

Asking About Attitude Change

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Abstract

Surveys often ask respondents how information or events changed their attitudes. Does [information X] make you more or less supportive of [policy Y]? Does [scandal X] make you more or less likely to vote for [politician Y]? We show that this type of question (the *change format*) exhibits poor measurement properties, in large part because subjects engage in response substitution. When asked how their attitudes changed, people often report the level of their attitudes rather than the change in them. As an alternative, we propose the *counterfactual format*, which asks subjects what their attitude would have been in the counterfactual world in which they did not know the treatment information. Using a series of experiments embedded in four studies, we show that the counterfactual format greatly reduces bias relative to the change format.

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In advance of Alabama’s 2017 special election for U.S. Senator, polling firm JMC Analytics released a survey that sought to estimate the effect of sexual misconduct allegations on support for Republican Roy Moore. The question read, “Given the allegations that have come out about Roy Moore’s alleged sexual misconduct against four underage women, are you more or less likely to support him as a result of these allegations?” Among the 575 registered Alabama voters sampled, 29% responded “more likely,” 38% “less likely,” and 33% “no difference.” Among self-identified evangelical Christians, “more” outnumbered “less.” Many commentators decried the apparent depravity of those whose support for Moore had seemingly increased as because of the allegations (e.g., [Ballesteros 2017](#); [Wilson 2017](#)).

Surveys often ask respondents to assess the causal effect of exposure to some news event on their attitudes. This article shows that *change questions* of this type exaggerate the extent to which information about events causes attitude change. This bias is at least partially explained by a phenomenon known as *response substitution* ([Gal and Rucker 2011](#); [Yair and Huber 2019](#)), wherein respondents use the question to indicate the level of their opinion rather than the change in it. According to the response substitution interpretation, Alabama voters were not saying they support Roy Moore more because he was accused of sexual misconduct; they were saying they support him anyway.

To some, it may seem obvious that self-reports of attitude change should not be taken at face value. Indeed, some analysts argued that the poll really meant that 29% of Alabama voters wanted to express support for Moore despite the scandal (e.g., [Klein 2017](#)). Though this interpretation has merit, note that it subtly switches the estimand from the average causal effect of the scandal on support to the average level of support after the scandal, which can be measured more directly. This article focuses squarely on the original, causal estimand.

Questions about attitude change are a staple of public opinion surveys. Examples

stretch back to the early days of polling.¹ To better understand their contemporary uses, a research assistant helped us document nearly 200 self-reported attitude change questions that appeared in statewide or national polls during 2017 and 2018 (see Table 1 for some political examples and the appendix for the full set of examples, which also covers nonpolitical topics like sports, drug use, and consumer behavior). The largest category of questions concerned the effects of policy positions on candidate support. Other common topics included how candidate endorsements affected support for other candidates, how information affects attitudes, and how events changed social and economic behavior. Many other questions concerned sexual misconduct, including 15 questions about allegations against Supreme Court Justice Brett Kavanaugh. Despite their prevalence, we are not aware of survey methodological research that evaluates change questions.

This article has two main goals. The first is to explain why the change format generates biased inferences. We test the response substitution explanation with a series of experiments in which some subjects are randomly assigned to state the absolute level of their opinion before answering the change question. The results show that answering the level question first substantially reduces the exaggeration in self-reported attitude change.

The second goal is to introduce an alternative, the *counterfactual format*. It proceeds in two steps. First, subjects are reminded of the treatment information and then asked to report the level of their attitude or opinion as in a standard survey question. Second, subjects are asked to imagine how they would have responded if they did not know the treatment information. Comparing the answers given by each subject yields each subject's beliefs about the causal effect of the treatment information.

The relative accuracy of the change and counterfactual formats is evaluated through comparisons to the difference-in-means estimate from a randomized experiment, which provides an unbiased estimate of the causal effect of information. Though neither format is

¹The earliest example we have encountered is summarized by [Dahl \(1961\)](#). In 1954, the Survey Research Center asked whether respondents would be more or less likely to vote for a politician who had the support of Senator Joseph McCarthy.

Table 1: Questions about attitude change in public-facing polls

Category	Polls	Qs	Example
Candidate positions	25	68	If your member of Congress voted for the health care bill currently being considered by Congress, would that make you more or less likely to vote for them in the next election, or would it not make a difference either way? — <i>Public Policy Polling, July 2017</i>
Endorsements by or support for other people	25	33	If [Claire McCaskill / Heidi Heitkamp / Joe Donnelly] votes against Brett Kavanaugh’s nomination to the Supreme Court, would that make you more likely or less likely to vote for [her / him], or would it not make a difference to your vote for Senate? — <i>Fox News, September 2018</i> .
Politics and social or economic behavior	13	17	As you may know, some athletes and sports teams have begun not standing during the national anthem in order to protest police violence against the black community in the United States. Does this make you more likely, less likely or has no influence on you to watch NFL games on television? — <i>University of North Florida, September 2017</i> .
Attitudes	12	30	If you knew that the Republican tax plan would cause a significant increase in the national debt over the next 10 years, would that make you more likely to support it, less likely to support it, or would it not have an impact? — <i>Quinnipiac, November 2017</i>
Misconduct	10	13	Does the issue of sexual harassment make you more likely to vote for a [Democratic / Republican / woman] candidate, or not? — <i>Quinnipiac, December 2017</i>
Candidate attributes	9	12	Stacey Abrams has discussed being more than \$200,000 in debt. Does Stacey Abrams’ debt make you more likely to consider voting for her? Less likely to consider voting for her? Or does it make no difference? — <i>SurveyUSA, May 2018</i>
Political participation	6	7	Has what you’ve seen in Washington over the last year made you more likely to speak up and let your political views be known, less likely to speak up and let your political views be known, or has there been no change? — <i>CBS, October 2018</i>

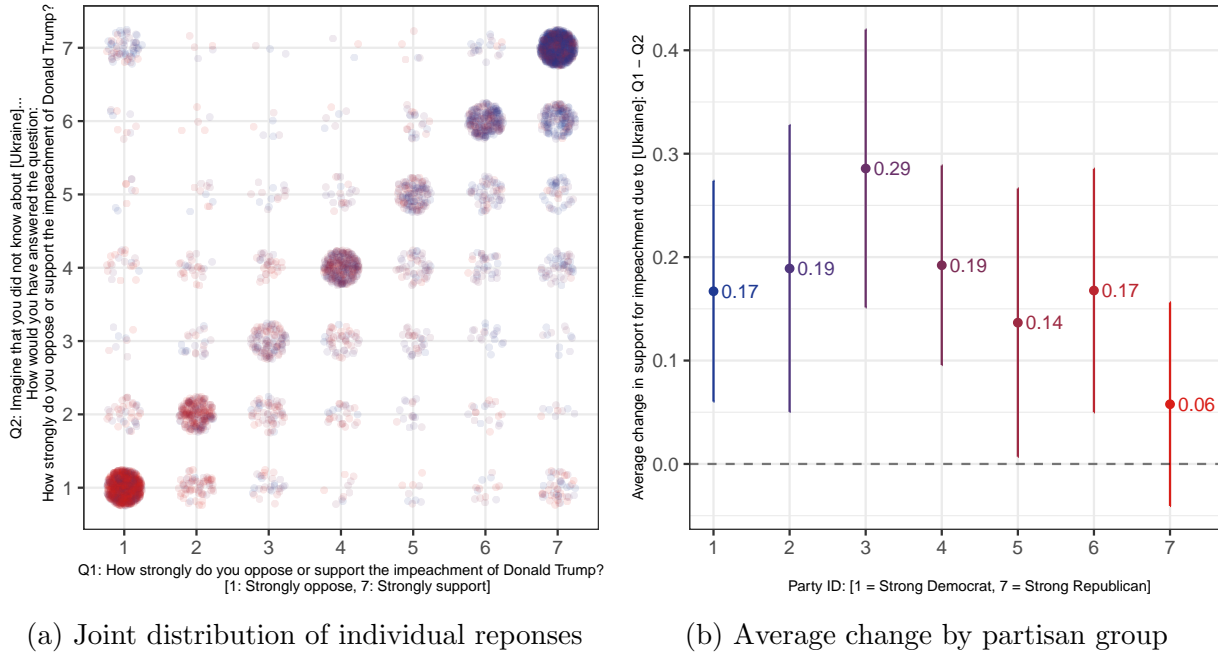
Note: The questions summarized in this table were compiled using two searches. First, a search of the Roper Center’s iPoll database using the search string: more OR less OR make% OR likely OR (change AND your) OR (would AND you AND be) OR (rate AND you%). Second, a Google search for this same search string plus the word “poll.” Both searches only considered polls conducted between January 1, 2017 and December 31, 2018. The supplementary materials list all of the questions.

perfect, we find that the counterfactual format consistently produces more accurate estimates of attitude change. This suggests that survey researchers who want to reduce bias in questions about attitude change should abandon change questions in favor of the counterfactual format.

To illustrate, we used the counterfactual format to estimate Americans’ beliefs about the effect of the Ukraine revelations on support for the impeachment of Donald Trump. In December 2019, we obtained 4,034 survey responses from Lucid, which quota samples online survey respondents to match U.S. Census demographic margins. The survey reminded subjects of the treatment information by asking whether they had heard about “Donald Trump withholding military aid to Ukraine while urging the President of Ukraine to investigate allegations of corruption against the Biden family” and whether they thought Trump’s actions were appropriate. It then asked subjects for their level of support for impeachment: “How strongly do you oppose or support the impeachment of Donald Trump? [1: Strongly oppose; 7: Strongly support]” The second step asked, “Imagine that you did not know about Donald Trump withholding military aid to Ukraine while urging the President of Ukraine to investigate allegations of corruption against the Biden family. How would you have answered the question: How strongly do you oppose or support the impeachment of Donald Trump?”

The results are presented in Figure 1. Panel (a) plots the first question against the second, with a small amount random noise added to distinguish the points. Panel (a) offers prima facie evidence that subjects are not bewildered by the nonstandard question format: the strong correlation (0.82) of the two responses indicates that most subjects believe their counterfactual attitudes would have been very close to their actual attitudes (72% report exactly zero change). That said, some subjects do believe the allegations changed their support for impeachment, albeit by a small amount. The average difference between the first and second question is 0.16 (SE = 0.02). Panel (b) shows the average difference across partisan groups. For all groups except strong Republicans, the estimated effect of the Ukraine revelations on impeachment support is small, positive, and statistically significant. Subjects

Figure 1: Counterfactual format example



Source: 4,034 Lucid survey respondents.

appear to believe that their support or opposition to impeachment is mainly due to other factors but that the Ukraine allegations did increase support ever so slightly.

The intuition behind this approach is to give subjects a “counterfactual assist” to help them think about causal effects. The change format requires subjects to do three things at once: figure out their opinion, figure out what their opinion *would have been*, and take the sign of the difference. The counterfactual format simply splits these tasks apart, allowing respondents to take them one at a time.

We emphatically do not claim that the counterfactual format is an unbiased measure of individual-level causal effects. Nothing about the format guarantees that respondents’ guesses of their counterfactual attitudes will be correct. Indeed, compared with experimental benchmarks, we find direct evidence that subjects are sometimes wrong about what their attitudes would have been. In our view, the counterfactual format should be interpreted as a measure of subject *beliefs* about causal effects.

Despite these difficulties, we recommend retiring change questions in favor of questions

that ask respondents to imagine counterfactuals. This approach greatly reduces bias relative to experimental benchmarks.

Questions About Attitude Change

The Change Format

The standard approach to asking about attitude change is the *change format*, which asks respondents whether some event or information made them more or less supportive of a candidate or policy proposal. For example, amid the health care reform debate in summer 2010, angry protestors disrupted town hall meetings across the country. To understand how exposure to the protests affected attitudes, Gallup and USA Today asked,

From what you know or have read, have these town hall meeting protests against the proposed bills made you more sympathetic to the protestors' views, do the protests not make any difference to you either way, or have the protests made you less sympathetic to the protestors' views?

Overall, 35% of respondents said “more sympathetic” compared with just 21% percent who said “less sympathetic.” Republicans split 51% to 8% while Democrats split 17% to 39%. The opening sentence of *USA Today*'s coverage of the poll declared that “[t]he raucous protests at congressional town-hall-style meetings have succeeded in fueling opposition to proposed health care bills” (Page 2009). The causal language in the coverage appears to take the survey reports of attitude change at face value.

To formalize change questions, we draw on the potential outcomes framework, a standard model for thinking about causal inference in the social sciences (Neyman 1923; Rubin 1974). The treated potential outcome, $Y_i(D = 1)$ (or $Y_i(1)$ for short), is the attitude subject i would express if they were aware of the protests. The untreated potential outcome, $Y_i(0)$, is the attitude the subject would express if they were unaware of the protests. Change questions ask respondents to compare the two states of the world, then assess whether their treatment attitude is higher, lower, or the same as their untreated attitude. The difference

is the individual-level treatment effect, $\tau_i \equiv Y_i(1) - Y_i(0)$. Effectively, change questions ask respondents to report the sign of their individual-level treatment effect, $\text{sgn}(\tau_i)$.

Why might it be hard to measure this quantity? First, the fundamental problem of causal inference states that we can observe one potential outcome, but never both (Holland 1986). Though counterfactuals can never be observed, they can sometimes be imputed with reasonable accuracy. Consider a skydiver with a parachute who survives a fall from a plane: $Y_i(\text{parachute} = 1) = \text{alive}$. One cannot be certain as to how the skydiver would have fared without a parachute, but $Y_i(\text{parachute} = 0) = \text{dead}$ is a reasonable imputation based on a mix of theory, intuition, and time-series evidence (for related discussion, see Smith and Pell 2003; Yeh et al. 2018).

Imputing counterfactual attitudes may be tougher. Longitudinal work indicates that people tend to misremember their past attitudes as being more consistent with their present attitudes than they really were (Levine 1997; Markus 1986; McFarland and Ross 1987; Schacter 1999; Wilson et al. 1998) and tend to exaggerate the extent of favorable changes in their personality over time (Conway and Ross 1984; McFarland and Alvaro 2000; Schryer and Ross 2012; Wilson and Ross 2001). In a review, Brinol and Petty (2012) conclude that “people can err in either direction—seeing no change in their attitudes or themselves when there actually has been change, and seeing some change where there actually has been none” (168).

A second reason to mistrust change questions is that respondents may not answer them as intended by survey researchers. In particular, respondents may use them to partially express the *level* of their attitude ($Y_i(1)$) rather than the change in it (τ_i). Then-White House adviser David Axelrod used a version of this argument to critique *USA Today*’s interpretation of the health care protest question:

White House adviser David Axelrod questioned the USA TODAY survey’s methodology, saying those who report being more sympathetic to the protesters now were likely to have been on that side from the start. “There is a media fetish about these things,” Axelrod said of the protests, “but I don’t think this has changed much” when it comes to public opinion. (Page 2009)

Here, Axelrod suggests that health reform opponents may have used the change question to voice their general opposition to healthcare reform. Under this interpretation, change questions are vulnerable to *response substitution*, or survey subjects' tendency to sometimes answer a different question from the one the researcher has asked. [Gal and Rucker \(2011\)](#) use the example of a person who liked a restaurant's service but hated the food. Asked to rate the service, this person might say "terrible" even though their true rating of the service is "good." The rating of the food, which the person wanted to express, was substituted for the rating of the service. This same phenomenon can affect political surveys. When asked to rate the physical attractiveness of potential dating partners, people rate co-partisans lower than out-partisans ([Nicholson et al. 2016](#)). This gap shrinks substantially when people are also given the chance to rate the potential dating partner's moral values, suggesting that respondents often use the question about physical attractiveness to express their disapproval of something else ([Yair and Huber 2019](#)). These patterns are consistent with other findings that respondents exclude information that was measured in preceding questions ([Schuman and Presser 1981](#); [Strack and Martin 1987](#); [Sudman et al. 1996](#); [Tourangeau et al. 2000](#)).

When it comes to questions about attitude change, response substitution entails using a question about change (did hearing about the protests change your attitude?) to state the level of one's attitude (I support/oppose healthcare reform). Accordingly, response substitution should usually bias attitude change reports away from zero. If true, the response substitution hypothesis could explain why Democrats tended to say that they became more supportive of healthcare reform while Republicans tended to say they became less supportive. To test for response substitution, we conduct experiments similar in spirit to [Gal and Rucker \(2011\)](#) and [Yair and Huber \(2019\)](#). In our experiments, some subjects are offered the opportunity to express the level of support before reporting the change in it. If response substitution biases self-reports of attitude change, this treatment should ameliorate the problem by allowing subjects to answer the question they seem to want to answer.

The Counterfactual Format

We propose the *counterfactual format* as an alternative method for asking about attitude change. We present two versions of the format that depend on whether subjects have been “pretreated” with the treatment information under study (Druckman and Leeper 2012; Slothuus 2016; Linos and Twist 2018). When the research goal is to learn about the effects of an event that has already occurred (a common setting for public-facing pollsters), researchers can use a nonrandomized counterfactual format analogous to the impeachment example above. By contrast, the randomized counterfactual format may be a superior option in settings in which subjects have not been pretreated – or, as in our case, when researchers want an unbiased experimental benchmark against which to evaluate other methods of asking about attitude change.

The *nonrandomized counterfactual format* proceeds as follows. Subjects first receive a prompt that reminds them of the treatment information.² They are then asked for the level of their opinion, $Y_i(1)$. In the second stage, subjects are asked to guess what their untreated potential outcome would have been if they did not know the treatment information. We refer to the true untreated potential outcome as $Y_i(0)$ and to subjects’ best guess of their untreated outcome as $\tilde{Y}_i(0)$. The tilde indicates a guess about a counterfactual state of the world.

The counterfactual format estimate of subject beliefs about the causal effect of information on their attitude is then $\tilde{\tau}_i = Y_i(1) - \tilde{Y}_i(0)$. In order to interpret this causal effect estimate ($\tilde{\tau}_i$) as being equal the true causal effect ($\tau_i \equiv Y_i(1) - Y_i(0)$), one would need to believe that subjects can accurately guess their counterfactual attitudes, i.e., that $\tilde{Y}_i(0) = Y_i(0)$. When this condition does not hold, $\tilde{\tau}_i$ remains an estimate of subject *beliefs* about causal effects, which may be of interest to survey researchers regardless of whether those beliefs are accurate.

²This reminder may have a priming or otherwise influencing effect on attitudes, so survey researchers should follow good design practices (e.g., neutral question wording) to ensure the reminder avoids “pushing” subjects to one response or another.

When subjects have not been pretreated, one could reverse the process: solicit the level of each subject’s untreated opinion ($Y_i(0)$), expose them to the treatment information, then ask how they would have responded had they known the treatment information ($\tilde{Y}_i(1)$). This “control-first” version is similar to some common within-subject designs.

However, if subjects have not been pretreated, researchers can do better than the control-first, within-subject design. Instead, they can use the *randomized counterfactual format* to take advantage of researcher control over exposure to information. In the first stage, all subjects participate in a standard two-arm randomized experiment in which m of N subjects are assigned see the treatment information and the remaining $(N - m)$ control subjects are not. Both groups then report their attitudes, $Y_i(1)$ for the treatment group and $Y_i(0)$ for the control group. Using these data, one can directly estimate the average treatment effect (ATE) using a standard approach like the difference-in-means estimator: $\widehat{ATE}_{DIM} = \frac{\sum_{i=1}^m Y_i(1)}{m} - \frac{\sum_{i=m+1}^N Y_i(0)}{N-m}$. Under typical random assignment procedures, this estimator is unbiased for the ATE (for a textbook proof, see [Gerber and Green 2012](#), Chapter 2). In the second stage, subjects imagine what their response would have been in the other treatment condition. This entails exposing control group subjects to the treatment information and asking the outcome question a second time. As in the nonrandomized version, treatment group subjects are asked to imagine they did not know the treatment information before reporting their attitudes a second time.

This procedure is formalized as follows. Control group subjects first report their untreated potential outcome, $Y_i(0)$, then their guess of their treated potential outcome, $\tilde{Y}_i(1)$.³ Treatment group subjects first report their treated potential outcome, $Y_i(1)$, followed by their guess of their untreated potential outcome, $\tilde{Y}_i(0)$. For subjects in the control group, the individual-level treatment effect estimates ($\tilde{\tau}_i|D = 0$) is equal to $\tilde{Y}_i(1) - Y_i(0)$. For treatment group subjects, the estimate is ($\tilde{\tau}_i|D = 1$) = $Y_i(1) - \tilde{Y}_i(0)$. The value of $\tilde{\tau}_i$ is conditioned

³To be fully explicit, this potential outcome could be written as $\tilde{Y}_i(1, D = 0, Y_i(0))$ to insist upon the idea that this counterfactual guess is made for subjects in the control group who have revealed their $Y_i(0)$. The fully explicit $\tilde{Y}_i(1)$ can be defined analogously.

on the treatment assignment D to emphasize that $\tilde{\tau}_i$ could be affected by treatment. The counterfactual format estimate of the ATE is then $\widehat{ATE}_{CF} = \frac{\sum_{i=1}^N \tilde{\tau}_i}{N}$, averaging over both the treatment and control groups. If subjects' guesses about their counterfactual attitudes are correct, then for all subjects, $\tilde{Y}_i(1) = Y_i(1)$, $\tilde{Y}_i(0) = Y_i(0)$, and $(\tilde{\tau}_i|D = 0) = (\tilde{\tau}_i|D = 1) = \tau_i$.

The randomized counterfactual format embeds a direct test of whether subjects' guesses are accurate. One can directly compare distributions of $Y_i(0)$, $\tilde{Y}_i(1)$, and $\tilde{\tau}_i|D = 0$ in the control group to the distributions of $\tilde{Y}_i(0)$, $Y_i(1)$, and $\tilde{\tau}_i|D = 1$ in the treatment group using standard hypothesis testing procedures like the two-sample t-test. Rejection of the null hypothesis of no difference is direct evidence that at least some subjects' guesses are incorrect. In contrast to the change format, a major virtue of the randomized counterfactual format is the built-in test of the accuracy of subject beliefs.

As we have emphasized, counterfactuals are difficult to imagine and subjects' guesses may for many reasons be incorrect. When they are, the results of the counterfactual format will be biased away from the true causal effects. We hasten to add, however, that any biases that attend to the counterfactual format will apply all the more strongly to the change format, which asks subjects report the sign of the difference between two counterfactuals. Our results suggest that though the counterfactual format is sometimes inaccurate, the change format is substantially less accurate.

Detailed Example

We illustrate our approach using the example of Tony Cornish, a former Republican state legislator from Minnesota who was accused of sexual harassment. Because Cornish is not well-known outside his district, subjects were unlikely to have known the treatment information prior to the study, which justifies the use of the randomized counterfactual format. We present three sets of results: a test for response substitution in the change format, a direct comparison of the counterfactual format to the experimental benchmark, and an evaluation of the overall accuracy of each format.

