

# Electability Salience Can Bias Voting Decisions \*

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“Electability” received considerable attention during the 2020 Democratic primary campaign, with some critics claiming that the term was code for sexism. From a rational choice perspective, “electability” could affect voting in multiple ways, including via expected utility; previous scholarship suggests that many voters consider it as such. Yet this scholarship ignores the role that salience plays in decision-making, and is silent on which sorts of candidate might benefit from the effects of priming electability. To address these issues, we conducted a survey experiment during the 2020 primary season, measuring Democratic primary voters’ preferences for candidates, electability estimates, and candidate rankings. Our experiment manipulated salience by randomizing the order in which preferences and electability were elicited. We show that electability salience caused a substantial increase in the probability that a respondent made decisions based only on electability.

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Pundits, activists, and voters paid considerable attention to “electability” during the 2020 Democratic presidential primary campaign.<sup>1</sup> This debate focused primarily on which candidates were most likely to beat incumbent Donald Trump in the general election. But a secondary debate emerged about whether such considerations *should* affect voters’ decisions.<sup>2</sup>

“Electability” could also be a valid consideration, when viewed from a rational choice perspective. Acting rationally according to this perspective entails taking both preferences and electability into account, as in expected utility theory, whereas voting decisions based solely on one’s preferences for candidates—without regard for election outcomes—are considered myopic. Decisions based only on which candidates are deemed to have the highest probability of winning the general election are deemed myopic as well. Discussion about electability could be important, therefore, if it encourages voters to act rationally, in line with expected utility. From this point of view, the danger is that such discussion could encourage voters to (irrationally) make decisions based on electability alone. Reassuringly, scholars have indeed found that, in past elections, most primary voters made decisions consistent with expected utility (Abramowitz, 1989; Abramson et al., 1992; Stone, Rapoport and Abramowitz, 1992).

Yet this scholarship on electability has three important limitations. First, the evidence comes from elections in the 1980s. Changes in American politics over the last four decades may have altered voter decision making, as it has in the relationship between ideology and objective electability (Utych, 2020). Second, previous scholarship implicitly assumes that decision making is dispositional, imperturbable by environmental factors like media content. Voter decision making, however, is also situational, so electability salience can affect sub-

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<sup>1</sup>Competing interests: The author(s) declare none.

<sup>2</sup>Critics argued that discussions of “electability” were at best imprecise (Seitz-Wald, 2019) and at worst code for sexism (Cain, 2020). If so, encouraging consideration of electability would be tantamount to encouraging bias (Bateson, 2020; Green, Schaffner and Luks, 2021), tilting the odds away from candidates who would increase diversity or from candidates otherwise likely to win the general election (Cryer, 2019; Lawless and Pearson, 2008).

sequent choices, consistent with priming (Berger, Meredith and Wheeler, 2008). Third, if this priming hypothesis is correct, it becomes an empirical question which sort of candidates might benefit from the effect.

To address these questions, we conducted a survey experiment during the 2020 primary season. The survey measured Democratic primary voters’ preferences for candidates, electability estimates, and candidate rankings. Taking these perceptions as given, our focus is on the role of electability in the voting calculus and the effect of increasing its salience. We experimentally manipulated electability salience by randomizing the order in which preferences and electability were elicited. We then classified each respondent’s decision-making type—whether they appeared to make choices based on preferences only, electability only, or expected utility—and estimated the effects of the ordering manipulation on both these types and candidate rankings.

We found that most participants in our experiment took electability into account. We classified 20% of respondents as making vote choices based only on electability and about 40% as making choices based on expected utility. Increasing electability salience—eliciting it just before rankings—caused a 10 percentage point increase in the probability that a respondent made decisions based only on electability, with a similar drop in the probability that a voter made choices based on preferences alone, and no change in the proportion who made (rational) decisions based on expected utility. That our manipulation had an effect at all is potentially surprising given that electability was already a much-discussed and heightened consideration among Democratic elites and activists, particularly following Hillary Clinton’s loss in 2016 (Masket, 2020). We conclude that raising the salience of electability did *not* work to make participants more rational.

