participants’ self-ratings on how important the issue of border wall construction was to them personally ($1 = \text{not at all important} \text{ to } 11 = \text{extremely important}; M = 7.59$, $SD = 2.37$). Prior issue attitude was measured on a 11-point scale ($1 = \text{strongly oppose} \text{ to } 11 = \text{strongly support}$) that tapped into respondents’ preexisting attitudes toward the construction of the wall ($M = 3.42$, $SD = 2.81$). Lastly, to isolate the party label effect, we also controlled for respondents’ evaluative responses to Donald Trump on a 100-point scale ($M = 30.0$, $SD = 22.8$).

Study 1. Results

To explore the main effect of outcome congruence (H1) and embedded context (H2) on poll quality evaluation, a series of ordinary least squares (OLS) regressions were conducted (see Table 1). Other things being equal, strong Republican supporters were more likely to perceive a prowall poll as more credible ($\beta = .02$, $p < .05$; Model 1). On the other hand, partisan embedded context has a negative effect on credibility evaluation ($\beta = -1.50$, $p < .000$; Model 2): Polls embedded in a partisan context were perceived as less credible, compared with the identical findings presented as a standalone message. Results supported both H1 and H2.
Table 1. OLS Regressions Predicting Poll Quality Evaluation.

<table>
<thead>
<tr>
<th>Control</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.13</td>
<td>.08</td>
<td>.07</td>
</tr>
<tr>
<td>Education</td>
<td>-.18</td>
<td>-.22</td>
<td>-.00</td>
</tr>
<tr>
<td>Income</td>
<td>.05</td>
<td>.00</td>
<td>.09</td>
</tr>
<tr>
<td>Ethnicity (White = 1)</td>
<td>-.38</td>
<td>-.44</td>
<td>-.59</td>
</tr>
<tr>
<td>Gender (Female = 1)</td>
<td>-.13</td>
<td>.06</td>
<td>.07</td>
</tr>
<tr>
<td>Knowledge</td>
<td>-.11</td>
<td>-.01</td>
<td>-.05</td>
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<tr>
<td>Involvement</td>
<td>.02</td>
<td>-.02</td>
<td>.02</td>
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<tr>
<td>Prior Attitude</td>
<td>.78</td>
<td>.72</td>
<td>1.12**</td>
</tr>
<tr>
<td>Trump Supporter</td>
<td>.02*</td>
<td>.01*</td>
<td>.14</td>
</tr>
<tr>
<td>Predictor</td>
<td></td>
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<tr>
<td>Result Congruence</td>
<td>.02*</td>
<td></td>
<td>.03*</td>
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<tr>
<td>Partisan Context</td>
<td>–</td>
<td>-1.50***</td>
<td>-2.65**</td>
</tr>
<tr>
<td>Pollster Reference</td>
<td>–</td>
<td>–</td>
<td>.95**</td>
</tr>
<tr>
<td>Interaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Congruence*Partisan</td>
<td>–</td>
<td>–</td>
<td>.59**</td>
</tr>
<tr>
<td>Congruence*Pollster</td>
<td>–</td>
<td>–</td>
<td>-.02</td>
</tr>
<tr>
<td>Partisan*Pollster</td>
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<td>–</td>
<td>.77</td>
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<tr>
<td>Three-Way Interaction</td>
<td>–</td>
<td>–</td>
<td>-.59*</td>
</tr>
<tr>
<td>$R^2$ (%)</td>
<td>24.59***</td>
<td>40.98***</td>
<td>49.71***</td>
</tr>
</tbody>
</table>

Note. *p < .05; **p < .01; ***p < .001.

Regarding the interaction between the two (Model 3), results further revealed that the effect of result congruence on perceived credibility was contingent on the context of presentation ($\beta = .59, p < .01$): Biased evaluative processes were more pronounced when poll results were cited in a politician’s tweet, compared with when the identical information was presented as a standalone message, supporting H3. Figure 2(a) depicts the relationships, with higher scores on the x-axis indicating stronger identification with the Republicans.