The Change Format

One random subset of survey respondents was assigned to answer questions in the change format. These subjects read a short vignette then answered a question about how one piece of information – the treatment – changed their opinions. The background information was closely paraphrased from Cornish’s website. The treatment information describes an allegation against Cornish using real quotes from the Minneapolis *Star Tribune* (Bjorhus and Coolican 2017). The vignette read:

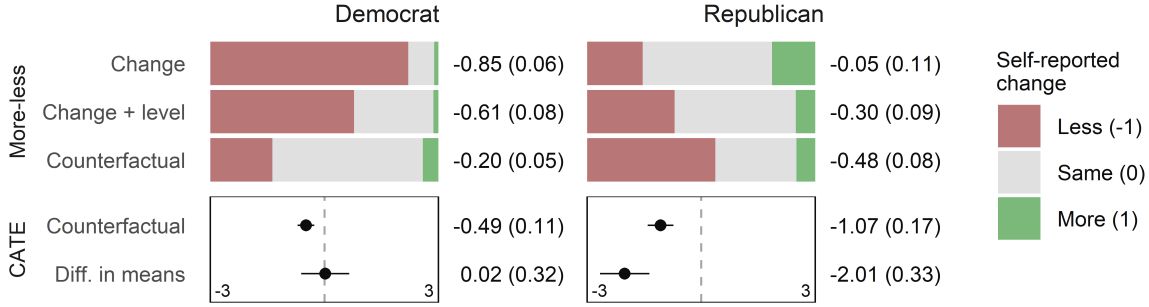
Tony Cornish, a Republican, was first elected to the state legislature in 2002. He grew up on a small farm. Before entering politics, he worked as a sheriff and game warden. According to his web site, Cornish

- Fought against government waste and opposed the governor’s plan to raise sales taxes.
- Played a key role in crafting a new policy that allows county attorneys to carry handguns at work.
- Increased prison sentences for car thieves and other criminals.

Cornish has been accused of making inappropriate sexual comments by fellow legislator Erin Quade, a Democrat. Cornish denied the allegations, saying he was “blindsided.” Quade admitted having a “cordial and collegial relationship” with Cornish but said that “doesn’t excuse sexual harassment.”

After reading the vignette, subjects were asked: “Does the fact that Cornish was accused of sexual misconduct make you more or less likely to support him in an election against a moderate Democrat? [Less likely, no change, more likely]” The top row of Figure 2 shows the distribution of responses, broken down by subject partisanship. A huge majority of Democratic respondents (87%) report that the accusation made them less likely to vote for Cornish. By contrast, most Republicans (57%) reported that the information had no effect. As in the Roy Moore example, these self-reports may be contaminated by response substitution: Democrats may have simply expressed their disapproval of Cornish while Republicans expressed their continued support despite the allegations.

Figure 2: Self-reported change (Cornish example)



Reducing Response Substitution

To test the claim that the self-reports are biased due to response substitution, a separate, also randomly-selected group of respondents was offered the opportunity to express their level of support before answering the change question. The level question read: “If Cornish were running for Congress in your district against a moderate Democrat, how likely would you be to support him? [Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain].” A comparison of the first two rows of Figure 2 shows the effect of the level question on responses to the change question. Recoding the change question from -1 to 1, we see that Democrats score -0.85 on this measure, but answering the level question first increases their score to -0.61 , for an increase of 0.24 (SE: 0.10). By contrast, the level question decreases this measure among Republicans (-0.24 points, SE: 0.14). Like a valve blowing off steam, asking the level question first appears to reduce subjects’ tendency to use the change question to express the level of their attitudes.

Evaluating the Counterfactual Format

The counterfactual format was tested on yet another separate, also randomly selected subset of respondents. The first stage proceeded like a randomized experiment. The treatment group read the entire vignette, while the control group read a version that left out the accusation. Both groups then answered the level question about their support for Cornish. In the second stage, subjects were asked to imagine how they would have responded had they been in the other group. The third row of Figure 2 shows that this procedure had an

even larger effect on self-reports of change: less negative for Democrats, more negative for Republicans.

According to the unbiased difference-in-means estimate that uses first-stage responses only, the information had a very small average effect among Democrats (0.02 scale points, SE: 0.32, 7 point scale) and a large negative average effect among Republicans (-2.01 points, SE: 0.33). Directly contrary to the implications of the change format, the experimental estimate shows that Cornish suffered a heavy loss of support among Republicans, not Democrats, as a consequence of the allegations.

Among Democrats, the counterfactual format estimate that uses responses from both stages is -0.49 scale points (SE: 0.11) and the corresponding figure for Republicans is -1.07 points (SE: 0.17). As demonstrated in the bottom two rows of Figure 2, the counterfactual ATE estimates are biased away from the experimental benchmarks: Democrats overstate negative change by approximately half a point and Republicans understate it by almost a full point.

The main takeaways from this example are that the change format is badly biased and that the counterfactual format represents a large improvement. Subjects still make mistakes when using the counterfactual format – causal inference is hard! – but they express substantially more accurate beliefs about how the information changed their attitudes.

Research Design

For a broader look at the performance of the two question formats, the full research design evaluated eleven total information treatments using the strategies described just above in the detailed example. Study 1 conducted the “reducing response substitution” experiments using eight information treatments. Study 3 applied this strategy to one additional treatment. Using the same eight treatments, Study 1 also evaluated the counterfactual format using the same strategies described above. Study 2 applied these strategies to two additional treatments. Table 2 summarizes all eleven treatments and their corresponding

outcome variables.

Our evaluation focuses on treatments for which it is credible to assume that that respondents were not pretreated by the information. This enables the use of the *randomized* counterfactual format, which includes a built-in randomized experiment. If the counterfactual format outperforms the change format in such settings, it is also likely to outperform the change format in settings in which respondents are pretreated. The last set of results applies the nonrandomized counterfactual format to four cases in which we suspect pre-treatment.

The empirical analysis is based on four total surveys.⁴ The first three were conducted using Lucid, which produces treatment effects that are similar to other commonly-used online platforms (Coppock and McClellan 2019). Study 1 was conducted in May 2018 ($N = 417$, refusal rate = 3.0%) and included eight of the information treatments described in Table 2. Study 2a was conducted in November 2018 ($N = 2,475$, refusal rate = 2.8%) and test two of the treatments used in our evaluation (Table 2), plus four additional treatments that are used to demonstrate the nonrandomized counterfactual format (Table 3).

Study 2b ($N = 1,110$, refusal rate = 3.2%) replicated four of Study 2a’s treatments using binary outcomes rather than Likert scales. As the results are very close to Study 2a, the results of Study 2b are presented in the appendix. That survey also included a pilot test of an additional question format – the *simultaneous outcomes format* – that appeared to underperform even the change format (see appendix).

Study 3 was the most limited in scope. The day after special counsel Robert Mueller made his first public comments about the investigation into Russian interference in the 2016 election, we included change questions in an otherwise unrelated survey conducted on Amazon Mechanical Turk ($N = 1,074$, refusal rate = 0.3%). Study 3 did not include the counterfactual format.

All of the analysis is split by political party (including leaners) because the biases associated with response substitution appear to be strongly correlated with party. Conse-

⁴The impeachment example in the introduction comes from an unrelated fifth survey, also conducted on Lucid.

Table 2: Summary of information treatments and outcome questions

Topic	Study	Treatment summary	Level question	Change question
Blocked whistleblower	1	Sen. Ricardo Lara (D-CA) blocked a bill protecting staffers making sexual misconduct allegations.	If Lara were running for Congress in your district against a moderate Republican, how likely would you be to support him? [1: Nearly zero; 7: Nearly certain]	Does the fact that Lara blocked a whistleblower protection bill make you more or less likely to support him in an election against a moderate Republican?
Death penalty	1	States with and without the death penalty have very similar murder rate trends (with graphic).	How strongly do you support or oppose the death penalty? [1: Strongly oppose; 7: Strongly support]	Does the information make you more or less supportive of the death penalty?
Disputed accusation	1	Rep. Tony Cornish (R-MN) was accused of sexual harassment by Rep. Erin Quade (D-MN).	If Cornish were running for Congress in your district against a moderate Democrat, how likely would you be to support him? [1: Nearly zero; 7: Nearly certain]	Does the fact that Cornish was accused of sexual misconduct make you more or less likely to support him in an election against a moderate Democrat?
Endorsed Trump	1	Rep. Kevin Kelly (R-CT), a centrist, endorsed Donald Trump for president.	If Kelly were running for Congress in your district against a moderate Democrat, how likely would you be to support him? [1: Nearly zero; 7: Nearly certain]	Does the fact that Kelly endorsed Donald Trump make you more or less likely to support him in an election against a moderate Democrat?
Immigrant population	1	Immigrants will soon constitute their largest-ever share of the U.S. population (with graphic).	Do you support or oppose increasing the number of immigrants who can come to the United States? [1: Strongly oppose; 7: Strongly support]	Does the information make you more or less supportive of increasing the number of immigrants who can come to the United States?
Mueller comments	3	[No treatment. The response substitution test was part of an unrelated survey conducted just after public comments by Mueller.]	Is this statement true or false? Robert Mueller’s report said there is “undeniable proof” that President Trump personally conspired with Russian agents to influence the 2016 election. [0: Definitely false; 100: Definitely true]	Did Robert Mueller’s comments yesterday make you more or less likely to believe this statement? [Same statement.]
Supports charters	1	Rep. Don Shooter (R-AZ) supports expanding charter schools.	If Shooter were running for Congress in your district against a moderate Democrat, how likely would you be to support him? [1: Nearly zero; 7: Nearly certain]	Does the fact that Shooter supported expanding charter schools make you more or less likely to support him in an election against a moderate Democrat?
Tax Cuts and Jobs Act	1	List of provisions in the Tax Cuts and Jobs Act.	How strongly do you support or oppose the Tax Cuts and Jobs Act, a law President Trump signed in December 2017? [1: Strongly oppose; 7: Strongly support]	Does the information make you more or less supportive of the Tax Cuts and Jobs Act, a law President Trump signed in December 2017?
Undisputed accusation	1	Rep. Dean Westlake (D-AK) faces several sexual misconduct allegations and has a long history of misconduct.	If Westlake were running for Congress in your district against a moderate Republican, how likely would you be to support him? [1: Nearly zero; 7: Nearly certain]	Does the fact that Westlake was accused of sexual misconduct make you more or less likely to support him in an election against a moderate Republican?
Obama torture	2a, 2b	President Obama issued an executive order banning the CIA and other agencies from torturing detainees.	Do you support or oppose banning the CIA and other government organizations from torturing detainees? [1: Definitely oppose; 6: Definitely support]	How does this change your support for banning the CIA and other government organizations from torturing detainees?
Trump coal	2a, 2b	President Trump issued an executive order that reduced restrictions on coal ash disposal.	Do you support or oppose strict regulations on the disposal of coal ash, the pollutant left over after power plants burn coal? [1: Definitely oppose; 6: Definitely support]	How does this change your support for strict regulations on the disposal of coal ash, the pollutant left over after power plants burn coal?

Note: From left to right, this table lists each treatment, the study in which it appeared, a paraphrase of the treatment question, the full text of the level question, and the full text of the change question. The counterfactual format consists of two level questions, one of which includes a preface asking the respondent to suppose they did not know the treatment information. The full text of all questions is available in the appendix.

quently, treatment effect estimates are referred to as Conditional Average Treatment Effects (CATEs), conditioning on respondent partisanship. All of the analyses uses ordinary least squares (OLS) regression to estimate means and differences-in-means. With two noted exceptions, HC2 robust standard errors are reported.

Results

Response Substitution in the Change Format

Studies 1 and 3 included a series of experiments that test our claim that the change format is biased due to response substitution. Subjects were randomly assigned to answer a change question either immediately after seeing the treatment information or after answering a level question. If allowing people to express the level of their attitude reduces self-reports of change, we will infer that response substitution is a meaningful explanation for the bias in the change format.

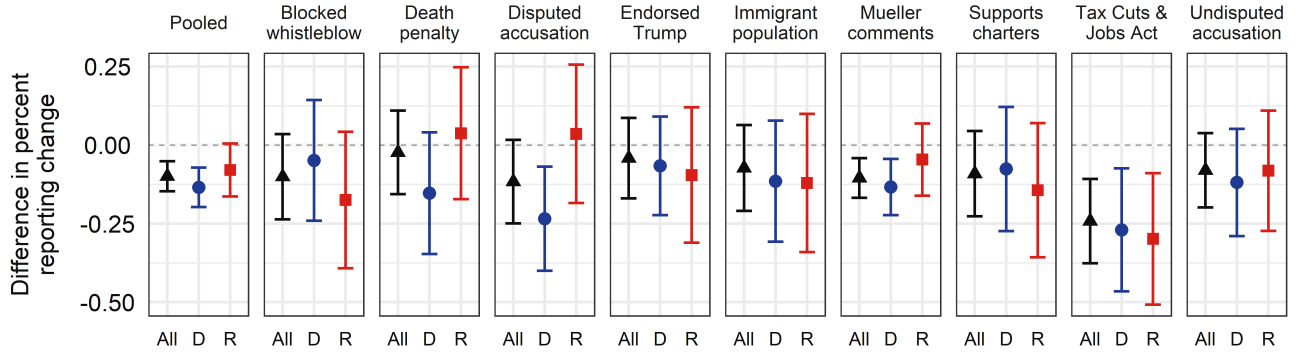
As shown in Figure 3a, asking the level question first greatly reduces self-reports of attitude change. Overall, the effect is a 10 percentage point decrease in reporting any change (SE: 2 points). The effect is larger among Democrats (−14 points, SE: 3 points) and Republicans (−8 points, SE: 4 points) than among pure independents (−2 points, SE: 6 points).⁵ Response substitution may be less severe among independents if hold more moderate or ambivalent positions on issues that are polarized by party (though see [Ahler and Broockman 2018](#)).

Further support for the response substitution hypothesis comes from Figure 3b. To aggregate change questions, we scored “more” as 1, “less” as -1, and “no change” as 0. This is mathematically equivalent to subtracting the percentage of respondents who said “less” from the percentage of subjects who said “more,” which is a common procedure for analyzing the change format. We refer to this as the *more-minus-less* estimator.

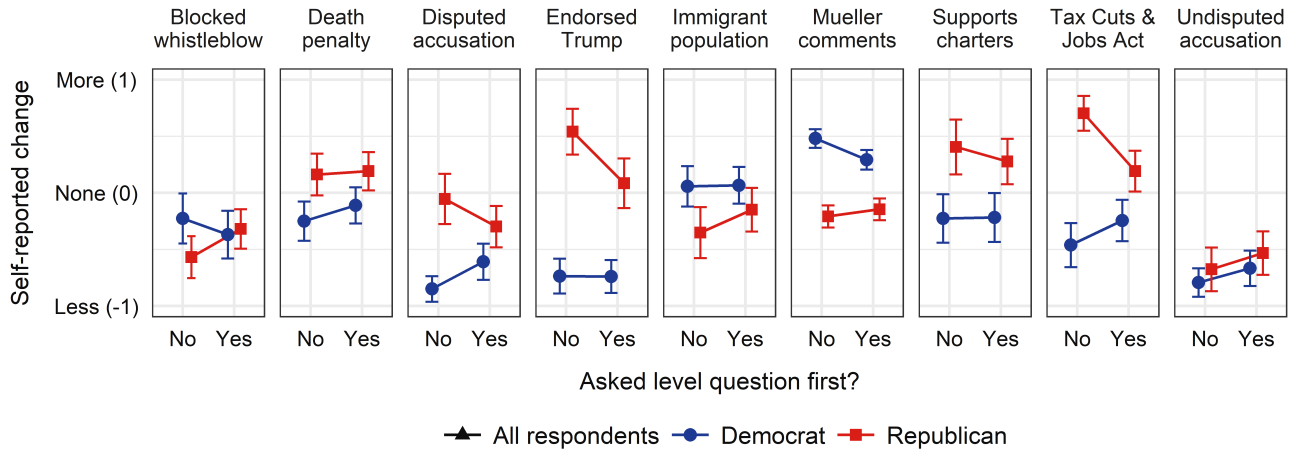
⁵Since respondents answered more than question, the standard errors in this paragraph are clustered by respondent.

Figure 3: Effect of level question on self-reports of change, studies 1 and 3

(a) Estimated effects of asking the level question first on reporting any attitude change



(b) Estimated effects of asking the level question first on the sign of self-reported attitude change



Note: Panel (a) shows the estimated effect of asking the level question first on self-reported attitude change in percentage points, where change is scored 1 if subjects choose “more” or “less,” and 0 otherwise, for the full sample and separately among Democrats and Republicans. Panel (b) shows the subgroup effects of the level question on the attitude change itself, with “more” scored +1, “none” scored 0, and “less” scored -1. Error bars are 95% confidence intervals.

The key pattern is that when level questions reduced self-reports of change, they tended to make Democrats’ and Republicans’ reactions to the information look more similar.⁶ For example, in the *Endorsed Trump* facet, asking the level question first reduced Republican claims that their support Kevin C. Kelly, a moderate Republican, increased because he endorsed Donald Trump. Similarly, in the *Muller comments* facet, Democrats became less likely to claim that special counsel Robert Mueller’s comments made them believe Donald Trump had personally colluded with Russian agents.

In sum, Figure 3 shows that change format responses are sensitive to whether a level question comes first, from which we infer that response substitution is a serious source of bias in the change format. The next section shows that the counterfactual format had an even larger effect on self-reports of attitude change, which suggests that the level-first treatment is not sufficient to fully purge the bias attending to the change format.

Evaluating the Randomized Counterfactual Format

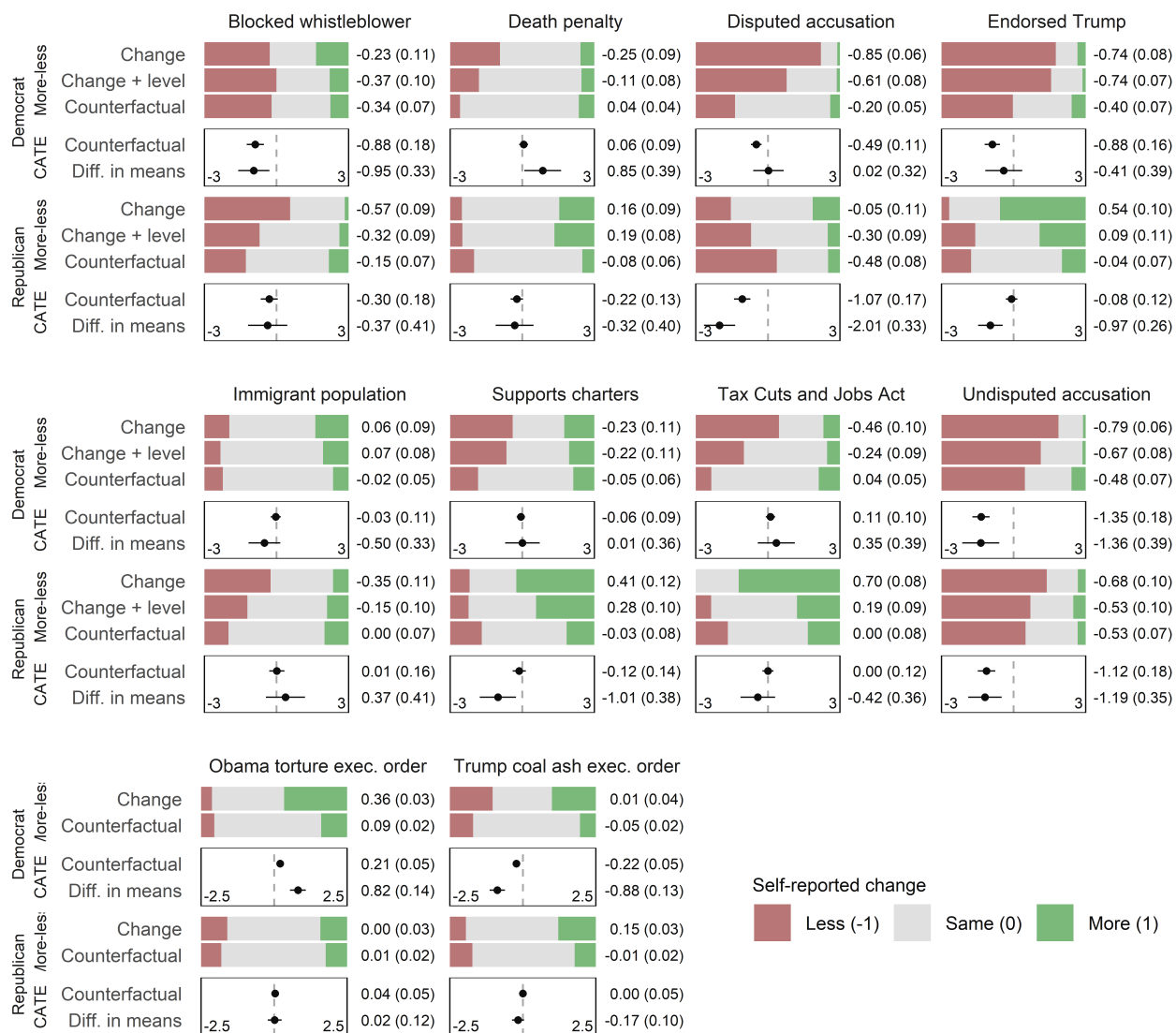
This section evaluates the randomized counterfactual format’s performance in estimating the effects of ten information treatments to which respondents subjects had likely not been pre-exposed. Figure 4 presents the complete results, again split by party.

In terms of matching the substantive conclusions of the experimental benchmark, the counterfactual format easily outperforms the change format. The more-minus-less estimates derived from the change format have the opposite sign as the experimental difference-in-means estimates in 12 out of 20 opportunities, compared with 3 of 20 for the counterfactual format. In all three of those cases, neither the counterfactual estimate nor the difference in means estimate can be distinguished from zero. More often than not, the change format gets the *sign* wrong, whereas the counterfactual format does not.

A clear example of the relative performance of the two formats comes from the *Tax Cuts and Jobs Act* treatment, a bulleted list of provisions contained in the 2017 tax reform bill.

⁶This pattern is consistent with research that suggests that in most cases, different types of people respond to persuasive evidence by updating their beliefs in the same direction (Guess and Coppock 2018; Wood and Porter 2018).

Figure 4: Comparison of change format, randomized counterfactual format, and experiment



Note: This figure displays the full set of estimates for ten treatments in studies 1 and 2. The horizontal bars represent the distribution of self-reported change. The white boxes contain CATE estimates derived from difference-in-means with first-stage responses and from the counterfactual format. Point estimates with robust standard errors are presented on the right-hand side of each facet.

In the change format, Democrats overwhelmingly report that the information made them less supportive of the tax cuts; by an even larger margin, Republicans report the opposite. This pattern is wholly contradicted by the experiment, which indicates small, nonsignificant effects in both parties. Asking a level question prior to the change question eliminated some of the bias, but not all. By contrast, the counterfactual format corresponds the experimental benchmark very well in this case.

All told, this collection of tests yields 20 opportunities to compare the difference-in-means estimate to the counterfactual guess of the ATE (ten experiments \times two parties). The difference between the two estimates was statistically significant in six cases (30%), indicating that subjects' guesses are sometimes but not uniformly correct.⁷ Separating the treatment and control outcomes gives us 40 additional opportunities to evaluate subjects' performance (ten experiments \times two parties \times two potential outcomes). Of these, difference-in-means tests reject the null hypothesis of no difference in 12 cases (30.0%).

The Nonrandomized Counterfactual Format

Many potential applications of the counterfactual format will likely arise in the wake of large political events that would have been hard to anticipate. In such cases, subjects are pretreated, meaning they cannot reveal their true untreated potential outcomes. Table 3 shows three examples in which it is likely that many subjects could have been exposed to the treatment information before the survey: former Vice President Joe Biden's skepticism of Anita Hill's allegations against Supreme Court Justice Clarence Thomas; the projected economic benefits of the Development, Relief, and Education for Alien Minors (DREAM) Act; and whether the U.S. Senator from the respondent's home state voted to confirm Brett Kavanaugh to the Supreme Court. We offer these as illustrative examples of what researchers can do to estimate subject beliefs about causal effects when subjects may have

⁷Since the two estimates are not independent of one another, 95 percent confidence intervals are bootstrapped using the percentile method. The appendix presents complete results of these tests.

been pretreated.

Table 3: Summary of information treatments and outcome questions, pre-treated examples.