## Electability and Voter Decision Making

Following the previous literature (Abramowitz, 1989; Abramson et al., 1992; Stone, Rapoport and Abramowitz, 1992), we distinguish between two key inputs to vote choice: *preferences*

and *electability*. These correspond to primitives in formal theories of choice under uncertainty. Formally, we define *preferences* over *outcomes*, represented by  $u_C$ , the utility for candidate  $C$  in the event that  $C$  wins both the primary and the general elections. Preferences are general and may vary from voter to voter, depending on different mixes of issues, ideology, candidate quality, etc. Similarly, we define *electability* as  $p_C$ , the *subjective belief* that, if  $C$  were the party nominee, they would win the general election. As with preferences, beliefs are general and may be accurate or biased. We take both of these inputs as given.

Given these rudiments, we distinguish three types of decision making. First, voters make decisions based on *preferences only* if  $u_C > u_D$  entails that she would rank  $C$  over  $D$ . This type corresponds to “sincere” voting in the primary, myopically ignoring the general. Second, voters make decisions based on *electability only* if  $p_C > p_D$  entails ranking  $C$  over  $D$ . This type indicates a single-minded focused on choosing a candidate to win the general election. Third, voters make decisions based on *expected utility* if  $p_C u_C + (1 - p_C) u_T > p_D u_D + (1 - p_D) u_T$  entails ranking  $C$  over  $D$ , where  $u_T$  represents the voter’s preferences for the opposing party candidate. This type is characterized as “sophisticated” or “rational.” While the first two involve a single input and are therefore cognitively simple to implement, the third requires weighing preferences and electability, and considering preferences for the opponent, making it more cognitively taxing.

Several studies of voting behavior in the 1984 and 1988 elections compared sincere and sophisticated voting models and found support for decision making consistent with the expected utility type. Stone, Rapoport and Abramowitz (1992) find evidence favoring the expected utility model for a sample of 1984 Iowa Democratic caucus voters and state convention delegates. Abramowitz (1989) distinguishes between electability and “viability” (beliefs about winning the nomination), finding that the expected utility model outperformed both preferences-only and an alternative “bandwagon” model focused on viability, based on 1988 Super Tuesday exit poll data from Dekalb County, Georgia. Abramson et al. (1992) also analyze Super Tuesday voters using ANES data, and conclude that voting behavior was

consistent with a sophisticated voter model, using viability as beliefs.

Applying these results straightforwardly, we might conjecture that most voters rely on expected utility. Such application, however, tacitly assumes that voters' decision making is wholly dispositional, despite evidence from political psychology to the contrary. Decision making is characterized by both dispositional and situational concerns, based on which considerations are available when they make choices (Tversky and Kahneman, 1973). Availability is affected by frequency of emphasis, e.g. in media mentions of crime (Iyengar and Kinder, 1987), and by recency, e.g. in evaluations of incumbent performance (Huber, Hill and Lenz, 2012). Voters for whom electability is more available are therefore more likely to take electability into account when making decisions. In formal terms, such voters are more likely to present as *electability only* types.

Recent experimental research has explored the effects of manipulating electability salience on voter decisions. Rickershauser and Aldrich (2007) find that providing information about electability in the 2004 Democratic primary increased positive evaluations of candidates who were depicted as electable. Simas (2017) finds that providing information about hypothetical House candidates' electability increases voters' likelihood of voting for the candidate who the poll suggests is most electable. While both studies relied on convenience samples, and neither linked its findings to the potential for bias, both suggest that manipulating electability salience has downstream effects.

There is also good reason to expect that there will be a specific, gender-related effect of electability salience because of strategic discrimination (Bateson 2020). The logic of strategic discrimination suggests that individual primary voters may prefer not to vote for women candidates, not because the voters themselves are personally opposed to electing women, but because they fear that women candidates will be less likely to win in the general election. Rather than owing to first-order misogyny, such individuals may reason that other voters would be misogynist, and therefore less likely to vote for the woman nominee. In our context, we expect that the logic of strategic discrimination will become more available as a

cognitive resource to participants when it has been made salient more recently.

## Questionnaire, Measurement, & Data

On January 15-16, 2020, we fielded an online survey of Democratic party identifiers.<sup>3</sup> We asked respondents about seven candidates for the Democratic presidential nomination who were leading in polling averages at the time: Joe Biden, Michael Bloomberg, Pete Buttigieg, Amy Klobuchar, Bernie Sanders, Elizabeth Warren, and Andrew Yang.

