

Online Appendix to Experimental Measurement of Misperception in Political Beliefs *Journal of Experimental Political Science*

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A Reporting Standards

A.1 Hypotheses

This paper sought to introduce a new experimental method for measuring second-order political beliefs. As a result, we do not test specific hypotheses, but rather demonstrate the use of the method through an application that is exploratory in nature. The paper serves to answer questions such as: How can we measure second-order political beliefs? How do design features such as incentives, probabilistic estimates, and iterative information provision affect bias in second-order perceptions?

A.2 Subjects and Context

- Eligibility and exclusion criteria for participants: We recruited a sample from Lucid because it has been shown to be representative (Coppock and McClellan, 2019), allowed for the simple delivery of additional monetary incentives (bonuses), and fit within our budget. All US citizens over 18 who were available through the Lucid platform were eligible to participate. There were no changes to our recruitment strategy throughout the course of data collection.
- Procedures used to recruit and select participants: We used Lucid, which is a survey aggregator. More information on Lucid’s recruitment procedures can be found here: <https://youtu.be/3BFgp-HXmFA>
- Recruitment dates defining the periods of recruitment and when experiments were conducted: We fielded the experiment between January 28, 2019 and February 5, 2019. There were no repeated measures or follow-up studies.
- Settings and locations where the data were collected: Data were collected online via the Qualtrics survey platform. Participants could complete the survey on any device with an internet connection (phone, tablet, computer).
- Response Rate: Because we collected our data from Lucid, we do not have a way of calculating the response rate.

A.3 Allocation Method

- Details of the procedure used to generate the assignment sequence: There were a few randomization procedures in our study. First, we randomly selected four out of our six attributes (race, gender, state of residence, party identification, most important problem, and income) for each ANES respondent who reported voting for either Trump or Clinton in 2016 and was validated to have turned out to vote. Next, participants in our experiment were randomly paired with four of these ANES respondents with four attributes. Second, participants were randomly assigned (via Qualtrics randomization) to receive monetary incentives for accurate guesses (2/3 of sample) or to win “points” (1/3 of sample). Third, we randomized (via Qualtrics randomization) whether the probability scale was labeled with Hillary Clinton on the left (and Donald Trump on the right) or Hillary Clinton on the right (and Donald Trump on the left).
- Details of randomization procedure: There were no restrictions or blocking. Participants were randomized at the individual-level.

- Evidence of random assignment: Because our study randomizes attributes shown to participants and randomly pairs each unique participant to an ANES respondent, we cannot produce a balance table since there are too many “groups.”
- Blinding: Participants were blind to the randomization of monetary incentives and whether Trump or Clinton was on the left or right of the response scale, but they knew that they had been randomly paired with a respondent from the ANES. The researchers were not blind to the randomization.

A.4 Treatments

- Description of the interventions: Please see section H for the full instructions and survey instrument.
- How and when manipulations or interventions were administered
 - Method of delivery: computer, phone, or tablet (Internet)
 - Software: Qualtrics, please contact the researchers for the .qsf files
 - Additional items:
 - * Participants completed four rounds of the study and a trial run. This means that they evaluated four ANES respondents (plus a short trial run). The ANES respondents were presented in a randomized order. There was no piggybacking on other protocols and subjects could not complete the full study more than once.
 - * It took participants about 8 minutes to complete the study. Participants were only expected to complete the study once.
 - * There were no “sessions” since participants could complete the study on their own time and as many participants as possible could complete the study at the same time.
 - * There was no deception and this was made clear to participants throughout the consent and instructions process.
 - * Treatment fidelity: Participants were not given quizzes on instructions, but were given a trial run before the game began to familiarize themselves with the task. The practice round results did not differ from the results of the full study. The study did not include any manipulation checks. Participants were able to communicate any thoughts on their experience with the study to the researchers at the end of the survey. Most participants reported that they found the task to be fun.
 - * 2/3 of participants were randomly assigned to receive monetary incentives for accurate guesses. See section C for a description of this process. In brief, we used the crossover scoring method and participants could win an additional \$0.10 per elicitation, per round. The other 1/3 of participants received a flat-rate bonus of \$2.00, regardless of their performance in the task. All bonus payments were made via TangoCard and participants could choose whether they wanted to receive their payment via TangoCard (they would have to provide an email address for this) or if they would like their payment donated to a charity instead (they would not have to provide an email address).

A.5 Results

1. Outcome Measures and Covariates: See Section H for the full survey instrument. See the manuscript for descriptions of how variables were calculated.
2. CONSORT Participant Flow Diagram: Our study had no relevant exclusion criteria and strong compliance, so we do not include a diagram here. We obtained a sample of 3,253 respondents and no participants were excluded post-treatment. We did experience some drop-off throughout the course of the study with some participants leaving questions blank. Overall, our 3,253 respondents would lead us to expect 52,048 prior beliefs reported across the four rounds of our study. We obtained 52,017 prior beliefs, meaning that we are only missing 31 priors. We should expect to measure 65,060 posterior beliefs and we obtained 65,021, meaning that we are only missing 39 posterior beliefs due to non-response.
3. Statistical Analysis: We do not analyze the results of this study by treatment group, so all results presented in the manuscript reflect appropriate means or medians. When there is missing data, we use list-wise deletion. There was no weighting procedure for analyzing the results of our experiment. However, in calculating the estimated Trump and Clinton support using the ANES data, we used the survey weights as appropriate with the ANES (see footnote in the manuscript).

A.6 Other Information

- This study was approved by the IRB at UC San Diego
- The experimental protocol was not pre-registered
- This experiment was funded by the UC Academic Senate. The funders did not have a role in the analysis or execution of the study. There is no conflict of interest.
- The replication materials are available at: <https://doi.org/10.7910/DVN/OJ3HJE>

B Why perceptions of others' vote choices matters

We chose to study perceptions of others' candidate preferences because perceptions of others' voting behavior is a crucial component of our own choices. There is a common assumption in strategic models of political competition that vote choice depends upon beliefs about how others will act. Models of electoral behavior that embed choices within the social process of elections show that a voter's best response depends on the actions of other voters participating (or eligible to participate) in that election. A prominent example is Feddersen and Pesendorfer (1996), where voters who lack information act based on their beliefs about the partisan balance of other voters in the electorate. Voter actions also depend upon beliefs about how others will act in theories of nomination politics (Aranson and Ordeshook, 1972), candidate entry (Besley and Coate, 1997), strategic survey response (Meirowitz, 2005), and turnout (Palfrey and Rosenthal, 1985). Our results suggest that unbiased but noisy perceptions may be a reasonable simplifying assumption, but that some misperceptions do prevail. *Balancing theories* attribute the regularity with which the American president's party loses seats at midterm elections to voters' efforts to counteract the policy of the

elected president (e.g., Alesina and Rosenthal, 1989; Fiorina, 1996). This interpretation presupposes that voters were not able to anticipate the preferences of others at the previous presidential election – else they would already have voted for a balancing Congress.

Beyond the strategic voting literature, the political network literature also finds perceptions of others' voting preferences to be important. Accuracy in perception of the voting preferences of social network ties has long been a question of study for scholars of political networks, with recent work questioning the extent of voter knowledge of the politics of others. Americans typically live in social settings with largely – but not exclusively – homogeneous political discussions and like-minded social ties (e.g., Huckfeldt, Johnson, and Sprague, 2004; Mutz, 2006; Sinclair, 2012). Further complicating this task, individuals are often hesitant to express their true political opinions to others, and sometimes go so far as to pretend that they hold views that they do not to blend in with the crowd (Carlson and Settle, 2016; Levitan and Verhulst, 2016). While individuals might have incentives to misrepresent their views to their peers, recent work suggests that we are able to draw political inferences about others from their seemingly non-political behaviors and preferences, such as their Facebook activity (Settle, 2018), vehicle choices (Hetherington and Weiler, 2018), and even their food, pet, and movie tastes (Settle and Carlson, n.d., Chapter 3). While our study does not specifically measure perceptions within social networks, our methodology might be useful for networks research.

