Mass Communication and Society

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/hmcs20

When Pundits Weigh In: Do Expert and Partisan Critiques in News Reports Shape Ordinary Individuals' Interpretations of Polls?

Ozan Kuru , Josh Pasek & Michael W. Traugott

To cite this article: Ozan Kuru , Josh Pasek & Michael W. Traugott (2020) When Pundits Weigh In: Do Expert and Partisan Critiques in News Reports Shape Ordinary Individuals' Interpretations of Polls?, Mass Communication and Society, 23:5, 628-655, DOI: 10.1080/15205436.2020.1774780

To link to this article: https://doi.org/10.1080/15205436.2020.1774780

MASS COMMUNICATION AND SOCIETY
2020, VOL. 23, NO. 5, 628–655
https://doi.org/10.1080/15205436.2020.1774780

Routledge
Taylor & Francis Group

When Pundits Weigh In: Do Expert and Partisan Critiques in News Reports Shape Ordinary Individuals' Interpretations of Polls?

Ozan Kuru[a], Josh Pasek[b], and Michael W. Traugott[c]

[a]Annenberg Public Policy Center, University of Pennsylvania; [b]Department of Communication and Media, University of Michigan; [c]Institute for Social Research (ISR), University of Michigan

ABSTRACT

Journalists rely on polls as they cover public opinion. In order to provide perspectives within the news stories, journalists frequently quote pundits – expert and partisan – who evaluate the methodological quality and implications of the numbers. While partisan pundits might attack unfavorable polls as biased and even fake, experts typically provide rational assessments of methodological quality; news readers may also encounter critiques of the reliability of polls in general in op-eds. How do Americans evaluate polls when they come accompanied with such commentaries? Building on evidence that individuals perceive polls in biased ways, this study examines whether and how individuals react to pundit commentary and whether such commentary can increase or decrease partisan bias in evaluations. In a nationally representative survey experiment fielded during the 2016 U.S. presidential election, we exposed 2,078 individuals to news stories about polls that included various expert or partisan comments. Although commentaries shifted perceptions of the polls, they did little to mitigate or amplify news readers' biases. We conclude that poll commentary is not an effective tool for mitigating bias. Implications for public perceptions, corrective attempts against biased processing of statistical information in news reports, and journalistic coverage at large are discussed.

Political communication scholars have long noted that polls – issue polls, horserace polls, and approval ratings – occupy a central position in political news (Patterson, 2005). This is laudable given that these surveys provide

CONTACT Ozan Kuru okuru@umich.edu Annenberg Public Policy Center, University of Pennsylvania, Philadelphia, PA 19104, USA.

Supplemental data for this article can be accessed on the publisher's website.

one of the few sources of objective information about politics. Yet, many scholars have lamented that an excessive focus on polls comes at the expense of issue coverage (Cappella & Jamieson, 1997; Patterson, 2005). Moreover, ordinary individuals may interpret news about poll results in problematic ways. Given that Americans are not particularly knowledgeable about polling despite reporting high levels of interest in them (Traugott & Kang, 2000), it is perhaps unsurprising that people appear to assess the credibility of polls in part based on whether they provide favorable or unfavorable results (Kuru et al., 2017, 2019; Madson & Hillygus, 2019). Such biased processing could lead individuals to inaccurate perceptions of public opinion that, in turn, might polarize the electorate and reduce trust in both the press and government (cf. Chia & Chang, 2017; Nir, 2011; Sances & Stewart, 2015).

Aspects of the media presentation of polls could influence ordinary individuals' perceptions of the evidence in important ways as well, potentially reducing or fueling biased processing. To date, the concerns raised by political communication scholars have focused on the ubiquity of public opinion polls (e.g., Brettschneider, 1997; Cappella & Jamieson, 1997) and whether poll methodology is properly reported (e.g., Bhatti & Pedersen, 2015; Larson, 2003; Sonck & Loosveldt, 2010); yet the influence of extensive punditry about polls on public perceptions has largely escaped scrutiny. But poll statistics rarely appear in isolation; they are usually covered with extensive commentary and interpretation. The current study examines whether and how punditry on polls might shape the evaluations of newsreaders.

News reports of polls typically include extensive punditry as a way both to generate more engaging stories and help readers make sense of the results (cf. Turcotte et al., 2017). In poll reports, academicians, journalists, polling experts, and partisan representatives are often asked to evaluate the accuracy of the evidence presented. These pundit comments could provide a framework for how people process and interpret poll findings (cf. Trende, 2016). Specifically, objective expert commentaries focusing on the quality of polls could mitigate individuals' biases by highlighting the methodological robustness or weaknesses of the polls (cf. Dunwoody & Kohl, 2017; Vraga & Bode, 2017). Alternatively, partisan commentaries or overall critiques of polls could reinforce biases (Suhay et al., 2018; see Feldman, 2011c).

In this study, we investigate how expert and partisan commentaries shaped individuals' evaluations of horserace polls in the context of the 2016 U.S. presidential election. We are interested in three key questions: Do comments matter? Do comments reduce or increase biased processing of polls? And, are some respondents more receptive to comments than others based on their education levels? In an online preregistered survey experiment on a nationally representative sample of Americans, we

examined whether and how three specific types of commentaries altered interpretations of election polling results. Pundit comments included (1) objective expert judgments about methodological quality, (2) partisan commentaries which assert that a poll where the in-party candidate is leading is better than an objectively equivalent poll where the out-party candidate is leading, and (3) broad critiques about the quality of contemporary polls. In each case, we examined how these comments shaped respondents' perceptions of the relative accuracy of two simultaneously presented polls and the extent to which those respondents relied on partisan identities in their assessments.

The interpretative discourse around polls

Whereas polls are an essential and growing element of news coverage in general and campaign coverage specifically, what dominates polling coverage is the interpretative discourse surrounding poll results. When opinion polls are reported in news, they are typically accompanied by commentary which comes in a variety of forms: reporters seek experts to help clarify the meanings and interpretations of poll results, partisans are asked to weigh in on the strategic implications of results, and opinion and editorial writers use polls to shape readers' perceptions. That is, journalists, experts, and political elites continuously and competitively evaluate and interpret available polling evidence by providing their assessments of methodological validity, limitations, and framing of results as well as the practical implications of those results (cf. Toff, 2018; Turcotte et al., 2017).

First, investigating the influence of comments on poll results is crucial for our understanding of audience perceptions and the impact of polls at large. Given the methodological challenges inherent in contemporary polling (e.g., Baker et al., 2013) and the myriad subjective design decisions that could alter polling results (e.g., Voss et al., 1995), it is prudent for journalists to contextualize the results they are reporting to audience members. Such commentary is likely to aid news consumers, the vast majority of whom are not trained in survey methodology. As traditional journalists are poorly equipped to report and interpret the polls accurately themselves (e.g., Bhatti & Pedersen, 2015; Oleskog Tryggvason & Strömbäck, 2018), they rely on experts to make sense of results and to elucidate methodological aspects of polling in their reports.[1] Data journalists, who have expertise in reporting polling results, also contribute to punditry in mainstream

[1]Expert analyses often include discussion of the margin of error, poll timing, sample representativeness, and results of other recent polls. Experts sometimes also challenge the methodological and epistemological underpinnings of contemporary polling. For some examples, see Online Appendix A.

coverage that draws the attention of ordinary news readers (cf. Toff, 2018). And, in what we presume is an attempt to spur conflict and engage more readers, journalists also often invite political representatives to react to poll results; these partisan commentators frequently provide subjective and one-sided assertions (cf. Feldman, 2011a, in the context of hostile media perceptions).[2] Given the variety of pundit comments that appear alongside poll reports, it is important to investigate whether and how this commentary shapes the way people understand the results.