Respondents registered *preferences* ( $u_C$ ) using a slider to indicate how much they would “prefer for each candidate to become President” on a scale from 0 to 100. We explicitly used the word “preference” (rather than “feelings”) and asked that respondents “ignore their chances of winning.” To facilitate a meaningful interval scale, we explain that “placing candidates farther apart indicates a larger difference in preference than candidates you put closer together” and instruct that “if two candidates are equally preferred, give them the same number.” We first ask respondents to rate Donald Trump, then randomize the order of the Democratic candidates and an attention check (asking to drag the slider to 27).

To measure *electability* ( $p_C$ ), we asked respondents to “indicate each candidate’s likelihood of winning against Trump in terms of a percentage chance out of 100.” We provide guidance that “0 means will certainly lose to Trump,” “50 means complete toss up,” and “100 means will certainly defeat Trump,” and explicitly instruct them to ignore their preferences (“ignoring who you want to win”). We randomize the order of candidates, again including an attention check (asking them to drag the slider to 88).

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<sup>3</sup>After giving informed consent, we asked respondents about their partisanship using the standard ANES branching format and immediately screened out respondents who did not identify as a Democrat or Democratic-leaner. See Appendix A for the complete questionnaire, including the full text of the consent statement; responses were completely anonymous, no deception was involved, and respondents were not compensated. The study was approved by XXX IRB.

We manipulate electability salience by randomizing the order of elicitation for preference and electability, separating the two with a distractor task. Following the second elicitation, respondents completed a second distractor. Finally, we elicited *candidate rankings* by asking respondents to “rank the candidates in terms of how likely you are to vote for them if they are on the ballot in your state’s Democratic primary or caucus in 2020.” Respondents indicated intentions graphically, by dragging candidates’ names into the desired order. This experimental design is premised on the idea that, because each elicitation task is cognitively challenging, the cognitive content required for the second task will be more available when participants are finally asked to rank candidates.

The survey yields ready measures of both *preferences* and *electability*, but we must derive a measure of *expected utility*. To do so, we combined their observed preferences and electability measures for each candidate with those for Trump. Formally, a voter’s expected utility for candidate  $C$  is equal to  $p_C u_C + (1 - p_C) u_T$ , where  $u_T$  is their indicated preference for Trump.

We use these measures to classify the types of respondents as *preferences only*, *electability only*, or *expected utility*. To that end, we estimated three separate rank-ordered logit models (Allison and Christakis, 1994) of the (reversed) candidate rankings. Each model corresponds to one type, and includes the single regressor identified with that type. For each model, we calculated (martingale) residuals (Box-Steffensmeier and Jones, 2004), and determined each respondent’s type based on the model that yielded the smallest sum of squared residuals over the seven candidate rankings.<sup>4</sup>

We recruited our sample via Lucid, using target quotas to approximate the gender, age,

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<sup>4</sup>Rank-ordered logits are not invariant to reversals of rankings because the process is sequential, and so we also conducted a similar exercise using non-reversed rankings. In models using reversed rankings, candidates are drawn in order from last to first, whereas in non-reversed rankings the candidates are drawn from first to last. The models of reversed rankings yielded substantially better fit (AIC) in each case. Type classifications were identical for most respondents, with a  $\chi^2$  test providing strong evidence of similarity ( $p < 0.001$ ).

racial, ethnic, educational, and regional characteristics of self-identified Democratic primary voters in the 2016 ANES and registered Democratic voters in the 2018 CCES (see Appendix B), ultimately receiving 1211 complete responses. To test covariate balance, we used equivalence testing (Hartman and Hidalgo, 2018), and rejected null hypotheses of differences between treatment conditions for all covariates (Appendix C). Our focus is on the effect of elicitation order on the type classifications of respondents. For robustness, we also directly estimated treatment effects as multiplicative interactions of elicitation order on each of the three regressors in a single rank-ordered logit model of rankings. Results are similar to those we present here (Appendix D). For analysis, we focus on the subsample of respondents who failed no more than one of our three included attention checks (Berinsky, Margolis and Sances, 2014), who did not indicate voting for Trump in 2016, and who rated Trump as their least preferred candidate in our preference elicitation, leaving us with 833 observations. All analyses were also conducted on the full dataset of 1211 respondents (Appendix E), and we indicate all instances in which the datasets yielded different inferences.