Some researchers have been interested in whether we can accurately infer the political views of those within our social networks and among relevant groups in the electorate. In the classic *Voting*, Berelson, Lazarsfeld, and McPhee (1954, ch. 5) found that one-third of the electorate reports being unable to guess how “major socioeconomic and ethnic groups will vote,” and that among the other two-thirds, individual beliefs were biased by individual characteristics.¹ Even within friendship networks, Huckfeldt and Sprague (1987) find that 66% of Reagan voters accurately identified Mondale voters and 55% of Mondale voters accurately identified Reagan voters. However, Eveland et al. (2019) question whether the way in which researchers have measured accuracy could conflate inaccuracy with uncertainty. Our elicitation instrument provides incentives for subjects to directly provide their true belief about the others' vote without hedging due to uncertainty. We acknowledge that our study focuses on guessing the views of strangers as opposed to those in our social networks. However, we believe that our survey instrument could be adapted to a political discussion context to help disentangle inaccuracy and uncertainty.

¹Berelson, Lazarsfeld, and McPhee (1954) do not characterize accuracy and presentation of their results does not facilitate it. Comparison of their Chart XXIII (actual vote of minority ethnic and religious groups) to Chart XXXIII (perceived vote of some of those groups) suggests large inaccuracy in citizen perceptions.

C Crossover scoring method

This presentation follows that in Hill (2017). The crossover scoring method elicits probabilistic beliefs from participants with incentives aligned for truthful reporting. The design asks participants for what probability p they would be indifferent between receiving a payment with probability p and receiving a payment if their answer is correct. To elicit this probability with incentives, the subject is told that after the probability p is reported, a number y will be drawn at random from the uniform distribution on $[0, 1]$. If $y > p$, the subject will enter a lottery which pays incentive v with probability y and 0 with probability $1 - y$. If $y < p$, the subject is paid incentive v if the statement is true, and 0 if it is false.

To see that a subject maximizes their chance of receiving incentive v by accurately reporting their true belief, consider a subject with true belief p^* who reports a belief \hat{p} . With the uniform draw of y and the mechanism above, reporting belief \hat{p} means that the subject is paid based upon the truth of the statement with probability \hat{p} and enters the lottery with probability $1 - \hat{p}$ (because $\Pr(y < \hat{p}) = \hat{p}$ for a uniform random variate y). Their expected payout under the truth mechanism given true beliefs p^* is vp^* . Expected payout under the lottery is $v[(1 - \hat{p})/2 + \hat{p}]$, the midpoint of the uniform distribution of y conditional on $y > \hat{p}$ (i.e., ranging from \hat{p} to 1). Then, the expected value of giving report \hat{p} given true belief p^* is

$$EV[\hat{p}] = v\hat{p}p^* + v(1 - \hat{p})\left(\frac{1 - \hat{p}}{2} + \hat{p}\right). \quad (\text{A1})$$

To see that setting $\hat{p} = p^*$ maximizes expected payout, take the derivative and solve for the F.O.C.:

$$\begin{aligned} dEV/d\hat{p} &= vp^* + v(1 - \hat{p})\left(-\frac{1}{2} + 1\right) + v\left(\frac{1 - \hat{p}}{2} + \hat{p}\right)(-1) \\ &= vp^* + v(1 - \hat{p})\frac{1}{2} - v(1 - \hat{p})\frac{1}{2} - v\hat{p}. \end{aligned} \quad (\text{A2})$$

$$\begin{aligned} 0 &= vp^* - v\hat{p} \\ \hat{p} &= p^*. \end{aligned} \quad (\text{A3})$$

Thus, subjects maximize incentives when reporting their true beliefs, $\hat{p} = p^*$.

D Change in Accuracy with Information

Much of the attenuation in the slope presented in Figure 1 in the manuscript is because individual subject elicitations are noisy. More than 16 percent of elicitations were either greater than 99 or less than 1. While these responses may represent legitimate perceptions, this level of clustering might alternatively suggest some responses are driven either by inattention or by instrumentation error (i.e., subjects did not fully understand the task). We note that either inattention or instrumentation error biases us against finding accuracy or systematic bias in perceptions, but take the conservative approach of including all responses in analysis. All results in this paper should be interpreted in that context. We investigated this possibility by removing all subjects who spent less than three seconds on each elicitation, as we observed no learning from information until that threshold in the raw data. Dropping these subjects yields a regression slope of 0.39.

Figure A4 presents beliefs in the first elicitation before receiving any information about the other both overall and by subject vote choice and round. Most initial beliefs were around 50, reflecting uncertainty as we might expect. Distributions were similar across round and vote choice. Almost 10 percent of initial beliefs are greater than 99 or less than 1.

Figure A1 builds on the general pattern presented in Figure 2 to show how accuracy varies by elicitation number and round. We would expect accuracy to increase as subjects learn more about the other from elicitation one to five. It is also possible that subjects learned over the course of the experiment, so this figure allows us to evaluate if accuracy is greater when subjects evaluate their fourth other versus their first, second, or third other.² The y-axis shows the proportion of elicitations that fell within the 95% confidence interval around vote share among the ANES subset with the characteristics the subject had viewed up to that elicitation, e.g. females from Texas. We define accuracy as the subject's elicited probability residing within the confidence interval of Trump vote share among others with those characteristics. This definition is our attempt to account for sampling error in the ANES and to use a more reasonable measure of accuracy than requiring beliefs to match *exactly* that observed in ANES respondents. Using the confidence interval also accounts for some characteristic combinations being more rare than others (e.g., Black Republican vs. Black Democrat).

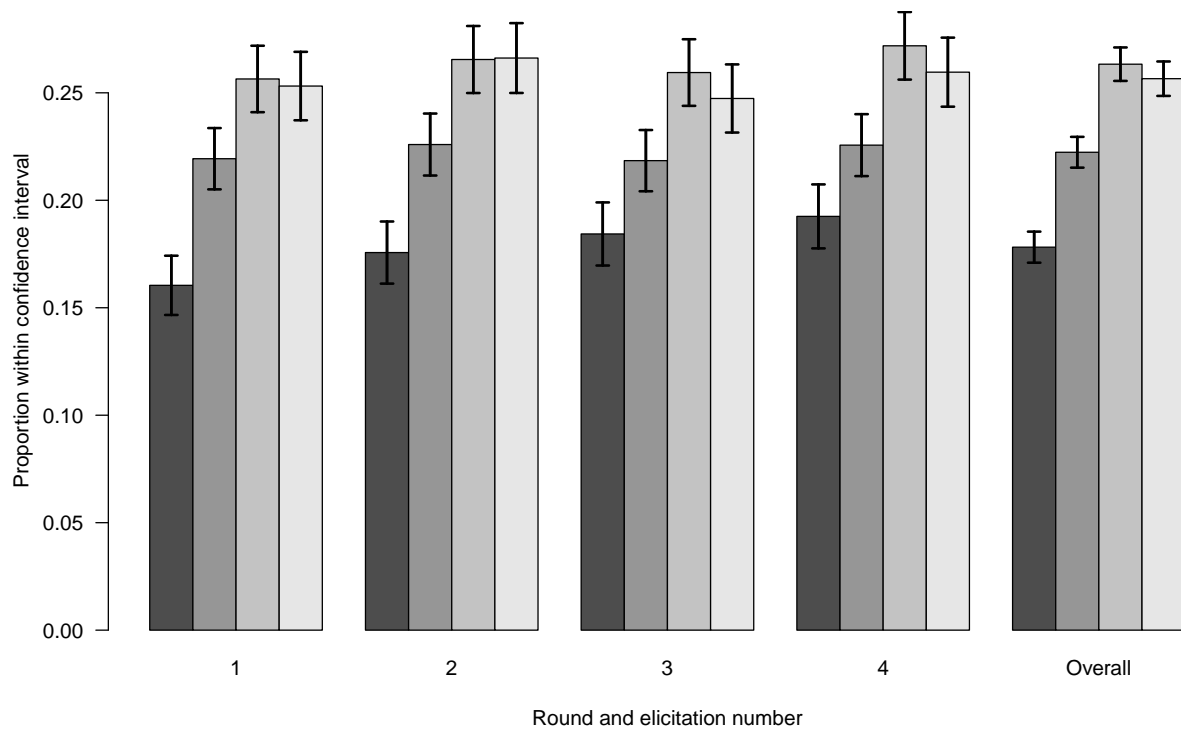
We see limited evidence that subjects improved in the task over the course of the four different ANES others that they evaluated. Elicitation two beliefs (darkest bars) increase linearly from round one to four left to right. This increase in accuracy, however, is small and a similar pattern is not clear for later elicitations across rounds. In general, each round's group of bars is similar to the overall grouping at the far right.