To answer H4, which concerns the main and interactive effect of pollster reference ("a recent poll" vs. "Gallup Poll"), OLS regressions were conducted, controlling for the same control variables. As predicted, mentioning pollster names significantly boosted perceived credibility ($\beta = .95, p < .01$). Apart from the main effect, pollster reference also moderated the relationship between result congruence and embedded context ($\beta = -.59, p < .05$), confirming a significant three-way interaction (see Table 1, Model 3). As revealed in Figure 2(b), partisan embeddedness played a much more pronounced role in facilitating group-serving credibility judgment when no specific pollster names were mentioned. By contrast, when a reputable pollster label was attached, partisan embeddedness consistently reduced perceived credibility, regardless of content favorability. H4a and H4b were thus both supported.
Limitations

Taken together, results from Study1 underscore the role of partisan embeddedness in shaping perceived poll credibility, with the nature of influence contingent on result congruence and pollster reference. There are, nevertheless, several important questions left unanswered. First, Study1 focuses only on one side of the issue. A fully crossed experiment that involves manipulating the content (i.e., majority support vs. majority oppose) would yield more comprehensive understanding of the proposed relationships. Additionally, Study1 seeks to understand predictors of poll credibility perception. However, our knowledge remains limited with respect to whether a poll’s perceived quality remains an important predictor of its influence. Relatedly, to increase external validity, it is important to replicate the current study with a more representative sample. Finally, a fully crossed design, coupled with a more balanced sample on partisanship, would allow us to test potential partisan asymmetry of the proposed models. To address these issues, Study 2 was conducted with an adult sample and a different issue context.

Linking Poll Quality Evaluation to Poll Effects

The association between message evaluation and acceptance has been well documented in the literature (e.g., Lavine & Snyder, 1996). That is, attitude or perception change is more likely for those who find the results sufficiently credible. Especially in today’s poll-saturated environment, credibility perception seems a reasonable precursor to any poll influence.
This theoretical linkage, however, has not been fully explored. On the one hand, research on perceived credibility has predominantly focused on the contributing factors, such as delivery medium or inclusion of methodological details (Kim et al., 2010), not its potential outcomes. On the other hand, studies on poll influence (Moy & Rinke, 2012) rarely directly examine in what ways perceptual credibility is related to their investigated outcomes, such as opinion climate perception. Based on the literature on subjective quality perceptions underlying persuasive effects (Lavine & Snyder, 1996), we first predict that perceptual credibility will be positively related to poll-aligned opinion climate perception (H5a) and personal opinion (H5b). Moreover, in line with motivated reasoning (Taber & Lodge, 2006), congruent polls should be associated with greater ability to move opinion climate perception (H6a) and personal opinion (H6b).

In addition, the impersonal influence hypothesis (Mutz, 1998) suggests that knowing where the majority stands may “trigger social influence processes” (p. 4). This idea dovetails well with the consensus heuristic (Chaiken, 1987), where people use consensus information to inform their own decision making. As such, we also hypothesize an effect of opinion climate perception on personal opinion (H7). Taken together, a causal path model is proposed predicting a poll’s influence on personal opinion, sequentially via perceptual credibility and opinion climate perception (H8). Figure 3 presents the conceptual model summarizing all hypotheses and their theoretical foundations for Study 2.

![Figure 3. Conceptual model for Study 2.](image)

**Partisan Asymmetry**

Thus far, we have reported the average treatment effects, controlling for partisanship. However, there are good reasons to expect that the proposed models may in fact differ for Democrats and Republicans. Recent data have shown that those on the political right are less trusting of polling results, with 60% of Democrats saying most polls are accurate whereas only 36% of Republicans agreed (The Hill/HarrisX, 2018). Distrust of opinion polls has been a long-term trend in conservative ideology, rooted in more deep-seated skepticism toward liberal agenda in the mainstream media, science, and other institutions (Jost, 2017). This general distrust, reinforced by elite rhetoric, suggests Republicans may be less responsive to polling results.

1 For instance, former president Richard Nixon frequently mentioned the “silent majority” not captured in the polls. Donald Trump also spoke of “fake polls” misrepresenting the public.
Alternatively, there is a long-documented partisan asymmetry in motivated reasoning beyond its baseline effect, with conservatives less likely to update beliefs in light of new information (Enders & Smallpage, 2019). Works from political psychology often attribute this to fundamental differences between liberals and conservatives in cognitive rigidity, needs for certainty, and intolerance of ambiguity (Jost, 2017). Following this reasoning, it is probable that Republicans are more likely to engage in motivated processing of opinion polls than their liberal counterparts. Given the competing hypotheses and dearth of empirical evidence, we propose a research question about the potential heterogeneity by political affiliation in the effects of partisan embeddedness and its interaction with pollster source mentions, as well as the indirect mechanisms (RQ1).