## Results

Table 1 reports the overall results by candidate. We summarize the evidence with each candidate’s mean ranking, which is interpretable as a Borda count, and the percentage of participants who selected a candidate as their first choice, each separately by treatment condition. The mean rankings reveal only one change depending on electability salience, that between the sixth and seventh ranked candidates. Similarly, we observe that electability salience appears to benefit higher ranked candidates at the expense of lower ranked ones. Simple pairwise  $t$ -tests of differences in first choices yield two-sided  $p$ -values that are significant ( $p < .05$ ) only for Buttigieg.<sup>5</sup> Both these pieces of evidence suggest that the effect of

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<sup>5</sup>A more appropriate, though more complex, approach would be to use a multinomial logit model to test the sharp null hypothesis of no effect based on permutations of treatment. However, taking Biden as the reference category, the  $p$  values from such an approach are



electability salience are larger and more consistent for lower ranked candidates.

Table 1: Summary of Results by Candidate

Candidate	Mean Ranking		% First Choice		Difference	$p$
	Electability Last	Preferences Last	Electability Last	Preferences Last		
Biden	2.7	2.8	37.3	35.0	+2.3	0.49
Sanders	3.0	3.1	27.4	22.9	+4.5	0.13
Warren	3.2	3.2	16.0	16.0	+0.3	0.99
Bloomberg	4.2	4.2	10.9	11.2	-0.3	0.89
Buttigieg	4.5	4.4	4.1	8.3	-4.2	0.01
Yang	5.1	5.2	3.4	4.0	-0.7	0.62
Klobuchar	5.4	5.1	1.0	2.6	-1.7	0.07

The table displays overall average rankings of candidates, which are interpretable as Borda counts, along the percentage of participants in each treatment condition that listed each candidate as their first choice. The final column reports the differences in percentages by treatment for each candidate, along with two-sided  $p$ -values based on pairwise  $t$ -tests.

Turning to the effect of salience on participant types, we find that electability factors into the vote choices of most respondents (59%), either on its own (21%) or via expected utility (38%). Although previous research suggests that pluralities of voters’ behavior conformed to expected utility in primary elections from the 1980s, we find instead that a plurality are preferences-only types (42%), suggesting changes in behavior over the past four decades.

Figure 1 displays a ternary plot of average types in each treatment condition, as estimated with a multinomial logistic regression of types on *Electability Last*, which equals 1 in that condition and 0 otherwise. We used the model to calculate mean predicted probabilities for each condition, estimating uncertainty with 1000 bootstraps over respondents. Comparing conditions, we see that the mean type is significantly closer to the electability-only vertex (top) in the “Electability Last” condition than in the “Preferences Last” condition.

Figure 2 depicts the effects of electability salience on the prevalence of each type. When electability is elicited last, the probability a respondent is an electability-only type increases by 12 percentage points relative to when preferences are elicited last (95% interval = [6, 18],  $p = 0.002$ ). Concomitantly, the probability a respondent is a preferences-only type declines by 10 percentage points when electability is elicited last ( $[-17, -4]$ ,  $p < 0.001$ ).

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also significant (*i.e.*,  $p < .05$ ) only for Buttigieg, and so we opt for the simpler strategy.

### Elicitation Order Affects Type Distribution

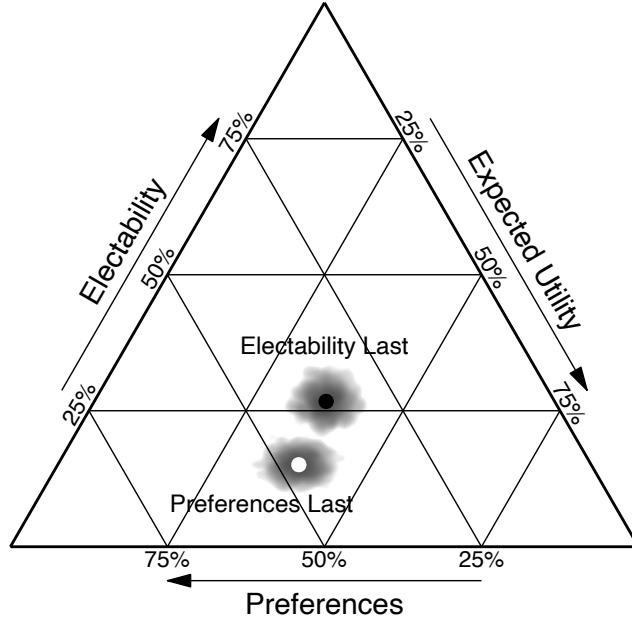


Figure 1: The figure displays a ternary plot of the mean types in each treatment condition. Each vertex of the triangle indicates a distribution composed entirely of one type, and the center of the triangles indicates a completely mixed distribution. When electability is elicited last, the distribution tends toward the (top) electability vertex.