Second, aside from audience perceptions, studying the potential influence of expert and partisan comments in poll stories is important because doing so contributes to our understanding of contemporary news-making. Investigating the influence of polling critiques may help us understand how shifting news practices can lead audiences to extract different information from the news. Public opinion polls have been reported in the news since the mid 20th century (Gallup & Rae, 1940), but their evolving presentation reflects the changing practices, values, and technological affordances of news more generally as well as the impact of these changes. Of particular interest to the readers of this special issue, the work of Herbert Gans in *Deciding What's News* provides a broader framework for understanding how evolving news values and specific viewpoints of journalists shape and construct news stories (Bennett, 1988; Gans, 1979). With the rise of precision journalism (Meyer, 1973), increasing availability of computers (Coddington, 2015), and the increased norm of transparency in reporting polling methodology (as in, e.g., the Transparency Initiative of the American Association for Public Opinion Research), journalists' stories about poll results have changed drastically. News outlets shifted from reporting just the proportions of respondents supporting various candidates to providing methodological and scientific details about those results to presenting detailed interactive analysis of data across multiple polls with the introduction of data journalism websites such as *FiveThirtyEight, the NYT Upshot, RealClearPolitics* and explanatory journalism such as Vox (Coddington, 2015). These transformations resulted in a wealth of polling data as well as a more contested public platform for discussing the validity and reliability of poll results. Hence, the interpretative discourse around polls, both in the form of expert and partisan comments, reflects these underlying changes in news production practices interacting with technological affordances of digital journalism at large (cf. Anderson, 2018). Investigating audience perceptions of these novel aspects of poll reporting is crucial not only for understanding how the public thinks about polling

[2]These may come from campaign representatives who have strategic reasons to highlight favorable poll results and dismiss other polls as "biased," "skewed," or "fake."

data, but also for making sense of changing journalistic norms and their impact. It thus sheds light into what news is and what news should be when reporting polls as well as other statistics and data.

How punditry can influence public reception of polls

In this context, pundits' comments could have important and distinct influences on news readers' interpretations of poll results. To understand what people make of polling commentary, we conducted an experiment in which Americans were presented with a news story that included results from two polls and asked to evaluate the relative quality of those polls, after which they rendered their assessments of who they thought would win the election. We compared news stories that included pundit comments with those that did not include these cues to assess the impact of pundit messages. We are interested in two types of impact: First, we want to know whether pundit commentary changes how Americans evaluate polling evidence. That is, will people make different assessments of the relative quality of the surveys when the commentary is present than when it is absent? Second, we want to know whether the effects of pundit comments depend on what respondents already believe about the narrative they support.[3]

In thinking about how pundit comments might shape interpretations of polling information, we draw from work on dual-process theories of persuasion and motivated reasoning theory. Dual-process theories contend that people vacillate between central and peripheral routes to processing information, engaging with new information in the central route and employing low-information cues when relying on peripheral modes (Petty & Cacioppo, 1986). Individuals are expected to engage in elaboration (central processing) when they are highly motivated, when they have the capacity to do so, and when the task is not particularly difficult (Krosnick, 1991; Lodge & Taber, 2013; Taber & Lodge, 2006). Motivated reasoning theory argues that people will attempt to reach positive conclusions about information that supports their preexisting beliefs and identities (Kunda, 1990). They are presumed to accomplish this through a tendency to elaborate on information that challenges their preexisting beliefs by looking for reasons to reject that information (Lodge & Taber, 2013).

[3]For instance, when an expert correctly asserts that a poll showing Hillary Clinton leading is more accurate than one showing Donald Trump leading, we are interested in whether Democrats and Republicans evaluate those claims in different ways given the real methodological quality differences between two polls. As a second outcome variable we measured whether commentaries might also shape electoral expectations; results are reported in Online Appendix F.

Collectively, then, pundit commentary about poll results seems likely to matter for the interpretation of polls. And it is expected to have the potential either to mitigate or exacerbate partisan biases depending on choices that journalists make about who should comment on polling results in their news stories. In the sections that follow, we present a series of expectations about how interpretations of polling results might depend on the presence of various types of commentary and how pundit comments might shape the scope of partisan biases in interpretations of polling evidence.[4] In each case, we consider the impact that comments might have when citizens encounter a pair of poll results that present conflicting results about which party is most likely to win.

Implications of expert evaluations

One common form of punditry involves the inclusion of polling experts who help readers assess the methodological quality of polls. There is extensive scholarly debate on the likely role of expert evaluations of information. One body of evidence suggests that experts may be unable to correct misinformation or prevent biased processing, as they can be dismissed if what they say challenges existing beliefs (cf. Kahan et al., 2011; Lodge & Taber, 2013; Lord et al., 1979). Under these conditions, expert comments might have no effects or may even backfire.[5] Yet, there are other reasons that make us expect expert comments will be effective. For one, research shows that experts can be influential in contexts ranging from science and health to politics (Dunwoody & Kohl, 2017; Kohl et al., 2016; Lyons, 2018; Vraga & Bode, 2017). Second, in the current study, experts are playing a very different role from when they attempt to correct misinformation. Here, they are helping people understand information from polls rather than leveraging their expertise as a mere indicator of argument credibility. Thus, by walking readers through the reasoning for why one piece of information is higher quality than others, the experts do not position themselves on one side or the other but simply aid respondents who wish to elaborate in their efforts to comprehend the information before them.[6] Third, studies where expert correctives are ineffective or tend to

[4]Our expectations for this latter question were preregistered at Evidence in Governance and Politics (EGAP). Note that in 2020 the EGAP database was moved to the Open Science Framework.

[5]Also see the studies on the presentation of factual information with competing frames on new technology and policy debates which generally document biased evaluations (Druckman & Bolsen, 2011; Druckman et al., 2012).

[6]In this study, to maximize ecological validity, we always ensure that expert assessments highlight real/objective methodological quality differences between polls (for example, by noting that a survey based on a nationally representative sample is

backfire almost universally present experts refuting an argument that had been presented earlier. Studies show, however, that the timing of informational corrections matters; and generally simultaneous corrections (Garrett & Weeks, 2013) or inoculation strategies (Cook et al., 2017) tend to work better in curbing biased processing. In polling news stories, expert assessments are presented alongside the data.

Because expert comments provide accurate information that might aid readers in making sense of polling quality and do so simultaneously with the presentation of that information, we expect that these comments will generally lead respondents to more accurate overall assessments of the relative quality of two competing polls (**H1a**). Because we expect that individuals, particularly partisans and those with higher levels of interest and involvement, would generally elaborate and thereby accept expert commentary that reveals the objective quality differences in pairs of polling results, this sort of commentary should also reduce biases in how people evaluate the evidence. Republican and Democratic assessments of poll results should therefore be more similar when expert commentary helps to highlight objective quality differences than when such commentary is not present. To evaluate whether leading-party differences might matter, we test this expectation separately for the high-quality Republican-leading poll (presented with a low-quality Democrat-leading poll) with and without expert commentary (**H1b**) and the high-quality Democrat-leading poll with and without expert commentary (presented with a low-quality Republican-leading poll; **H1c**).[7]

Partisan comments

When partisans comment on poll results, their statements do not necessarily help readers evaluate objective quality. Instead, they often try to introduce distinctions between methodologically equivalent results. Partisan comments, as an attempt to divert attention from a reasonable evaluation

more valid than an alternative poll that relies on a convenience sample). This is a strong informational corrective/intervention. Expertise in not communicated as a mere source cue and credibility signal but is also demonstrated by presenting argument and evidence.

[7]With the exception of H1a, all hypotheses presented in the paper were preregistered. They have all been renumbered here for clarity of presentation. The original hypothesis numbers can be found in Online Appendix B. In response to reviewer comments, we also disaggregate the hypotheses here by partisanship; the preregistered results where analyses from both parties are combined are presented in Online Appendix C. We also tested the influence of expert comments where results of both polls were consistent; these are presented in Online Appendix D.

of actual methodological weaknesses or robustness of polls, could even move individuals away from an objectively higher quality poll.

When we investigate comments in relation to poll results' favorability for particular respondents, we expect that the mere presence of partisan commentary can be a polarizing force. Because individuals tend to evaluate more positively polls that support their preferred candidate (Kuru et al., 2019), co-partisans will likely be bolstered by such commentary whereas those in the opposing camp will tend to reject the claims of a partisan pundit. This sort of polarization has been observed for opinionated news. Compared to non-opinionated news, opinion stories have been shown to evoke anger (Boukes et al., 2014), increase online news engagement (Muddiman & Stroud, 2017), polarize attitudes (Feldman, 2011c; Suhay et al., 2018), undermine political learning (Feldman, 2011b), and fuel perceptions of media bias (Boukes et al., 2014; Feldman, 2011a).[8]

Individuals may accept the arguments in partisan commentary when partisan comments suggest that a favorable poll is more accurate and may reject that message when favored polls get attacked by an out-partisan, compared to a case when there was no commentary. It is unclear what the net effect of these messages will be for polling assessments (**RQ1**). But, in contrast to assessments of contrasting polls where no commentary is present, we would expect that evaluations of polls will be more polarized when partisan comments are present (**H2a and H2b** for Democratic and Republican pundits respectively).