While evidence of cross-round improvement in accuracy is limited, within each round subject accuracy increases with each piece of information up to the fourth. After one characteristic, around 18 percent of elicitations are within the 95 percent confidence interval. After two characteristics, about 22 percent are within the interval, and after three and four characteristics, about 26 percent. The fourth characteristic does not appear to improve accuracy over the third. Recall that the magnitude of accuracy is influenced by subjects who reliably give responses near zero or one hundred due to inattention or instrumentation error.

Our experiment shows that citizens have accurate perceptions of the vote choice of others on

²Subjects were not provided information on their performance until the very end of the study. Any learning that occurred from one round to the next is likely more reflective of getting more comfortable with the game and the instrument itself than learning about which characteristics are predictive of voting for which candidate.

Figure A1: Proportion within 95% confidence interval of ANES vote share given other's characteristics, by round elicitation number



Note: Bars within each group represent elicitation two, three, four, and five. Each group is one round, Overall averaged across rounds. Bars extend to 95% confidence interval on sample proportion.

average, but that individual perceptions are quite noisy. Only around a quarter of subject perceptions are within the 95% confidence interval of where they should be, but aggregated beliefs increase with true vote share.

D.1 Additional operationalizations of accuracy

If we operationalize accuracy differently, such as a perceived probability of greater than 50% in favor of the correct candidate for that other, accuracy is much higher. However, we choose the more conservative accuracy measure based on the 95% confidence interval of the observed proportions. This avoids creating an arbitrary cutoff for accuracy. For instance, we could have dichotomized the elicited probabilities as "accurate" and "inaccurate," but it is unclear what the appropriate threshold for "accuracy" would be. For instance, we could have considered any probability greater than 50% for the correct candidate to be "accurate," but this would treat a guess of near uncertainty, say 51%, the same as a guess of near certainty, say 99%.

E Informativeness of Characteristics

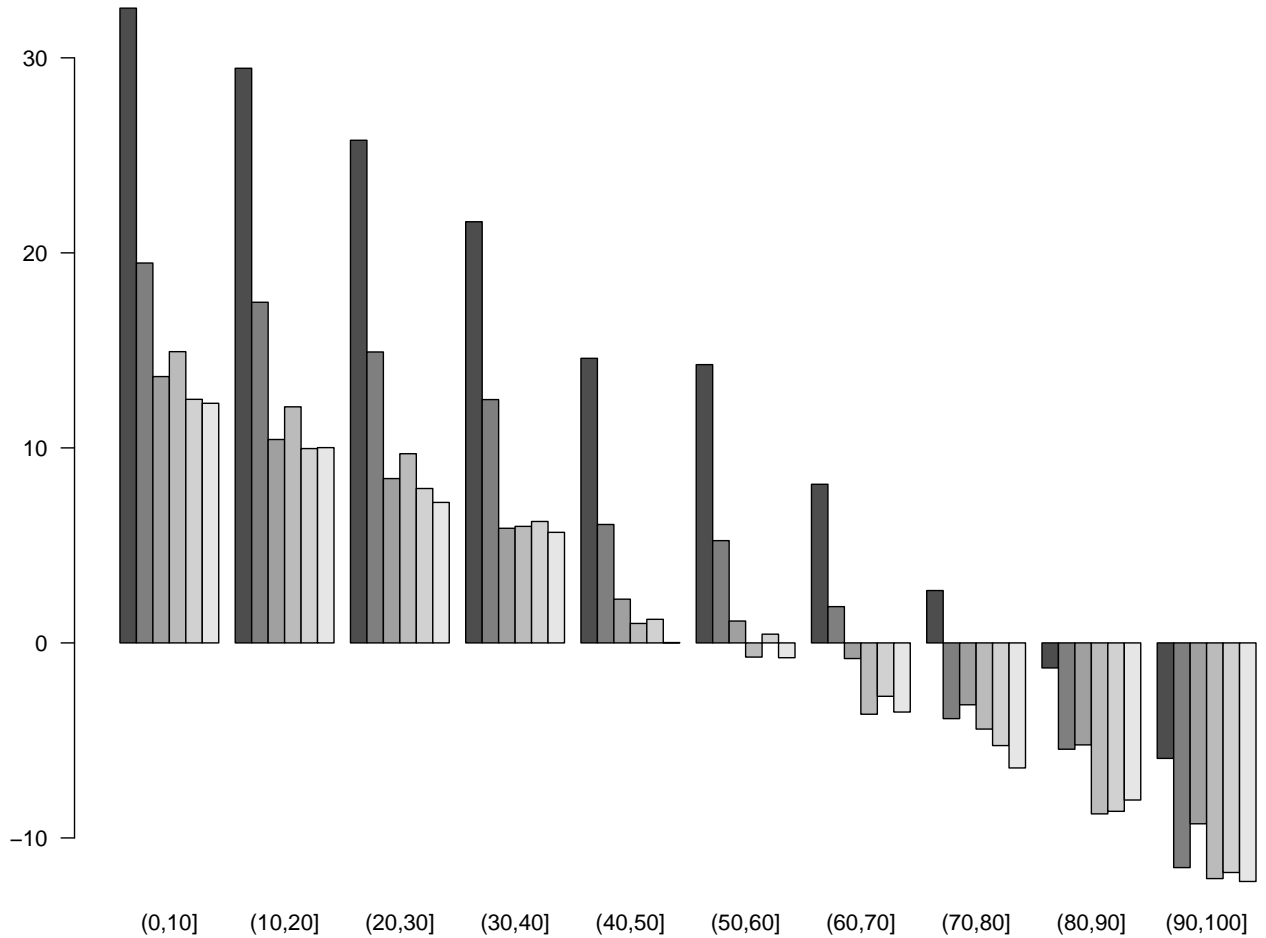
Figure A2 summarizes how much each characteristic led subjects to update beliefs. The y-axis represents average movement toward the true vote choice of the other. For example, 30 means that subjects updated their beliefs 30 points in the correct direction, on average. Negative values mean subjects moved away from truth. The x-axis groups movement by subjects' prior beliefs about the other's vote choice and by characteristic. Each bar is shaded to represent the characteristic delivered about the other in that elicitation, ordered by overall average informativeness as indicated in the figure note.³

Of first note is that different types of information are differentially informative. Partisanship leads to the greatest increase in accuracy. For example, those whose prior beliefs were between 0 and 10 (very inaccurate) moved about one-third of the scale toward truth when they were informed of the other's partisanship. Those who began with an uncertain prior around 50 became about 12 points more accurate after learning the other's partisanship. In contrast, those who already had an accurate prior belief (between 90 and 100) did not update their beliefs by much at all, and on average reduced accuracy by about 5 points with partisanship. The second most informative characteristic was the other's report of the most important problem, followed by race.

Figure A2 strongly suggests ceiling and floor effects. Subjects with beliefs near the floor respond to new information at much greater magnitude than those closer to 50, and subjects near the ceiling on average move away from the truth. There is a roughly linear decline in magnitude of movement towards truth as the prior increases.