Study 2. Method

Experiment Design and Stimuli

An online experiment with a 2 (polling results: majority support vs. majority oppose) × 2 (embedded context: control vs. partisan) × 2 (pollster reference: absent vs. present) between-subjects factorial design was conducted to test the hypotheses. Participants were invited to take a survey experiment hosted on Qualtrics. After providing consent, participants were randomly assigned to one of the eight conditions where they read a fictitious poll following the same format as Study 1. After reading the assigned message, participants were then asked to evaluate the poll’s credibility, estimate public opinion distribution, and report their own opinions on the issue. Demographics and other covariates were measured before participants were thanked and debriefed.

The format of the stimuli was consistent with Study 1. For polling result manipulation, in the majority-support condition, the poll concluded that more than half of the Americans hold favorable views of the Affordable Care Act (also known as Obamacare), whereas in the majority-oppose condition, the content was kept verbatim except for the direction of majority support. To manipulate the poll’s embedded context, the finding was either presented as a stand-alone message (i.e., control condition) or embedded in a politician’s tweet (i.e., partisan condition). Finally, to manipulate source reference, the poll was attributed either vaguely to “a recent poll” or made specific references to a pollster source. Given our focus on partisan effect, to ensure external validity, the majority-oppose poll was cited by Donald Trump, the Republican candidate in the 2020 presidential election, whereas the majority-support poll was endorsed by Joe Biden, the candidate from the Democratic Party (for example stimuli, see Appendix 1).

Participants

Data were collected in September 2020, using Amazon Mechanical Turk. Past research suggests that MTurk provides a diverse sample of the U.S. population, which are comparable in quality to other conventional data sources (Horton, Rand, & Zeckhauser, 2011). For this study, those who were younger than 18 years and/or not living in the United States were excluded. In addition, those who did not follow the instructions, did not pass the manipulation checks, or self-identified as Independents were excluded, yielding a final sample of 459 for analysis.
The final sample was broadly representative on key demographics, including age, ethnicity, education attainment, and household income. The average age was 39.6, and 80.89% White/Caucasian. A slightly higher proportion of our sample was male (55.97%), compared with approximately 50% in the general population. Consistent with prior research using MTurk (Horton et al., 2011), our sample was slightly more liberal (56.75% self-identified as Democrats). The median for education attainment was bachelor’s degree, with the median household income located in the bracket of $50,000 to $80,000 (see Appendix 2 for a comparison with census data).

**Measures**

*Opinion Climate Perception*

Respondents were asked about their perceptions of public support for ACA on a scale from 0 (*total lack of support*) to 100 (*consensual support*) \((M = 53.93, SD = 18.87)\). For those assigned to the majority-oppose condition, respondents’ answers were reverse coded such that higher scores indicate perception in the direction of the poll.

*Posttest Issue Attitude*

Respondents were asked to indicate on a 11-point scale to what extent they personally supported Obamacare \((1 = strongly oppose to 11 = strongly support; M = 7.28, SD = 3.37)\). For those assigned to the majority-oppose condition, respondents’ answers were reverse coded such that higher scores indicate greater alignment between the reported majority opinion and personal opinion.

*Controls*

Study 2 included the same set of control variables as Study 1, namely, issue knowledge \((M = 4.76, SD = 1.27)\), involvement \((M = 5.05, SD = 1.60)\), pre-test issue attitude \((M = 7.50, SD = 3.48)\), and demographics. For variables not reported here, the measures were identical to those in Study 1.