Implications of general polling critiques

In recent years, many commentators have taken to dismissing all polling results as unworthy of attention or credibility. Similar to comments targeting specific polls, these general critiques of polling could influence readers' evaluations. When we look at how general polling critiques play out in comparing evaluations of favorable vs. unfavorable polls, we would expect greater bias in evaluations. If respondents are indeed seeking fodder to challenge polls they dislike, general critiques of polling might be expected to increase partisan motivated reasoning. Motivated reasoning processes require that individuals construct counterarguments that can be used to challenge dissonant claims (Lodge & Taber, 2013). Counterarguing against a poll result thus requires a base of knowledge that people can use to discredit unfavorable messages – exactly the kind of information that

[8]Similarly, attempts by partisans, political leaders, and campaign representatives to interpret polls – where they have sometimes argued that polls are biased, skewed, or "fake" – could be perceived as manipulative by people who do not dislike poll results (cf. Chia & Chang, 2017 for hostile media perceptions).

general critiques offer, raising questionable issues without directly attacking or praising particular poll results (Kuru et al., 2017). Again, the overall impact of these messages on assessments is unclear (**RQ2**), but the expectations for partisans are more straightforward. Here, we hypothesize that the presence of general polling critiques will increase a partisan divergence in assessments of equivalent quality polls that have competing results (**H3**).[9]

The role of education levels

Earlier work on motivated reasoning suggests that more knowledgeable and sophisticated individuals are more likely to engage in motivated reasoning. Sophisticated individuals are expected to have a greater capacity to counter argue against unfavorable evidence (Lodge & Taber, 2013), hence tend to exhibit greater bias when provided with an opportunity, and subsequently are more likely to discredit unfavorable messages (Kahan et al., 2017; Miller et al., 2016). Similarly, more politically knowledgeable people and those who have higher levels of methodological knowledge about polls are more likely to engage in biased processing (Kuru et al., 2017). Hence, we expect that those respondents with a greater ability to critique information will be the most susceptible to motivational biases; they will differentially evaluate favorable vs. unfavorable polls to a greater extent compared to low education respondents. Notably, there are a number of different ways that we could think about the capacity that various individuals have to counterargue against unfavorable poll results. Our own earlier work showed that individuals were more likely to discredit information when they had greater knowledge about the topics of the polls and about polling methodology (Kuru et al., 2017). In this study, we examine this hypothesis using a more general measure of respondents' education levels **(H4)**. Although our choice of this measure was partially a function of study design, education should effectively capture this capacity – more educated Americans tend to have greater numerical literacy and are more politically knowledgeable than their less educated counterparts (e.g., Delli Carpini & Keeter, 1996; Rasmussen, 2016). Further, education has moderated motivated reasoning in earlier work (Lodge & Taber, 2013).[10]

[9]Since both Democrat and Republican-leading polls have equivalent (robust) methodological quality in these conditions and the nature of the critique concerns polls in general, there is no need to test this separately for Democrat and Republican-leading polls.

[10]Limited space on the TESS questionnaire precluded adding a battery of questions about respondents' political knowledge or methodological knowledge about polls.

Methods

Data

Data for the current study come from a nationally representative survey of 2,078 Americans interviewed between June 5 and 20, 2016. Respondents were members of the GfK KnowledgePanel® (now part of IPSOS), a sample of Americans recruited primarily via address-based sampling to complete surveys online. Individuals who joined the panel who did not already have a computer and Internet access were provided with a tablet and/or Internet connection to complete surveys online. Response rates for the study were 63.6% of panel members and 2% cumulative with panel recruitment (CUMRR-1, Callegaro & DiSogra, 2009). The current study was funded through a Short Studies program grant from the Time-Sharing Experiments in the Social Sciences (TESS): NSF Grant 0818839, Jeremy Freese and James Druckman, Principal Investigators.[11] Additional details about sample composition are provided in Online Appendix E. The study received IRB approval at the University of Michigan (#HUM00113718).

Preregistration

Hypotheses for the current study were preregistered at the Evidence in Governance and Politics website (EGAP.org, ID # 20160629AA).[12] Original wordings for all hypotheses as well as other preregistration details are presented in Online Appendix B. To make the presentation of results simpler, we followed one peer reviewer's suggestion to disaggregate results by political party. The original (unchanged) preregistration hypotheses and results are presented in Online Appendix C. The conclusions drawn from both analysis strategies were substantively identical, but the results reported in the manuscript are easier to interpret.

Procedure and manipulations

Each respondent was exposed to a single news story which included information about two polls on the contest between Hillary Clinton and

[11]This data collection followed an unrelated experiment on the same questionnaire funded by another research team. That study used a conjoint experimental design, minimizing the potential for the spillover effects. For an examination of the possibility, see Online Appendix G.

[12]Current hypotheses correspond to hypotheses 6–8 in the preregistration; the education hypothesis was also preregistered, but it was not given a specific number in the preregistration because it was proposed for all preceding hypotheses. Hypotheses 1–4 of the preregistration were tested in a separate study (Kuru et al. 2019). Hypothesis 5 is in Online Appendix D.

Donald Trump as candidates in the 2016 U.S. presidential election. Respondents were randomly assigned to one of 12 experimental conditions manipulated in the news story, seven of which included pundit commentary. Participants proceeded to answer questions designed to tap their assessments of the relative accuracy of the surveys in the news report as well as their predictions about the election outcome (Online Appendix F). At the end of the study, they were debriefed.[13]

Across twelve news story conditions, we varied three facets of the stories presented. First, in some conditions, the story presented two polls where the same candidate was leading whereas in others, different candidates were leading in each poll. Second, stories either presented two high-quality polls (with large sample sizes, probability-based methods, and small margins of error) or paired one high-quality poll with one lower-quality poll (with a small sample size, a convenience sample, and a larger margin of error). Finally, the presence and type of commentary varied, with some respondents receiving objective expert comments, some getting subjective partisan commentary, some encountering general critiques of polls, and some getting no commentary at all. When one candidate was leading in both polls or when the candidate leading varied along with polling quality, we produced multiple conditions to randomize which candidate was favored.[14] Similarly, partisan comments were also randomly assigned to prefer one candidate or the other. The conditions and comparisons are presented in Table 1 (Online Appendix B presents all versions of the manipulation stories).[15] Note that in this particular design, there is no confounding of comment source (expert vs. partisan) and content (objective vs. subjective) because we considered such conditions to be ecologically invalid. Hence, experimental conditions were not

[13]The study examined two dependent variables: perceived relative accuracy of the polls and respondents' expectations of the electoral outcome. Given our focus on accuracy evaluations of polls and mostly null results, and for the sake of brevity, we present results on electoral expectations in Online Appendix F. There was also little reason to expect that electoral expectations would shift when commentary conditions had little impact on perceived relative accuracy.

[14]Due to the randomization and bipolar nature of the dependent variable (perceived relative accuracy), distinctions between the news stories' poll results and the body of actual poll results at the time of data collection should not bias the results.

[15]Each test relied on a specific comparison between multiple experimental conditions. As condition 1 (one Democrat leading poll and one Republican leading poll, and both polls were of robust methodological quality) was compared against the combination of multiple conditions, it was oversampled. These details were also preregistered. There was no space for a traditional manipulation check in the TESS short study framework. Instead we conducted a manipulation check using an Amazon MTurk sample. The result of this study is reported in Online Appendix B.

Table 1. Experimental conditions and contrasts for hypotheses testing.