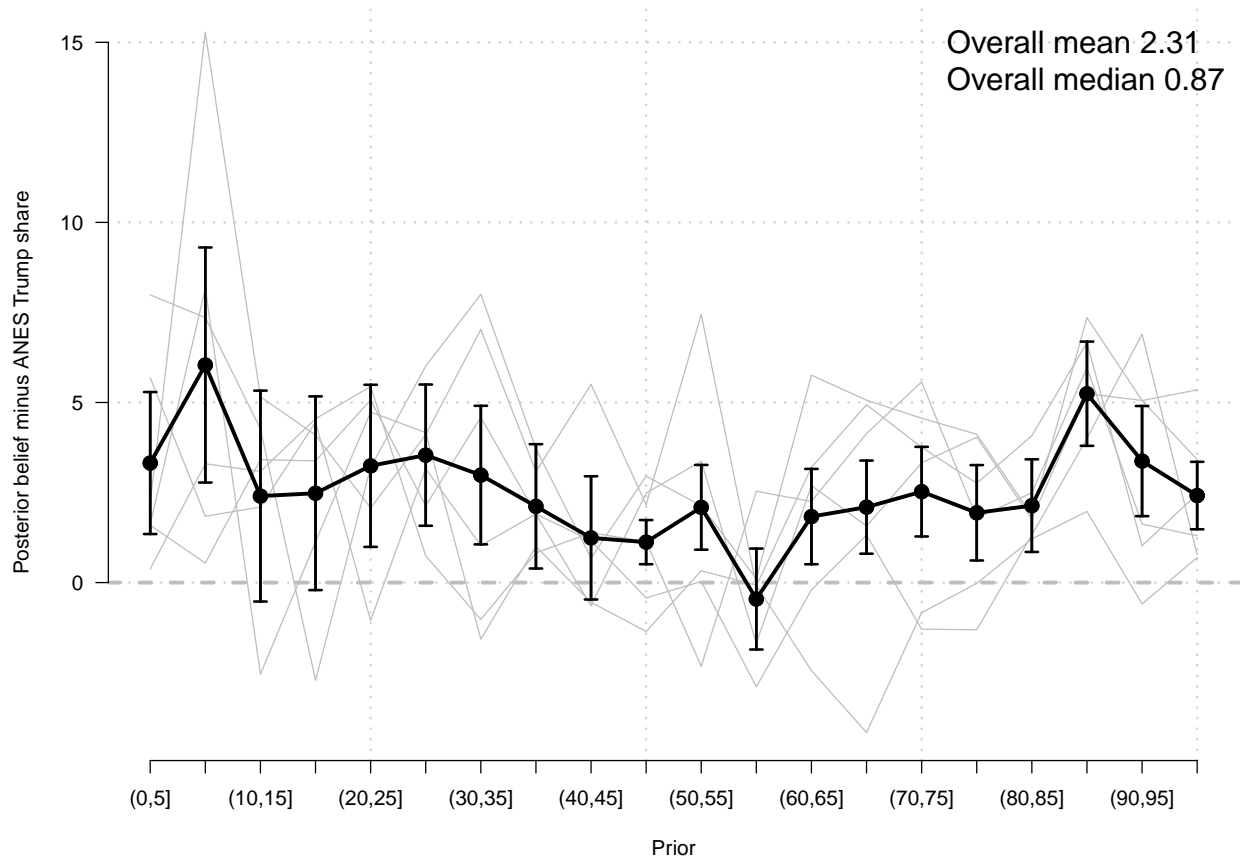
³Appendix Figure A6 replicates Figure A2 with confidence intervals.

Figure A2: Average movement towards truth by characteristic and prior



Note: Each bar is average movement towards true having just been delivered characteristic corresponding to bar color, bars grouped by prior belief. Bars sorted in order of average movement towards true, darker to lighter gray: PID (13.1), MIP (4.0), RACE (1.0), STATE (-0.3), GENDER (-0.5), INCOME (-1.2).

Figure A3: Average distance between estimate and ANES vote share given characteristics



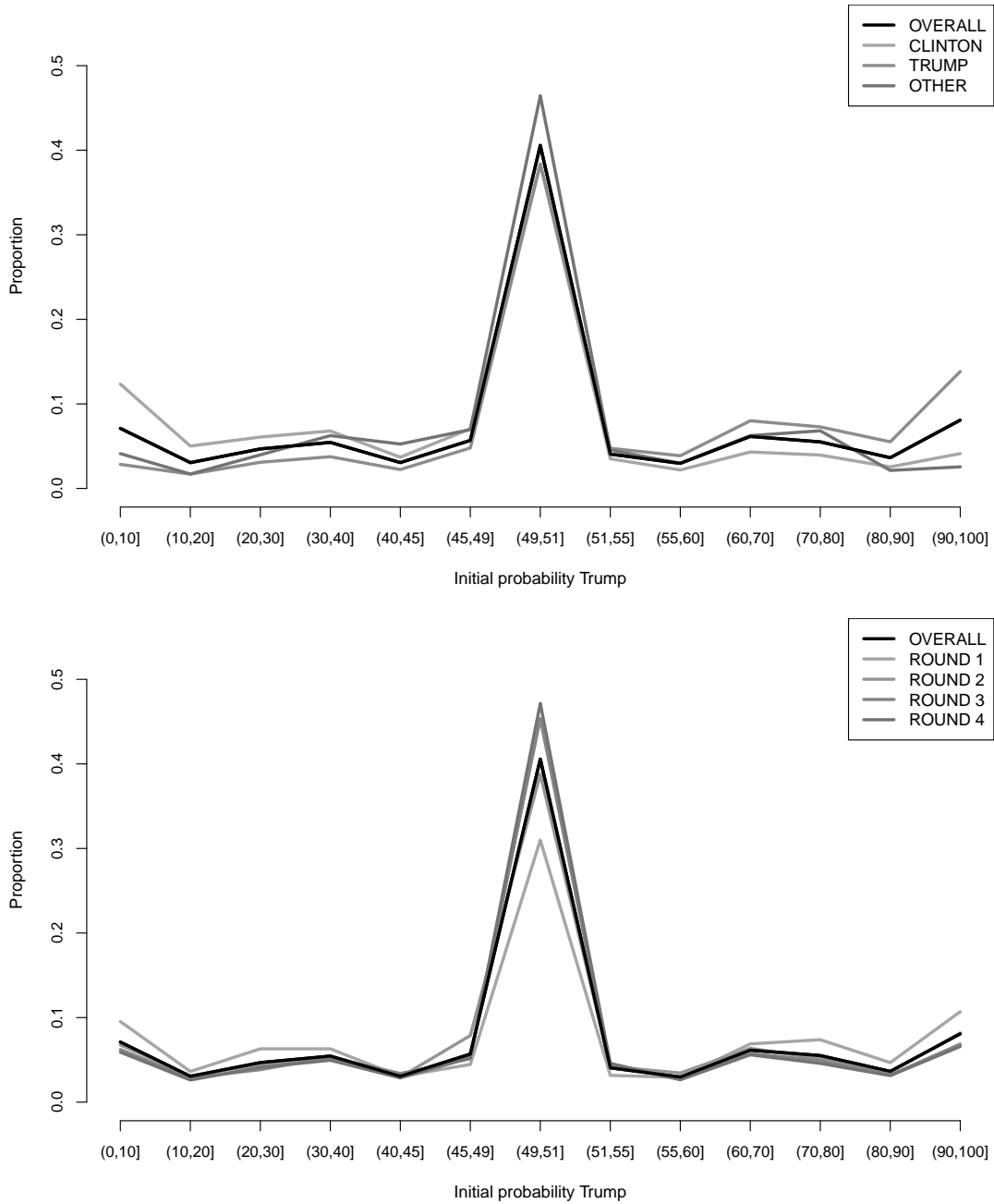
Note: Each point is distance between elicited probability and actual ANES vote share given the characteristics so far delivered to the subject with error bars to 95% confidence intervals. Gray lines are each characteristic separately.

F Bias and misperception

Figure A3 plots bias against categories of prior beliefs. The y-axis is the average posterior belief that the other voted Trump minus the ANES rate for Trump vote given the characteristics so far delivered about the other. The x-axis groups subject-elicitations by prior beliefs. For example, the first point on the left shows that subjects with prior beliefs about the other's Trump vote between 0 and 5 have posterior bias towards Trump of about 3 percentage points.