**Study 2. Results**

Before presenting the main findings, we first discuss results from replicating the first study. Confirming Study 1, those reading a congruent poll tended to perceive it as more credible \((\beta = 1.23, p < .001)\). By contrast, identical information appeared less credible when embedded in a partisan context \((\beta = -.62, p < .05)\). Also, there was a significant interaction between result congruence and partisan embeddedness \((\beta = .97, p < .05)\): When embedded in a politician’s tweet, motivated reasoning became more pronounced such that people evaluated poll quality based on result congruence. Moreover, as in Study 1, such evaluative biases were stronger when no specific pollster names were mentioned yet attenuated when a pollster source was provided \((\beta = -2.17, p < .05)\). Overall, results from Study 2 offer additional support for Study 1.
Linking Poll Quality Evaluation to Poll Effects

To answer H5–H7, OLS regressions were run with the same control variables added. Results confirm that a poll’s perceived credibility was positively associated with its ability to move (a) opinion climate perception (β = 4.05, p < .001) and (b) personal opinion (β = .93, p < .001) in the direction of the reported majority. In addition, exposure to congruent polls were more likely to induce poll-consistent (a) opinion climate perception (β = 10.35, p < .001) and (b) personal opinion (β = 3.69, p < .001). H5 and H6 were both supported. Furthermore, there was a significant association between changes in opinion climate perception and personal opinion, supporting H7 (β = .10, p < .001).

Finally, to formally test the proposed causal path model (i.e., result congruence → perceived credibility → opinion climate perception → issue attitude), path analysis was conducted using the lavaan package in R (Rosseel, 2012), with the significance of indirect relationships estimated by bias-corrected 95% bootstrap percentile confidence intervals (1,000 iterations). Figure 4 visually presents the results, with common model performance indices showing satisfactory fit. H8 was therefore also supported.

Figure 4. Path model predicting issue attitude toward the Affordable Care Act.

Asymmetric Influence of Congruence and Context

Finally, RQ1 asks whether the effect of poll result congruence and embedded context will vary for Democrats and Republicans. A series of OLS regressions were run to investigate the proposed relationships for the two subsets. As shown in Table 2, the effect of congruence was stronger for Democrats (β = 1.55, p < .001) than for Republicans (β = .62, p < .05). Moreover, polls embedded in a tweet were rated as significantly less credible among Democrats (β = −.71, p < .05), but citing polls on Twitter did not alter credibility judgment for Republicans (β = −.09, p = ns; Model 1).
Table 2. OLS Regression Models Predicting Poll Quality Evaluation.

<table>
<thead>
<tr>
<th></th>
<th>Democrats (n = 263)</th>
<th>Republicans (n = 196)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td>Result Congruence</td>
<td>1.55***</td>
<td>.87*</td>
</tr>
<tr>
<td>Source Reference</td>
<td>−.33</td>
<td>−.35</td>
</tr>
<tr>
<td>Partisan Context</td>
<td>−.71*</td>
<td>−1.43**</td>
</tr>
<tr>
<td>Cong*Context</td>
<td>−</td>
<td>1.40*</td>
</tr>
<tr>
<td>Three-Way Interaction</td>
<td>−</td>
<td>−</td>
</tr>
</tbody>
</table>

Note. All models control for the same set of control variables. †p < .10; *p < .05; **p < .01; ***p < .001.

Apart from main effects, there was a significant two-way interaction between result congruence and partisan context for Democrats (β = 1.40, p < .05): Motivated processing was stronger when polling outcome was embedded in a politician tweet, that is, partisan context (Model 2; Figure 5a). For Republicans, the Congruence × Context interaction was significantly moderated by pollster reference, such that partisan context reinforced congruence-based evaluation only when no specific pollster names were provided (β = −2.35, p < .05; Model 3; Figure 5b).

Figure 5(a). Interactive effect between result congruence and partisan context (Democrats).

Figure 5(b). Three-way interaction among result congruence, partisan context, and pollster reference (Republicans).

Multigroup Path Analysis for Moderated Mediation

To investigate whether the hypothesized serial mediations differ for the two partisan groups, a multigroup path analysis was performed using the lavaan package in R, with bootstrapping technique (1,000
iterations) and bias-corrected bootstrap confidence intervals (95% CI; Ryu & Cheong, 2017). Poll result congruence was entered into the model as the independent variable, perceived credibility and poll-aligned opinion climate perception as two mediators, issue attitude as the dependent variable, and partisanship as the grouping variable (see Figure 6).