RQs and Hs	Comment Type	Included Conditions/Contrast
H1a and H1b	Corrective Expert Comment on Varying Quality Polls	**dR** *(N = 160, C5)* vs. **dR-NP** *(N = 172, C8)*
H1a and H1c	Corrective Expert Comment on Varying Quality Polls	**rD** *(N = 158, C4)* vs. **rD-NP** *(N = 163, C9)*
RQ1 and H2a	Unsubstantiated Partisan Comment on Equivalent Quality Polls	**DR** *(N = 316, C1)* vs. **DR-PN** *(N = 140, C10)*
RQ1 and H2b	Unsubstantiated Partisan Comment on Equivalent Quality Polls	**DR** *(N = 316, C1)* vs. **RD-PN** *(N = 159, C11)*
RQ2 and H3	Overall Critique of Polls on Equivalent Quality Polls	**DR** *(N = 316, C1)* vs. **DR-NN** *(N = 157, C12)*

Notes. Abbreviations: D indicates a poll result showing the lead of the Democratic candidate while R indicates Republican-leading poll. P indicates a positive comment, N (without italics) indicates a negative comment. Small letter indicate polls with poor methodological quality and capital letters indicate polls with robust quality. *Ns* in *ITALICS* of each condition are reported in parentheses. *C* means original condition number as preregistered, for example, *C1* is condition 1). Note that C2 and C3 tests (for polls with consistent results) are provided in Online Appendix D. DR condition is oversampled because of multiple comparisons. Example: "rD" means that the respondent was exposed to a low-quality Republican-leading poll followed by a high-quality Democrat-leading poll. "rD-NP" is the same polling details, but there is additional expert commentary in which the expert debunks the first poll (r) as having poor methodology and praises the second poll (D) as having robust methodology. Hence, for example, H1c (row 2) tests the influence of expert commentary and how that interacts with respondent partisanship (when Republican leading poll is low quality and Democrat leading poll is high quality).

administered in a full factorial design, as many potential permutations were not theoretically interesting or relevant.[16]

In this paper, we consider the role of commentary in cases when two surveys conflict about which candidate is leading. Conditions where the leading candidate is consistent across polls are presented in Online Appendix D. We examine how assessments of accuracy vary depending on how respondent partisan identification compares to the partisan beneficiary of the commentary. Results for electoral predictions are presented in Online Appendix F.

Measures

Perceived relative accuracy

Perceptions of the relative accuracy of the two polls were measured with a single question: "Comparing the two polls directly, which poll do you think is more accurate in representing the public support for the likely candidates in this election?" Response options were "The first poll (KnowPolitics) is much more accurate than the second one (Public-Metrics)," "The first poll (KnowPolitics) is somewhat more accurate than the second one (Public-Metrics)," "The first poll (KnowPolitics) is a little

[16]E.g., it is not clear what impact comments from a Democratic partisan should have on a pair of high-quality polls where both showed Trump ahead.

more accurate than the second one (Public-Metrics)," "Neither poll is more accurate than the other poll," "The second poll (Public-Metrics) is a little more accurate than the first one (KnowPolitics)," "The second poll (Public-Metrics) is somewhat more accurate than the first one (KnowPolitics)," "The second poll (Public-Metrics) is much more accurate than the first one (KnowPolitics)." Relative accuracy provides an objective measure because we can state objectively which of two polls is "better" even if experts could never agree on exactly how accurate each one is. Further, by not asking about the methodological quality of the polls directly, this format and wording of the question avoids cueing respondents to examine methodological details which would have increased the artificiality of responses and lowered external and ecological validity of the experiment.[17] Positive coefficients of predictors in all models indicate that respondent viewed the second poll as relatively more accurate than the first.

Party-ID

Party identification was asked with the traditional question format (first asking the affiliations and then the strength of affiliations for partisans or the inclinations for Independents) leading to seven response options: Strong Republican, Republican, Republican-leaning Independent, Independent, Democrat-leaning Independent, Democrat, and Strong Democrat. This question was asked of all panel respondents prior to the current study. Democrats were presumed to disagree with polls that showed Trump ahead, and Republicans were presumed to disagree with polls that showed Clinton leading. In order to observe how partisans evaluate evidence, we excluded the small number of (non-leaning) Independents (N = 88) from the analyses reported here. Results including Independents (Online Appendix H), treating party ID as nominal (Online Appendix I), among only Independents and leaners (Online Appendix J), and within parties (Online Appendix K), yield substantively identical results. Johnson-Neyman tests examining potential differential moderator slopes (Online Appendix L) provided further evidence of robustness.

Education

The education levels of respondents were coded into four categories: "less than high school," "high school degree," "some college," and "college degree and more." For details about other demographic questions, see Online Appendix E.

[17]One downside is that respondents might be prompted to compare the poll to their prior beliefs about the election. Notably, this possibility does not complicate our testing of the influence of commentary on partisan biases, given random assignment and symmetric testing of who leads in which poll. A manipulation check confirmed that relative assessments and assessments of individual polls one by one produced similar results (Online Appendix B).

Analytical procedure

To summarize, we use manipulations, respondent party identification, and education level (independent variables) to predict the perceived relative accuracy of the polls.

The research questions and hypotheses are tested by first examining whether the presence of commentary introduced overall shifts in poll evaluations. Then, in order to examine how respondents supporting different parties behaved, and whether their partisan biases increased or decreased, we interacted the presence of commentary with respondents' party identifications in regression models. Nonresponse was negligible and did not vary by experimental condition.[18] Finally, we tested three-way interactions with education.[19]

Results

Do comments matter? (Main effects of comments)

Across the board, commentaries did little to change Americans' perceptions of competing polls. Controlling for respondents' party identification, we do not observe consistent main effects for the presence of expert commentary (**H1a**). Partisan commentaries, on the other hand, had small but consistent main effects (Table 2). When a Clinton campaign representative attacked a methodologically equivalent Republican leading poll as biased, the perceived credibility of the Republican leading poll suffered ($b = -.05$, $se = .02$, $p < .01$, Table 2, column 3, **RQ1**). An identical result emerged when a Trump campaign representative attacked the Democrat-leading poll as biased ($b = .04$, $se = .02$, $p < .05$, Table 2, column 4, **RQ1**). There was no effect of overall polling critiques (**RQ2**).[20] Thus, commentaries only appear to have mattered when they were levied by partisans.

[18]The distribution of refusals across the experimental conditions was largely invariant, ranging from 3.5% to 5%. Only condition 10 had a lower refusal rate than others (less than 1%, with only 1 respondent). For the outcome variable of election prediction, there was no outlier condition.

[19]For ease of interpreting and plotting the interactions, ordinary least squares regression results are presented for all analyses. We replicated analyses with ordinal logit regressions, and there were no substantive differences in the results observed (Online Appendix C). We present unweighted results for all regressions (cf. Gelman, 2007). The results did not change substantively with weights. Results also were not sensitive to controlling for political interest (Online Appendix C).

[20]There were no significant interactions between these effects and education (Online Appendix M).

Table 2. The influence of commentary and Party ID on perceived relative accuracy of the second poll (Main effects).

	H1a (dR vs. dR-NP)			H1a (rD vs. rD-NP)			RQ1 (DR vs. DR-PN)			RQ1 (DR vs. RD-PN)			RQ2 (DR vs. DR-NN)		
	Coef.		**SE**	**Coef.**		**SE**	**Coef.**		**SE**	**Coef.**		**SE**	**Coef.**		**SE**
Intercept	.65	***	*(.03)*	.50	***	*(.03)*	.59	***	*(.02)*	.59	***	*(.02)*	.58	***	*(.02)*
Party ID	−.14	***	*(.04)*	.12	**	*(.04)*	−.17	***	*(.03)*	−.16	***	*(.03)*	−.16	***	*(.03)*
Comment	−.04		*(.03)*	.01		*(.03)*	−.05	**	*(.02)*	.04	*	*(.02)*	−.03		*(.02)*
N	312			298			429			438			438		
R-square	.05			.03			.11			.08			.08		

Notes. Party indicate (continuous variable) respondent party identification where greater scores represent Democrats and lower scores represent Republicans (Independents, N = 88 are excluded). Comment is a dummy variable indicating the presence of a comment as opposed to absence. † denotes p lower than .10, * lower than .05, ** lower than .01, *** denotes p lower than .001.