Topic	Study	Treatment summary	Level question	Change question
Biden / Hill	2a, 2b	Joe Biden was skeptical of Anita Hill’s sexual harassment allegations against Clarence Thomas.	Do you support Joe Biden’s possible run for president in 2020? [1: Definitely oppose; 6: Definitely support]	How does this change your support for Joe Biden’s possible run for president in 2020?
DREAM Act	2a, 2b	The DREAM Act would make the economy grow by \$30,000 per beneficiary.	Do you support or oppose the DREAM Act, which would allow unauthorized immigrants who were brought to the United States as children to apply for citizenship? [1: Definitely oppose; 6: Definitely support]	How does this change your support for the DREAM Act, which would allow unauthorized immigrants who were brought to the United States as children to apply for citizenship?
Kavanaugh	2a, 2b	Respondent’s Senator [opposed / supported] Brett Kavanaugh’s nomination to the Supreme Court.	Will you support [last name] or [her / his] [Republican / Democratic] opponent? [1: Definitely oppose [last name]; 6: Definitely support [last name]]	How does this change your support for [last name] against [her / his] [Republican / Democratic] opponent?

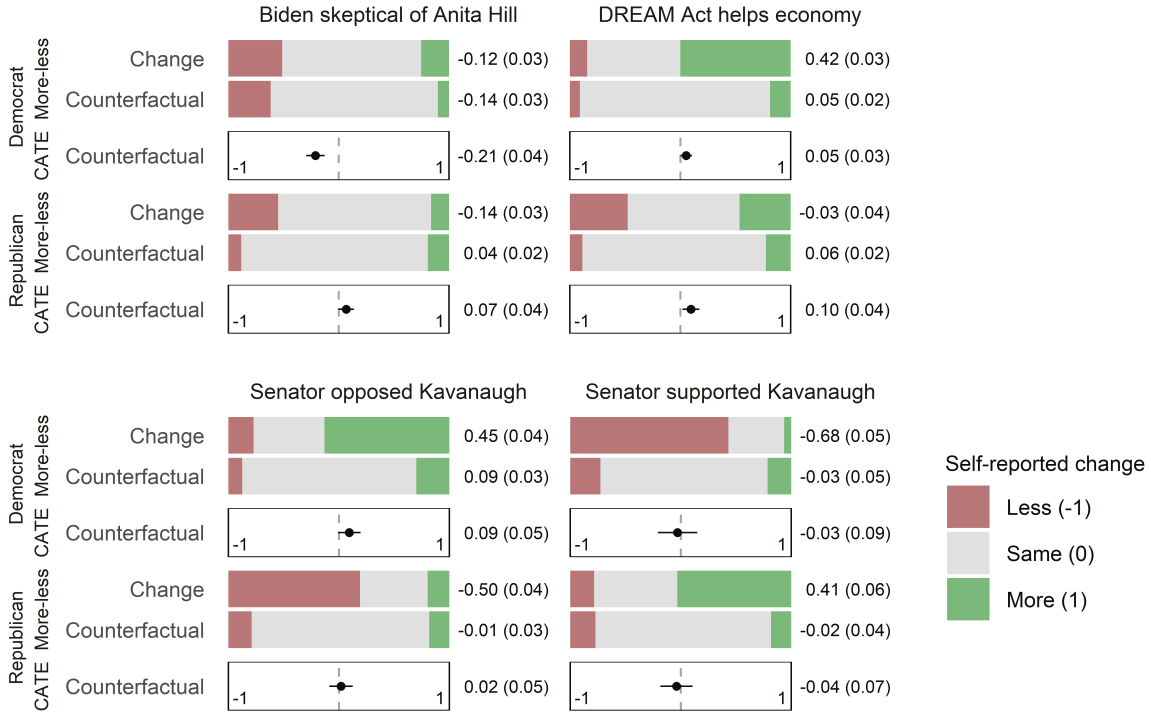
Note: See note below Table 2.

A familiar pattern emerges in Figure 5. Relative to the change format, the counterfactual format greatly reduces self-reports of attitude change. In fact, to make the estimates visible at all, we shrank the scale for the counterfactual CATE to just 40 percent of the width used in Figure 4.

Consider the impact that a Senator’s vote on Brett Kavanaugh’s confirmation might have had on U.S. Senate elections in 2018, which was the topic of at least 15 change format questions in public-facing polls. According to the change format, voting for or against Kavanaugh has implausibly large electoral consequences for Senators, with large majorities of Democratic and Republican respondents saying it impacted their candidate preference. By contrast, the counterfactual format offers the more realistic conclusion that the effect was small, perhaps ever-so-slightly boosting the steadfastness of Democratic Senators’ support within their own party.

In the case of Biden’s skepticism of Hill’s allegations, the difference across formats was also striking. The change format suggests that Biden’s handling of the allegations cost him slightly more support among Republicans than among Democrats, while the counterfactual format suggests that any loss of support is concentrated among Democrats. The DREAM

Figure 5: Comparison of change format and nonrandomized counterfactual format



Act treatment produces a similar pattern: the change format suggests that the information immensely improves Democrats' already-high support for the Act, whereas the counterfactual format suggests a small boost mainly for Republicans.

Because these survey subjects may have been pre-exposed to the treatments in each question, a comparison to an experimental benchmark is not possible. Nevertheless, the change format results are almost certainly not credible in these cases, whereas the counterfactual format produces plausible, useful information about subject beliefs about the effects of each treatment.

Discussion

The first goal of this article was to evaluate the standard approach to asking about attitude change. We confirmed that change questions are biased and that response substitution appears to be at least partially to blame. The main evidence in support of the latter claim is that change questions are sensitive to whether level questions are asked immediately beforehand.

The second goal was to propose an alternative. The counterfactual format improves upon the change format by inducing subjects to imagine the level of their attitudes in counterfactual worlds; the difference is a measure of subject beliefs about causal effects. Across ten treatments, we found that the counterfactual format yields far more accurate estimates of the effect of information on attitudes. Even as we tout the counterfactual format’s advantages relative to the change format, we have endeavored to be clear about its limitations. Because survey subjects can be wrong about what their responses would have been had things been different, we do not regard the difference between observed outcomes and the counterfactual guesses as true individual-level causal effects.

Together, the results suggest that relative to asking directly about attitude change, methods that ask respondents to explicitly imagine their counterfactual attitudes are more trustworthy. Depending on the context, researchers who want to ask about attitude change can choose between the nonrandomized and the randomized counterfactual formats. The nonrandomized version is appropriate when the research goal is to estimate the attitudinal effects of an event that has already occurred or information that has already been revealed. This involves first asking subjects to state the level of their attitude, then to imagine what their attitude would have been if they did not know about the event.

The randomized version is more appropriate when subjects have not encountered the treatment information before entering the study. This is likely to be the case for many of the questions in Table 1; for example, many questions about attitude change ask how specific candidate positions would change support for a hypothetical candidate. In these settings, a

standard treatment-versus-control comparison remains the best way to obtain an unbiased estimate of the ATE. In the short run, the randomized version is likely to be most useful as a template for evaluating the measurement properties of questions about attitude change.

In the longer term, the counterfactual format may hold promise as a tool for the estimation of heterogeneous treatment effects, which is usually plagued by large standard errors. At the cost of a single additional follow-up question, obtaining estimates of individual-level causal effects greatly reduces the variance in heterogeneous treatment effect estimates, at the cost of some bias. Rather than estimating highly imprecise treatment-by-covariate interaction terms, researchers could instead directly inspect how the subject-level treatment effect estimates covary with other subject-level characteristics, as in the estimates by partisanship in Figure 1.

Survey researchers often want to learn the causal effects of events and information to which many subjects have already been exposed. Unable to conduct an experiment that would estimate the effect of such a “treatment,” researchers often resort to question formats that directly ask subjects how their attitudes changed in response to information. Subjects have some self-knowledge that could be of use, but the change format attempts to extract this information in clumsy way that yields misleading answers. A better way of asking about attitude is to give subjects a “counterfactual assist” that encourages them to imagine what their attitude might otherwise have been. We hope this article alerts researchers to the problems with the change format and sparks further development of alternatives rooted in counterfactual thinking.

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Supplementary material for
Asking About Attitude Change

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Matthew H. Graham and Alexander Coppock*

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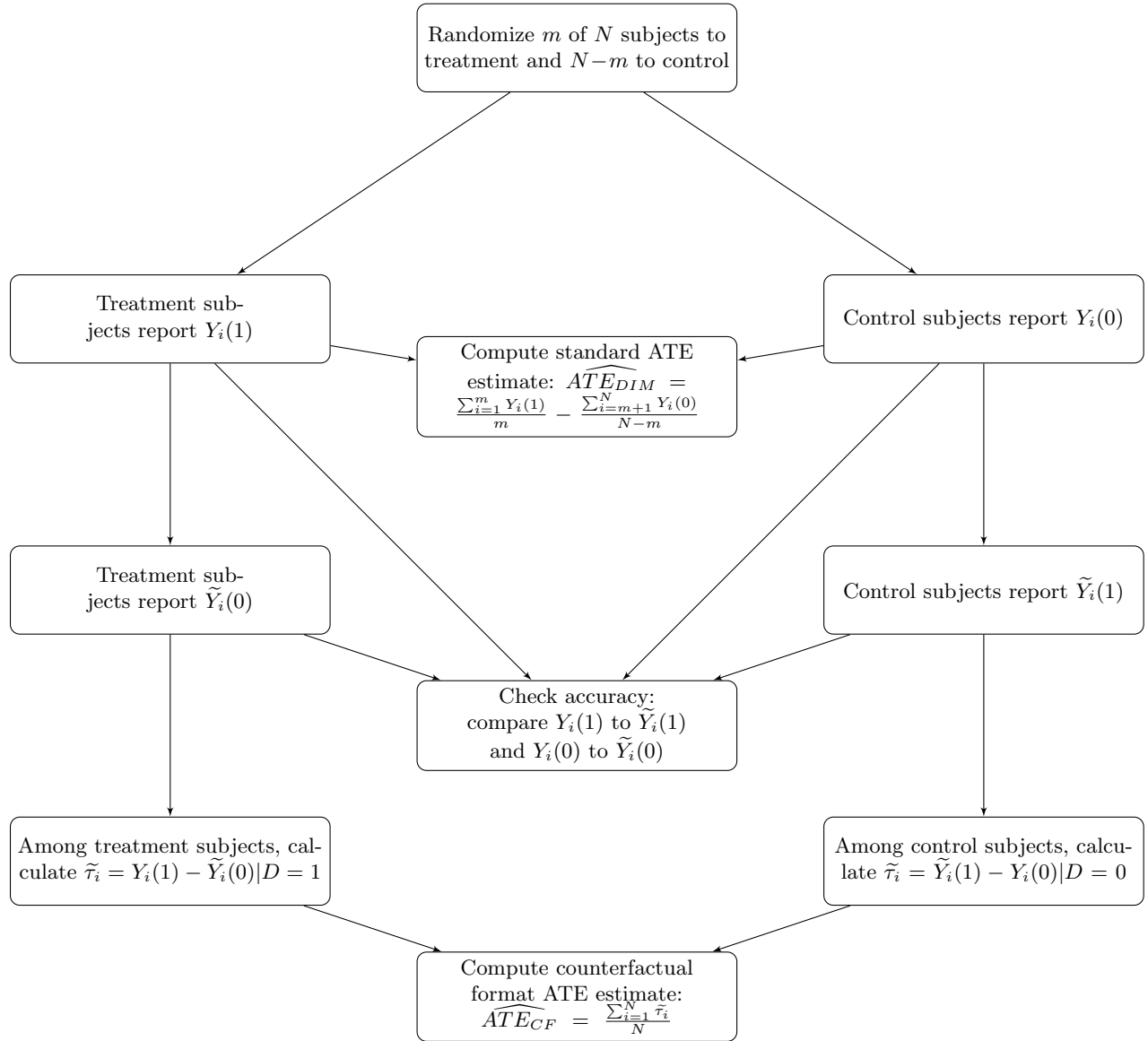
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A Diagram of the Randomized Counterfactual Format

Figure A.1: Design of the counterfactual format



B Full Text of Detailed Example

This table shows the full sequence of information and questions seen by the treatment and control groups in the Cornish example. The full text of all of the remaining treatments appears in Section F.

Table B.1: Counterfactual Format (Cornish example)

Control Group	Treatment Group
<p>Tony Cornish, a Republican, was first elected to the state legislature in 2002. He grew up on a small farm. Before entering politics, he worked as a sheriff and game warden. According to his web site, Cornish</p> <ul style="list-style-type: none"> • Fought against government waste and opposed the governor’s plan to raise sales taxes. • Played a key role in crafting a new policy that allows county attorneys to carry handguns at work. • Increased prison sentences for car thieves and other criminals. 	<p>Tony Cornish, a Republican, was first elected to the state legislature in 2002. He grew up on a small farm. Before entering politics, he worked as a sheriff and game warden. According to his web site, Cornish</p> <ul style="list-style-type: none"> • Fought against government waste and opposed the governor’s plan to raise sales taxes. • Played a key role in crafting a new policy that allows county attorneys to carry handguns at work. • Increased prison sentences for car thieves and other criminals. <p>Cornish has been accused of making inappropriate sexual comments by fellow legislator Erin Quade, a Democrat. Cornish denied the allegations, saying he was “blindsided.” Quade admitted having a “cordial and collegial relationship” with Cornish but said that “doesn’t excuse sexual harassment.”</p>
<p>If Cornish were running for Congress in your district against a moderate Democrat, how likely would you be to support him? (1: Nearly Zero, 7: Nearly Certain)</p>	<p>If Cornish were running for Congress in your district against a moderate Democrat, how likely would you be to support him? (1: Nearly Zero, 7: Nearly Certain)</p>
<p>(New Slide) Now we would like you to consider the same information about Cornish, plus some new information.</p> <p>Tony Cornish, a Republican, was first elected to the state legislature in 2002. He grew up on a small farm. Before entering politics, he worked as a sheriff and game warden. According to his web site, Cornish</p> <ul style="list-style-type: none"> • Fought against government waste and opposed the governor’s plan to raise sales taxes. • Played a key role in crafting a new policy that allows county attorneys to carry handguns at work. • Increased prison sentences for car thieves and other criminals. <p>Cornish has been accused of making inappropriate sexual comments by fellow legislator Erin Quade, a Democrat. Cornish denied the allegations, saying he was “blindsided.” Quade admitted having a “cordial and collegial relationship” with Cornish but said that “doesn’t excuse sexual harassment.”</p> <p>If Cornish were running for Congress in your district against a moderate Democrat, how likely would you be to support him? (1: Nearly Zero, 7: Nearly Certain)</p>	<p>(New Slide) Suppose you had seen the same information, but without any mention of the fact that Cornish was accused of sexual misconduct.</p> <p>Tony Cornish, a Republican, was first elected to the state legislature in 2002. He grew up on a small farm. Before entering politics, he worked as a sheriff and game warden. According to his web site, Cornish</p> <ul style="list-style-type: none"> • Fought against government waste and opposed the governor’s plan to raise sales taxes. • Played a key role in crafting a new policy that allows county attorneys to carry handguns at work. • Increased prison sentences for car thieves and other criminals. <p>If Cornish were running for Congress in your district against a moderate Democrat, how likely would you be to support him? (1: Nearly Zero, 7: Nearly Certain)</p>

C Examples of Self Reported Change Questions

This table lists all of the real-world examples that the paper summarizes in Table 1.

Date	Organizations	Question
03-02-17	Quinnipiac	Have you recently become more interested in attending town hall meetings with your US Senator or Congressperson, less interested, or are you just as interested in attending those meetings as before?
03-07-17	Yahoo News, Marist	Would you have more or less respect for your child’s teacher if you learned they used marijuana in their personal life? If it makes no difference please say so.
03-07-17	Yahoo News, Marist	Would you have more or less respect for your doctor if you learned they used marijuana in their personal life? If it makes no differences please say so.
03-07-17	Yahoo News, Marist	Would you have more or less respect for your favorite sports athlete if you learned they used marijuana in their personal life? If it makes no difference please say so.
03-07-17	Yahoo News, Marist	Would you have more or less respect for your religious leader if you learned they used marijuana in their personal life? If it makes no difference please say so.
03-07-17	Yahoo News, Marist	Would you have more or less respect for your favorite celebrity if you learned they used marijuana in their personal life? If it makes no difference please say so.
03-24-17	TIPP, Investor’s Business Daily	Had your senator or congressperson voted to repeal Obamacare, would you have been more likely or less likely to vote for his or her reelection, or would it have had no impact on your voting decision?
03-29-17	Politico, Harvard School of Public Health, Social Science Research Solutions	Given what President (Donald) Trump and Republicans have done so far on the ACA or Obamacare, would you be more likely to vote for a Democrat in the 2018 congressional election, more likely to vote for a Republican, or wouldn’t it make much difference in your vote?
04-12-17	Quinnipiac	Based on what you’ve heard about this controversy (multiple sexual harassment allegations against him), are you more likely to watch Bill O’Reilly’s show on Fox, less likely to watch his show, or are you just as likely to watch Bill O’Reilly’s show on Fox as you were before?
05-04-17	Quinnipiac	If a candidate for the House of Representatives supports President (Donald) Trump, does that make you: more likely to vote for them, less likely to vote for them, or doesn’t it have an impact either way?
05-09-17	Public Policy Polling	Last week, Speaker of the House Paul Ryan and House Republicans voted to repeal the Affordable Care Act, and replace it with the American Health Care Act, which removes protections for people with pre-existing conditions and may throw 24 million people off of their health coverage. Does hearing this make you less likely or more likely to vote to reelect Paul Ryan, or does it not make a difference?

Date	Organizations	Question
05-13-17	Monmouth	Donald Trump said he had already decided to fire (Federal Bureau of Investigation director James) Comey even before he received a recommendation from the Justice Department. Does that make you more likely or less likely to think that other factors besides the Clinton investigation were behind Comey's dismissal, or doesn't it change your opinion?
05-16-17	Kaiser, Princeton Survey Research Associates International	I'm going to read you several specific elements included in the health care plan that passed the House. Please tell me if each make you more or less likely to support the plan, or does not make much difference. The plan...eliminates the requirement for nearly all Americans to have health insurance but allows insurance companies to charge people 30% higher premiums for a year if they haven't had continuous coverage. Does that make you more likely to support the plan, less likely to support it, or does it not make much difference?
05-16-17	Kaiser, Princeton Survey Research Associates International	I'm going to read you several specific elements included in the health care plan that passed the House. Please tell me if each make you more or less likely to support the plan, or does not make much difference. The plan...makes changes that would generally decrease what younger people pay for insurance and increase what older people pay. Does that make you more likely to support the plan, less likely to support it, or does it not make much difference?
05-16-17	Kaiser, Princeton Survey Research Associates International	I'm going to read you several specific elements included in the health care plan that passed the House. Please tell me if each make you more or less likely to support the plan, or does not make much difference. The plan...decreases the financial help available to lower-income people who buy their own insurance and increases the financial help available to middle- and upper-income people. Does that make you more likely to support the plan, less likely to support it, or does it not make much difference?
05-16-17	Kaiser, Princeton Survey Research Associates International	I'm going to read you several specific elements included in the health care plan that passed the House. Please tell me if each make you more or less likely to support the plan, or does not make much difference. The plan...cuts federal funding that was included in the 2010 health care law for states that expanded Medicaid to cover more lower-income people. Does that make you more likely to support the plan, less likely to support it, or does it not make much difference?
05-16-17	Kaiser, Princeton Survey Research Associates International	I'm going to read you several specific elements included in the health care plan that passed the House. Please tell me if each make you more or less likely to support the plan, or does not make much difference. The plan...changes Medicaid so that instead of matching state spending, the federal government reduces what it pays states and gives states more flexibility to decide who and what services to cover. Does that make you more likely to support the plan, less likely to support it, or does it not make much difference?

Date	Organizations	Question
05-16-17	Kaiser, Princeton Survey Research Associates International	I'm going to read you several specific elements included in the health care plan that passed the House. Please tell me if each make you more or less likely to support the plan, or does not make much difference. The plan...allows states to require adults without disabilities to be working or looking for work in order to get health insurance through Medicaid. Does that make you more likely to support the plan, less likely to support it, or does it not make much difference?
05-16-17	Kaiser, Princeton Survey Research Associates International	I'm going to read you several specific elements included in the health care plan that passed the House. Please tell me if each make you more or less likely to support the plan, or does not make much difference. The plan...stops federal payments to Planned Parenthood clinics for health care services provided to people on Medicaid for one year. Does that make you more likely to support the plan, less likely to support it, or does it not make much difference?
05-16-17	Kaiser, Princeton Survey Research Associates International	I'm going to read you several specific elements included in the health care plan that passed the House. Please tell me if each make you more or less likely to support the plan, or does not make much difference. The plan...allows states to let health insurance companies cut back on the benefits they cover so they could sell cheaper plans that do not cover benefits like hospitalization, prescription drugs, maternity care, and mental health services. Does that make you more likely to support the plan, less likely to support it, or does it not make much difference?
05-16-17	Kaiser, Princeton Survey Research Associates International	I'm going to read you several specific elements included in the health care plan that passed the House. Please tell me if each make you more or less likely to support the plan, or does not make much difference. The plan...allows states to decide if health insurance companies can charge sick people more than healthy people if they haven't had continuous coverage. Does that make you more likely to support the plan, less likely to support it, or does it not make much difference?
05-16-17	Kaiser, Princeton Survey Research Associates International	I'm going to read you several specific elements included in the health care plan that passed the House. Please tell me if each make you more or less likely to support the plan, or does not make much difference. The plan...provides federal funding for states to cover people with pre-existing conditions through separate high-risk pools. Does that make you more likely to support the plan, less likely to support it, or does it not make much difference?
05-16-17	Kaiser, Princeton Survey Research Associates International	I'm going to read you several specific elements included in the health care plan that passed the House. Please tell me if each make you more or less likely to support the plan, or does not make much difference. The plan...eliminates the taxes and tax increases on higher-income people imposed by the Affordable Care Act. Does that make you more likely to support the plan, less likely to support it, or does it not make much difference?

Date	Organizations	Question
05-17-17	Quinnipiac	If your US Senator or Congressperson votes to replace Obamacare with the Republican health care plan, will that make you more likely to vote for their reelection, less likely to vote for their reelection, or won't it matter much either way?
06-14-17	Kaiser, Social Science Research Solutions	Now thinking about your own Senator or representative. If your elected representative votes against the Republican plan to repeal and replace the 2010 Affordable Care Act because they think it is either the wrong approach or will be bad for the people they represent, will you be more likely to support them, less likely to support them, or does it not affect how likely you are to support them?
06-14-17	Kaiser, Social Science Research Solutions	Now thinking about your own Senator or representative. If your elected representative votes for the Republican plan to repeal and replace the 2010 Affordable Care Act because they think it is either the right approach or will be good for the people they represent, will you be more likely to support them, less likely to support them, or does it not affect how likely you are to support them?
06-27-17	Pew	If a friend of yours told you they voted for...Hillary Clinton (for president in 2016), do you think this would put a strain on your friendship, make your friendship stronger, or would it not have any effect on your friendship?
07-24-17	Public Policy Polling	If your member of Congress voted for the health care bill currently being considered by Congress, would that make you more or less likely to vote for them in the next election, or would it not make a difference either way?
08-17-17	Quinnipiac	Since the 2016 election, are you more motivated to vote in local, state, and federal elections, less motivated to vote, or are you just as motivated to vote as you were before?
09-21-17	Quinnipiac	If your US Senator or Congressperson votes to replace Obamacare with the Republican health care plan, will that make you more likely to vote for their reelection, less likely to vote for their reelection, or won't it matter much either way?
09-25-17	Remington Research Group	On Sunday, a number of NFL players knelt during the national anthem in protest of Donald Trump's statements, including players from your favorite team. Does this make you more likely or less likely to watch your favorite team's games in the future?
09-30-17	Democracy Corps, Greenberg Quinlan	As you may know, three major hurricanes recently hit the US. Harvey broke the record for rainfall in one storm in the US, Irma was one of the strongest hurricanes ever recorded in the Atlantic and Maria devastated Puerto Rico. After these storms are you more likely to think that climate change is happening or less likely to think that climate change is happening, or have they made no difference?...Much more likely, somewhat more likely, made no difference, somewhat less likely, much less likely
10-05-17	Gallup	Next we'd like to ask about your chances of suing someone, if you felt you were being sexually harassed. As a result of the recent events in the news about sexual harassment, would you be more likely or less likely to file a lawsuit against someone who sexually harassed you, or have your chances of suing someone not changed?