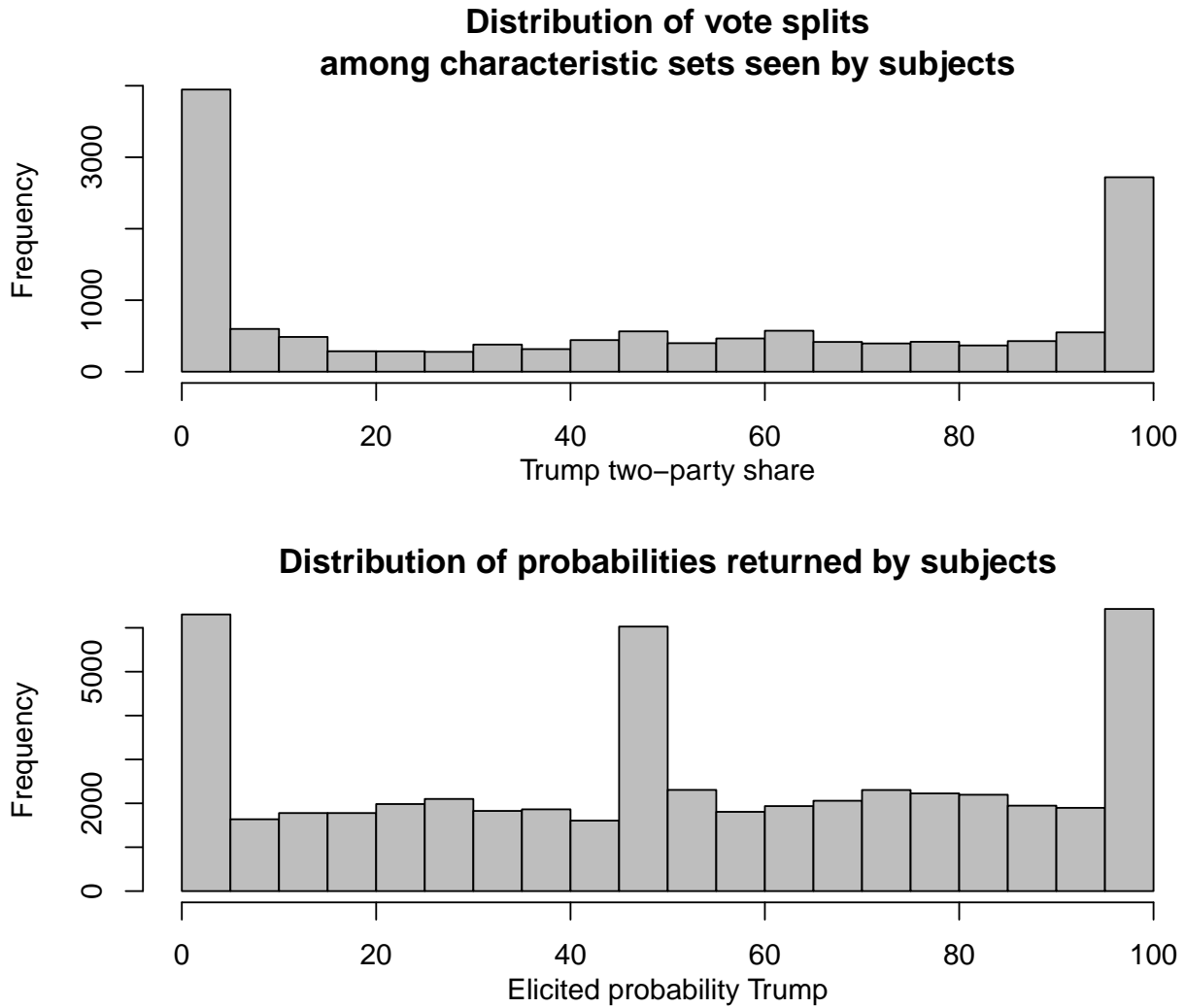
G Additional tables and figures

Figure A4: Initial beliefs by subject vote choice and by round



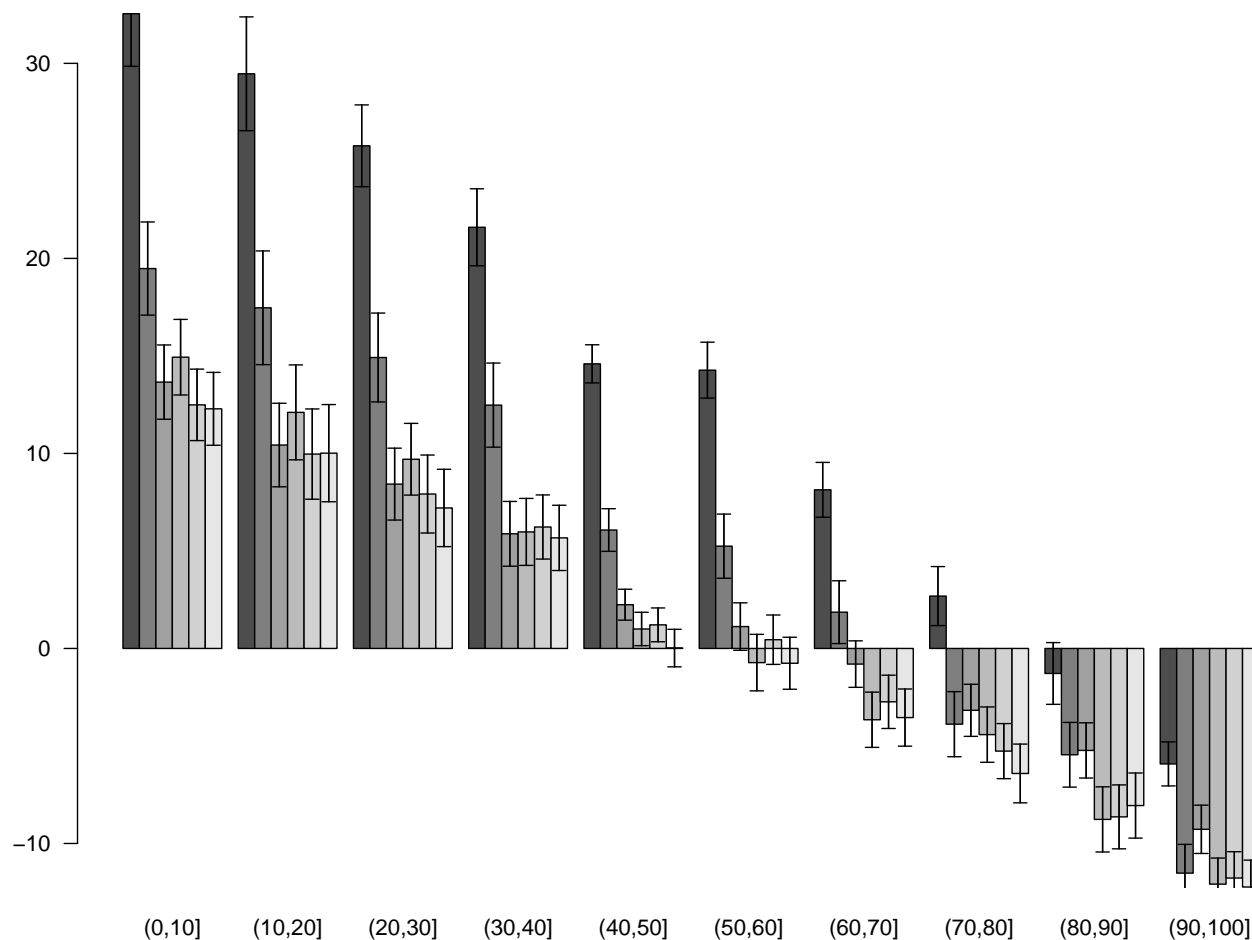
Note: First frame plots the density of initial beliefs overall and by subject vote choice, as indicated by the legend. Second frame is by round and overall.