Documenting bias (Main effects of party identification)

Americans also consistently discredited polls that showed unfavorable results (Table 2). For example, when both polls were high quality (condition DR without comments), Democrats were five times as likely to report that the Clinton-leading poll was more accurate than to assert that the Trump-leading one was. Similarly, Republicans were more than three times as likely to state that the Trump-leading poll was the more accurate one. Notably, these biases were apparent whether or not poll quality varied or commentary was present; hence, there was some level of motivated bias in the perceived accuracy of polls.

Do comments reduce or increase bias? (Interaction between comments and Party ID)

Overall, we find that commentary did little to change partisan evaluations of polls. When poll results indicated different leading candidates, expert comments only seemed to matter when the Democrat-leading poll had the robust quality, and this interaction was only marginally significant ($b = .15$, $se = .08$, $p < .10$, column 2 in Table 3). This relationship is plotted in Figure 1A which shows how predicted accuracy assessments would vary for an otherwise typical American depending on partisanship. Without commentary, there was no partisan bias for respondents evaluating a high-quality Democratic poll and a low-quality Republican poll (solid line in Figure 1A). When comments aided respondents in seeing this quality differential, Democrats became more attentive to the quality difference whereas Republicans did not (dashed line). Thus, the presence of commentary polarized evaluations, increasing the difference between Democrats' assessments and those of Republicans. Notably, it is not clear to what extent this reflects less accurate evaluations among Republicans versus increased accuracy among Democrats (**H1b and H1c not supported;** see Figure L4 in Online Appendix L). There were no significant interactions between respondent party identification and partisan comments, regardless of which party was commenting (columns 3 and 4 of Table 3). There was also no interaction between party identification and the overall critique of polls (column 5 in). These results imply that commentary had neither consistent nor meaningful effects in shaping partisan bias **(H2a, H2b, and H3 not supported)**.

Are some Americans more receptive to comments than others? (Comments, Party ID, education interaction)

In two of the five comparisons, Americans seemed to react to the commentaries differently depending on their education levels. In line with prior studies, we had expected to find that more sophisticated individuals would

Table 3. The influence of commentary and respondent Party ID on perceived relative accuracy of the second poll (Interactive effects).

	H1b (dR vs dR-NP)			H1c (rD vs rD-NP)			H2a (DR vs DR-PN)			H2b (DR vs RD-PN)			H3 (DR vs DR-NN)		
	Coef.		**SE**	**Coef.**		**SE**	**Coef.**		**SE**	**Coef.**		**SE**	**Coef.**		**SE**
Intercept	.63	***	*(.04)*	.54	***	*(.04)*	.60	***	*(.02)*	.60	***	*(.02)*	.60	***	*(.02)*
Party	−.12	*	*(.06)*	.04		*(.06)*	−.19	***	*(.03)*	−.19	***	*(.03)*	−.19	***	*(.03)*
Comment	−.01		*(.05)*	−.07		*(.05)*	−.08	*	*(.04)*	.01		*(.03)*	−.07	*	*(.03)*
Party X Comment	−.05		*(.08)*	.15	†	*(.08)*	.05		*(.06)*	.07		*(.05)*	.08		*(.05)*
N	312			298			429			438			438		
R-square	.05			.04			.11			.10			.09		

Notes. Party indicate (continuous variable) respondent party identification where greater scores represent Democrats and lower scores represent Republicans (Independents, N = 88 are excluded). Comment is a dummy variable indicating the presence of a comment as opposed to absence. † denotes p lower than .10, * lower than .05, ** lower than .01, *** denotes p lower than .001.

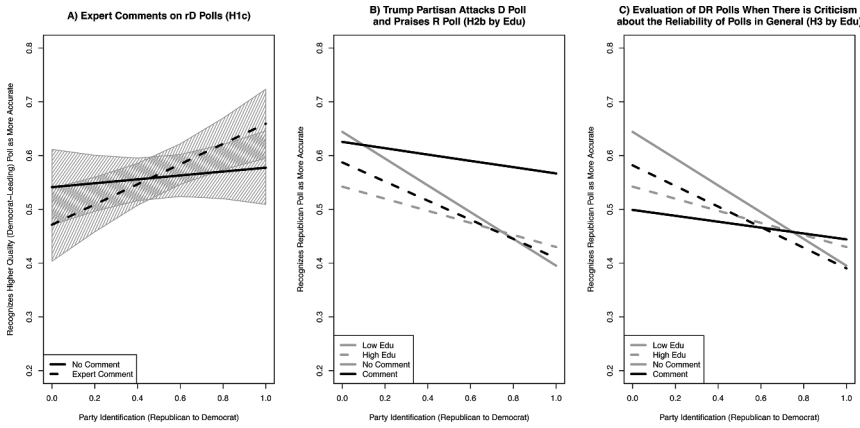

Figure 1. Predicted probabilities for the perceived relative accuracy of the second poll. Please refer to Table 1 for details. Confidence intervals are not shown in the three-way interactions to show the lines easily.

leverage pundit commentaries in ways that furthered their partisan biases. In contrast to these expectations, we found no evidence that commentary enhanced bias among highly educated respondents (**H4**). When interactions were present, it instead appears that partisan biases were mitigated when less educated respondents received commentary. These interactions appeared when a Republican partisan attacked a Democratic poll and when respondents encountered a general critique of polling. We walk through these results in the paragraphs that follow.

When a Trump campaign representative asserted that a Democratic leaning poll was biased, low education Democrats deferred to the pundit in their assessments of the two polls. This introduced a three-way interaction between education, party ID, and commentary (H4; $b = -.38$, $se = .18$, $p < .05$, column 4, row 8, in Table 4). As seen in the plot in Figure 1B, when Americans saw polls that diverged in assessments of who was ahead, (1) partisan bias was present without commentary for both low and high education individuals, (2) high education respondents, regardless of party identity, did not react to the Trump campaign's attack against the Democratic poll (i.e., their assessments were the same whether or not commentary was presented), but (3) compared to a condition without commentary, low education Democrats tended to accept the assessment of the pundit and subsequently asserted that the Republican leading poll was slightly more accurate. This was true even though the polls were identical in objective quality. This shift can be seen by comparing the solid gray line in Figure 1B (low education respondents without commentary) with the solid black line (low education respondents with

Table 4. The influence of commentary, respondent Party ID, and education levels on perceived relative accuracy of the second poll (Three-way interactions).

	H4 (moderation by education)														
	(dR vs dR-NP)			(rD vs rD-NP)			(DR vs DR-PN)			(DR vs RD-PN)			(DR vs DR-NN)		
	Coef.		**SE**	**Coef.**		**SE**	**Coef.**		**SE**	**Coef.**		**SE**	**Coef.**		**SE**
Intercept	.58	***	*(.09)*	.43	***	*(.07)*	.69	***	*(.05)*	.69	***	*(.05)*	.69	***	*(.05)*
Party	−.05		*(.14)*	.09		*(.12)*	−.32	***	*(.07)*	−.32	***	*(.07)*	−.32	***	*(.07)*
Comment	−.03		*(.12)*	−.13		*(.10)*	−.08		*(.08)*	−.05		*(.08)*	−.24	***	*(.07)*
Education (Edu)	.09		*(.12)*	.17		*(.11)*	−.15	*	*(.06)*	−.15	*	*(.07)*	−.15	*	*(.06)*
Party X Comment	−.13		*(.20)*	.18		*(.16)*	.00		*(.12)*	.32	*	*(.13)*	.33	**	*(.12)*
Party X Education	−.11		*(.19)*	−.08		*(.18)*	.20	*	*(.10)*	.20	†	*(.10)*	.20	*	*(.10)*
Comment X Edu	.03		*(.17)*	.11		*(.14)*	.00		*(.11)*	.10		*(.11)*	.28	**	*(.10)*
Party X Comment X Edu	.13		*(.26)*	−.06		*(.24)*	.09		*(.17)*	−.38	*	*(.18)*	−.41	*	*(.17)*
N	313			299			430			439			439		
R-square	.06			.09			.13			.13			.11		

Notes. Party indicate respondent party identification where greater scores represent Democrats and lower scores represent Republicans (Independents, N = 88 are excluded). Comment is a dummy variable indicating the presence of a comment as opposed to absence. Edu(cation) is a continuous variable with greater scores indicating higher education levels. † denotes p lower than .10, * lower than .05, ** lower than .01, *** denotes p lower than .001.

commentary). Although this constitutes a reduction of partisan bias for low education Democrats, who were less likely to distinguish between equally robust competing polls after the partisan attack, it is still normatively problematic, as it suggests that the partisan attack was largely successful.[21]

When Americans encountered a general critique of polling quality, low education individuals appeared to recognize the relative objective quality of competing polls. That is, they ceased to evaluate these polls through a partisan lens and instead accurately reported that the quality of both polls was similar. This too is reflected in a three-way interaction between education, partisan identity, and the presence of commentary (H4, $b = -.41$, $se = .17$, $p < .05$, column 5, row 8, in Table 4). As seen in the plot in Figure 1C, high education respondents (dashed lines) moved little in response to the overall critique of polling. Whereas low education respondents had exhibited the greatest bias in the absence of commentary, the overall critique prompted these respondents to instead regard both polls as equally accurate (black solid line). This shift was slightly more pronounced for Republicans. Hence presenting a critique of polling reliability achieves a reduction in partisan bias for low education Americans.