There is no significant difference in the probabilities of an expected utility type across conditions. We conclude that electability salience increases the probability that voters rely on it exclusively in decision making, without making them more rational. The result is robust to forgoing our measure of voters' types, and instead directly regressing candidate rankings on measures of preferences, electability, expected utility, and the interactions of each with *Electability Last* (Appendix D).

Finally, we examine whether electability salience benefits men candidates. Overall, comparing men and women candidates, the former were rated 4 points more preferred and 7 points more electable (both on 0 to 100 scales), and men were placed 0.3 ranks more highly. To test the effect of salience, we estimate a linear model, regressing reversed candidate rankings on *Electability Last*, an indicator for whether the candidate was a man, and their interaction. Reversing rankings means that positive changes correspond to better rankings

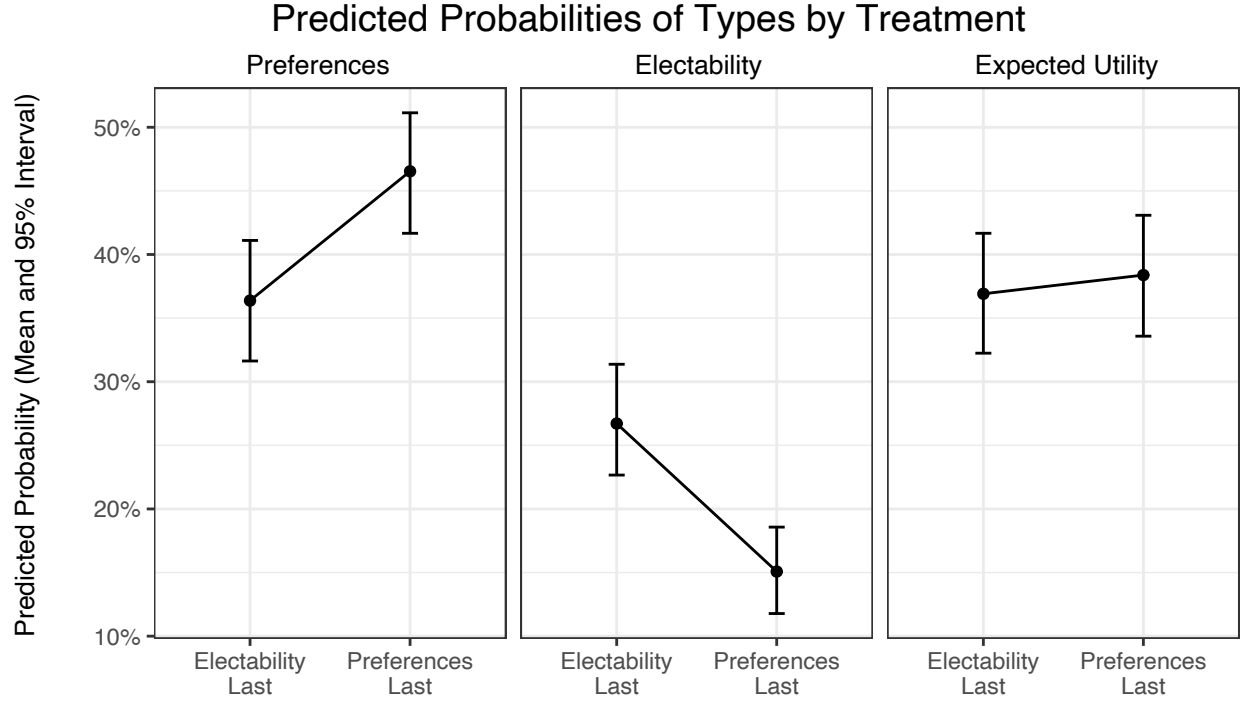


Figure 2: The figure displays estimated average effects of elicitation order on the predicted probabilities of types. When preferences are elicited last, there is a statistically significant increase in the probability of a respondent being classified as a preferences type, with a concomitant change in the probability of being an electability type when it is elicited last.

in the “Electability Last” condition than in the “Preferences Only” condition. We use this model to estimate the effect of *Electability Last* for each gender, and estimate uncertainty with 1000 bootstrap resamples over respondents.