Figure A5: Distribution of vote splits and probabilities



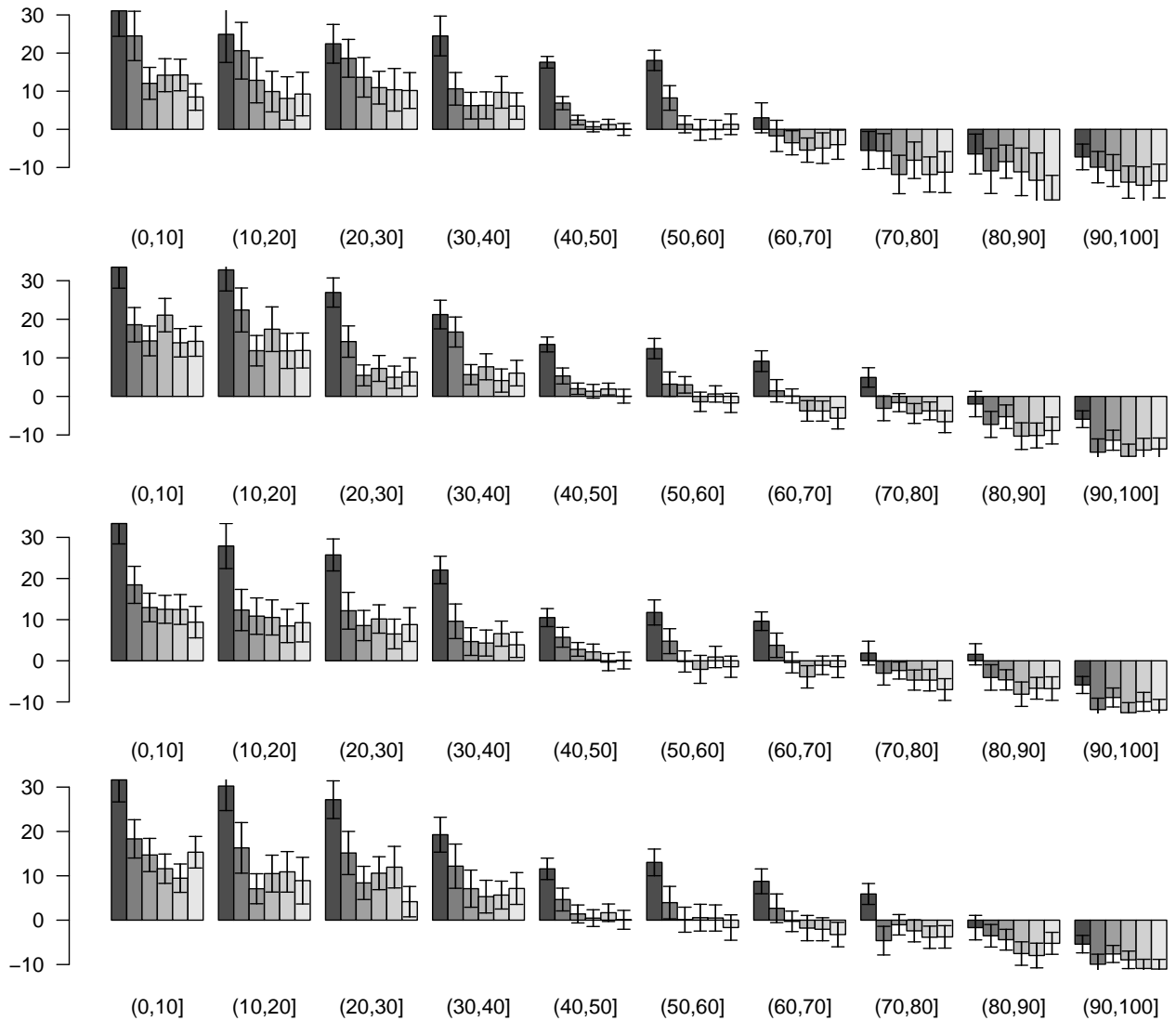
Note: X-axis in top frame is the observed rate of Trump vote among ANES respondents given a unique set of characteristics as observed by subjects in the experiment. X-axis in bottom frame is the elicited probability of subjects evaluating the ANES characteristic set conditional on having seen at least one of the characteristics.

Figure A6: Average movement towards truth by characteristic and prior; With error bars



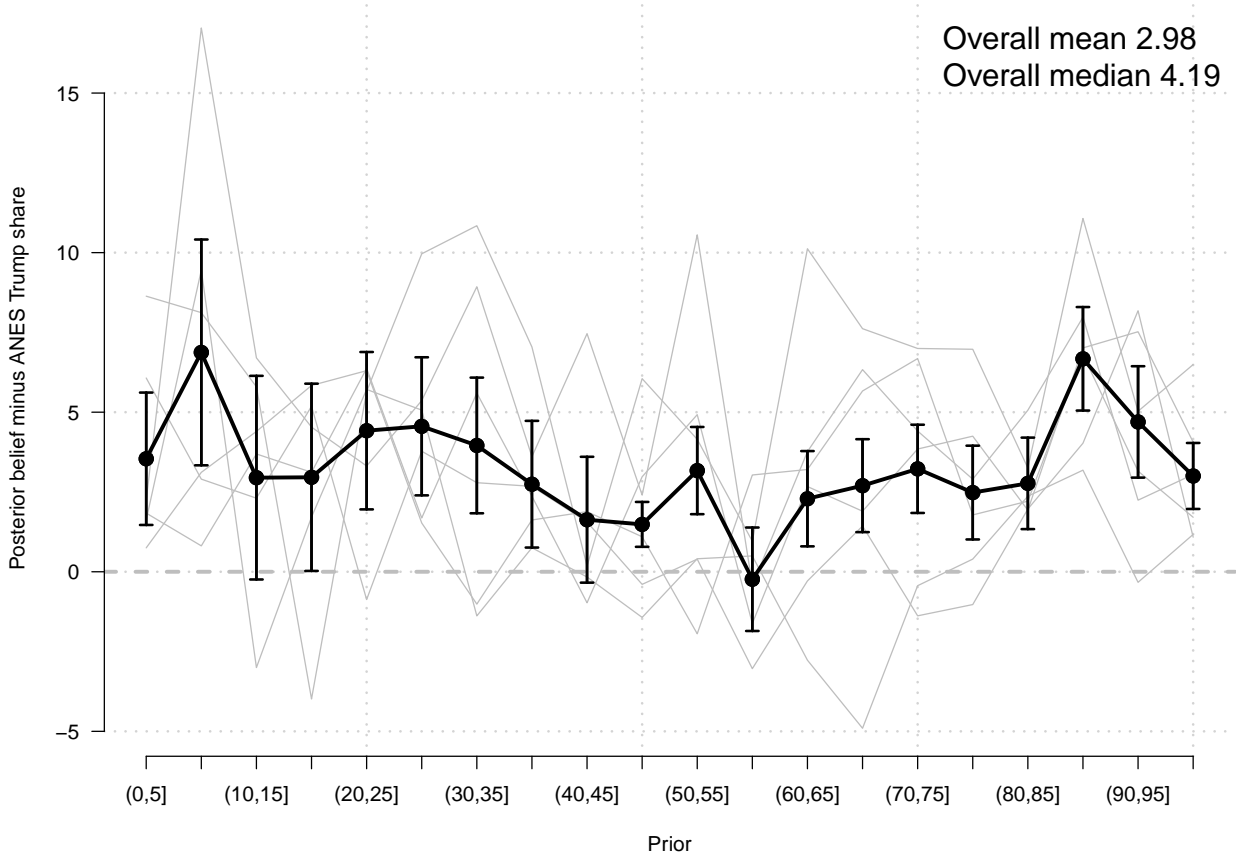
Note: Each bar is average movement towards true having just been delivered characteristic corresponding to bar color, bars grouped by prior belief. Bars sorted in order of average movement towards true, darker to lighter gray: PID (13.1), MIP (4.0), RACE (1.0), STATE (-0.3), GENDER (-0.5), INCOME (-1.2). Error bars extend to 95% confidence intervals.