Overall, these three-way interactions show us that Americans' education levels operate to shape their reactions to commentaries in complicated ways, but not as we expected **(H4 not supported).**

Discussion

Journalists often include expert commentary in news stories under the assumption that it will help readers interpret polling information. There are also reasons to think that such comments might aid readers in reaching unbiased assessments of poll results (or more biased ones when the comments are partisan in nature). These assumptions fuel recommendations from the public opinion research community that journalists should put polls in context and should seek expert commentaries (e.g., Newport et al., 2013). On the other hand, partisan commentary is common in news coverage, and op-eds frequently discuss the limitations and methodological challenges in polling. The current research suggests that the corrective value of expert comments may simply be overwhelmed by individuals' motivational biases; instead partisan comments and overall critiques seems to matter more.

[21]Moreover, the attack by Trump campaign representative also shifted low education Democrats' electoral expectations; they lost confidence in a Clinton win prediction when such partisan comment claimed that Clinton poll was biased (Figures 1 and 2 in Online Appendix F).

Across the board, we find that comments in news reports on election polls did little to change Americans' evaluations of polls. Additionally, we found that comments linked to poll results did not increase or mitigate individuals' motivational biases when processing polling information. This was true whether commentary was designed to help respondents identify quality results, to provide a partisan assessment, or to critique polling in general. Indeed, people appeared to either ignore comments or pick-and-choose which polls to believe; what commentators told them did little to influence their focus on the favorability of the results. Only some of the respondents, based on their education levels, moved in response to comments, as discussed further below.

What should we make of these minimal effects? Although it is possible that the impact of commentary was hobbled by some feature of our design, it is difficult to identify substantive differences between the types of comments presented in the manipulated poll reports and those featured in traditional news articles. Instead, the strong implication of these findings is that, in most cases, commentary is no remedy for bias. This may stem from a situation where Americans reading poll results simply ignore pundit comments or where those comments largely lead them to conclusions that they would reach if the commentary were not present. Whatever mechanisms are at play, the lack of significant moderation effects has implications both for mitigating biased perceptions of polls and for the practices journalists employ when presenting public opinion data.

Addressing bias in perceptions of polls

The present study builds on a growing body of literature about both the potential to correct for biased factual beliefs in general and the ability to address biases in the specific area of news reports on public opinion polls (Chan et al., 2017). Like earlier research on the effectiveness of informational corrections, the present results suggest more about what does not work than what does (Garrett & Weeks, 2013; Nyhan & Reifler, 2010). And the few recent studies focusing on perceptions of public opinion polls have not identified any strong moderating effects (Kuru et al., 2017, 2019; Madson & Hillygus, 2019).

Although scholars have identified some tactics that can reduce biased perceptions, these typically cannot be applied to interpretations of public opinion polls. For instance, in the contexts of scientific uncertainty and health-related misperceptions, the use of experts sometimes appears capable of helping individuals reach accurate conclusions (Dunwoody & Kohl, 2017; Kohl et al., 2016; Vraga & Bode, 2017). In the political arena, however – as the current study demonstrates – expert correctives often have no effect and can even backfire (cf. Nyhan & Reifler, 2010; Wood &

Porter, 2019). While there is some evidence that overwhelming information can serve to override motivated reasoning (Redlawsk et al., 2010), such an intervention is difficult to imagine in a journalistic format. Similarly, successful strategies such as inoculation (e.g., Cook et al., 2017) and sourcing corrective messages from likeminded individuals (e.g., Berinsky, 2017) are poorly suited to improving perceptions of poll results.

Implications for journalistic presentation of polls and news-making practices

Given these small effects of expert and partisan punditry, what should journalists do in covering polls? Unfortunately, our results provide little practical guidance. Evidence that motivated reception of polls cannot be effectively mitigated by expert comments suggests that a common journalistic remedy is largely ineffective. At scale, then, the ever-increasing presence of horserace coverage seems poised to exacerbate partisan perceptual differences with no remedy in sight. As scholars have become increasingly concerned about affective polarization (Iyengar et al., 2012), the search for tactics that might mitigate these perceptions remains a priority.

Notably, the fact that generalized expert critiques of polling and partisan commentary do not exacerbate motivated biases could be read as slightly positive. Of course, there are still reasons to worry about such coverage – both because general critiques might undermine confidence in polling and because partisan messages do appear to induce shifts in perceived accuracy. Hence, the current results should not be construed to suggest that these types of commentary are harmless. Partisan comments could even shift low education respondents when there is no reason to differentiate polls of equivalent quality. Future research should test these possibilities.[22]

Journalists, then, should not simply assume that expert evaluations of methodological quality will protect individuals from biased evaluations of poll accuracy. Experts likely don't hurt, but some larger intervention is necessary. Perhaps employing additional context could avoid misperceptions and biased interpretations, such as presenting polling averages or other metrics of public opinion like forecasting models. Recent evidence, however, suggests that these too may be frequently misinterpreted (Westwood et al., 2020). The increasing popularity of data journalism and polling blogs like *FiveThirtyEight, RealClearPolitics*, and the *New York Times Upshot* renders

[22]It is possible that education may be conflating two distinct moderators that may operate in different ways. That is, more educated individuals presumably have (1) more capacity to interpret the results of the polls and comments as well as (2) more motivation to do so in line with their partisan political views (Lodge & Taber, 2013; Zaller, 1992). These processes may operate in different directions.

more urgent the question of how news providers can help people engage with polling evidence in more nuanced and sophisticated ways without further skewing their perceptions of public opinion.

These concerns do not imply that media should discount polling information or eschew the presentation of polls altogether. Although there are good reasons to remind the public about the limitations of polling, traditional polls remain the most objective and systematic sources of evidence about what ordinary people think (Callegaro & Yang, 2018). If news organizations remove polling results from the public sphere, they would undermine citizens' capacity to have a voice in many aspects of the political process and their ability to learn what their fellow citizens are thinking about important issues of the day. There are many reasons to think that other forms of public opinion measurement (e.g., social media posts) would only prove more problematic (Westwood et al., 2020). Finally, these findings reveal how journalistic practices of poll reporting, which are shaped by data journalism affordances and transparency values, may have unintended effects (cf. Gans, 1979; Meyer, 1973). In the digital presentation of methodological and statistical details, transparency is easier said than achieved (Stohl et al., 2016). In this study, we showed not only that Americans interpret poll reports in biased ways, but that the provision of expert commentary falls short of achieving its ostensible purpose; this, in turn, makes us reconsider our broader assumptions about the reception of social scientific information in the news (cf. Anderson, 2018; Gans, 1979; Herbst, 1993; Meyer, 1973).

Limitations and future research

The results presented here only address one presentation of poll findings, in the form of competing results reported by an ostensibly neutral source. Although this design allowed a relatively clean test of the implications of results, quality, and commentary on interpretations of poll reports, it vastly oversimplifies the challenge citizens face in interpreting public opinion data. In the real world, people encounter different poll results across news articles, from multiple media outlets with varying biases and norms of presentation. These are coupled with varying cues about data quality and context about the other public opinion data that are available. Evidence from even the most realistic experiment is limited by its ability to tap a small microcosm of a vast information environment.

