# A Measurement Gap? Effect of Survey Instruments on Partisan Knowledge Gaps

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#### **Abstract**

Conventional wisdom suggests large, persistent gaps between partisans' stores of political knowledge, fanning concerns about democratic accountability. We reconsider the frequency and size of these "partisan knowledge gaps," in series of experiments. Our findings suggest that knowledge gaps—when they do exist—stem more from motivated responding than genuine differences in factual knowledge.

In a series of experiments, we find that partisan gap reduces to close to

## Two Theories of Partisan Gaps

Research shows that partisan gaps in political knowledge are wide and widespread (???). For instance, when Americans were quizzed at the end of Bill Clinton's first term in 1996 about whether the budget deficits increased, decreased, or remained the same, 39% of Democrats correctly identified that the budget deficit had decreased, only 25% of Republicans did the same (?, 280). There are two broad explanations for these gaps. The first is that partisan gaps on partisan consequential knowledge and misinformation items are a result of the fact that partisans know different things. The second theory is that partisans gaps are an artifact of the survey design.

#### Partisan Gaps in Knowledge

Partisan gaps in survey measures of political knowledge and misinformation may reflect *actual differences* in what partisans believe. These differences in beliefs may in turn stem from selective exposure to information, which may be because partisans trust different sources of information or because partisans pay attention to different issues, topics, and politicians (e.g., ??). To the extent that partisan gaps in political knowledge and misinformation stem from different 'tastes' in politics, the gaps are similar to other types of gaps — see research on gaps in gender (??) and race (?).

Selective exposure is generally made worse by "motivated skepticism" (??). People are more skeptical of uncongenial than congenial information and thus may be more likely to follow-up and do the due diligence to disprove an uncongenial fact or may just take uncongenial information to be untrue and move past it. People may be less likely to remember uncongenial information.

When people encounter information that conflicts with their predispositions, they experience cognitive discomfort, which they try to minimize by employing a variety of defense

mechanisms (e.g., ??). Specifically, they avoid exposing themselves to sources that provide them with uncongenial information, distrust such information when they do come across it, and do not work as hard to retain it (???). Partisanship helps reduce cognitive discomfort by acting as a "perceptual screen," filtering in congenial facts that comport with an individual's partisan worldview while filtering out those that challenge it (??).

To summarize, it is possible that the observed partisan gaps in political knowledge in survey research reflect actually excisiting knowledge gaps, which originate in partisans knowing different things, holding different types of misinformation or being ignorant about different aspects of politics.

#### Partian Gaps As Artifact of Survey Design

Partisan gaps on partisan consequential knowledge and misinformation items on surveys may be an *artifact of questionnaire design*.

One reason why partisan gaps may be inflated is because surveys encourage people to guess when they don't know. Guesses, in turn, cause structured error. Minimally, if we don't adjust for random guessing, guesses cause us to think that more people know the thing than they do. But guesses by partisans on partisan consequential items have a structure to them. Partisans either use affect as a guide to infer the answer. For instance, asked about what happened to the federal deficit during the Obama administration, Republicans, thinking Democrats cause bad things infer that deficits increased under Obama. Alternately, a longer reasoning chain may ensue — regarding Democrats as generally insouciant about deficits, may infer, without actually knowing, that it increased.

Surveys also encourage respondents to respond 'expressively,' highlighting partisan motivations than accuracy motivations. (?) The latter explanation has attracted a bunch of research. Some research shows that up to half of the partisan gaps are a result of expressive responding (??). Though see Berinsky.

#### **Empirical implications of the theories**

To disambiguate between the two explanations, we mount a series of survey experiments. If partisan gaps are a result of actual differences, minor differences in question wording and response options stem should principally have little effect on the gap. On the other hand if the gaps are sensitive to question and response attributes, it suggests that some of the partisan gaps may not be founded in differences in strongly held beliefs. The argument goes that partisan gaps emerge because surveys are designed in a way that encourage respondents to provide answers that are congenial to them even when they don't have strongly held beliefs about the question at hand. Inflationary features — not including don't know (cite bullock who prices DK), social proof, guessing encouraging, and not accounting for guessing. Our hunch is that if you take out the inflationary features, the partisan gaps go down.