Date	Organizations	Question
10-10-17	University of North Florida	As you may know, some athletes and sports teams have begun not standing during the national anthem in order to protest police violence against the black community in the United States. Does this make you more likely, less likely or has no influence on you to watch NFL games on television?
10-10-17	University of North Florida	As you may know, some athletes and sports teams have begun not standing during the national anthem in order to protest police violence against the black community in the United States. Does this make you more likely, less likely or has no influence on you attending an NFL game?
10-18-17	Hampton University	Do negative campaign ads make you more or less likely to vote for the candidate who produced the ad?
10-23-17	NBC, Wall Street Journal, Hart Research Associates	Recently, there have been several high profile stories about issues related to how women are treated in society, including sexual harassment and other unfair treatment in the workplace. In thinking about these stories, I am going to read you some statements, and for each one, please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with that statement....These stories have made you more likely to speak out in the future if you are personally treated unfairly due to your gender.
10-23-17	NBC, Wall Street Journal, Hart Research Associates	(Recently, there have been several high profile stories about issues related to how women are treated in society, including sexual harassment and other unfair treatment in the workplace. In thinking about these stories, I am going to read you some statements, and for each one, please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with that statement.)...These stories have made you more likely to speak out if you see a woman treated unfairly.
11-09-17	JMC Analytics	Given the allegations that have come out about Roy Moore's alleged sexual misconduct against four underage women, are you more or less likely to support him as a result of these allegations?
11-15-17	Quinnipiac	Have reports of severe brain damage in NFL (National Football League) players made you less likely to watch football, or not?
11-15-17	Quinnipiac	Are you more likely to believe someone who reports sexual harassment than you were a year ago, less likely to believe someone, or are you just as likely to believe someone who reports sexual harassment as you were before?
11-29-17	Quinnipiac	If you knew that the Republican tax plan would cause a significant increase in the national debt over the next 10 years, would that make you more likely to support it, less likely to support it, or would it not have an impact?
12-03-17	CBS	Have recent mass shootings made you less likely to attend large public events these days, or not?
12-05-17	Suffolk University	Thinking about politics and elections—if there was a candidate you agreed with on political views, but he faced credible allegations of sexual misconduct, would it make you more or less likely to vote for him?

Date	Organizations	Question
12-05-17	Suffolk University	Thinking about movie and TV celebrities—would you be more or less likely to go see a movie or watch a TV show if the star faced credible allegations of sexual misconduct?
12-06-17	Quinnipiac	If your US Senator or Congressperson voted against the Republican tax plan, does that make you more likely to vote for their reelection, less likely to vote for their reelection, or won't it matter much either way?
12-06-17	Quinnipiac	Does the issue of sexual harassment make you more likely to vote for a...Republican candidate, or not?
12-06-17	Quinnipiac	Does the issue of sexual harassment make you more likely to vote for a...Democratic candidate, or not?
12-06-17	Quinnipiac	Does the issue of sexual harassment make you more likely to vote for a...woman candidate, or not?
12-10-17	CNBC, Hart Research Associates	As you may know, the stock market has recently been at record highs. As a result of this do you expect to do any of the following things?...Spend more this holiday than you normally would, spend more in general than you normally would, reduce the amount of money you put into savings
01-12-18	Quinnipiac	If a candidate for president lacks any government experience, does that make you more likely to vote for them, less likely to vote for them, or does it not impact your vote much either way?
01-19-18	Quinnipiac	Does this government shutdown make you more likely to vote for a Democrat in 2018, less likely to vote for a Democrat, or does this government shutdown have no impact on your vote in 2018?
01-19-18	Quinnipiac	Does this government shutdown make you more likely to vote for a Republican in 2018, less likely to vote for a Republican, or does this government shutdown have no impact on your vote in 2018?
01-29-18	Seton Hall, Sharkey Institute	Would you be more likely to buy a product advertised during the Olympics (Winter 2018), less likely or does it make no difference?
02-15-18	Morning Consult, Politico	And does this increase in your take-home pay make you more or less likely to support each of the following? Republicans in Congress who voted for the bill
02-15-18	Morning Consult, Politico	And does this increase in your take-home pay make you more or less likely to support each of the following? Democrats in Congress who did not vote for the bill
02-15-18	Morning Consult, Politico	And does this increase in your take-home pay make you more or less likely to support each of the following? The tax bill that was recently signed in to law by President Trump
02-15-18	Morning Consult, Politico	And does this increase in your take-home pay make you more or less likely to support each of the following? President Trump
02-20-18	CNN, Social Science Research Solutions	If you heard that a candidate for Congress in your district had accepted a campaign donation from...the National Rifle Association, also known as the NRA...would that make you more likely to vote for that candidate, less likely to vote for that candidate, or would it not make a difference in your vote?

Date	Organizations	Question
02-20-18	CNN, Social Science Research Solutions	If you heard that a candidate for Congress in your district had accepted a campaign donation from...interest groups advocating for stricter gun laws, such as Everytown for Gun Safety...would that make you more likely to vote for that candidate, less likely to vote for that candidate, or would it not make a difference in your vote?
03-03-18	Quinnipiac	If a private company announces that it will no longer sell assault weapons, are you more likely to shop at that company's stores, less likely to shop at their stores, or won't it have an effect on whether or not you shop at their stores?
03-05-18	Marist	Are you more likely or less likely to support a brand or company that has cut ties with the NRA (National Rifle Association)?
03-16-18	Quinnipiac	If President (Donald) Trump campaigns for a political candidate, does that make you more likely to vote for that candidate, less likely to vote for that candidate, or would it have no impact on your vote?
03-22-18	TIPP, Investor's Business Daily	As a result of the recent news stories, how likely are you to decrease your use of Facebook?...Very likely, somewhat likely, not very likely, not at all likely
03-30-18	Silicon Valley Community Foundation, Choose Children 2018, J. Wallin Opinion Research, Tulchin Research	While estimates vary, it would cost (NUMBER) dollars a year for California to provide high-quality, publicly funded childcare and preschool programs with well-trained, qualified teachers and caregivers and lesson plans to make sure children learn the building blocks of language and critical thinking skills, and to ensure that they're ready for the growing demands of kindergarten. Does knowing this make you more likely or less likely to vote for a candidate for Governor who commits to creating a system of high-quality, publicly funded childcare and preschool programs for all California babies, toddlers and preschoolers?
04-04-18	Strategic National	Did that ad make you more or less likely to support Sandy Pensler for the position of US Senate?
04-06-18	Monmouth	Does knowing that Hugin is a former pharmaceutical executive make you more likely or less likely to vote for him, or doesn't this impact your vote?
04-06-18	Monmouth	Does this issue just strengthen the party choice you would typically make, or will you actually consider voting for a different party than you typically do? [If DIFFERENT PARTY: Does it make you more likely to vote Republican or Democrat this year?]
04-06-18	Monmouth	Does knowing that Menendez was recently on trial make you more or less likely to vote for him, or doesn't this impact your vote?
04-17-18	Mason-Dixon	University of Tennessee research estimates that expanding Medicaid will bring in \$1.4 billion a year into the state economy and create 15,000 new jobs. Does that make you more likely to support expanding the state Medicaid program, less likely to support expanding it, or does it have no effect on your view?

Date	Organizations	Question
04-17-18	Mason-Dixon	Tennessee leads the nation in the closure of rural hospitals, which is decreasing health care access for many citizens. In 18 states that have not expanded Medicaid, including Tennessee, hospitals are six times more likely to close than in the 32 states that have expanded their programs. Does that make you more likely to support expanding the state Medicaid program, less likely to support expanding it, or does it have no effect on your view?
04-17-18	Mason-Dixon	Accepting federal funding to expand Medicaid coverage would provide addiction treatment to some people who currently don't have insurance. Does that make you more likely to support expanding the state Medicaid program, less likely to support expanding it, or does it have no effect on your view?
04-17-18	Mason-Dixon	Governor Bill Haslam proposed, with the agreement of the Tennessee Hospital Association, to assess hospitals for the state's share of the cost of Medicaid expansion. Does that make you more likely to support expanding the state Medicaid program, less likely to support expanding it, or does it have no effect on your view?
04-20-18	Kaiser, Social Science Research Solutions	Thinking again about the upcoming Congressional election in November (2018)... Say a candidate for Congress...wants to repeal the 2010 health care law, also known as the Affordable Care Act. Would that make you more likely to vote for that candidate, less likely, or wouldn't it make much difference in your vote?
04-20-18	Kaiser, Social Science Research Solutions	Thinking again about the upcoming Congressional election in November (2018)... Say a candidate for Congress...supports passing legislation to bring down the price of prescription drugs. Would that make you more likely to vote for that candidate, less likely, or wouldn't it make much difference in your vote?
04-20-18	Kaiser, Social Science Research Solutions	Thinking again about the upcoming Congressional election in November (2018)... Say a candidate for Congress...supports the 2010 health care law, also known as the Affordable Care Act. Would that make you more likely to vote for that candidate, less likely, or wouldn't it make much difference in your vote?
04-20-18	Kaiser, Social Science Research Solutions	Thinking again about the upcoming Congressional election in November (2018)... Say a candidate for Congress...wants to lower the amount individuals pay for health care and health insurance. Would that make you more likely to vote for that candidate, less likely, or wouldn't it make much difference in your vote?
04-20-18	Kaiser, Social Science Research Solutions	Thinking again about the upcoming Congressional election in November (2018)... Say a candidate for Congress...supports passing a national health plan in which all Americans would get their insurance from a single government plan. Would that make you more likely to vote for that candidate, less likely, or wouldn't it make much difference in your vote?
04-20-18	Kaiser, Social Science Research Solutions	Thinking again about the upcoming Congressional election in November (2018)... Say a candidate for Congress...supports universal health care coverage. Would that make you more likely to vote for that candidate, less likely, or wouldn't it make much difference in your vote?

Date	Organizations	Question
04-25-18	Center for American Progress, GBA Strategies	Thinking about the election for Congress later this year, would you be more likely or less likely to vote for a candidate who supports legislation to automatically seal the records of individuals convicted of nonviolent felonies or misdemeanors, including marijuana convictions, if the person has completed his or her sentence and has not committed another criminal offense?
04-25-18	Center for American Progress, GBA Strategies	While you currently oppose this proposal, would any of the following facts, if true, make you more likely to support legislation to automatically seal the records of individuals convicted of non-violent felonies or misdemeanors if the person has completed his or her sentence and has not committed another criminal offense? “Sealing a record is not the same as clearing or expunging a record, and an individual whose record is sealed isn’t ‘getting away’ with anything: if they are ever arrested again, law enforcement and the courts have access to their full record.”
04-25-18	Center for American Progress, GBA Strategies	While you currently oppose this proposal, would any of the following facts, if true, make you more likely to support legislation to automatically seal the records of individuals convicted of non-violent felonies or misdemeanors if the person has completed his or her sentence and has not committed another criminal offense? “Automatically sealing records of those without another conviction after 10 years will significantly reduce the workload of overburdened courts and save taxpayers money.”
05-02-18	CNN, Social Science Research Solutions	Would you be more likely to vote for a (2018) candidate for Congress who supports President (Donald) Trump, or more likely to vote for a candidate who opposes President Trump?
05-03-18	CBS, Social Science Research Solutions	If a candidate for Congress supports...the tax law passed by Congress, would that make you more likely to vote for the candidate, less likely to vote for the candidate, or would the candidate’s support of...the tax law passed by Congress not make much difference in your vote?
05-03-18	CBS, Social Science Research Solutions	If a candidate for Congress supports...stricter gun laws, would that make you more likely to vote for the candidate, less likely to vote for the candidate, or would the candidate’s support of...stricter gun laws not make much difference in your vote?
05-03-18	CBS, Social Science Research Solutions	If a candidate for Congress supports...trying to impeach Donald Trump, would that make you more likely to vote for the candidate, less likely to vote for the candidate, or would the candidate’s support of...trying to impeach Donald Trump not make much difference in your vote?
05-03-18	CBS, Social Science Research Solutions	If a candidate for Congress supports...legal status for DACA (Deferred Action on Childhood Arrivals) immigrants, would that make you more likely to vote for the candidate, less likely to vote for the candidate, or would the candidate’s support of...legal status for DACA immigrants not make much difference in your vote?

Date	Organizations	Question
05-03-18	CBS, Social Science Research Solutions	If a candidate for Congress supports...Donald Trump's agenda, would that make you more likely to vote for the candidate, less likely to vote for the candidate, or would the candidate's support of...Donald Trump's agenda not make much difference in your vote?
05-04-18	Salesforce	Which of the following offerings would make you more willing to ask your healthcare provider for a specific brand of medication? If the pharmaceutical company that made the medication offered an online patient portal for support and advice.
05-04-18	Salesforce	Which of the following offerings would make you more willing to ask your healthcare provider for a specific brand of medication? If the pharmaceutical company that made the medication offered an online community with other people taking the medication
05-04-18	Salesforce	Which of the following offerings would make you more willing to ask your healthcare provider for a specific brand of medication? If the pharma company that made the medication offered virtual assistance (e.g., two-way video conferencing, live chat).
05-10-18	SurveyUSA	Stacey Abrams has discussed being more than \$200,000 in debt. Does Stacey Abrams' debt make you ... more likely to consider voting for her? Less likely to consider voting for her? Or does it make no difference either way?
06-01-18	NBC, Wall Street Journal, Hart Research Associates	I'm going to describe different types of candidates for Congress. For each one, please tell me whether you would be more likely or less likely to vote for this type of candidate for Congress, or if it would not make much difference either way in terms of your vote for Congress next year....A candidate who would promise to provide a check on Donald Trump
06-01-18	NBC, Wall Street Journal, Hart Research Associates	(I'm going to describe different types of candidates for Congress. For each one, please tell me whether you would be more likely or less likely to vote for this type of candidate for Congress, or if it would not make much difference either way in terms of your vote for Congress next year.)...A candidate who supports Donald Trump's policies on immigration and border security
06-01-18	NBC, Wall Street Journal, Hart Research Associates	(I'm going to describe different types of candidates for Congress. For each one, please tell me whether you would be more likely or less likely to vote for this type of candidate for Congress, or if it would not make much difference either way in terms of your vote for Congress next year.)...A candidate who has supported President (Donald) Trump's issue positions over ninety percent of the time
06-01-18	NBC, Wall Street Journal, Hart Research Associates	(I'm going to describe different types of candidates for Congress. For each one, please tell me whether you would be more likely or less likely to vote for this type of candidate for Congress, or if it would not make much difference either way in terms of your vote for Congress next year.)...A candidate who would support Nancy Pelosi as Speaker of the House if Democrats take control
06-21-18	NORC, MTV, Associated Press	Did the outcome of the 2016 Presidential election increase your interest in the 2018 midterm elections, decrease your interest in the 2018 midterm elections, or did it have no impact?

Date	Organizations	Question
06-22-18	Morning Consult, Politico	And does this increase in your take-home pay make you more or less likely to support each of the following? Republicans in Congress who voted for the bill
06-22-18	Morning Consult, Politico	And does this increase in your take-home pay make you more or less likely to support each of the following? Democrats in Congress who did not vote for the bill
06-22-18	Morning Consult, Politico	And does this increase in your take-home pay make you more or less likely to support each of the following? The tax bill that was recently signed in to law by President Trump
06-22-18	Morning Consult, Politico	And does this increase in your take-home pay make you more or less likely to support each of the following? President Trump
07-09-18	NORC, National Partnership for Women and Families, PerryUndem, Bellwether	If a candidate for Congress in 2018 publicly supported a national paid family and medical leave policy, would that make you more likely to vote for him/her, less likely to vote for him/her, or have no effect on your vote for him/her?
07-09-18	NORC, National Partnership for Women and Families, PerryUndem, Bellwether	If a candidate for Congress in 2018 publicly opposed a national paid family and medical leave policy, would that make you more likely to vote for him/her, less likely to vote for him/her, or would that have no effect on your vote for him/her? publicly supported a national paid family and medical leave policy, would that make you more likely to vote for him/her, less likely to vote for him/her, or have no effect on your vote for him/her?
07-09-18	imge insights	As you may know, the FCC recently got rid of these net neutrality protections. The Senate passed a resolution to overturn the FCC and restore net neutrality in a bipartisan vote, but the House has taken no action. If your Congressman took immediate action to force a vote to overturn the FCC and restore net neutrality protections, and said he did so because it was important to put people ahead of big cable companies like Comcast and ATandT, would that make you more likely or less likely to vote for him?
07-09-18	imge insights	If your Congressman refused to help force a vote to overturn the FCC and restore net neutrality protections and his Democratic challenger pointed out that such inaction demonstrates that he gave in to special interests and big cable companies like Comcast and ATandT - and in so doing put individuals and small businesses at a disadvantage - would that make you more or less likely to vote for him?
07-10-18	Remington Research Group, Missouri Times	Appearing on the August ballot will be Proposition A. Proposition A will give voters the choice of adopting or rejecting legislation known as Right to Work. Does knowing Proposition A will appear on the August ballot make you more excited or less excited to vote this August?
07-19-18	NPR, PBS, Marist	Does your impression of President (Donald) Trump make you more likely to vote for a Republican for Congress this November (2018), or more likely to vote for a Democrat for Congress this November

Date	Organizations	Question
07-24-18	Harris, Harvard Kennedy School	If your Senator voted to confirm Brett Kavanaugh to serve on the Supreme Court, would that make you more likely or less likely to vote to re-elect that Senator, or wouldn't it matter much either way?
07-24-18	Harris, Harvard Kennedy School	If you knew the following, would that make you more likely to say the Senate should vote on Brett Kavanaugh's nomination this year, before the midterm elections, or would that make you more likely to say the Senate should wait until next year, after the midterm elections, to vote on Kavanaugh's nomination? President Trump has already appointed one justice to the Supreme Court during his presidency
07-24-18	Harris, Harvard Kennedy School	If you knew the following, would that make you more likely to say the Senate should vote on Brett Kavanaugh's nomination this year, before the midterm elections, or would that make you more likely to say the Senate should wait until next year, after the midterm elections, to vote on Kavanaugh's nomination? After Justice Antonin Scalia died in February 2016, Senate Republicans refused to consider President Obama's nominee to the Supreme Court
07-24-18	Harris, Harvard Kennedy School	If you knew the following, would that make you more likely to say the Senate should vote on Brett Kavanaugh's nomination this year, before the midterm elections, or would that make you more likely to say the Senate should wait until next year, after the midterm elections, to vote on Kavanaugh's nomination? The Senators elected in the 2018 midterm elections will take office in about 170 days
07-24-18	Harris, Harvard Kennedy School	If you knew the following, would that make you more likely to say the Senate should vote on Brett Kavanaugh's nomination this year, before the midterm elections, or would that make you more likely to say the Senate should wait until next year, after the midterm elections, to vote on Kavanaugh's nomination? Justice Kennedy was a moderate justice. Brett Kavanaugh is likely to be a more conservative justice than Justice Kennedy
07-26-18	Public Policy Polling	Last year, John Katko voted for the Republican tax plan that repealed a portion of the Affordable Care Act that ensures all people have health insurance. Does that make you more likely or less likely to vote for John Katko next time, or does it not make a difference?
07-26-18	Public Policy Polling	Thinking about everything you have heard in this poll, let me ask you again: Last year, John Katko voted for the Republican tax plan that repealed a portion of the Affordable Care Act that ensures all people have health insurance. Does that make you more likely or less likely to vote for John Katko next time, or does it not make a difference?
08-16-18	NORC	Would a Congressional candidate's commitment to allowing Medicare to negotiate directly with drug companies to get lower prices on prescription drugs make you more likely to vote for them, not make any difference, or less likely to vote for them?