One notable limitation stems from our measure of respondent sophistication. Although education levels have been used in other studies, it is possible that education serves a complex role in helping respondents evaluate survey data. If education is more than an indicator of sophistication, it would be valuable for future research to compare the findings presented here with results from other moderators such as political knowledge and methodological knowledge (Kuru et al., 2017).

Future research should also disentangle media source effects. We used *Yahoo! News*, an ostensibly neutral source, for the source of all our stories. Previous work found that media source did not moderate the biases in perceptions of issue polls (Kuru et al., 2017). Within the context of contemporary data journalism, whether commentaries come from mainstream news sites or political data blogs and outlets (e.g., 538, RealClearPolitics, NYT Upshot, Pollster) is also a potentially important distinction, especially given that the source of messages matters more in competitive environments (Tormala & Clarkson, 2007).

The current study began with a concern that Americans might be predisposed to interpret public opinion polls in ways consistent with their partisanship and with the hope that these concerns might be mitigated by journalistic practices of soliciting commentary. We expected that journalists, by including measured expert commentary and eschewing partisan punditry, might help ordinary individuals focus on evidentiary quality when evaluating the accuracy of poll reports. These hopes were not realized. Instead, we found that motivated processing of public opinion polls guided perceptions of accuracy regardless of the presence and nature of expert and partisan commentary. The results provide little guidance for those who hope to reduce bias while suggesting that one popular strategy is unlikely to make a sizable difference.[23,24]

Notes on contributors

Ozan Kuru is the Howard Deshong Postdoctoral Fellow at the Annenberg Public Policy Center at the University of Pennsylvania.

Josh Pasek is Associate Professor of Communication and Media and Faculty Associate in the Center for Political Studies, Institute for Social Research, at the University of Michigan.

Michael W. Traugott is Research Professor in the Center for Political Studies, Institute for Social Research, and Professor Emeritus in Communication Studies, University of Michigan.

[23]We were not theoretically interested in disaggregating what individuals might make of any of these features individually.

[24]Further split analysis based on whether the better methodology poll was Clinton or Trump-leading indicated that this effect was primarily driven in cases where Trump leading poll was of better quality. When Trump-leading poll was better, an expert commentary increase Republicans' perceived chances of Trump win and pushed Democrats to believe in Clinton victory stronger.

References

Anderson, C. A. (2018). *Apostles of certainty: Data journalism and the politics of doubt*. Oxford University Press.

Baker, R., Brick, J. M., Bates, N. A., Battaglia, M., Couper, M. P., Dever, J. A., Gile, K. J., & Tourangeau, R. (2013). Summary report of the AAPOR task force on non-probability sampling. *Journal of Survey Statistics and Methodology*, *1*(2), 90–143. https://doi.org/10.1093/jssam/smt008

Bennett, W. L. (1988). *News: The politics of illusion*. Longman.

Berinsky, A. J. (2017). Rumors and health care reform: Experiments in political misinformation. *British Journal of Political Science*, *47*(2), 241–261. https://doi.org/10.1017/S0007123415000186

Bhatti, Y., & Pedersen, R. T. (2015). News reporting of opinion polls: Journalism and statistical noise. *International Journal of Public Opinion Research*, *28*(1), 129–141. https://doi.org/10.1093/ijpor/edv008

Boukes, M., Boomgaarden, H. G., Moorman, M., & De Vreese, C. H. (2014). News with an attitude: Assessing the mechanisms underlying the effects of opinionated news. *Mass Communication and Society*, *17*(3), 354–378. https://doi.org/10.1080/15205436.2014.891136

Brettschneider, F. (1997). The press and the polls in Germany, 1980–1994 poll coverage as an essential part of election campaign reporting. *International Journal of Public Opinion Research*, *9*(3), 248–265. https://doi.org/10.1093/IJPOR/9.3.248

Callegaro, M., & DiSogra, C. (2009). Computing response metrics for online panels. *Public Opinion Quarterly*, *72*(5), 1008–1032. https://doi.org/10.1093/poq/nfn065

Callegaro, M., & Yang, Y. (2018). The role of surveys in the era of "Big Data". In D. L. Vannette & J. A. Krosnick (Eds.), *The palgrave handbook of survey research* (pp. 175–192). Springer International Publishing. https://doi.org/10.1007/978-3-319-54395-6_23

Cappella, J. N., & Jamieson, K. H. (1997). *Spiral of cynicism: The press and the public good*. Oxford University Press. https://global.oup.com/academic/product/spiral-of-cynicism-9780195090642?cc=us&lang=en&

Chan, M. S., Jones, C. R., Jamieson, K. H., & Albarracín, D. (2017). Debunking: A meta-analysis of the psychological efficacy of messages countering misinformation. *Psychological Science*, *28*(11), 1531–1546. https://doi.org/10.1177/0956797617714579

Chia, S. C., & Chang, T.-K. (2017). Not my horse: Voter preferences, media sources, and hostile poll reports in election campaigns. *International Journal of Public Opinion Research*, *29*(1), 23–45. https://doi.org/10.1093/IJPOR/EDV046

Coddington, M. (2015). Clarifying journalism's quantitative turn. *Digital Journalism*, *3*(3), 331–348. https://doi.org/10.1080/21670811.2014.976400

Cook, J., Lewandowsky, S., & Ecker, U. K. H. (2017). Neutralizing misinformation through inoculation: Exposing misleading argumentation techniques reduces their influence. *Plos One*, *12*(5), e0175799. https://doi.org/10.1371/journal.pone.0175799

Delli Carpini, M. X., & Keeter, S. (1996). *What Americans know about politics and why it matters*. Yale University Press. https://yalebooks.yale.edu/book/9780300072754/what-americans-know-about-politics-and-why-it-matters

Druckman, J. N., & Bolsen, T. (2011). Framing, motivated reasoning, and opinions about emergent technologies. *Journal of Communication*, *61*(4), 659–688. https://doi.org/10.1111/j.1460-2466.2011.01562.x

Druckman, J. N., Fein, J., & Leeper, T. J. (2012). A source of bias in public opinion stability. *American Political Science Review*, *106*(2), 430–454. https://doi.org/10.1017/S0003055412000123

Dunwoody, S., & Kohl, P. A. (2017). Using weight-of-experts messaging to communicate accurately about contested science. *Science Communication*, *39*(3), 338–357. https://doi.org/10.1177/1075547017707765

Feldman, L. (2011a). Partisan differences in opinionated news perceptions: A test of the hostile media effect. *Political Behavior*, *33*(3), 407–432. https://doi.org/10.1007/s11109-010-9139-4

Feldman, L. (2011b). The effects of journalist opinionation on learning from the news. *Journal of Communication*, *61*(6), 1183–1201. https://doi.org/10.1111/j.1460-2466.2011.01602.x

Feldman, L. (2011c). The opinion factor: The effects of opinionated news on information processing and attitude change. *Political Communication*, *28*(2), 163–181. https://doi.org/10.1080/10584609.2011.565014

Gallup, G., & Rae, S. F. (1940). *The pulse of democracy*. Simon and Schuster.

Gans, H. J. (1979). *Deciding what's news: A study of the CBS evening news, NBC nightly news, Newsweek, and Time*. Vintage.

Garrett, R. K., & Weeks, B. E. (2013). The promise and peril of real-time corrections to political misperceptions. In *Proceedings of the ACM Conference on Computer Supported Cooperative Work, CSCW* (pp. 1047–1057). https://doi.org/10.1145/2441776.2441895

Gelman, A. (2007). Struggles with survey weighting and regression modeling. *Statistical Science*, *22*(2), 153–164. https://doi.org/10.1214/088342306000000691

Herbst, S. (1993). *Numbered voices: How opinion polling has shaped American politics*. University of Chicago Press.