Figure A7: Average movement towards truth by characteristic, prior, and elicitation number; With error bars



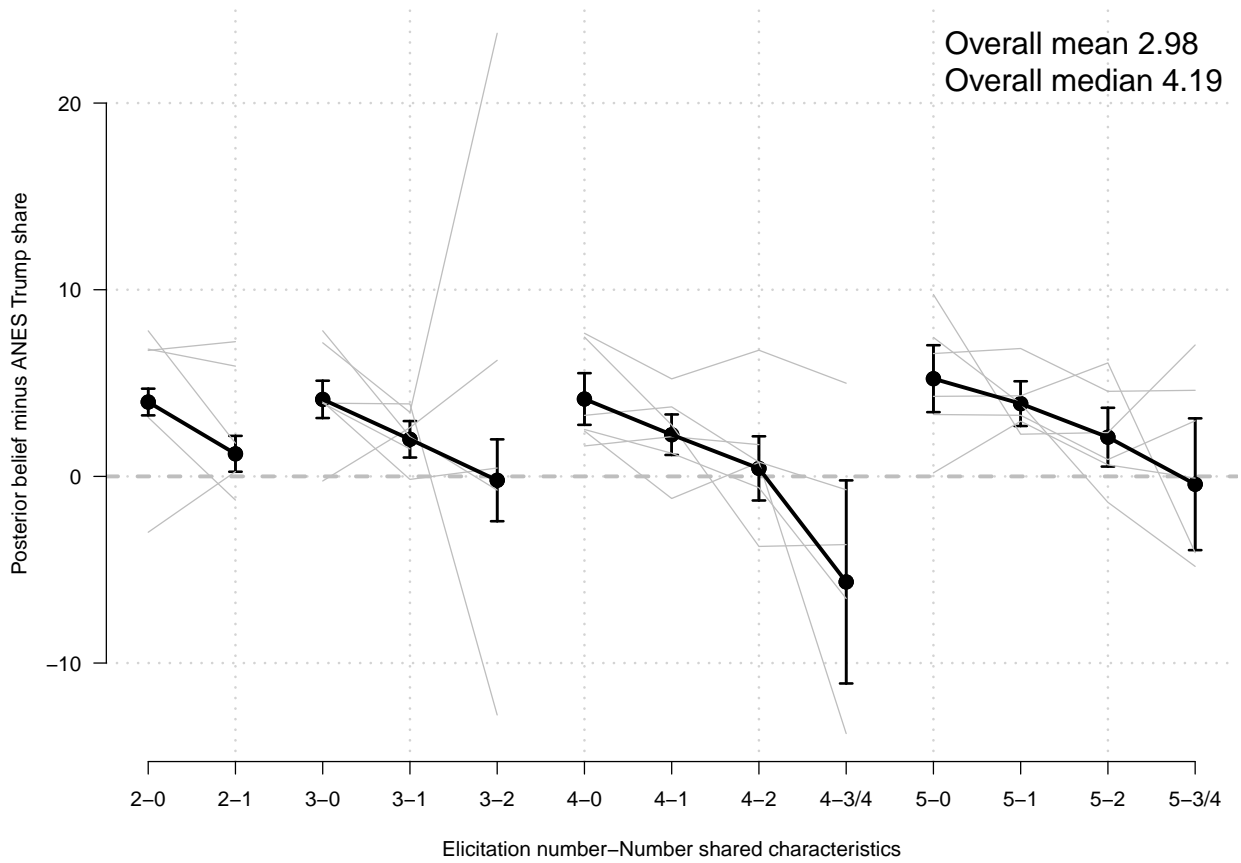
Note: Each bar is average movement towards true having just been delivered characteristic corresponding to bar color, bars grouped by prior belief. Each facet represents elicitation number, two through five. Bars sorted in order of average movement towards true, darker to lighter gray: PID (13.1), MIP (4.0), RACE (1.0), STATE (-0.3), GENDER (-0.5), INCOME (-1.2). Error bars extend to 95% confidence intervals.

Figure A8: Average distance between estimate and ANES vote share given characteristics given estimate outside of confidence interval



Note: Each point is the average distance between elicited probability and actual ANES vote share given the characteristics so far delivered to the subject with error bars to 95% confidence intervals. Gray lines are each characteristic separately.

Figure A9: Average distance between estimate and ANES vote share by elicitation number and number of shared characteristics given estimate outside of confidence interval



Note: Each point is the average distance between elicited probability and actual ANES vote share given the characteristics so far delivered to the subject with error bars to 95% confidence intervals. Gray lines are each characteristic separately.

Table A1: Average effect of voter characteristic on beliefs about vote choice of others

	Basic	Prior less than 33	Prior 33 to 67	Prior greater than 67	Paid per round	Flat payment
Prior	0.70* (0.00)	0.77* (0.02)	0.67* (0.02)	0.68* (0.02)	0.69* (0.00)	0.73* (0.01)
Party identification	28.82* (0.31)	32.27* (0.69)	30.96* (1.00)	26.09* (1.39)	30.03* (0.39)	26.16* (0.53)
Most important problem	20.34* (0.32)	20.42* (0.71)	22.56* (1.01)	20.47* (1.38)	21.19* (0.39)	18.46* (0.53)
Race	17.59* (0.32)	14.14* (0.70)	18.34* (1.01)	21.71* (1.39)	18.34* (0.39)	15.90* (0.54)
Gender	16.13* (0.32)	13.36* (0.71)	17.58* (1.01)	19.01* (1.39)	16.54* (0.39)	15.15* (0.54)
Income	15.46* (0.32)	12.95* (0.72)	16.48* (1.01)	18.65* (1.39)	16.02* (0.40)	14.19* (0.54)
State	16.33* (0.32)	15.38* (0.71)	16.99* (1.01)	19.05* (1.40)	16.95* (0.40)	14.94* (0.54)
N	52011	11755	21886	18370	35231	16780
RMSE	23.42	28.09	20.73	22.94	23.90	22.35
R ²	0.87	0.55	0.88	0.92	0.87	0.88
adj R ²	0.87	0.55	0.88	0.92	0.87	0.88

*p ≤ 0.05

Note: Ordinary least squares regression estimates with standard errors in parentheses. Dependent variable is beliefs in round after exposure to information of class in rows.

H Survey instrument

H.1 Instructions

In this section, we present screenshots of the instructions and example round used as our survey instrument. For simplicity, we have presented the instructions in one way, but we note below some of the randomization included in the instructions.

Incentives: \$0.10 bonus or points

Approximately one-third of our respondents were randomly assigned to the incentives structure described in the screenshot, earning points in each round, but receiving \$1.50 on a Tango Card regardless of their performance. The remaining two-thirds of our respondents received slightly different instructions on the first page in which they could receive a 10 cent bonus for correct responses, also paid to them on a Tango Card. Specifically, this part of the instructions read: “You have the opportunity to win \$0.10 in each round, paid to you as a bonus on a Tango Card that you can use to buy e-gift cards to places like Target and Starbucks. Note that in order to receive your winnings, you will need to provide an email address to which your Tango Card can be delivered. If you would rather donate your winnings to a charity, you do not have to provide an email address.”

On the fifth instructions screen, right before the example, participants in the monetary incentives condition read the following, instead of what is shown in the screenshot: “...Each time we ask, you have an opportunity to win \$0.10 paid to you on your Tango Card.” Similarly, on the last page of instructions, those receiving the monetary bonus read “...There will be **20** rounds. You will be paid \$0.10 as a bonus for each round you win, and \$0.00 for each round you lose.”

Candidate: Trump or Clinton

In the example that follows, the participant was randomly assigned to indicate how likely they thought it was that the person voted for *Donald Trump*. Half of our respondents were randomly assigned to this condition, while the other half were randomly assigned to evaluate the likelihood that the person voted for *Hillary Clinton*. As such, the instructions the other respondents saw said “Hillary Clinton” wherever “Donald Trump” is written in the included example. Importantly, the slider scales were also adjusted so that Hillary Clinton was on the right (99.9) and Donald Trump was on the left (0.1).

Example round: Gender or party identification

The example included here shows an example round in which the subject was given information that the other’s self-reported gender was female. Half of our respondents viewed gender as the informational input in their example screen, viewing either female or male as the self-reported gender. The other half of our respondents were randomly assigned to view party identification in their example, reading that “Person A generally thinks of him/herself as a Republican” or “Person A generally thinks of him/herself as a Democrat.”

You are invited to participate in a game. We are going to present you with pieces of information about an American who reported voting for either Donald Trump or Hillary Clinton for president in the 2016 general election. In each round, you will report how likely you believe it is that the person voted for Donald Trump on a scale from 0 to 100. You will have the opportunity to earn points in each round, but your points are not related to your winnings. To thank you for your participation, you will be paid \$1.50 on a Tango Card that you can use to buy e-gift cards to places like Target and Starbucks. Note that in order to receive payment, you will need to provide an email address to which your Tango Card can be delivered. If you would rather donate your payment to a charity, you do not have to provide an email address. The game works as follows:



In each round, you will be randomly matched to someone who was interviewed as part of the National Election Study in November of 2016. The study is a representative sample of America. The person with whom you will be matched reported voting for either Donald Trump or Hillary Clinton for president in the 2016 general election. You will be presented with a piece of information about that person and asked to indicate how likely you think it is that the person voted for Hillary Clinton on a scale from 0 to 100. Zero means that you believe it is impossible that the person voted for Hillary Clinton and 100 means that you are absolutely certain that the person voted for Hillary Clinton.