Date	Organizations	Question
08-22-18	Deseret News, Dan Jones and Associates	if a doctor without any specialized training could provide a six-month medical marijuana card in a 15-minute office visit, to what extent does that make you more likely or less likely to support Proposition 2, or does it have no effect on your vote?
08-22-18	SurveyUSA	Do the charges against Hunter make you ... more likely to vote for him? Less likely to vote for him? Or do they make no difference either way?
09-01-18	Elon University Poll	[Tax cap] Does this amendment make you more or less likely to turn out to vote in the November election?
09-01-18	Elon University Poll	[Voter ID] Does this amendment make you more or less likely to turn out to vote in the November election?
09-08-18	Fox News, Anderson Robbins, Shaw and Co.	If Heidi Heitkamp votes against Brett Kavanaugh's nomination to the Supreme Court, would that make you more likely or less likely to vote for her, or would it not make a difference to your vote for Senate?
09-08-18	Fox News, Anderson Robbins, Shaw and Co.	If Claire McCaskill votes against Brett Kavanaugh's nomination to the Supreme Court, would that make you more likely or less likely to vote for her, or would it not make a difference to your vote for Senate?
09-08-18	Fox News, Anderson Robbins, Shaw and Co.	If Joe Donnelly votes against Brett Kavanaugh's nomination to the Supreme Court, would that make you more likely or less likely to vote for her, or would it not make a difference to your vote for Senate?
09-09-18	NBC, SurveyMoney	Thinking about the upcoming elections in November, if a candidate wanted to expand Medicaid in your state, would that make you more likely to vote for that candidate, less likely, or wouldn't it make much difference in your vote?
09-16-18	NBC, Wall Street Journal, Hart Research Associates	Now, I'm going to read you several characteristics of a possible candidate for Congress. For each one I mention, please tell me whether you would be more likely or less likely to vote for a candidate for Congress with that characteristic, or whether it would make no difference in your vote either way....Is a woman
09-16-18	NBC, Wall Street Journal, Hart Research Associates	(Now, I'm going to read you several characteristics of a possible candidate for Congress. For each one I mention, please tell me whether you would be more likely or less likely to vote for a candidate for Congress with that characteristic, or whether it would make no difference in your vote either way.)...Has not previously held elective office
09-16-18	NBC, Wall Street Journal, Hart Research Associates	(Now, I'm going to read you several characteristics of a possible candidate for Congress. For each one I mention, please tell me whether you would be more likely or less likely to vote for a candidate for Congress with that characteristic, or whether it would make no difference in your vote either way.)...Is an incumbent running for reelection

Date	Organizations	Question
09-16-18	NBC, Wall Street Journal, Hart Research Associates	I'm going to read you some positions that someone running for Congress could take. For each one, please tell me whether you would be more likely to vote for a candidate for Congress who takes this position, less likely to vote for this candidate, or would it not make a difference to you either way?...Favors a program that allows young adults who were brought to his country illegally by their parents when they were children to stay here legally to attend college or work
09-16-18	NBC, Wall Street Journal, Hart Research Associates	(I'm going to read you some positions that someone running for Congress could take. For each one, please tell me whether you would be more likely to vote for a candidate for Congress who takes this position, less likely to vote for this candidate, or would it not make a difference to you either way?)...Supports cutting the tax rate for businesses and corporations and cutting taxes for most Americans
09-16-18	NBC, Wall Street Journal, Hart Research Associates	(I'm going to read you some positions that someone running for Congress could take. For each one, please tell me whether you would be more likely to vote for a candidate for Congress who takes this position, less likely to vote for this candidate, or would it not make a difference to you either way?)...Favors stricter regulations on assault and military-style firearms
09-16-18	NBC, Wall Street Journal, Hart Research Associates	(I'm going to read you some positions that someone running for Congress could take. For each one, please tell me whether you would be more likely to vote for a candidate for Congress who takes this position, less likely to vote for this candidate, or would it not make a difference to you either way?)...Favors Medicare for all, a single payer health care system in which all Americans would get their health insurance from one government plan that is financed in part by taxes
09-16-18	NBC, Wall Street Journal, Hart Research Associates	(I'm going to read you some positions that someone running for Congress could take. For each one, please tell me whether you would be more likely to vote for a candidate for Congress who takes this position, less likely to vote for this candidate, or would it not make a difference to you either way?)...Favors more deportations of people who have come to this country illegally
09-16-18	NBC, Wall Street Journal, Hart Research Associates	(I'm going to read you some positions that someone running for Congress could take. For each one, please tell me whether you would be more likely to vote for a candidate for Congress who takes this position, less likely to vote for this candidate, or would it not make a difference to you either way?)...Supports weakening or eliminating the Affordable Care Act health care law, also called Obamacare
09-16-18	NBC, Wall Street Journal, Hart Research Associates	(I'm going to read you some positions that someone running for Congress could take. For each one, please tell me whether you would be more likely to vote for a candidate for Congress who takes this position, less likely to vote for this candidate, or would it not make a difference to you either way?)...Favors imposing tariffs to respond to the trade practices of other countries

Date	Organizations	Question
09-16-18	NBC, Wall Street Journal, Hart Research Associates	(I'm going to read you some positions that someone running for Congress could take. For each one, please tell me whether you would be more likely to vote for a candidate for Congress who takes this position, less likely to vote for this candidate, or would it not make a difference to you either way?)...Favors holding impeachment hearings of Donald Trump
09-16-18	NBC, Wall Street Journal, Hart Research Associates	(I'm going to read you some positions that someone running for Congress could take. For each one, please tell me whether you would be more likely to vote for a candidate for Congress who takes this position, less likely to vote for this candidate, or would it not make a difference to you either way?)...Supports President (Donald) Trump's issue positions over ninety percent of the time
09-16-18	NBC, Wall Street Journal, Hart Research Associates	(I'm going to read you some positions that someone running for Congress could take. For each one, please tell me whether you would be more likely to vote for a candidate for Congress who takes this position, less likely to vote for this candidate, or would it not make a difference to you either way?)...Favors increasing funding for a wall along the border with Mexico
09-16-18	NBC, Wall Street Journal, Hart Research Associates	(I'm going to read you some positions that someone running for Congress could take. For each one, please tell me whether you would be more likely to vote for a candidate for Congress who takes this position, less likely to vote for this candidate, or would it not make a difference to you either way?)...Favors abolishing ICE, that is Immigration and Customs Enforcement
09-16-18	NBC, Wall Street Journal, Hart Research Associates	(I'm going to read you some positions that someone running for Congress could take. For each one, please tell me whether you would be more likely to vote for a candidate for Congress who takes this position, less likely to vote for this candidate, or would it not make a difference to you either way?)...Will vote for Nancy Pelosi as the next Speaker of the House if Democrats take control of Congress
09-16-18	NBC, Wall Street Journal, Hart Research Associates	(I'm going to read you some positions that someone running for Congress could take. For each one, please tell me whether you would be more likely to vote for a candidate for Congress who takes this position, less likely to vote for this candidate, or would it not make a difference to you either way?)...Favors cutting Social Security and Medicare to help pay for the (Donald) Trump tax cuts
09-16-18	Fox News, Anderson Robbins, Shaw and Co.	Would you be more or less likely to vote for a congressional candidate this November (2018) if...Barack Obama campaigns for them, or would that not make a difference to your vote?
09-16-18	Fox News, Anderson Robbins, Shaw and Co.	Would you be more or less likely to vote for a congressional candidate this November (2018) if...Bernie Sanders campaigns for them, or would that not make a difference to your vote?
09-16-18	Fox News, Anderson Robbins, Shaw and Co.	Would you be more or less likely to vote for a congressional candidate this November (2018) if...Donald Trump campaigns for them, or would that not make a difference to your vote?

Date	Organizations	Question
09-16-18	Fox News, Anderson Robbins, Shaw and Co.	Would you be more or less likely to vote for a congressional candidate this November (2018) if...Mike Pence campaigns for them, or would that not make a difference to your vote?
09-17-18	Scott Walker Campaign	Experts say Tony Evers' proposed government spending will cost Wisconsin taxpayers over \$4 billion, requiring state taxes to go up nearly 8 percent, the interviewer stated. "Does knowing this make you more likely or less likely to vote for Tony Evers?"
09-17-18	Public Policy Polling	If Senator Susan Collins voted to confirm Brett Kavanaugh to the Supreme Court, would that make you more likely or less likely to vote for her next time, or would it not make a difference?
09-17-18	Public Policy Polling	If Senator Susan Collins voted to confirm Brett Kavanaugh to the Supreme Court and then Kavanaugh votes to overturn Roe v. Wade or overturn health care protections for people with preexisting conditions, would that make you more likely or less likely to vote for her next time, or would it not make a difference?
09-17-18	Public Policy Polling	Supreme Court nominee Brett Kavanaugh will likely support the Trump Administration position on a lawsuit which would strike down healthcare protections for people with preexisting conditions. Does learning this make you more likely or less likely to support confirmation of Brett Kavanaugh for the Supreme Court, or does it not make a difference?
09-17-18	Public Policy Polling	Supreme Court nominee Brett Kavanaugh would likely tip the balance of the court to overturning Roe v. Wade that protects health care choices for women. Does learning this make you more likely or less likely to support confirmation of Brett Kavanaugh for the Supreme Court, or does it not make a difference?
09-24-18	Southern Illinois University	Impact of Federal Tax Bill on Voting Does your view on this issue make you more or less likely to vote for Republican Congressional candidates in November? [If more or less] Is that much or somewhat more/less likely?
09-27-18	Reuters, ISPOS, UVA Center for State Politics	As you may know, Claire McCaskill recently reported she would be voting against confirming Judge Brett Kavanaugh as a Supreme Court Justice. Does her vote make you more or less likely to vote for her for the Senate?
09-29-18	Fox News, Anderson Robbins, Shaw and Co.	If Heidi Heitkamp votes against Brett Kavanaugh's nomination to the Supreme Court, would that make you more likely or less likely to vote for her, or would it not make a difference to your vote for Senate?
09-29-18	Fox News, Anderson Robbins, Shaw and Co.	If Claire McCaskill votes against Brett Kavanaugh's nomination to the Supreme Court, would that make you more likely or less likely to vote for her, or would it not make a difference to your vote for Senate?
09-29-18	Fox News, Anderson Robbins, Shaw and Co.	If Joe Donnelly votes against Brett Kavanaugh's nomination to the Supreme Court, would that make you more likely or less likely to vote for her, or would it not make a difference to your vote for Senate?

Date	Organizations	Question
10-01-18	NPR, PBS, Marist	Thinking about your vote for congress this November (2018), are you more likely to vote for a candidate who supports President (Donald) Trump's US Supreme Court nominee Brett Kavanaugh, opposes President Trump's US Supreme Court nominee Brett Kavanaugh, or does US Supreme Court nominee Brett Kavanaugh not make any difference to your vote?
10-02-18	SurveyUSA	How much of a factor is President Trump in your decisions about which candidates you will vote for in the November election? Does he make you more likely to vote for Republicans? Make you more likely to vote for Democrats? Or does he have no impact either way?
10-02-18	CBS, Social Science Research Solutions	Have the recent reports of past sexual abuse of children by priests made you more likely to attend Mass, less likely, or have they had no effect on how likely you are to attend Mass?
10-03-18	GfK, Harvard Kennedy School	If a candidate for Congress described themselves as a Democratic Socialist, would that make you more likely to vote for him/her, less likely to vote for him/her – or does it not make a difference either way?
10-08-18	ABC, Washington Post, Abt Associates	Does the debate over (Brett) Kavanaugh's confirmation (to the Supreme Court) make you more likely to support Democratic candidates in the midterm election, more likely to support Republican candidates, or does it make no difference in your vote?
10-13-18	Vox Populi	Recently, Senator Joe Donnelly voted against confirming Brett Kavanaugh to the Supreme Court. Does this make you more or less likely to vote for him in the upcoming election?
10-15-18	The Star Tribune, Minnesota Public Radio	Does the confirmation of Brett Kavanaugh to the Supreme Court make you more likely to vote for Democrats or Republicans?
10-15-18	IndyPolitics.org, Mason Strategies	As you may know, Joe Donnelly voted against confirming Brett Kavanaugh to the Supreme Court. Does his vote make you more likely or less likely to vote for him for U.S. Senate, or does it have no impact on your vote? IF MORE OR LESS LIKELY, PROBE: Is that much (more/less) likely or somewhat?
10-17-18	CBS, Social Science Research Solutions	Has what you've seen in Washington over the last year made you more likely to speak up and let your political views be known, less likely to speak up and let your political views be known, or has there been no change?
10-25-18	WBUR Massachusetts, Mass INC Polling Group	If a candidate for US Senate made Reducing the cost of health care a major priority, would it make you more likely to support him or her, less likely to support him or her, or would it make no difference?
10-25-18	WBUR Massachusetts, Mass INC Polling Group	If a candidate for US Senate made Addressing climate change a major priority, would it make you more likely to support him or her, less likely to support him or her, or would it make no difference?
10-25-18	WBUR Massachusetts, Mass INC Polling Group	If a candidate for US Senate made Standing up to Donald Trump a major priority, would it make you more likely to support him or her, less likely to support him or her, or would it make no difference?

Date	Organizations	Question
10-25-18	WBUR Massachusetts, Mass INC Polling Group	If a candidate for US Senate made Working across party lines a major priority, would it make you more likely to support him or her, less likely to support him or her, or would it make no difference?
10-25-18	WBUR Massachusetts, Mass INC Polling Group	If a candidate for US Senate made Reducing income inequality a major priority, would it make you more likely to support him or her, less likely to support him or her, or would it make no difference?
10-25-18	WBUR Massachusetts, Mass INC Polling Group	If a candidate for US Senate made Cutting taxes a major priority, would it make you more likely to support him or her, less likely to support him or her, or would it make no difference?
10-25-18	WBUR Massachusetts, Mass INC Polling Group	If a candidate for US Senate made Stopping illegal immigration a major priority, would it make you more likely to support him or her, less likely to support him or her, or would it make no difference?
10-25-18	WBUR Massachusetts, Mass INC Polling Group	If a candidate for US Senate made Protecting undocumented immigrants from deportation a major priority, would it make you more likely to support him or her, less likely to support him or her, or would it make no difference?
10-25-18	WBUR Massachusetts, Mass INC Polling Group	If a candidate for Massachusetts Governor made Fighting the opioid problem a major priority, would it make you more likely to support him or her, less likely to support him or her, or would it make no difference?
10-25-18	WBUR Massachusetts, Mass INC Polling Group	If a candidate for Massachusetts Governor made Increasing funding for public schools a major priority, would it make you more likely to support him or her, less likely to support him or her, or would it make no difference?
10-25-18	WBUR Massachusetts, Mass INC Polling Group	If a candidate for Massachusetts Governor made Reducing the cost of health care in Massachusetts a major priority, would it make you more likely to support him or her, less likely to support him or her, or would it make no difference?
10-25-18	WBUR Massachusetts, Mass INC Polling Group	If a candidate for Massachusetts Governor made Making state government function better a major priority, would it make you more likely to support him or her, less likely to support him or her, or would it make no difference?
10-25-18	WBUR Massachusetts, Mass INC Polling Group	If a candidate for Massachusetts Governor made Improving the state's transportation system a major priority, would it make you more likely to support him or her, less likely to support him or her, or would it make no difference?
10-25-18	WBUR Massachusetts, Mass INC Polling Group	If a candidate for Massachusetts Governor made Keeping state taxes as low as possible a major priority, would it make you more likely to support him or her, less likely to support him or her, or would it make no difference?
10-25-18	WBUR Massachusetts, Mass INC Polling Group	If a candidate for Massachusetts Governor made Standing up to Donald Trump a major priority, would it make you more likely to support him or her, less likely to support him or her, or would it make no difference?

Date	Organizations	Question
10-25-18	WBUR Massachusetts, Mass INC Polling Group	If a candidate for Massachusetts Governor made Addressing the high cost of housing Massachusetts a major priority, would it make you more likely to support him or her, less likely to support him or her, or would it make no difference?
10-25-18	WBUR Massachusetts, Mass INC Polling Group	If a candidate for Massachusetts Governor made Reducing income inequality a major priority, would it make you more likely to support him or her, less likely to support him or her, or would it make no difference?
10-25-18	WBUR Massachusetts, Mass INC Polling Group	Charlie Baker endorsed the full Republican slate of statewide candidates in Massachusetts, including Senate candidate Geoff Diehl. Geoff Diehl was also Donald Trump's co-chair in 2016. (Does/did) hearing the Charlie Baker has endorsed Geoff Diehl make you READ AND ROTATE FIRST 2 OPTIONS or (does/did) it make no difference in your vote?
10-25-18	WBUR Massachusetts, Mass INC Polling Group	(Does/did) the fact that Elizabeth Warren may run for President make you READ AND ROTATE?
12-14-18	PerryUndem	Did the situation around Dr. Ford and Judge Kavanaugh make you think more about sexism in our society, or not?
12-14-18	PerryUndem	Did any events related to Judge Kavanaugh and Dr. Ford's testimony or the outcome make you feel less tolerant of sexism in your own life?
12-14-18	PerryUndem	Did these [#MeToo] news stories make you think more about sexism in our society, or not?

D Additional Results

D.1 Distribution of change format

For each information treatment and study, Table D.3 displays the distribution of the standard self-reported change question. The “Level Q?” column indicates whether the respondent was asked a level question immediately before the change question. Standard errors appear in parentheses.

Table D.3: Distribution of Change Format by Study and Treatment

Treatment	Party	Level Q?	N	More	No change	Less	Difference
Blocked whistleblower (Study 1)	Democrat	No	53	22.6 (5.8)	45.3 (6.9)	32.1 (6.5)	-22.6 (11.0)
		Yes	46	13.0 (5.0)	50.0 (7.5)	37.0 (7.2)	-37.0 (10.5)
	Independent	No	14	14.3 (9.7)	21.4 (11.4)	64.3 (13.3)	-7.1 (16.5)
		Yes	10	-0.0 (0.0)	30.0 (15.3)	70.0 (15.3)	-30.0 (15.3)
	Republican	No	37	2.7 (2.7)	59.5 (8.2)	37.8 (8.1)	-56.8 (9.1)
		Yes	47	6.4 (3.6)	38.3 (7.2)	55.3 (7.3)	-31.9 (8.7)
Death penalty (Study 1)	Democrat	No	52	9.6 (4.1)	34.6 (6.7)	55.8 (7.0)	-25.0 (8.6)
		Yes	45	8.9 (4.3)	20.0 (6.0)	71.1 (6.8)	-11.1 (7.9)
	Independent	No	12	16.7 (11.2)	-0.0 (0.0)	83.3 (11.2)	16.7 (11.2)
		Yes	10	40.0 (16.3)	10.0 (10.0)	50.0 (16.7)	30.0 (21.3)
	Republican	No	37	24.3 (7.2)	8.1 (4.5)	67.6 (7.8)	16.2 (9.1)
		Yes	47	27.7 (6.6)	8.5 (4.1)	63.8 (7.1)	19.1 (8.4)
Disputed accusation (Study 1)	Democrat	No	53	1.9 (1.9)	86.8 (4.7)	11.3 (4.4)	-84.9 (5.6)
		Yes	46	2.2 (2.2)	63.0 (7.2)	34.8 (7.1)	-60.9 (7.9)
	Independent	No	13	7.7 (7.7)	46.2 (14.4)	46.2 (14.4)	-38.5 (18.0)
		Yes	10	10.0 (10.0)	50.0 (16.7)	40.0 (16.3)	-40.0 (22.1)
	Republican	No	37	18.9 (6.5)	24.3 (7.2)	56.8 (8.3)	-5.4 (10.9)
		Yes	47	8.5 (4.1)	38.3 (7.2)	53.2 (7.4)	-29.8 (9.1)
Endorsed Trump (Study 1)	Democrat	No	53	5.7 (3.2)	79.2 (5.6)	15.1 (5.0)	-73.6 (7.7)
		Yes	46	2.2 (2.2)	76.1 (6.4)	21.7 (6.1)	-73.9 (7.2)
	Independent	No	14	-0.0 (0.0)	28.6 (12.5)	71.4 (12.5)	-28.6 (12.5)
		Yes	10	20.0 (13.3)	40.0 (16.3)	40.0 (16.3)	-20.0 (24.9)
	Republican	No	37	59.5 (8.2)	5.4 (3.8)	35.1 (8.0)	54.1 (10.0)
		Yes	47	31.9 (6.9)	23.4 (6.2)	44.7 (7.3)	8.5 (10.9)
Immigration (Study 1)	Democrat	No	52	23.1 (5.9)	17.3 (5.3)	59.6 (6.9)	5.8 (8.9)
		Yes	45	17.8 (5.8)	11.1 (4.7)	71.1 (6.8)	6.7 (8.0)
	Independent	No	12	16.7 (11.2)	8.3 (8.3)	75.0 (13.1)	8.3 (14.9)
		Yes	10	20.0 (13.3)	20.0 (13.3)	60.0 (16.3)	-0.0 (21.1)
	Republican	No	37	10.8 (5.2)	45.9 (8.3)	43.2 (8.3)	-35.1 (11.1)
		Yes	47	14.9 (5.2)	29.8 (6.7)	55.3 (7.3)	-14.9 (9.6)
Supports charters (Study 1)	Democrat	No	53	20.8 (5.6)	43.4 (6.9)	35.8 (6.7)	-22.6 (10.7)
		Yes	46	17.4 (5.7)	39.1 (7.3)	43.5 (7.4)	-21.7 (10.7)
	Independent	No	14	21.4 (11.4)	14.3 (9.7)	64.3 (13.3)	7.1 (16.5)
		Yes	10	20.0 (13.3)	10.0 (10.0)	70.0 (15.3)	10.0 (18.0)
	Republican	No	37	54.1 (8.3)	13.5 (5.7)	32.4 (7.8)	40.5 (11.9)

Table D.3: Distribution of Change Format by Study and Treatment (continued)

Treatment	Party	Level Q?	N	More	No change	Less	Difference
		Yes	47	40.4 (7.2)	12.8 (4.9)	46.8 (7.4)	27.7 (9.9)
Tax cuts (Study 1)	Democrat	No	52	11.5 (4.5)	57.7 (6.9)	30.8 (6.5)	-46.2 (9.7)
		Yes	45	8.9 (4.3)	33.3 (7.1)	57.8 (7.4)	-24.4 (9.1)
	Independent	No	12	33.3 (14.2)	16.7 (11.2)	50.0 (15.1)	16.7 (20.7)
		Yes	10	30.0 (15.3)	30.0 (15.3)	40.0 (16.3)	0.0 (25.8)
	Republican	No	37	70.3 (7.6)	-0.0 (0.0)	29.7 (7.6)	70.3 (7.6)
		Yes	47	29.8 (6.7)	10.6 (4.5)	59.6 (7.2)	19.1 (8.9)
Undisputed accusation (Study 1)	Democrat	No	53	1.9 (1.9)	81.1 (5.4)	17.0 (5.2)	-79.2 (6.2)
		Yes	45	2.2 (2.2)	68.9 (7.0)	28.9 (6.8)	-66.7 (7.8)
	Independent	No	13	15.4 (10.4)	53.8 (14.4)	30.8 (13.3)	-38.5 (21.3)
		Yes	10	-0.0 (0.0)	80.0 (13.3)	20.0 (13.3)	-80.0 (13.3)
	Republican	No	37	5.4 (3.8)	73.0 (7.4)	21.6 (6.9)	-67.6 (9.5)
		Yes	47	8.5 (4.1)	61.7 (7.2)	29.8 (6.7)	-53.2 (9.5)
Biden / Hill (Study 2a)	Democrat	No	332	12.7 (1.8)	24.4 (2.4)	63.0 (2.7)	-11.7 (3.3)
	Independent	No	135	3.0 (1.5)	14.1 (3.0)	83.0 (3.2)	-11.1 (3.4)
	Republican	No	355	8.2 (1.5)	22.5 (2.2)	69.3 (2.5)	-14.4 (2.8)
DREAM Act (Study 2a)	Democrat	No	332	50.0 (2.7)	7.8 (1.5)	42.2 (2.7)	42.2 (3.5)
	Independent	No	135	29.6 (3.9)	10.4 (2.6)	60.0 (4.2)	19.3 (5.2)
	Republican	No	355	23.1 (2.2)	26.2 (2.3)	50.7 (2.7)	-3.1 (3.7)
Obama Torture (Study 2a)	Democrat	No	332	43.1 (2.7)	7.5 (1.5)	49.4 (2.7)	35.5 (3.4)
	Independent	No	135	23.0 (3.6)	11.9 (2.8)	65.2 (4.1)	11.1 (5.0)
	Republican	No	356	18.3 (2.1)	18.0 (2.0)	63.8 (2.6)	0.3 (3.2)
Opposed Kav (Study 2a)	Democrat	No	237	56.5 (3.2)	11.4 (2.1)	32.1 (3.0)	45.1 (4.5)
	Independent	No	96	22.9 (4.3)	15.6 (3.7)	61.5 (5.0)	7.3 (6.3)
	Republican	No	225	9.8 (2.0)	59.6 (3.3)	30.7 (3.1)	-49.8 (4.5)
Supported Kav (Study 2a)	Democrat	No	95	3.2 (1.8)	71.6 (4.7)	25.3 (4.5)	-68.4 (5.5)
	Independent	No	39	7.7 (4.3)	25.6 (7.1)	66.7 (7.6)	-17.9 (8.9)
	Republican	No	130	51.5 (4.4)	10.8 (2.7)	37.7 (4.3)	40.8 (6.0)
Trump Coal (Study 2a)	Democrat	No	332	30.1 (2.5)	29.2 (2.5)	40.7 (2.7)	0.9 (4.2)
	Independent	No	135	19.3 (3.4)	15.6 (3.1)	65.2 (4.1)	3.7 (5.1)
	Republican	No	356	25.8 (2.3)	11.0 (1.7)	63.2 (2.6)	14.9 (3.1)
Biden / Hill (Study 2b)	Democrat	No	132	9.1 (2.5)	17.4 (3.3)	73.5 (3.9)	-8.3 (4.4)
	Independent	No	49	-0.0 (0.0)	20.4 (5.8)	79.6 (5.8)	-20.4 (5.8)
	Republican	No	108	11.1 (3.0)	25.0 (4.2)	63.9 (4.6)	-13.9 (5.7)
DREAM Act (Study 2b)	Democrat	No	131	54.2 (4.4)	6.1 (2.1)	39.7 (4.3)	48.1 (5.3)
	Independent	No	49	22.4 (6.0)	18.4 (5.6)	59.2 (7.1)	4.1 (9.2)

Table D.3: Distribution of Change Format by Study and Treatment (continued)

Treatment	Party	Level Q?	N	More	No change	Less	Difference
	Republican	No	108	29.6 (4.4)	34.3 (4.6)	36.1 (4.6)	-4.6 (7.7)
Obama Torture (Study 2b)	Democrat	No	131	55.0 (4.4)	9.2 (2.5)	35.9 (4.2)	45.8 (5.8)
	Independent	No	49	26.5 (6.4)	16.3 (5.3)	57.1 (7.1)	10.2 (9.3)
	Republican	No	108	25.0 (4.2)	34.3 (4.6)	40.7 (4.8)	-9.3 (7.4)
Trump Coal (Study 2b)	Democrat	No	131	32.8 (4.1)	36.6 (4.2)	30.5 (4.0)	-3.8 (7.3)
	Independent	No	49	16.3 (5.3)	26.5 (6.4)	57.1 (7.1)	-10.2 (9.3)
	Republican	No	108	32.4 (4.5)	16.7 (3.6)	50.9 (4.8)	15.7 (6.6)
Mueller comments (Study 3)	Democrat	No	256	58.2 (3.4)	10.2 (1.9)	31.6 (3.1)	48.0 (4.5)
		Yes	240	42.1 (3.4)	12.9 (2.2)	45.0 (3.4)	29.2 (4.6)
	Independent	No	131	33.6 (4.3)	16.8 (3.5)	49.6 (4.6)	16.8 (6.4)
		Yes	114	23.7 (4.0)	14.0 (3.3)	62.3 (4.6)	9.6 (5.7)
	Republican	No	168	12.5 (2.9)	33.3 (4.0)	54.2 (4.2)	-20.8 (5.5)
		Yes	165	13.3 (3.0)	27.9 (3.7)	58.8 (4.1)	-14.5 (5.3)

D.2 Accuracy of counterfactual guesses

Table D.4 presents difference-in-means tests between our experimental measures of $Y_i(0)$ and $Y_i(1)$ (in the “Actual” column) and subjects’ counterfactual guesses about these outcomes (in the “Guess” column). Robust standard errors are in parentheses.