Iyengar, S., Sood, G., & Lelkes, Y. (2012). Affect, not ideology: A social identity perspective on polarization. *Public Opinion Quarterly*, *76*(3), 405–431. https://doi.org/10.1093/poq/nfs038

Kahan, D. M., Jenkins-Smith, H., & Braman, D. (2011). Cultural cognition of scientific consensus. *Journal of Risk Research*, *14*(2), 147–174. https://doi.org/10.1080/13669877.2010.511246

Kahan, D. M., Peters, E., Dawson, E. C., & Slovic, P. (2017). Motivated numeracy and enlightened self-government. *Behavioural Public Policy*, *1*(1), 54–86. https://doi.org/10.1017/bpp.2016.2

Kohl, P. A., Kim, S. Y., Peng, Y., Akin, H., Koh, E. J., Howell, A., & Dunwoody, S. (2016). The influence of weight-of-evidence strategies on audience perceptions of (un)certainty when media cover contested science. *Public Understanding of Science*, *25*(8), 976–991. https://doi.org/10.1177/0963662515615087

Krosnick, J. A. (1991). Response strategies for coping with the cognitive demands of attitude measures in surveys. *Applied Cognitive Psychology*, *5*(3), 213–236. https://doi.org/10.1002/acp.2350050305

Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, *108*(3), 480–498. https://doi.org/10.1037/0033-2909.108.3.480

Kuru, O., Pasek, J., & Traugott, M. W. (2017). Motivated reasoning in the perceived credibility of public opinion polls. *Public Opinion Quarterly*, *81*(2), 422–446. https://doi.org/10.1093/poq/nfx018

Kuru, O., Pasek, J., & Traugott, M. W. (2019). When polls disagree: how competitive results and methodological quality shape Partisan perceptions of polls and electoral predictions. *International Journal of Public Opinion Research*. https://

academic.oup.com/ijpor/advance-article-abstract/doi/10.1093/ijpor/edz035/5603533?redirectedFrom=fulltext
Larson, S. G. (2003). Misunderstanding margin of error. *Harvard International Journal of Press/Politics*, *8*(1), 66–80. https://doi.org/10.1177/1081180X02238785
Lodge, M., & Taber, C. S. (2013). *The rationalizing voter*. Cambridge University Press.
Lord, C. G., Ross, L., & Lepper, M. R. (1979). Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology*, *37*(11), 2098–2109. https://doi.org/10.1037/0022-3514.37.11.2098
Lyons, B. A. (2018). When readers believe journalists: Effects of adjudication in varied dispute contexts. *International Journal of Public Opinion Research*, *30*(4), 583–606. https://doi.org/10.1093/IJPOR/EDX013
Madson, G. A., & Hillygus, S. (2019). All the best polls agree with me: Bias in evaluations of political polling. *Political Behavior*, 1–18. https://doi.org/10.1007/s11109-019-09532-1
Meyer, P. (1973). *Precision journalism: A reporter's introduction to social science methods*. Indiana University Press.
Miller, J. M., Saunders, K. L., & Farhart, C. E. (2016). Conspiracy endorsement as motivated reasoning: The moderating roles of political knowledge and trust. *American Journal of Political Science*, *60*(4), 824–844. https://doi.org/10.1111/ajps.12234
Muddiman, A., & Stroud, N. J. (2017). News values, cognitive biases, and partisan incivility in comment sections. *Journal of Communication*, *67*(4), 586–609. https://doi.org/10.1111/jcom.12312
Newport, F., Shapiro, R. Y., Ayres, W., Belden, N., Fishkin, J., Fung, A., Herbst, S., Lake, C., Page, B., Page, S., Pinkerton, J. P., Selzer, J. A., & Warren, M. (2013). Polling and democracy: Executive summary of the AAPOR task force report on public opinion and leadership. *Public Opinion Quarterly*, *77*(4), 853–860. https://doi.org/10.1093/poq/nft039
Nir, L. (2011). Motivated reasoning and public opinion perception. *Public Opinion Quarterly*, *75*(3), 504–532. https://doi.org/10.1093/poq/nfq076
Nyhan, B., & Reifler, J. (2010). When corrections fail: The persistence of political misperceptions. *Political Behavior*, *32*(2), 303–330. https://doi.org/10.1007/s11109-010-9112-2
Oleskog Tryggvason, P., & Strömbäck, J. (2018). Fact or fiction?: Investigating the quality of opinion poll coverage and its antecedents. *Journalism Studies*, *19*(14), 2148–2167. https://doi.org/10.1080/1461670X.2017.1330665
Patterson, T. E. (2005). Of polls, mountains: U.S. journalists and their use of election surveys. *Public Opinion Quarterly*, *69*(5), 716–724. https://doi.org/10.1093/poq/nfi065
Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of Persuasion. Communication and Persuasion. In L. Berkowitz (Ed.), *Advances of experimental social psychology* (Vol. 19, pp. 123–205). Academic Press.
Rasmussen, S. H. R. (2016). Education or personality traits and intelligence as determinants of political knowledge? *Political Studies*, *64*(4), 1036–1054. https://doi.org/10.1111/1467-9248.12214
Redlawsk, D. P., Civettini, A. J. W., & Emmerson, K. M. (2010). The affective tipping point: Do motivated reasoners ever "Get it"? *Political Psychology*, *31*(4), 563–593. https://doi.org/10.1111/j.1467-9221.2010.00772.x

Sances, M. W., & Stewart, C. (2015). Partisanship and confidence in the vote count: Evidence from U.S. national elections since 2000. *Electoral Studies*, *40*, 176–188. https://www.sciencedirect.com/science/article/pii/S0261379415001602?via%3Dihub

Sonck, N., & Loosveldt, G. (2010). Impact of poll results on personal opinions and perceptions of collective opinion. *International Journal of Public Opinion Research*, *22*(2), 230–255. https://doi.org/10.1093/IJPOR/EDP045

Stohl, C., Sothl, M., & Leonardi, P. M. (2016). Managing opacity: Information visibility and the paradox of transparency in the digital age. *International Journal of Communication*, *10*, 123–137. https://ijoc.org/index.php/ijoc/article/view/4466

Suhay, E., Bello-Pardo, E., & Maurer, B. (2018). The polarizing effects of online partisan criticism: Evidence from two experiments. *The International Journal of Press/Politics*, *23*(1), 95–115. https://doi.org/10.1177/1940161217740697

Taber, C. S., & Lodge, M. (2006). Motivated skepticism in the evaluation of political beliefs. *American Journal of Political Science*, *50*(3), 755–769. https://doi.org/10.1111/j.1540-5907.2006.00214.x

Toff, B. (2018). Rethinking the debate over recent polling failures. *Political Communication*, *35*(2), 327–332. https://doi.org/10.1080/10584609.2018.1440908

Tormala, Z. L., & Clarkson, J. J. (2007). Assimilation and contrast in persuasion: The effects of source credibility in multiple message situations. *Personality & Social Psychology Bulletin*, *33*(4), 559–571. https://doi.org/10.1177/0146167206296955

Traugott, M. W., & Kang, M.-E. (2000). Public attention to polls in an election year. In P. J. Lavrakas & M. W. Traugott (Eds.), *Election polls, the news media, and democracy* (pp. 185–205). Chatham House.

Trende, S. (2016). *It wasn't the polls that missed, it was the pundits*. RealClearPolitics. https://www.realclearpolitics.com/articles/2016/11/12/it_wasnt_the_polls_that_missed_it_was_the_pundits_132333.html

Turcotte, J., Medenilla, K., Villaseñor, K., & Lampwalla, S. (2017). All the polling (Data) that's fit to print? An analysis of online news coverage of 2016 primary polls. *Communication Research Reports*, *34*(3), 191–200. https://doi.org/10.1080/08824096.2017.1282856

Voss, D. S., Gelman, A., & King, G. (1995). Pre-election survey methodology: Details from nine polling organizations, 1988 and 1992. *Public Opinion Quarterly*, *59*(1), 98–132. https://doi.org/10.1086/269461

Vraga, E. K., & Bode, L. (2017). Using expert sources to correct health misinformation in social media. *Science Communication*, *39*(5), 621–645. https://doi.org/10.1177/1075547017731776

Westwood, S. J., Messing, S., & Lelkes, Y. (2020). Projecting confidence: How the probabilistic horse race confuses and demobilizes the public. *The Journal of Politics*, 708682. https://doi.org/10.1086/708682

Wood, T., & Porter, E. (2019). The elusive backfire effect: Mass attitudes' steadfast factual adherence. *Political Behavior*, *41*(1), 135–163. https://doi.org/10.1007/s11109-018-9443-y

Zaller, J. (1992). *The nature and origins of mass opinion*. Cambridge University Press.