For example, if you were almost entirely certain that the person voted for Hillary Clinton, you might enter 99. If you were almost entirely certain that the person did not vote for Hillary Clinton, you might enter 1.

If you were totally uncertain about the candidate for which the person voted, you should enter 50.

If you think it is *more likely* that the person voted for Hillary Clinton, but you're not entirely certain, you should enter something between 51 and 99, depending on how certain you are.

If you think it is *less likely* that the person voted for Hillary Clinton, but you're not entirely certain, you should enter something between 1 and 49, depending on how certain you are.

In each round, you'll be able to win or not win. On the next page, we'll present how your response determines whether or not you win one point for that round.



Winning in each round of the game depends upon your response.

At the most basic level, in each round your task is to give your best guess about how likely you believe it is that the person described voted for Hillary Clinton. The contest is designed so that you will maximize your winnings by reporting your beliefs as accurately as possible.



Here is how your response generates a win in the game. In each round, the computer will draw a random number from 0 to 100. Each number from 0 to 100 is equally likely to be drawn by the computer. How you win or lose that round of the contest depends on what number the computer draws and your response for that round:

1. If the computer draws a number that is LOWER than your response, and the person VOTED FOR Hillary Clinton, YOU WIN!
2. If the computer draws a number that is LOWER than your response, and the person VOTED FOR Donald Trump, YOU LOSE!
3. If the COMPUTER draws a number that is HIGHER than your response, the computer will draw a SECOND NUMBER at random.
 - If the computer's SECOND draw is LESS than the first draw, YOU WIN, regardless of whether the person voted for Hillary Clinton.
 - If the computer's SECOND draw is MORE than the first draw, YOU LOSE, regardless of whether the person voted for Hillary Clinton.

The game is designed so that you have the best chance for winning by being as accurate as possible with your response. The higher your response, the more likely you win if the person did vote for Hillary Clinton. Similarly, the lower your response, the more likely you win if the person did not vote for Hillary Clinton.

The random numbers and payment calculations happen behind the scenes. You will not see the draws in any round.



You will be matched with 4 different Americans from the National Election Study. We will ask your belief about whether each person voted for Hillary Clinton five times each. Each time we ask, you have an opportunity to win one point.

We emphasize that this is a NO DECEPTION study. The information provided to you comes from survey responses from an actual participant in the National Election Study who reported voting for either Donald Trump or Hillary Clinton in the 2016 general election.



Here is an example of what the contest will look like. Note: you are not being paid for this practice response.

You have been matched to a participant from the 2016 National Election Study at random. Let's call this individual "Person A." Person A voted for either Donald Trump or Hillary Clinton in the November 2016 election. How likely do you believe it is that Person A voted for Donald Trump? For example, 1 if you believe it is almost impossible, 99 if you believe it is almost certain, 50 if you are totally unsure.



Now that you have seen an example, it is time to begin the contest. You will evaluate each of **four** individuals five times. All of these Americans reported voting for Donald Trump or Hillary Clinton in the 2016 general election. There will be a total of **20** rounds. You will be paid \$0.10 as a bonus for each round you win, and \$0.00 for each round you lose.

Again, the basic idea is to tell us how likely you believe it is that the person voted for Donald Trump using the numbers from 0 to 100, and to use the information provided to make your best guess. You will maximize expected winnings by reporting your beliefs as accurately as possible.



H.2 Question Wording

- Is there anything else you would have liked to know about Person D to accurately guess the candidate for which he or she voted in November 2016? [text entry]

We have a few final questions about you to help us understand the results. Please answer the following.

- In what year were you born? [numeric entry]
- What is your gender
 - Male
 - Female
 - Other
- Are you...
 - Currently registered to vote in the state where you live
 - Currently registered to vote in a different state
 - Not currently registered to vote
- Suppose you had \$100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?
 - more than \$102
 - exactly \$102
 - less than \$102
- Now we want to learn about news you might read, watch, or listen to from the media. Do you happen to read any daily newspaper or newspapers regularly?
 - Yes
 - No
- Now we want to learn about news you might read, watch, or listen to from the media. Do you happen to watch any TV news program regularly?
 - Yes
 - No
- Now we want to learn about news you might read, watch, or listen to from the media. Do you listen to news on the radio regularly?
 - Yes
 - No

- Now we want to learn about news you might read, watch, or listen to from the media. Did you get any news online yesterday?
 - Yes
 - No
- Now we want to learn about news you might read, watch, or listen to from the media. Did you get any news on a smartphone, cell phone, tablet, or other mobile handheld device yesterday?
 - Yes
 - No
- Some people don't pay much attention to politics generally. From day to day, when there isn't any big election campaign going on, would you say you are...?
 - not interested at all
 - not very interested
 - somewhat interested
 - very interested
 - extremely interested
- In talking to people about elections, we often find that a lot of people were not able to vote because they weren't registered, they were sick, or they just didn't have time. Which one of the following best describes what you did in the elections that were held on Tuesday, November 8, 2016?
 - Definitely did not vote in the elections
 - Definitely voted in person at a polling place on Election Day
 - Definitely voted in person at a polling place before Election Day
 - Definitely voted by mailing a ballot to election officials before the election
 - Definitely voted in some other way
 - Not completely sure whether you voted or not
- The next question is about the total income of all the members of your household in 2017, before taxes. This figure should include income from all sources, including salaries, wages, pensions, Social Security dividends, interest, and all other income. What was the total income in 2017 of your household? [free response]
- Did you vote for Hillary Clinton and Tim Kaine with the Democrats or Donald Trump and Mike Pence with the Republicans? [only shown to those who reported voting in the 2016 election]
 - Clinton/Kaine - Democrats

- Trump/Pence - Republicans
- Another candidate - please specify
- Did not vote for president
- Which one of the following best describes what you did in the elections that were held on Tuesday, November 6, 2012?
 - Definitely did not vote in the elections
 - Definitely voted in person at a polling place on Election Day
 - Definitely voted in person at a polling place before Election Day
 - Definitely voted by mailing a ballot to election officials before the election
 - Definitely voted in some other way
 - Not completely sure whether you voted or not
- In 2012, did you vote for Barack Obama and Joe Biden with the Democrats or Mitt Romney and Paul Ryan with the Republicans?
 - Obama/Biden - Democrats
 - Romney/Ryan - Republicans
 - Another candidate - please specify
 - Did not vote for president
- Generally speaking, do you usually think of yourself as a Democrat, a Republican, an Independent, or what?
 - Democrat
 - Republican
 - Independent
 - Other Party (specify)
- Would you call yourself a strong Democrat/Republican or not a very strong Democrat/Republican? [Shown to those who reported Democrat or Republican above; shown selected party]
 - Strong Republican/Democrat [shown PID response]
 - Not very strong Republican/Democrat [shown PID response]
- Do you think of yourself as closer to the Republican Party or to the Democratic Party? [Shown to those who answered Independent or Other to the PID question above]
 - Closer to Republican
 - Neither
 - Closer to Democratic

- Where would you place yourself on this scale, or haven't you thought much about this?
 - liberal
 - slightly liberal
 - moderate; middle of the road
 - slightly conservative
 - conservative
 - haven't thought much about this
- How often do you attend religious services?
 - never
 - less than once a year
 - about once or twice a year
 - several times a year
 - about once a month
 - 2-3 times a month
 - nearly every week
 - every week
 - several times a week
- Thank you for your responses. [Shown winnings in the game earlier] You can choose to keep your bonus or donate it to charity. In order to receive your bonus, please enter an email address here where we can deliver you a Tango Card with your winnings. If you would rather donate your bonus to charity, please select the charity to which you would like your Tango Card winnings sent.
- If you have any other comments about the survey, game, or experience, please leave them here. Thank you! [free response]

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