The overall omnibus Wald test suggested poll result congruence had differential effects on credibility judgment and opinion climate perception between the two partisan groups. Specifically, result congruence positively increased perceived credibility ($\beta = 1.62, SE = .25, p < .001$; group difference: $p < .01$) and promoted poll-aligned perceptions ($\beta = 10.66, SE = 3.55, p < .01$; group difference: $p < .05$) only for Democarts, but not Republicans. Regarding the relationship between perceptual credibility and opinion climate perception, results suggested that perceptual credibility mattered more for Republicans ($\beta = 4.68, SE = 1.39, p < .001$) than for Democrats ($\beta = 1.69, SE = 1.10, p = ns$), although the coefficient difference was only marginally significant ($p < .10$). In contrast, the impersonal influence was significant for both groups such that people adjusted their personal opinion in line with the majority position. The difference in path coefficients was not significant ($\beta = .05, SE = .01, p < .001$ for Democrats; $\beta = .08, SE = .01, p < .001$ for Republicans), indicating the relationship was robust regardless of partisan identification.

With respect to the indirect relationship, congruent polls were significantly more able to move issue attitude in the direction of the poll via credibility judgment (congruence $\rightarrow$ credibility $\rightarrow$ posttreatment attitude), but the mediating pathway was significant only among Democrats ($\beta = .40, SE = .22$, 95% CI [.002, .855], not Republicans ($\beta = .10, SE = .14$, 95% CI [−.069, .477]). In addition, congruent polls were also more effective in shifting issue attitude, indirectly through shaping perception of collective preference, but again, the mediating pathway was significant only among Democrats ($\beta = .49, SE = .21$, 95% CI [.130, .926]. Overall, these suggested that polls were less influential among Republicans than Democrats.

**a) Democrats**

<table>
<thead>
<tr>
<th></th>
<th>Perceived Credibility</th>
<th>Opinion Climate Perception</th>
<th>Issue Attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result Congruence</td>
<td>1.62*** (.25)</td>
<td>ns</td>
<td>.05*** (.01)</td>
</tr>
<tr>
<td></td>
<td>10.66** (3.55)</td>
<td>24* (.13)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.55*** (.47)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Indirect 1 [Congruence $\rightarrow$ Credibility $\rightarrow$ Attitude]: $b = .40, \text{BootSE} = .22, 95\% \text{ CI} = [.002, .855]$
Indirect 2 [Congruence $\rightarrow$ Opinion Climate $\rightarrow$ Attitude]: $b = .49, \text{BootSE} = .21, 95\% \text{ CI} = [.130, .926]$
Indirect 3 [Congruence $\rightarrow$ Credibility $\rightarrow$ Opinion Climate $\rightarrow$ Attitude]: $b = .13, \text{BootSE} = .10, 95\% \text{ CI} = [-.032, .344]$
Discussion

Public opinion polls are an important source of political information and may affect both elites and citizens’ thinking and behaviors (Moy & Rinke, 2012). Increasingly, opinion poll results are encountered on social media in a partisan context wherein statistical information is repurposed by politicians to uphold personal views. This process likely motivates biased reception of polling evidence and may be further facilitated by social media’s content collapse (Pearson, 2020) and multiple layers of intermediary sources (Jang, 2021).

Positioned against the backdrop of increasing convergence between interpersonal and mass-oriented communication (O’Sullivan & Carr, 2018), this study examines the influence of opinion polls as contingent on the embedded context. Overall, across two survey experiments, the results suggest that congruent polls are generally considered more credible, in line with multiple research traditions—particularly motivated reasoning (Taber & Lodge, 2006), social judgment theory (Sherif & Hovland, 1961), and hostile media perception (Gunther & Chia, 2001)—as well as empirical data (Kuru et al., 2017; Madson & Hillygus, 2020). Moreover, our study further indicates that when polling data are cited by political figures to show the public is on their side, people tend to judge the poll as of lower quality. Importantly, political identification may serve as an interpretive lens, guiding individuals to process polling outcomes in a group-serving manner, especially when no clear source attribution is available.

These findings add to a long-standing line of research on source effects and elite cue taking (Arpan & Raney, 2003). While studies along this line generally found that political information shared by ingroup members tends to be more trusted (Lee et al., 2018), recent evidence also suggests that partisan cues can be overridden by competing heuristics (Messing & Westwood, 2014). In our case, reference to pollster brand names with established reputations has the potential to mitigate group-serving evaluation. As such, even
for unfavorable polls cited by a disliked candidate, mentioning pollster names as the original information provider may counteract outgroup cue taking. On a broader note, these findings also speak to the importance of studying statistical information use as it comes with (or without) relevant details and contexts.