- Real World (RW): The RW condition reflects the real-world standards most closely—it does not feature a 'Don't Know', it often features social proof about the incorrect answer, for instance, "Some people believe Barack Obama was not born in the United States, but was born in another country" on a question about where Mr. Obama was born, and some neutral information about the topic, like "According to the Constitution, American presidents must be 'natural born citizens'" on the birthplace question, that may encourage the ignorant to take a guess.
- No DK + SP + GE: It never includes the 'Don't Know,' it always includes neutral information that encourages people to take a guess, and it also includes social proof about the incorrect answer.
- DK + SP + No GE: The FSR standard adds a 'Don't Know and removes from the question stem any neutral information that is likely to cause people to offer a substantive response when they don't know.

- DK + No SP + No GE: The best version of the multiple-choice question—no social proof, no guessing encouraging neutral wording, and a don't know—while maintaining commensurability with other items.
- Confidence Scoring: Respondents rate the claim on a 0 to 10 scale going from 'definitely false' to 'definitely true.' The question is inspired by other attempts to take account of confidence in distinguishing misinformation from incorrect responses stemming from processes like inference, unlucky guessing, and such (see, for instance, (?)).

## Partisan Knowledge Gaps (MTurk)

### **Data and Research Design**

In a first survey on Amazon Mechanical Turk (MTurk) in April 2017, we randomly assigned 1,059 respondents to either closed-ended or truth-scale questions about four items. In the closed-ended version of the survey the participants received five options as answers, including a "Don't Know" option. In the truth-scale version of the survey respondents were asked to access the truth of the four statements that were answer options in the closed-ended questions. The question in this section of the survey covered the Afforcable Care Act (2), the effect of greenhouse gases (1), the consequences of president Trump's (then) recent executive order on immigration. Participants were randomly assigned to an open-ended follow-up question that asked them why they chose this response or a closed-ended ended version that gave them eight options to choose. The exact question wording for each of the items is presented in ??.

In a second survey on Amazon Mechanical Turk (MTurk) in July 2017, we randomly signed 1,253 respondents to one of five conditions Real World (RW), Iron Pyrite Standard (IP), Fewer Substantive Responses (FSR), 14k Gold Standard (14k), and the 24k Gold Standard (24k). In each condition respondents answered 9 misinformation items, ranging from citizenship and religion of Obama to whether global warming is happening or not. (The exact question wording for each of the items is presented in ??.) Respondents assigned to RW and IP saw a simple preface: "Now here are some questions about what you may know about politics and public affairs," while in all the other conditions, they were reassured that it is ok to not know answers to these questions and to commit to not looking up answers or asking anyone and to mark don't know when they dont know. (Again, see ?? for the specific wording.)

We start by summarising the average partisan gap for each survey item and each treat-

RW **IPS FSR** 14k 24k Obama birthplace Obama religion ACA illegal ACA death panels **GW** causes GW scientists agree Voter fraud MMR vaccine **Budget deficit** Average 6. -.3 6. -.3 -.3

**Figure 1:** Partisan Gap by Treatment Arm (MTurk)

Each point is the estimated gap between Republicans and Democrats for how congenial their responses are to their own party. Columns indicate the five different treatment arms described in Data and Research Design. Rows indicate the nine individual survey items described in ?? plus their average. Each point is the estimated  $\beta$  from estimating  $1\{party-congenial\ response\}_i = \alpha + \beta Rep_i + \varepsilon_i$  for each of items and each of the five arms. Horizontal bars are 95% confidence intervals constructed from robust standard errors.

ment arm from the MTurk sample. Figure 1 shows the results. Each marker represents how much more congenial the responses of the Republicans are to the Democrats. In the RW treatment arm (first column), the Republicans are, on average, 30 percentage points more likely than the Democrats to have party-congenial responses. The subsequent four columns in Figure 1 show that, while the estimated differences in party-congenial responses are precise (the narrow bars), the differences attenuated substantially depending on the treatment arms.

The attenuation is most pronounced when comparing the RW to the 24k arms (first vs.