Table D.4: Accuracy of counterfactual guesses

Topic	Outcome	Party	N	Actual	Guess	Difference	p
Blocked whistleblower (Study 1)	Y0	Democrat	103	5.36 (0.20)	4.98 (0.23)	-0.38 (0.31)	0.218
		Republican	73	3.32 (0.31)	2.83 (0.22)	-0.49 (0.38)	0.205
	Y1	Democrat	103	4.41 (0.25)	4.24 (0.23)	0.17 (0.34)	0.618
		Republican	73	2.95 (0.26)	2.45 (0.24)	0.50 (0.36)	0.165
Death penalty (Study 1)	Y0	Democrat	102	3.54 (0.26)	4.42 (0.28)	0.88 (0.38)	0.024
		Republican	72	5.19 (0.28)	5.15 (0.27)	-0.05 (0.39)	0.904
	Y1	Democrat	102	4.40 (0.29)	3.66 (0.27)	0.73 (0.39)	0.064
		Republican	72	4.88 (0.28)	5.03 (0.31)	-0.15 (0.41)	0.709
Disputed accusation (Study 1)	Y0	Democrat	103	2.66 (0.21)	3.11 (0.26)	0.45 (0.33)	0.174
		Republican	73	5.32 (0.19)	4.48 (0.25)	-0.85 (0.31)	0.009
	Y1	Democrat	103	2.68 (0.24)	2.14 (0.20)	0.55 (0.31)	0.082
		Republican	73	3.31 (0.26)	4.39 (0.30)	-1.08 (0.40)	0.008
Endorsed Trump (Study 1)	Y0	Democrat	103	3.80 (0.24)	3.77 (0.28)	-0.02 (0.37)	0.948
		Republican	73	5.87 (0.12)	5.02 (0.24)	-0.85 (0.27)	0.003
	Y1	Democrat	103	3.39 (0.31)	2.54 (0.23)	0.84 (0.38)	0.029
		Republican	73	4.90 (0.23)	5.84 (0.19)	-0.93 (0.30)	0.002
Immigration (Study 1)	Y0	Democrat	102	4.90 (0.19)	4.33 (0.27)	-0.57 (0.33)	0.087
		Republican	72	2.68 (0.33)	3.12 (0.23)	0.44 (0.40)	0.272
	Y1	Democrat	102	4.40 (0.27)	4.80 (0.19)	-0.40 (0.33)	0.230
		Republican	72	3.05 (0.25)	2.81 (0.29)	0.24 (0.38)	0.531
Supports charters (Study 1)	Y0	Democrat	103	2.63 (0.22)	2.75 (0.30)	0.12 (0.37)	0.740
		Republican	73	5.58 (0.23)	4.62 (0.25)	-0.96 (0.34)	0.006
	Y1	Democrat	103	2.64 (0.29)	2.61 (0.23)	0.03 (0.37)	0.944
		Republican	73	4.57 (0.30)	5.35 (0.27)	-0.78 (0.40)	0.055
Tax cuts (Study 1)	Y0	Democrat	102	2.81 (0.24)	2.93 (0.29)	0.12 (0.38)	0.758
		Republican	72	5.32 (0.26)	4.93 (0.22)	-0.40 (0.34)	0.249
	Y1	Democrat	102	3.16 (0.30)	2.83 (0.23)	0.33 (0.38)	0.381
		Republican	72	4.90 (0.25)	5.35 (0.28)	-0.45 (0.38)	0.232
Undisputed accusation (Study 1)	Y0	Democrat	102	4.46 (0.23)	3.86 (0.28)	-0.60 (0.36)	0.099
		Republican	72	3.29 (0.25)	2.90 (0.24)	-0.39 (0.34)	0.262
	Y1	Democrat	102	3.09 (0.32)	2.68 (0.26)	0.42 (0.41)	0.314
		Republican	72	2.10 (0.25)	1.74 (0.24)	0.36 (0.34)	0.306
Biden / Hill	Y0	Democrat	697	4.43 (0.08)	4.27 (0.08)	-0.16 (0.11)	0.163

Table D.4: Accuracy of counterfactual guesses

Topic	Outcome	Party	N	Actual	Guess	Difference	p
(Study 2a)	Y1	Republican	693	2.46 (0.08)	2.51 (0.08)	0.04 (0.12)	0.711
		Democrat	697	4.06 (0.08)	4.11 (0.08)	-0.05 (0.12)	0.673
		Republican	693	2.57 (0.08)	2.48 (0.08)	0.09 (0.12)	0.440
DREAM Act (Study 2a)	Y0	Democrat	697	5.03 (0.08)	4.89 (0.07)	-0.14 (0.11)	0.200
		Republican	691	3.33 (0.09)	3.35 (0.09)	0.01 (0.12)	0.912
	Y1	Democrat	697	4.95 (0.07)	5.06 (0.07)	-0.11 (0.10)	0.285
		Republican	691	3.44 (0.09)	3.36 (0.09)	0.09 (0.12)	0.483
Obama Torture (Study 2a)	Y0	Democrat	699	3.87 (0.11)	4.65 (0.09)	0.77 (0.14)	0.000
		Republican	693	3.43 (0.08)	3.41 (0.09)	-0.02 (0.12)	0.890
	Y1	Democrat	699	4.69 (0.09)	4.26 (0.10)	0.43 (0.13)	0.002
		Republican	693	3.45 (0.09)	3.47 (0.09)	-0.03 (0.12)	0.834
Opposed Kav (Study 2a)	Y0	Democrat	491	4.58 (0.11)	4.91 (0.09)	0.33 (0.14)	0.021
		Republican	436	2.18 (0.10)	2.27 (0.11)	0.10 (0.15)	0.518
	Y1	Democrat	491	5.00 (0.09)	4.76 (0.10)	0.24 (0.14)	0.084
		Republican	436	2.29 (0.11)	2.11 (0.10)	0.19 (0.15)	0.219
Supported Kav (Study 2a)	Y0	Democrat	210	1.76 (0.12)	1.91 (0.13)	0.16 (0.18)	0.392
		Republican	256	4.67 (0.13)	4.71 (0.14)	0.04 (0.19)	0.821
	Y1	Democrat	210	1.88 (0.14)	1.47 (0.09)	0.42 (0.17)	0.016
		Republican	256	4.67 (0.15)	4.73 (0.14)	-0.05 (0.20)	0.798
Trump Coal (Study 2a)	Y0	Democrat	701	4.77 (0.08)	4.09 (0.10)	-0.67 (0.13)	0.000
		Republican	693	4.15 (0.07)	3.94 (0.07)	-0.21 (0.10)	0.048
	Y1	Democrat	701	3.89 (0.11)	4.52 (0.09)	-0.63 (0.14)	0.000
		Republican	693	3.98 (0.07)	4.11 (0.07)	-0.13 (0.10)	0.204
Biden / Hill (Study 2b)	Y0	Democrat	196	0.88 (0.03)	0.84 (0.04)	-0.04 (0.05)	0.419
		Republican	209	0.32 (0.04)	0.39 (0.05)	0.08 (0.07)	0.256
	Y1	Democrat	196	0.82 (0.04)	0.76 (0.04)	0.07 (0.06)	0.245
		Republican	209	0.42 (0.05)	0.37 (0.05)	0.05 (0.07)	0.450
DREAM Act (Study 2b)	Y0	Democrat	194	0.89 (0.03)	0.84 (0.04)	-0.05 (0.05)	0.273
		Republican	209	0.48 (0.05)	0.51 (0.05)	0.03 (0.07)	0.636
	Y1	Democrat	194	0.82 (0.04)	0.90 (0.03)	-0.08 (0.05)	0.088
		Republican	209	0.51 (0.05)	0.50 (0.05)	0.01 (0.07)	0.834
Obama Torture (Study 2b)	Y0	Democrat	195	0.61 (0.05)	0.82 (0.04)	0.22 (0.06)	0.001
		Republican	209	0.45 (0.05)	0.48 (0.05)	0.03 (0.07)	0.661
	Y1	Democrat	195	0.86 (0.03)	0.79 (0.04)	0.07 (0.05)	0.177
		Republican	209	0.48 (0.05)	0.50 (0.05)	-0.02 (0.07)	0.825
Trump Coal (Study 2b)	Y0	Democrat	196	0.87 (0.03)	0.65 (0.05)	-0.22 (0.06)	0.000
		Republican	210	0.62 (0.05)	0.73 (0.04)	0.11 (0.06)	0.084

Table D.4: Accuracy of counterfactual guesses

Topic	Outcome	Party	N	Actual	Guess	Difference	p
	Y1	Democrat	196	0.58 (0.05)	0.78 (0.04)	-0.20 (0.07)	0.003
		Republican	210	0.68 (0.05)	0.66 (0.05)	0.02 (0.07)	0.802

D.3 Estimates of experimental and self-reported average treatment effects

For each treatment that we used to evaluate the randomized counterfactual format, Table D.5 presents estimates of the average treatment effect, the average self reported treatment effect, and the difference between the two. The SE column displays bootstrapped standard errors. Confidence intervals were computed using the percentile method.

Table D.5: Experimental versus Self-Reported Average Treatment Effect

Treatment	Party	N	Estimator	Estimate	SE	95% CI
Blocked whistleblower (Study 1)	Democrat	103	Experiment	-0.95	0.33	(-1.60, -0.31)
			Guess	-0.88	0.18	(-1.24, -0.53)
			Difference	-0.06	0.28	(-0.61, 0.48)
	Republican	73	Experiment	-0.37	0.40	(-1.15, 0.43)
			Guess	-0.30	0.18	(-0.64, 0.05)
			Difference	-0.07	0.33	(-0.73, 0.58)
Death penalty (Study 1)	Democrat	103	Experiment	0.85	0.38	(0.11, 1.59)
			Guess	0.06	0.09	(-0.12, 0.24)
			Difference	0.79	0.38	(0.06, 1.52)
	Republican	73	Experiment	-0.32	0.39	(-1.10, 0.44)
			Guess	-0.22	0.13	(-0.49, 0.01)
			Difference	-0.09	0.38	(-0.85, 0.63)
Disputed accusation (Study 1)	Democrat	103	Experiment	0.02	0.31	(-0.58, 0.64)
			Guess	-0.49	0.11	(-0.71, -0.28)
			Difference	0.51	0.30	(-0.07, 1.09)
	Republican	73	Experiment	-2.01	0.32	(-2.64, -1.38)
			Guess	-1.07	0.17	(-1.41, -0.74)
			Difference	-0.94	0.31	(-1.55, -0.35)
Endorsed Trump (Study 1)	Democrat	103	Experiment	-0.41	0.38	(-1.15, 0.35)
			Guess	-0.88	0.16	(-1.20, -0.57)
			Difference	0.47	0.34	(-0.19, 1.14)
	Republican	73	Experiment	-0.97	0.26	(-1.47, -0.47)
			Guess	-0.08	0.12	(-0.32, 0.15)
			Difference	-0.88	0.26	(-1.40, -0.39)
Immigration (Study 1)	Democrat	103	Experiment	-0.50	0.33	(-1.15, 0.15)
			Guess	-0.03	0.10	(-0.24, 0.17)
			Difference	-0.47	0.31	(-1.10, 0.15)
	Republican	73	Experiment	0.37	0.40	(-0.43, 1.15)
			Guess	0.01	0.16	(-0.29, 0.33)
			Difference	0.36	0.36	(-0.36, 1.04)
Supports charters (Study 1)	Democrat	103	Experiment	0.01	0.37	(-0.70, 0.74)
			Guess	-0.06	0.09	(-0.23, 0.11)
			Difference	0.07	0.36	(-0.63, 0.78)
	Republican	73	Experiment	-1.01	0.38	(-1.75, -0.27)
			Guess	-0.12	0.14	(-0.40, 0.14)

Table D.5: Experimental versus Self-Reported Average Treatment Effect (continued)

Treatment	Party	N	Estimator	Estimate	SE	95% CI
			Difference	-0.89	0.35	(-1.56, -0.21)
Tax cuts (Study 1)	Democrat	103	Experiment	0.35	0.39	(-0.41, 1.10)
			Guess	0.11	0.10	(-0.08, 0.30)
			Difference	0.24	0.36	(-0.47, 0.95)
	Republican	73	Experiment	-0.42	0.36	(-1.13, 0.27)
			Guess	0.00	0.11	(-0.22, 0.23)
			Difference	-0.42	0.34	(-1.09, 0.21)
Undisputed accusation (Study 1)	Democrat	103	Experiment	-1.36	0.39	(-2.11, -0.60)
			Guess	-1.35	0.18	(-1.72, -1.01)
			Difference	-0.01	0.35	(-0.70, 0.67)
	Republican	73	Experiment	-1.19	0.35	(-1.85, -0.50)
			Guess	-1.12	0.18	(-1.48, -0.76)
			Difference	-0.07	0.30	(-0.65, 0.51)
Obama Torture (Study 2a)	Democrat	703	Experiment	0.82	0.14	(0.55, 1.08)
			Guess	0.21	0.05	(0.11, 0.31)
			Difference	0.61	0.13	(0.36, 0.85)
	Republican	693	Experiment	0.02	0.12	(-0.21, 0.26)
			Guess	0.04	0.05	(-0.06, 0.14)
			Difference	-0.02	0.11	(-0.24, 0.19)
Trump Coal (Study 2a)	Democrat	703	Experiment	-0.88	0.13	(-1.14, -0.63)
			Guess	-0.22	0.05	(-0.33, -0.12)
			Difference	-0.65	0.12	(-0.90, -0.42)
	Republican	693	Experiment	-0.17	0.10	(-0.37, 0.04)
			Guess	0.00	0.05	(-0.09, 0.09)
			Difference	-0.17	0.09	(-0.35, 0.01)

E Study 2b

As we note in the main text, Study 2b replicated the results of four of Study 2a’s treatments and added an additional question format. The results for the change and counterfactual formats were very similar to those reported in the main text. In this section, we present complete results for Study 2b, but focus our narrative on describing the additional question format.

E.1 The simultaneous outcomes format

The additional question format included in Study 2b was the *simultaneous outcomes format*. Simultaneous outcome questions are worded identically to change questions, but the response options allow people to express both of their potential outcomes at once. For example, in the *Biden skeptical of Anita Hill* treatment, respondents assigned to the simultaneous format were asked:

In 1991, current Supreme Court Justice Clarence Thomas was accused of sexual harassment. Joe Biden, then the chairman of the Senate Judiciary Committee, was skeptical of the allegations.

How does this change your support Joe Biden’s possible run for president in 2020?

Support either way; Support, but would have opposed; Oppose either way; Oppose, but would have supported

Even though the question wording is the same as the change format, its response options allow it to simultaneously measure the respondent’s beliefs about $Y_i(0)$, $Y_i(1)$, and τ_i – but only when outcomes are binary.

E.2 Results

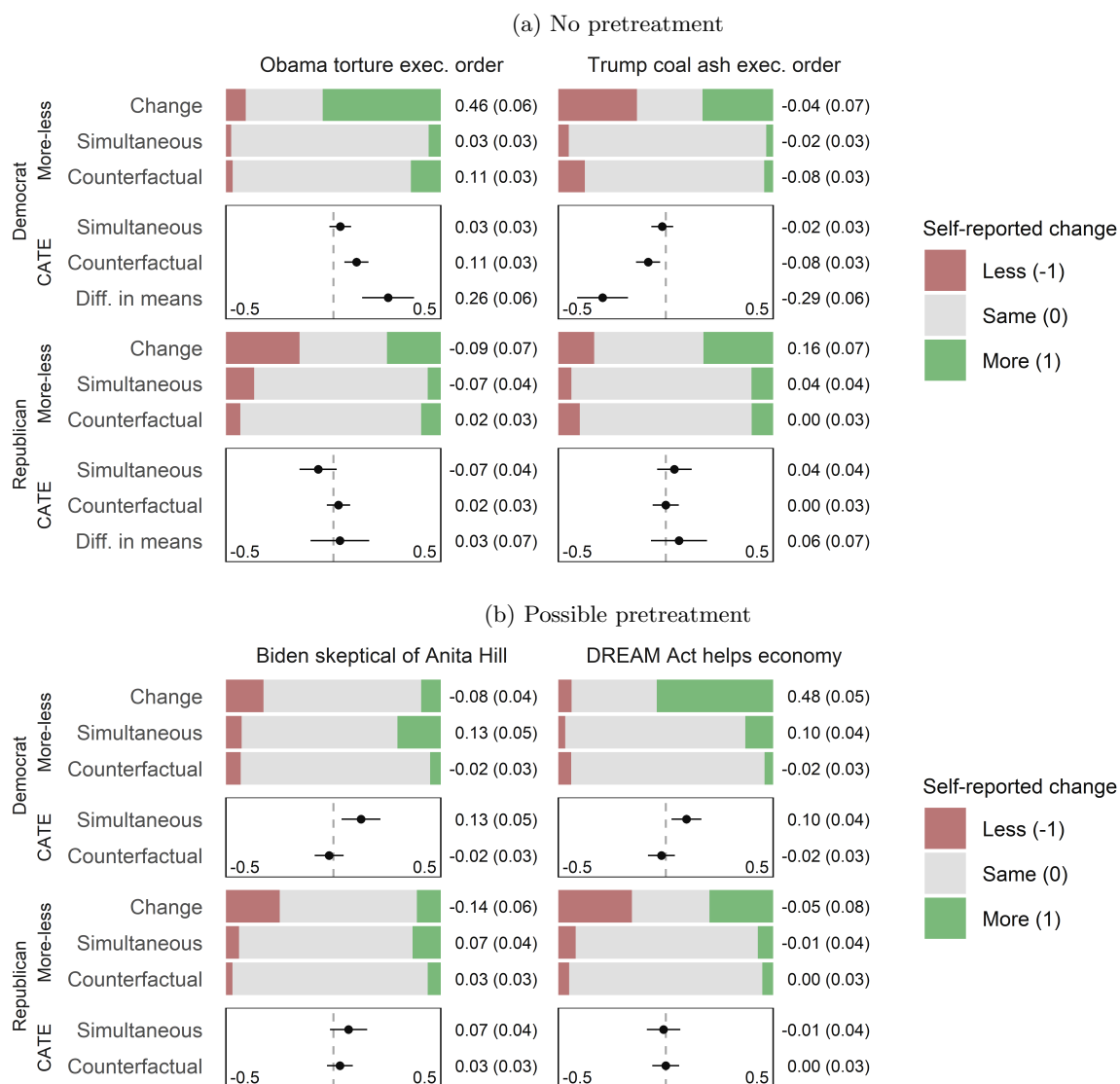
The simultaneous outcomes format appears to be less accurate than the counterfactual format. Relative to the counterfactual format, estimates from the simultaneous outcomes format were less consistent with the experimental results on the two treatments for which we do not expect the pretreatment problem (Obama’s torture order, and Trump’s coal ash order (Figure E.2a). For Democrats, this was the case for both treatments. For Republicans, the counterfactual format appears a bit more accurate than the simultaneous format on the Obama torture order treatment, but had no obvious advantage or disadvantage on the Trump coal ash treatment.

Moving to the two treatments for which we worry that pretreatment may be a factor, a striking example of the simultaneous outcome format’s apparent flaws comes from the Biden/Hill treatment. Switching from the change format to the simultaneous format doubles the percentage of Democrats reporting that Biden’s skepticism of Hill makes them more supportive of Biden’s presidential run, producing a positive self-reported

average treatment effect estimate (Figure E.2b). By contrast, the counterfactual format nearly eliminates Democrats' implausible claims that Biden's skepticism makes them more supportive of him now.

In addition to its apparent tendency to make self reports of attitude change less accurate rather than more accurate, the simultaneous format's ability to simultaneously elicit $Y_i(0)$, $Y_i(1)$, and τ_i depends on making outcomes binary. Researchers interested in measuring smaller amounts of attitude change may find this feature inconvenient. We think this format's failure could inform future research on self-reported change questions.

Figure E.2: Study 2b results



F Survey Information

F.1 Sampling procedure

Subjects for studies 1, 2a, 2b, and 4 were recruited through Lucid, a platform that matches survey researchers with more than 200 recruiters of online survey respondents. When a study is launched through Lucid, an offer to purchase a fixed number of survey responses appears on the platform, with quotas that limit the total number of responses that may come from demographic categories like age, gender, race, ethnicity, and household income. Recruiters pre-screen respondents and route them to surveys that are available to respondents with their demographic characteristics.

Subjects for study 3 were recruited through Amazon Mechanical Turk. We made a fixed number of surveys available to respondents on a first come, first served basis, without any demographic screening.

Neither procedure produces a traditional response rate. In the main text, we report the cooperation rate, or the percentage of subjects who agreed to continue with our study after reading our consent form.

F.2 Full text of study 1

Blocked whistleblower

Change format

Ricardo Lara is a Democratic state senator. He is the first openly gay person of color to be elected to the his state's Senate. According to his web site, Lara

- Authored the L.E.A.R.N. Initiative, which asked voters to expand multilingual programs for all students.
- Has emerged as one of the most effective environmental champions in the state by consistently passing policies that improve health conditions and rein in air pollution.

Lara has been accused of using his committee chairmanship to block whistleblower legislation. The bill would have made sure legislative staff who come forward with sexual harassment allegations are not punished.

Does the fact that Lara blocked a whistleblower protection bill make you more or less likely to support him in an election against a moderate Republican?

(Less likely, no change, more likely)

Change format with level

Ricardo Lara is a Democratic state senator. He is the first openly gay person of color to be elected to the his state's Senate. According to his web site, Lara

- Authored the L.E.A.R.N. Initiative, which asked voters to expand multilingual programs for all students.
- Has emerged as one of the most effective environmental champions in the state by consistently passing policies that improve health conditions and rein in air pollution.

Lara has been accused of using his committee chairmanship to block whistleblower legislation. The bill would have made sure legislative staff who come forward with sexual harassment allegations are not punished.

If Lara were running for Congress in your district against a moderate Republican, how likely would

you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

Does the fact that Lara blocked a whistleblower protection bill make you more or less likely to support him in an election against a moderate Republican?

(Less likely, no change, more likely)

Counterfactual format, control group

Ricardo Lara is a Democratic state senator. He is the first openly gay person of color to be elected to the his state's Senate. According to his web site, Lara

- Authored the L.E.A.R.N. Initiative, which asked voters to expand multilingual programs for all students.
- Has emerged as one of the most effective environmental champions in the state by consistently passing policies that improve health conditions and rein in air pollution.