Moreover, previous work typically studied individuals’ evaluative processes (Kuru et al., 2017) and their susceptibility to poll effects (Madson & Hillygus, 2020) separately. However, the mediating role of credibility merits further investigation, as recent studies on motivated reasoning suggest a decoupling process: People can be persuaded by an identity-challenging “inconvenient fact,” while still judging it to be biased and not trustworthy (e.g., Li, Foley, Dumdum, & Wagner, 2021). By formally testing the theoretical linkage in an integrated model, our study offers empirical evidence that credibility judgment remains a contributing factor to a poll’s influence.

It is important to note that the proposed relationships appear asymmetric across party lines. Overall, and in line with recent survey data that Republicans are less trusting of polling (The Hill/HarrisX, 2018), most mediated paths in our hypothesized model are not significant among Republican respondents. Nevertheless, the direct effect of poll congruence on polarized issue attitude remains significant. This suggests that, for Republicans, potential mediators other than the proposed cognitive pathway (i.e., perceived credibility) may be at play. For instance, congruent polls may induce positive group-based emotions, which in turn promote self-stereotyping and opinion constraint without appearing more credible. Future studies can bring more insights into potential affective mediators of poll effects, particularly on the political right.

In similar veins, partisan embeddedness also exerts differential effects on perceived credibility among the two partisan groups. Specifically, politician uptake of an opinion poll undermines its credibility to a greater extent for Democrats than for Republicans, although the negative impact of partisan embeddedness may be mitigated slightly when the poll sides with their liberal ingroup position. On the other hand, while pollster attribution did not make a difference among Democrats, it significantly moderates Republicans’ reaction. That is, loosely referencing “a recent poll” creates greater room for partisan motivated reasoning on the political right. Taken together, our study contributes to extant research by highlighting potential partisan asymmetry in the processing and influence of opinion polls.

There are several limitations worth noting. First, this study examines opinion poll influence with two specific issues. While their polarized nature provides a suitable context for our purpose, future studies can replicate the findings with more issues, such as using a vignette design. Along similar lines, our choice of Facebook inevitably limits the ability to generalize findings to other social media sites with differing affordances. We also acknowledge that this study only tests one of the many possible scenarios where opinion polls may be repurposed on social media. For instance, polling data are likely to be cited not to offer support but rather to advance critique. Relatedly, the format of referring a poll can also vary in multiple aspects, such as whether methodological details or hyperlinks to the full report are supplied. To fully understand how socially transmitted polls may affect the public’s understanding of political reality, we hope future studies can build upon our findings and explore these important issues. Lastly, it is reasonable to expect that pollster brand names may operate differently for those with differing levels of political
sophistication. As we enter a high-choice media environment, an important next-step would be to identify individual covariates and situational factors that may condition the use of pollster heuristic.

In conclusion, this study is one of the first steps to assess the impact of opinion polls outside the mass media context. As social media become a new avenue for the public to engage with polling data, it is important to consider where the content is embedded and how surrounding elements may alter the processing and reception of polling outcomes. On a broader note, the notion of partisan recontextualization of statistical information also has important implications for several ongoing trends, such as communication of populist causes and data journalism practice. Overall, the results expand our knowledge of socially transmitted polls, advancing a new research agenda to further understand their undesirable influence in an era of “polling-in-crisis.”

References


Appendix 1. Example Stimuli

Recent polls show that numbers of Americans supporting substantial expansion of the wall along the U.S.–Mexico border are going up fast, over 50%.

Stimuli A (Study 1).
A recent poll shows that more than half of the Americans hold favorable views of Obamacare, 7% rise from last year.

**Stimuli B (Study 2).**

**Appendix 2. Sample Representativeness.**

<table>
<thead>
<tr>
<th></th>
<th>U.S. Census (2020)</th>
<th>Our Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>38.5</td>
<td>39.6</td>
</tr>
<tr>
<td>Female</td>
<td>50.8%</td>
<td>44.03%</td>
</tr>
<tr>
<td>Race (White)</td>
<td>76.3%</td>
<td>80.9%</td>
</tr>
<tr>
<td>Education</td>
<td>Bachelor’s degree or higher</td>
<td>Bachelor’s degree or higher</td>
</tr>
<tr>
<td>Income</td>
<td>$62,843</td>
<td>$50,000 to $80,000</td>
</tr>
</tbody>
</table>