If Lara were running for Congress in your district against a moderate Republican, how likely would you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

(NEW SLIDE)

Now we would like you to consider the same information about Lara, plus some new information:

Ricardo Lara is a Democratic state senator. He is the first openly gay person of color to be elected to the his state's Senate. According to his web site, Lara

- Authored the L.E.A.R.N. Initiative, which asked voters to expand multilingual programs for all students.
- Has emerged as one of the most effective environmental champions in the state by consistently passing policies that improve health conditions and rein in air pollution.

Lara has been accused of using his committee chairmanship to block whistleblower legislation. The bill would have made sure legislative staff who come forward with sexual harassment allegations are not punished.

If Lara were running for Congress in your district against a moderate Republican, how likely would you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

Counterfactual format, treatment group

Ricardo Lara is a Democratic state senator. He is the first openly gay person of color to be elected to the his state's Senate. According to his web site, Lara

- Authored the L.E.A.R.N. Initiative, which asked voters to expand multilingual programs for all students.
- Has emerged as one of the most effective environmental champions in the state by consistently passing policies that improve health conditions and rein in air pollution.

Lara has been accused of using his committee chairmanship to block whistleblower legislation. The bill would have made sure legislative staff who come forward with sexual harassment allegations are not

punished.

If Lara were running for Congress in your district against a moderate Republican, how likely would you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

(NEW SLIDE)

Suppose you had seen the same information, but without any mention of the fact that Lara blocked a whistleblower protection bill:

Ricardo Lara is a Democratic state senator. He is the first openly gay person of color to be elected to the his state's Senate. According to his web site, Lara

- Authored the L.E.A.R.N. Initiative, which asked voters to expand multilingual programs for all students.
- Has emerged as one of the most effective environmental champions in the state by consistently passing policies that improve health conditions and rein in air pollution.

If Lara were running for Congress in your district against a moderate Republican, how likely would you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

Disputed accusation

Change format

Tony Cornish, a Republican, was first elected to the state legislature in 2002. He grew up on a small farm. Before entering politics, he worked as a sheriff and game warden. According to his web site, Cornish

- Fought against government waste and opposed the governor's plan to raise sales taxes.
- Played a key role in crafting a new policy that allows county attorneys to carry handguns at work.
- Increased prison sentences for car thieves and other criminals.

Cornish has been accused of making inappropriate sexual comments by fellow legislator Erin Quade, a Democrat. Cornish denied the allegations, saying he was "blindsided." Quade admitted having a "cordial and collegial relationship" with Cornish but said that "doesn't excuse sexual harassment."

Does the fact that Cornish was accused of sexual misconduct make you more or less likely to support him in an election against a moderate Democrat?

(Less likely, no change, more likely)

Change format with level

Tony Cornish, a Republican, was first elected to the state legislature in 2002. He grew up on a small farm. Before entering politics, he worked as a sheriff and game warden. According to his web site, Cornish

- Fought against government waste and opposed the governor's plan to raise sales taxes.
- Played a key role in crafting a new policy that allows county attorneys to carry handguns at work.
- Increased prison sentences for car thieves and other criminals.

Cornish has been accused of making inappropriate sexual comments by fellow legislator Erin Quade, a Democrat. Cornish denied the allegations, saying he was “blindsided.” Quade admitted having a “cordial and collegial relationship” with Cornish but said that “doesn’t excuse sexual harassment.”

If Cornish were running for Congress in your district against a moderate Democrat, how likely would you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

Does the fact that Cornish was accused of sexual misconduct make you more or less likely to support him in an election against a moderate Democrat?

(Less likely, no change, more likely)

Counterfactual format, control group

Tony Cornish, a Republican, was first elected to the state legislature in 2002. He grew up on a small farm. Before entering politics, he worked as a sheriff and game warden. According to his web site, Cornish

- Fought against government waste and opposed the governor’s plan to raise sales taxes.
- Played a key role in crafting a new policy that allows county attorneys to carry handguns at work.
- Increased prison sentences for car thieves and other criminals.

If Cornish were running for Congress in your district against a moderate Democrat, how likely would you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

(NEW SLIDE)

Now we would like you to consider the same information about Cornish, plus some new information:

Tony Cornish, a Republican, was first elected to the state legislature in 2002. He grew up on a small farm. Before entering politics, he worked as a sheriff and game warden. According to his web site, Cornish

- Fought against government waste and opposed the governor’s plan to raise sales taxes.
- Played a key role in crafting a new policy that allows county attorneys to carry handguns at work.
- Increased prison sentences for car thieves and other criminals.

Cornish has been accused of making inappropriate sexual comments by fellow legislator Erin Quade, a Democrat. Cornish denied the allegations, saying he was “blindsided.” Quade admitted having a “cordial and collegial relationship” with Cornish but said that “doesn’t excuse sexual harassment.”

If Cornish were running for Congress in your district against a moderate Democrat, how likely would you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

Counterfactual format, treatment group

Tony Cornish, a Republican, was first elected to the state legislature in 2002. He grew up on a small farm. Before entering politics, he worked as a sheriff and game warden. According to his web site, Cornish

- Fought against government waste and opposed the governor’s plan to raise sales taxes.

- Played a key role in crafting a new policy that allows county attorneys to carry handguns at work.
- Increased prison sentences for car thieves and other criminals.

Cornish has been accused of making inappropriate sexual comments by fellow legislator Erin Quade, a Democrat. Cornish denied the allegations, saying he was “blindsided.” Quade admitted having a “cordial and collegial relationship” with Cornish but said that “doesn’t excuse sexual harassment.”

If Cornish were running for Congress in your district against a moderate Democrat, how likely would you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

(NEW SLIDE)

Suppose you had seen the same information, but without any mention of the fact that Cornish was accused of sexual misconduct:

Tony Cornish, a Republican, was first elected to the state legislature in 2002. He grew up on a small farm. Before entering politics, he worked as a sheriff and game warden. According to his web site, Cornish

- Fought against government waste and opposed the governor’s plan to raise sales taxes.
- Played a key role in crafting a new policy that allows county attorneys to carry handguns at work.
- Increased prison sentences for car thieves and other criminals.

If Cornish were running for Congress in your district against a moderate Democrat, how likely would you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

Endorsed Trump

Change format

Kevin C. Kelly is a Republican state senator. He also owns a law firm. He and his wife Cindy have four children and five grandchildren. According to his web site, Kelly

- Is an advocate for common sense solutions to reduce government spending and create jobs for middle-class families.
- Prioritizes environmental stewardship.
- Has made an impact [on] health insurance & hospitals, Medicaid, and consumer protection.

In the 2016 election, Kelly endorsed Donald Trump for president.

Does the fact that Kelly endorsed Donald Trump make you more or less likely to support him in an election against a moderate Democrat?

(Less likely, no change, more likely)

Change format with level

Kevin C. Kelly is a Republican state senator. He also owns a law firm. He and his wife Cindy have four children and five grandchildren. According to his web site, Kelly

- Is an advocate for common sense solutions to reduce government spending and create jobs for middle-class families.

- Prioritizes environmental stewardship.
- Has made an impact [on] health insurance & hospitals, Medicaid, and consumer protection.

In the 2016 election, Kelly endorsed Donald Trump for president.

If Kelly were running for Congress in your district against a moderate Democrat, how likely would you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

Does the fact that Kelly endorsed Donald Trump make you more or less likely to support him in an election against a moderate Democrat?

(Less likely, no change, more likely)

Counterfactual format, control group

Kevin C. Kelly is a Republican state senator. He also owns a law firm. He and his wife Cindy have four children and five grandchildren. According to his web site, Kelly

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- Prioritizes environmental stewardship.
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If Kelly were running for Congress in your district against a moderate Democrat, how likely would you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

(NEW SLIDE)

Now we would like you to consider the same information about Kelly, plus some new information:

Kevin C. Kelly is a Republican state senator. He also owns a law firm. He and his wife Cindy have four children and five grandchildren. According to his web site, Kelly

- Is an advocate for common sense solutions to reduce government spending and create jobs for middle-class families.
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Counterfactual format, treatment group

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(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

(NEW SLIDE)

Suppose you had seen the same information, but without any mention of the fact that Kelly endorsed Donald Trump:

Kevin C. Kelly is a Republican state senator. He also owns a law firm. He and his wife Cindy have four children and five grandchildren. According to his web site, Kelly

- Is an advocate for common sense solutions to reduce government spending and create jobs for middle-class families.
- Prioritizes environmental stewardship.
- Has made an impact [on] health insurance & hospitals, Medicaid, and consumer protection.

If Kelly were running for Congress in your district against a moderate Democrat, how likely would you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

Supports charters

Change format

Don Shooter has been a Republican member of the state Senate since 2010. He works as a farmer and real estate developer. He has three children and five grandchildren. According to his web site, Shooter

- wants to solve illegal immigration by enforcing immigration laws, ending sanctuary policies, and enforcing identification standards
- cut spending and produced a balanced budget as chair of the appropriations committee.

Shooter wants to expand school choice, including charter schools and vouchers that can be used at private schools.

Does the fact that Shooter supported expanding charter schools make you more or less likely to support him in an election against a moderate Democrat?

(Less likely, no change, more likely)

Change format with level

Don Shooter has been a Republican member of the state Senate since 2010. He works as a farmer and real estate developer. He has three children and five grandchildren. According to his web site, Shooter

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If Shooter were running for Congress in your district against a moderate Democrat, how likely would you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

Does the fact that Shooter supported expanding charter schools make you more or less likely to support him in an election against a moderate Democrat?

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Counterfactual format, control group

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If Shooter were running for Congress in your district against a moderate Democrat, how likely would you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

(NEW SLIDE)

Now we would like you to consider the same information about Shooter, plus some new information:

Don Shooter has been a Republican member of the state Senate since 2010. He works as a farmer and real estate developer. He has three children and five grandchildren. According to his web site, Shooter

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If Shooter were running for Congress in your district against a moderate Democrat, how likely would you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

Counterfactual format, treatment group

Don Shooter has been a Republican member of the state Senate since 2010. He works as a farmer and real estate developer. He has three children and five grandchildren. According to his web site, Shooter

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Shooter wants to expand school choice, including charter schools and vouchers that can be used at private schools.

If Shooter were running for Congress in your district against a moderate Democrat, how likely would you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

(NEW SLIDE)

Suppose you had seen the same information, but without any mention of the fact that Shooter supported expanding charter schools:

Don Shooter has been a Republican member of the state Senate since 2010. He works as a farmer and real estate developer. He has three children and five grandchildren. According to his web site, Shooter

- wants to solve illegal immigration by enforcing immigration laws, ending sanctuary policies, and enforcing identification standards
- cut spending and produced a balanced budget as chair of the appropriations committee.

If Shooter were running for Congress in your district against a moderate Democrat, how likely would you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

Undisputed accusation

Change format

Dean Westlake, a Democrat, is a state representative. He fights for funding for rural schools and strongly supports municipal revenue sharing. As a legislator, Westlake

- sponsored legislation to allow prisons to profit off contracts that put inmates to work for private companies.
- sponsored a bill to increase regulations on Caribou hunting.

After seven state legislative staff accused Westlake of groping and unwanted sexual advances, reporters found old court records that suggest he impregnated a 15-year-old when he was 28.

Does the fact that Westlake was accused of sexual misconduct make you more or less likely to support him in an election against a moderate Republican?

(Less likely, no change, more likely)

Change format with level

Dean Westlake, a Democrat, is a state representative. He fights for funding for rural schools and strongly supports municipal revenue sharing. As a legislator, Westlake

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After seven state legislative staff accused Westlake of groping and unwanted sexual advances, reporters found old court records that suggest he impregnated a 15-year-old when he was 28.

If Westlake were running for Congress in your district against a moderate Republican, how likely would

you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

Does the fact that Westlake was accused of sexual misconduct make you more or less likely to support him in an election against a moderate Republican?

(Less likely, no change, more likely)

Counterfactual format, control group

Dean Westlake, a Democrat, is a state representative. He fights for funding for rural schools and strongly supports municipal revenue sharing. As a legislator, Westlake

- sponsored legislation to allow prisons to profit off contracts that put inmates to work for private companies.
- sponsored a bill to increase regulations on Caribou hunting.

If Westlake were running for Congress in your district against a moderate Republican, how likely would you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

(NEW SLIDE)

Now we would like you to consider the same information about Westlake, plus some new information:

Dean Westlake, a Democrat, is a state representative. He fights for funding for rural schools and strongly supports municipal revenue sharing. As a legislator, Westlake

- sponsored legislation to allow prisons to profit off contracts that put inmates to work for private companies.
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If Westlake were running for Congress in your district against a moderate Republican, how likely would you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

Counterfactual format, treatment group

Dean Westlake, a Democrat, is a state representative. He fights for funding for rural schools and strongly supports municipal revenue sharing. As a legislator, Westlake

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(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

(NEW SLIDE)

Suppose you had seen the same information, but without any mention of the fact that Westlake was accused of sexual misconduct:

Dean Westlake, a Democrat, is a state representative. He fights for funding for rural schools and strongly supports municipal revenue sharing. As a legislator, Westlake

- sponsored legislation to allow prisons to profit off contracts that put inmates to work for private companies.
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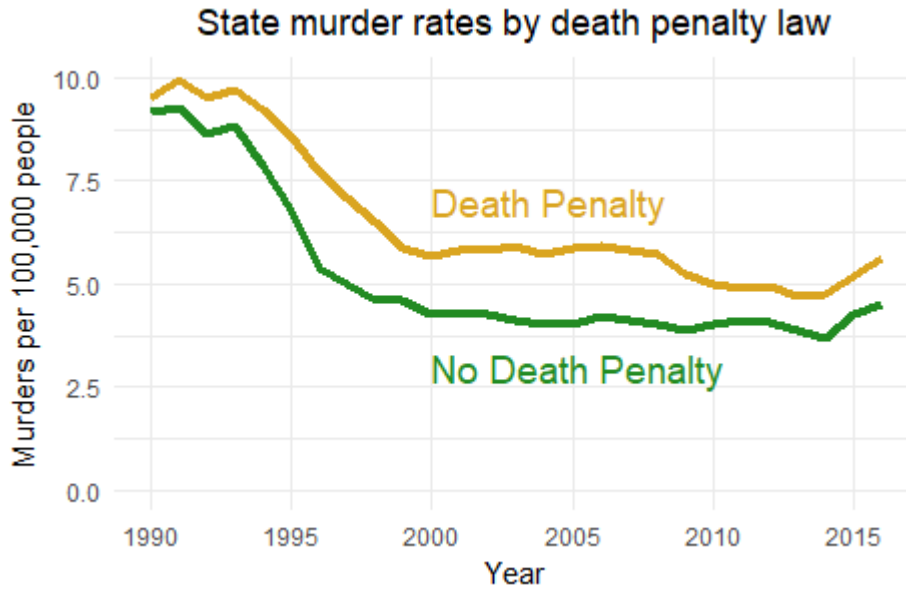
If Westlake were running for Congress in your district against a moderate Republican, how likely would you be to support him?

(Nearly zero, Very unlikely, Slightly unlikely, No opinion, Slightly likely, Very likely, Nearly certain)

Death penalty

Change format

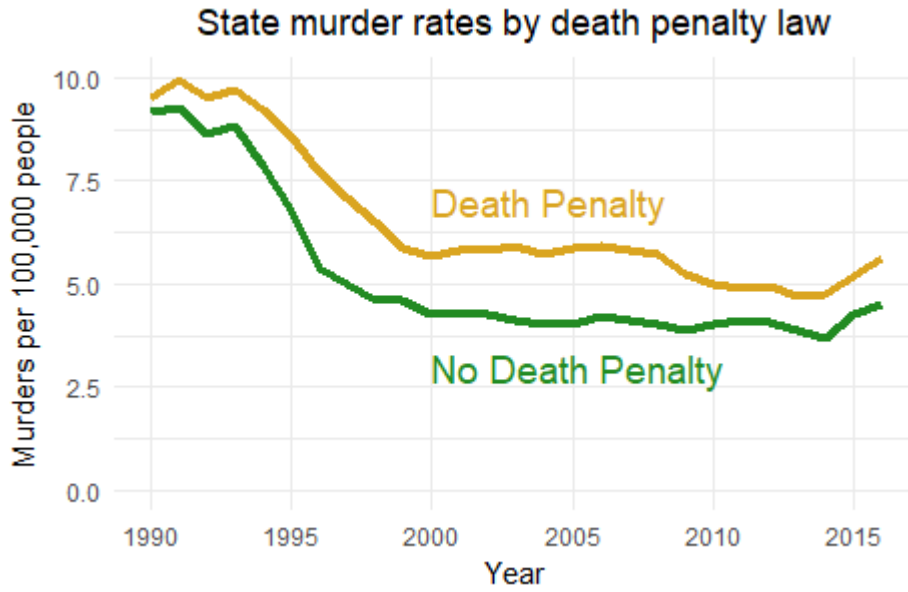
Murder rates in the United States rose in the past couple years, but are only about half as high as in 1990. The decline occurred at about the same pace in states with and without the death penalty. In fact, over the past three decades, states without the death penalty have had a *lower* murder rate than states that execute people who are convicted of murder.



Does the information make you more or less supportive of the death penalty?
(Less supportive, no difference, more supportive)

Change format with level

Murder rates in the United States rose in the past couple years, but are only about half as high as in 1990. The decline occurred at about the same pace in states with and without the death penalty. In fact, over the past three decades, states without the death penalty have had a *lower* murder rate than states that execute people who are convicted of murder.



How strongly do you support or oppose the death penalty?

(Strongly oppose, oppose, slightly oppose, neither support nor oppose, slightly support, support, strongly support)

Does the information make you more or less supportive of the death penalty?

(Less supportive, no difference, more supportive)

Counterfactual format, control group

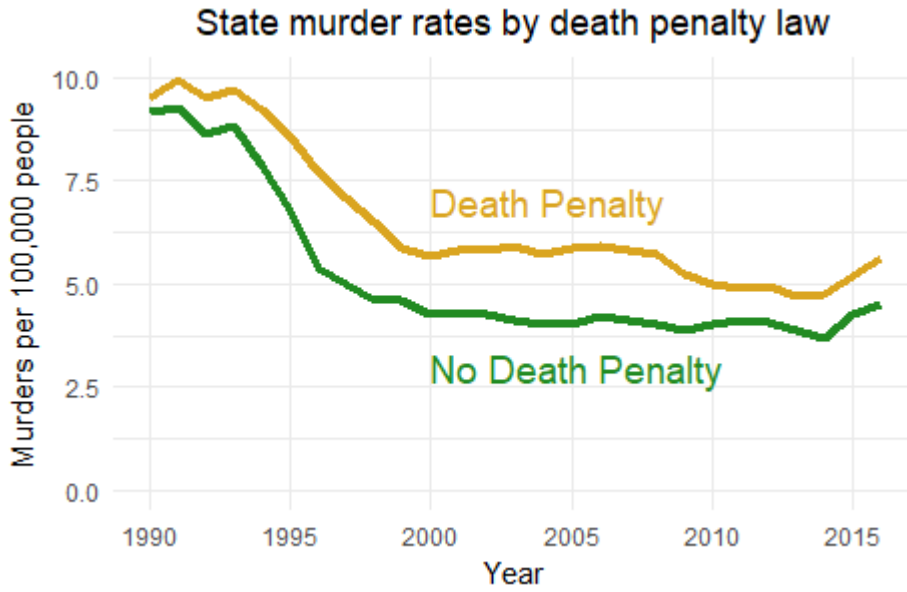
How strongly do you support or oppose the death penalty?

(Strongly oppose, oppose, slightly oppose, neither support nor oppose, slightly support, support, strongly support)

(NEW SLIDE)

Now please consider this information:

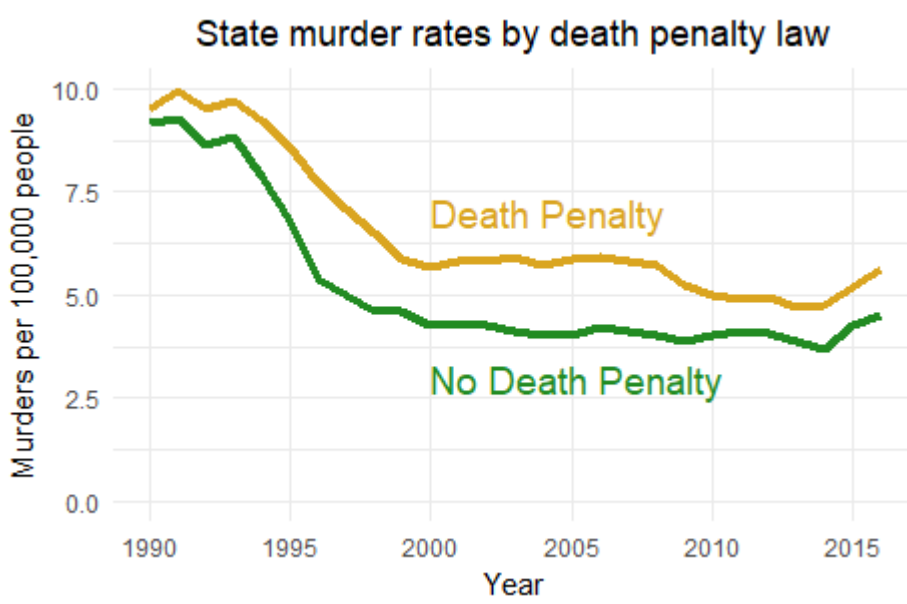
Murder rates in the United States rose in the past couple years, but are only about half as high as in 1990. The decline occurred at about the same pace in states with and without the death penalty. In fact, over the past three decades, states without the death penalty have had a *lower* murder rate than states that execute people who are convicted of murder.



How strongly do you support or oppose the death penalty?
 (Strongly oppose, oppose, slightly oppose, neither support nor oppose, slightly support, support, strongly support)

Counterfactual format, treatment group

Murder rates in the United States rose in the past couple years, but are only about half as high as in 1990. The decline occurred at about the same pace in states with and without the death penalty. In fact, over the past three decades, states without the death penalty have had a *lower* murder rate than states that execute people who are convicted of murder.



How strongly do you support or oppose the death penalty?
 (Strongly oppose, oppose, slightly oppose, neither support nor oppose, slightly support, support, strongly support)

support)

(NEW SLIDE)

Now suppose you had not seen any of the information on the previous page.

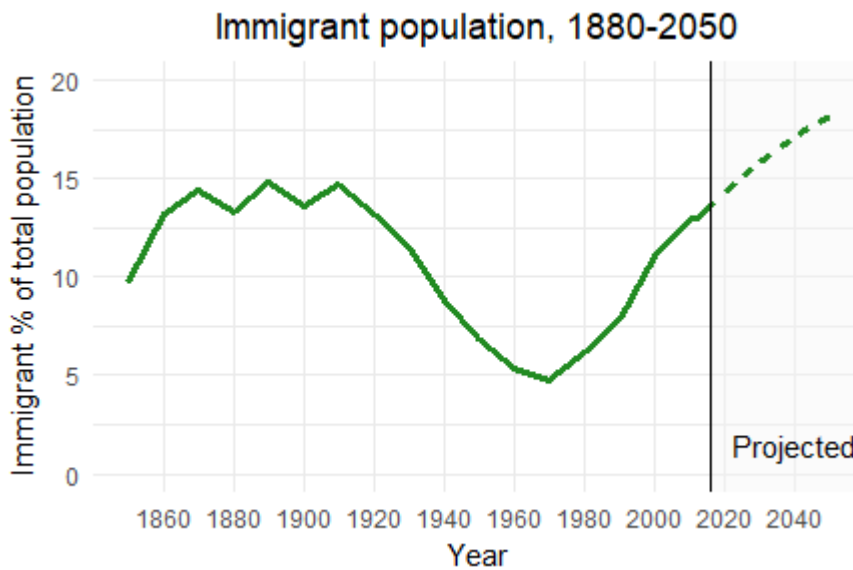
How strongly do you support or oppose the death penalty?

(Strongly oppose, oppose, slightly oppose, neither support nor oppose, slightly support, support, strongly support)

Immigrant population

Change format

Today about 14 percent of people in the United States are immigrants, meaning that they were born in another country. This is about the same level as the 1860s to 1920s, but is higher than more recent years. The Census Bureau projects that in about five years, the immigrant population will surpass the previous high of 14.7 percent. By 2050, 18 percent of Americans will be immigrants.

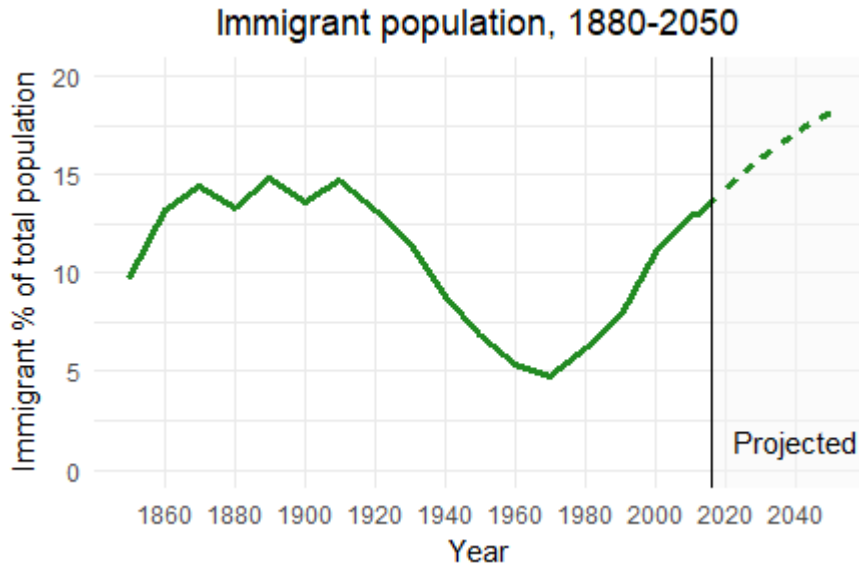


Does the information make you more or less supportive of increasing the number of immigrants who can come the United States?

(Less supportive, no difference, more supportive)

Change format with level

Today about 14 percent of people in the United States are immigrants, meaning that they were born in another country. This is about the same level as the 1860s to 1920s, but is higher than more recent years. The Census Bureau projects that in about five years, the immigrant population will surpass the previous high of 14.7 percent. By 2050, 18 percent of Americans will be immigrants.



Do you support or oppose increasing the number of immigrants who can come the United States?
 (Strongly oppose, oppose, slightly oppose, neither support nor oppose, slightly support, support, strongly support)

Does the information make you more or less supportive of increasing the number of immigrants who can come the United States?
 (Less supportive, no difference, more supportive)

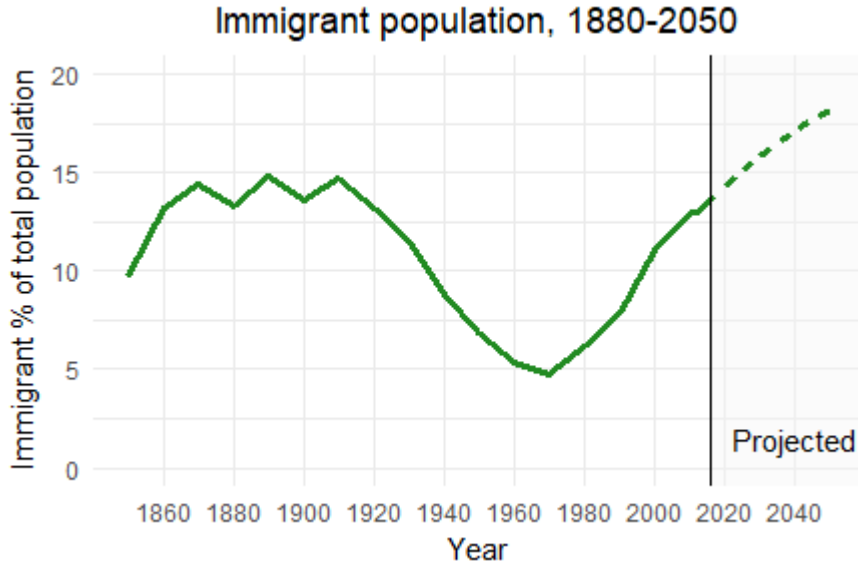
Counterfactual format, control group

Do you support or oppose increasing the number of immigrants who can come the United States?
 (Strongly oppose, oppose, slightly oppose, neither support nor oppose, slightly support, support, strongly support)

(NEW SLIDE)

Now please consider this information:

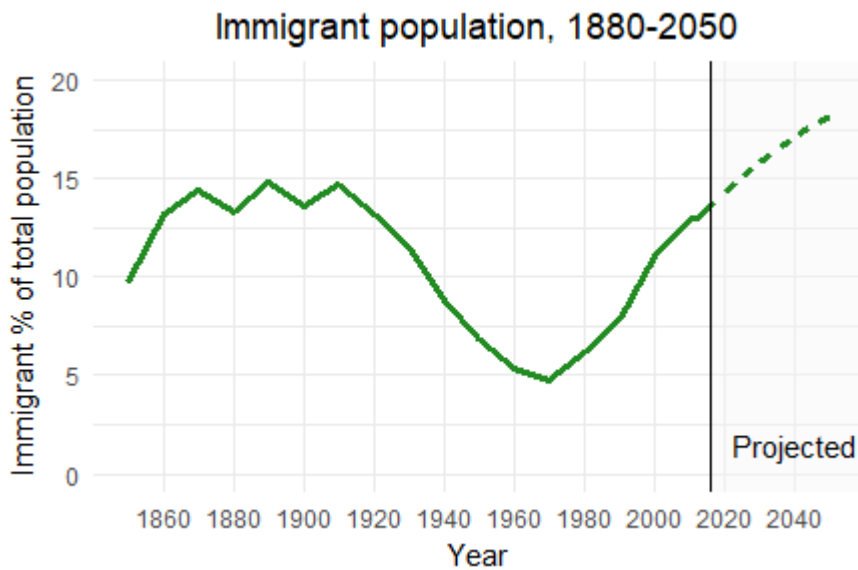
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Do you support or oppose increasing the number of immigrants who can come the United States?
 (Strongly oppose, oppose, slightly oppose, neither support nor oppose, slightly support, support, strongly support)

Counterfactual format, treatment group

Today about 14 percent of people in the United States are immigrants, meaning that they were born in another country. This is about the same level as the 1860s to 1920s, but is higher than more recent years. The Census Bureau projects that in about five years, the immigrant population will surpass the previous high of 14.7 percent. By 2050, 18 percent of Americans will be immigrants.



Do you support or oppose increasing the number of immigrants who can come the United States?
 (Strongly oppose, oppose, slightly oppose, neither support nor oppose, slightly support, support, strongly support)

(NEW SLIDE)

Now suppose you had not seen any of the information on the previous page.

Do you support or oppose increasing the number of immigrants who can come the United States?
(Strongly oppose, oppose, slightly oppose, neither support nor oppose, slightly support, support, strongly support)

Tax Cuts and Jobs Act

Change format

The Tax Cuts and Jobs Act made many changes to America's tax system, including:

- Cuts income taxes for all Americans by lowering rates by a few percent in each tax bracket.
- Cuts the corporate tax rate from 35 percent to 21 percent.
- Limits or eliminates many deductions. The mortgage interest deduction would be limited to \$750,000, and the deduction for state and local taxes would be limited to \$10,000.
- Expands the child tax credit from \$1,000 to \$2,000. Families who do not pay taxes can receive up to \$1,400 instead of the full credit.
- Most of the tax cuts for individuals expire in 2025. Unless Congress extends the cuts, many Americans will receive a tax increase relative to current law.

Does the information make you more or less supportive of the Tax Cuts and Jobs Act, a law President Trump signed in December 2017?

(Less supportive, no difference, more supportive)

Change format with level

The Tax Cuts and Jobs Act made many changes to America's tax system, including:

- Cuts income taxes for all Americans by lowering rates by a few percent in each tax bracket.
- Cuts the corporate tax rate from 35 percent to 21 percent.
- Limits or eliminates many deductions. The mortgage interest deduction would be limited to \$750,000, and the deduction for state and local taxes would be limited to \$10,000.
- Expands the child tax credit from \$1,000 to \$2,000. Families who do not pay taxes can receive up to \$1,400 instead of the full credit.
- Most of the tax cuts for individuals expire in 2025. Unless Congress extends the cuts, many Americans will receive a tax increase relative to current law.

How strongly do you support or oppose the Tax Cuts and Jobs Act, a law President Trump signed in December 2017?

(Strongly oppose, oppose, slightly oppose, neither support nor oppose, slightly support, support, strongly support)

Does the information make you more or less supportive of the Tax Cuts and Jobs Act, a law President Trump signed in December 2017?

(Less supportive, no difference, more supportive)

Counterfactual format, control group

How strongly do you support or oppose the Tax Cuts and Jobs Act, a law President Trump signed in December 2017?

(Strongly oppose, oppose, slightly oppose, neither support nor oppose, slightly support, support, strongly support)

(NEW SLIDE)

Now please consider this information:

The Tax Cuts and Jobs Act made many changes to America's tax system, including:

- Cuts income taxes for all Americans by lowering rates by a few percent in each tax bracket.
- Cuts the corporate tax rate from 35 percent to 21 percent.
- Limits or eliminates many deductions. The mortgage interest deduction would be limited to \$750,000, and the deduction for state and local taxes would be limited to \$10,000.
- Expands the child tax credit from \$1,000 to \$2,000. Families who do not pay taxes can receive up to \$1,400 instead of the full credit.
- Most of the tax cuts for individuals expire in 2025. Unless Congress extends the cuts, many Americans will receive a tax increase relative to current law.

How strongly do you support or oppose the Tax Cuts and Jobs Act, a law President Trump signed in December 2017?

(Strongly oppose, oppose, slightly oppose, neither support nor oppose, slightly support, support, strongly support)

Counterfactual format, treatment group

The Tax Cuts and Jobs Act made many changes to America's tax system, including:

- Cuts income taxes for all Americans by lowering rates by a few percent in each tax bracket.
- Cuts the corporate tax rate from 35 percent to 21 percent.
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- Most of the tax cuts for individuals expire in 2025. Unless Congress extends the cuts, many Americans will receive a tax increase relative to current law.

How strongly do you support or oppose the Tax Cuts and Jobs Act, a law President Trump signed in December 2017?

(Strongly oppose, oppose, slightly oppose, neither support nor oppose, slightly support, support, strongly support)

(NEW SLIDE)

Now suppose you had not seen any of the information on the previous page.

How strongly do you support or oppose the Tax Cuts and Jobs Act, a law President Trump signed in December 2017?

(Strongly oppose, oppose, slightly oppose, neither support nor oppose, slightly support, support, strongly support)

F.3 Full text of studies 2a and 2b

In Studies 2a and 2b, we used the same questions and information treatments, but some of the response options were different. Where appropriate, we indicate which study included which response options. Where no study is indicated, the response options were the same in both studies.

Biden skeptical of Anita Hill

Change format

In 1991, current Supreme Court Justice Clarence Thomas was accused of sexual harassment. Joe Biden, then the chairman of the Senate Judiciary Committee, was skeptical of the allegations.

How does this change your support Joe Biden's possible run for president in 2020?

Less supportive, no difference, more supportive

Counterfactual format, control group

Do you support Joe Biden's possible run for president in 2020?

Study 2: Definitely oppose, Probably oppose, Lean toward oppsing, Lean toward supporting, Probably support, Definitely support

Study 3: Oppose, Support

(NEW SLIDE)

In 1991, current Supreme Court Justice Clarence Thomas was accused of sexual harassment. Joe Biden, then the chairman of the Senate Judiciary Committee, was skeptical of the allegations.

If you had known this information, how would you have answered the question:

Do you support Joe Biden's possible run for president in 2020?

Study 2: Definitely oppose, Probably oppose, Lean toward oppsing, Lean toward supporting, Probably support, Definitely support

Study 3: Oppose, Support

Counterfactual format, treatment group

In 1991, current Supreme Court Justice Clarence Thomas was accused of sexual harassment. Joe Biden, then the chairman of the Senate Judiciary Committee, was skeptical of the allegations.

Do you support Joe Biden's possible run for president in 2020?

Study 2: Definitely oppose, Probably oppose, Lean toward oppsing, Lean toward supporting, Probably support, Definitely support

Study 3: Oppose, Support

(NEW SLIDE)

Imagine you did not know that Joe Biden was skeptical of the sexual harassment allegations against Clarence Thomas.

How would you have answered the question:

Do you support Joe Biden's possible run for president in 2020?

Study 2: Definitely oppose, Probably oppose, Lean toward oppsing, Lean toward supporting, Probably support, Definitely support

Study 3: Oppose, Support

Simultaneous outcomes format

In 1991, current Supreme Court Justice Clarence Thomas was accused of sexual harassment. Joe Biden, then the chairman of the Senate Judiciary Committee, was skeptical of the allegations.

How does this change your support Joe Biden's possible run for president in 2020?

Support either way; Support, but would have opposed; Oppose either way; Oppose, but would have supported

DREAM Act

Change format

The Center for American Progress estimates that passing the DREAM Act would cause the U.S. economy to grow by an additional \$30,000 per beneficiary.

How does this change your support for the DREAM Act, which would allow unauthorized immigrants who were brought to the United States as children to apply for citizenship?

Less supportive, no difference, more supportive

Counterfactual format, control group

Do you support or oppose the DREAM Act, which would allow unauthorized immigrants who were brought to the United States as children to apply for citizenship?

Study 2: Definitely oppose, Probably oppose, Lean toward oppsing, Lean toward supporting, Probably support, Definitely support

Study 3: Oppose, Support

(NEW SLIDE)

The Center for American Progress estimates that passing the DREAM Act would cause the U.S. economy to grow by an additional \$30,000 per beneficiary.

If you had known this information, how would you have answered the question:

Do you support or oppose the DREAM Act, which would allow unauthorized immigrants who

were brought to the United States as children to apply for citizenship?

Study 2: Definitely oppose, Probably oppose, Lean toward oppsing, Lean toward supporting, Probably support, Definitely support

Study 3: Oppose, Support

Counterfactual format, treatment group

The Center for American Progress estimates that passing the DREAM Act would cause the U.S. economy to grow by an additional \$30,000 per beneficiary.

Do you support or oppose the DREAM Act, which would allow unauthorized immigrants who were brought to the United States as children to apply for citizenship?

Study 2: Definitely oppose, Probably oppose, Lean toward oppsing, Lean toward supporting, Probably support, Definitely support

Study 3: Oppose, Support

(NEW SLIDE)

Imagine that you did not know that the Center for American Progress estimates that passing the DREAM Act would cause the U.S. economy to grow by an additional \$30,000 per beneficiary.

How would you have answered the question:

Do you support or oppose the DREAM Act, which would allow unauthorized immigrants who were brought to the United States as children to apply for citizenship?

Study 2: Definitely oppose, Probably oppose, Lean toward oppsing, Lean toward supporting, Probably support, Definitely support

Study 3: Oppose, Support

Simultaneous outcomes format

The Center for American Progress estimates that passing the DREAM Act would cause the U.S. economy to grow by an additional \$30,000 per beneficiary.

How does this change your support for the DREAM Act, which would allow unauthorized immigrants who were brought to the United States as children to apply for citizenship?

Support either way; Support, but would have opposed; Oppose either way; Oppose, but would have supported

Obama torture executive order

Change format

President Obama issued an executive order banning the CIA and other government organizations from torturing detainees.

How does this change your support for banning the CIA and other government organizations from torturing detainees?

Less supportive, no difference, more supportive

Counterfactual format, control group

Do you support or oppose banning the CIA and other government organizations from torturing detainees?

Study 2: Definitely oppose, Probably oppose, Lean toward oppsing, Lean toward supporting, Probably support, Definitely support

Study 3: Oppose, Support

(NEW SLIDE)

President Obama issued an executive order banning the CIA and other government organizations from torturing detainees.

If you had known this information, how would you have answered the question:

Do you support or oppose banning the CIA and other government organizations from torturing detainees?

Study 2: Definitely oppose, Probably oppose, Lean toward oppsing, Lean toward supporting, Probably support, Definitely support

Study 3: Oppose, Support

Counterfactual format, treatment group

President Obama issued an executive order banning the CIA and other government organizations from torturing detainees.

Do you support or oppose banning the CIA and other government organizations from torturing detainees?

Study 2: Definitely oppose, Probably oppose, Lean toward oppsing, Lean toward supporting, Probably support, Definitely support

Study 3: Oppose, Support

(NEW SLIDE)

Imagine that you did not know that President Obama issued an executive order banning the CIA and other government organizations from torturing detainees.

How would you have answered the question:

Do you support or oppose banning the CIA and other government organizations from torturing detainees?

Study 2: Definitely oppose, Probably oppose, Lean toward oppsing, Lean toward supporting

ing, Probably support, Definitely support

Study 3: Oppose, Support

Simultaneous outcomes format

President Obama issued an executive order banning the CIA and other government organizations from torturing detainees.

How does this change your support for banning the CIA and other government organizations from torturing detainees?

Support either way; Support, but would have opposed; Oppose either way; Oppose, but would have supported

Senator supported/opposed Kavanaugh

All text in brackets was filled in based on the respondent's state. In every state, at least one Senator (a) voted with their party on Kavanaugh's confirmation and (b) did not retire in 2018. For states with two such Senators, we used the Senator who would face re-election soonest.

Change format

Senator [full name], a [Democrat / Republican] from [respondent's state], [is running for / will be up for] re-election in [2018 / 2020 / 2022].

[Last name] voted [for / against] Brett Kavanaugh's nomination to the Supreme Court. Before the vote, three women accused Kavanaugh of sexual assault.

How does this change your support for [last name] against [her / his] [Republican / Democratic] opponent?

Less likely to support [last name], no difference, more likely to support [last name]

Counterfactual format, control group

Senator [full name], a [Democrat / Republican] from [respondent's state], [is running for / will be up for] re-election in [2018 / 2020 / 2022].

Will you support [last name] or [her / his] [Republican / Democratic] opponent?

Definitely oppose [last name], Probably oppose, Lean toward oppsing, Lean toward supporting, Probably support, Definitely support [last name]

(NEW SLIDE)

[Last name] voted [for / against] Brett Kavanaugh's nomination to the Supreme Court. Before the vote, three women accused Kavanaugh of sexual assault.

If you had known this information, how would you have answered the question:

Will you support [last name] or [her / his] [Democratic / Republican] opponent?

Definitely oppose [last name], Probably oppose, Lean toward oppsing, Lean toward supporting, Probably support, Definitely support [last name]

Counterfactual format, treatment group

Senator [full name], a [Democrat / Republican] from [respondent's state], [is running for / will be up for] re-election in [2018 / 2020 / 2022].

[Last name] voted [for / against] Brett Kavanaugh's nomination to the Supreme Court. Before the vote, three women accused Kavanaugh of sexual assault.

Will you support [last name] or [her / his] [Republican / Democratic] opponent?

Definitely oppose [last name], Probably oppose, Lean toward oppsing, Lean toward supporting, Probably support, Definitely support [last name]

(NEW SLIDE)

Imagine you did not know that [last name] voted [for / against] Kavanaugh's confirmation to the Supreme Court after allegations of sexual assault.

How would you have answered the question:

Will you support [last name] or [her / his] [Democratic / Republican] opponent?

Definitely oppose [last name], Probably oppose, Lean toward oppsing, Lean toward supporting, Probably support, Definitely support [last name]

Simultaneous outcomes format

Senator [full name], a [Democrat / Republican] from [respondent's state], [is running for / will be up for] re-election in [2018 / 2020 / 2022].

[Last name] voted [for / against] Brett Kavanaugh's nomination to the Supreme Court. Before the vote, three women accused Kavanaugh of sexual assault.

How does this change your support for [last name] against [her / his] [Republican / Democratic] opponent?

Support [last name] either way; Support, but would have opposed; Oppose [last name] either way; Oppose, but would have supported

Trump coal ash executive order

Change format

President Trump issued an executive order that reduced restrictions on coal ash disposal.

How does this change your support for strict regulations on the disposal of coal ash, the pollutant left over after power plants burn coal?

Less supportive, no difference, more supportive

Counterfactual format, control group

Do you support or oppose strict regulations on the disposal of coal ash, the pollutant left over after power plants burn coal?

Study 2: Definitely oppose, Probably oppose, Lean toward oppsing, Lean toward supporting, Probably support, Definitely support

Study 3: Oppose, Support

(NEW SLIDE)

President Trump issued an executive order that reduced restrictions on coal ash disposal.

If you had known this information, how would you have answered the question:

Do you support or oppose strict regulations on the disposal of coal ash, the pollutant left over after power plants burn coal?

Study 2: Definitely oppose, Probably oppose, Lean toward oppsing, Lean toward supporting, Probably support, Definitely support

Study 3: Oppose, Support

Counterfactual format, treatment group

President Trump issued an executive order that reduced restrictions on coal ash disposal.

Do you support or oppose strict regulations on the disposal of coal ash, the pollutant left over after power plants burn coal?

Study 2: Definitely oppose, Probably oppose, Lean toward oppsing, Lean toward supporting, Probably support, Definitely support

Study 3: Oppose, Support

(NEW SLIDE)

Imagine that you did not know that President Trump issued an executive order that reduced restrictions on coal ash disposal.

How would you have answered the question:

Do you support or oppose strict regulations on the disposal of coal ash, the pollutant left over after power plants burn coal?

Study 2: Definitely oppose, Probably oppose, Lean toward oppsing, Lean toward supporting, Probably support, Definitely support

Study 3: Oppose, Support

Simultaneous outcomes format

President Trump issued an executive order that reduced restrictions on coal ash disposal.

How does this change your support for strict regulations on the disposal of coal ash, the pollutant left over after power plants burn coal?

Support either way; Support, but would have opposed; Oppose either way; Oppose, but would have supported

F.4 Full text of study 3

Study 3 was a partial evaluation of one information treatment. Its purpose was to gather more data for a hypothesis we had otherwise only tested in Study 1: that asking a level question first reduces self-reports of change, and does so in a direction that is consistent with a response substitution explanation.

Most respondents took the survey the day after Robert Mueller’s first public comments on his investigation into Russian interference in the 2016 election. For the remaining respondents, the question wording was changed from “yesterday” to “earlier this week.” No information about the comments was provided to the respondents.

Mueller comments

Change format

Robert Mueller was in charge of the special counsel investigation into possible Russian interference in the 2016 election.

Consider the statement:

Robert Mueller’s final report stated that there is “undeniable proof” that President Trump personally conspired with Russian agents to influence the 2016 election.

Did Robert Mueller’s comments [yesterday / earlier this week] make you more or less likely to believe this?

[More likely, no difference, less likely]

Change format with $Y_i(1)$

Robert Mueller was in charge of the special counsel investigation into possible Russian interference in the 2016 election.

Is the following statement true or false?

Robert Mueller’s final report stated that there is “undeniable proof” that President Trump personally conspired with Russian agents to influence the 2016 election.

[True, False]

How many chances in 100 does your answer have to be correct?

[0-100 scale]

(NEW SLIDE)

Consider the statement:

Robert Mueller's final report stated that there is "undeniable proof" that President Trump personally conspired with Russian agents to influence the 2016 election.

Did Robert Mueller's comments [yesterday / earlier this week] make you more or less likely to believe this?

[More likely, no difference, less likely]