Electability salience appears to have produced a net benefit to men. These findings are illustrated in Figure 3, which presents the estimated average effect on rankings by gender. On average, men saw their rankings increase by 0.07 [0.01, 0.13] on the ranking scale (1-7), while the women candidates saw theirs decline by  $-0.18$   $[-0.32, -0.02]$ . These changes are not large, but the difference in effects is statistically significant ( $p = 0.02$ ). The result is similar in sign and magnitude, but statistically insignificant when we include respondents who failed multiple attention checks, who supported Trump in 2016, or who did not rank Trump as their least preferred candidate (Appendix E). To further explore the potential for variation

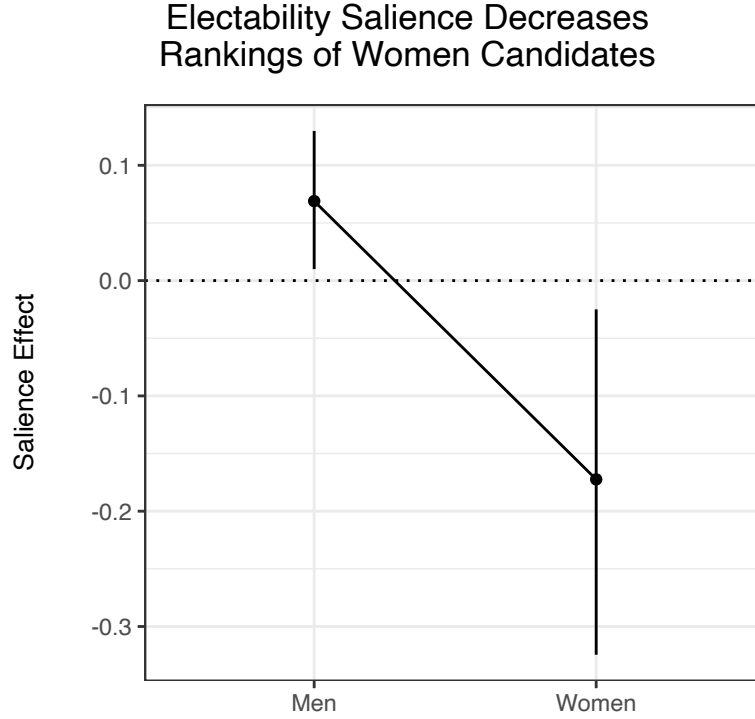


Figure 3: The figure displays the estimated average effects of eliciting electability last on the (reversed) rankings of men candidates as compared to women, with 95% intervals. Electability salience appears to benefit men candidates at the expense of women.

between candidates, we fit a version of the regression model used to generate Figure 3, but rather than including a dummy variable for Women, we included interaction terms of elicitation order with each candidate. We excluded the constituent term for elicitation order, which means that we effectively produced conditional average treatment effects for each candidate, rather than a comparison of each candidate against some arbitrary reference choice. As with Figure 3, results are interpretable on the scale of rankings. We found that these effects were negative for both women and positive for all men except for Buttigieg.<sup>6</sup> This analysis partially confirms that electability salience had negative effects on rankings for women as opposed to men, though it also suggests a more nuanced conclusion.

<sup>6</sup>In terms of statistical inference, the 95% bootstrapped interval excludes zero for Klobuchar  $[-0.4, -0.1]$  but not for Warren  $[-0.3, 0.1]$ . These intervals include zero for all men candidates.

## Conclusion

We study the effects of electability salience on voter decision making and candidate ranking. Overall, we find that the effect of electability salience on aggregate vote choices is driven primarily by changes among low-ranked candidates. Further, we show that, unlike in studies of primary voting in the 1980s, a plurality of respondents in our sample made decisions consistent with a preferences-only rule, rather than expected utility. Moreover, while electability salience increased the chances that a respondent made decisions based on electability alone, it did not have a perceptible effect on whether a voter behaves rationally (i.e., consistent with expected utility theory). Finally, we observe evidence consistent with the idea that electability salience caused respondents to rank men candidates more highly, at the expense of women. This effect may result from a compound of differences in both preferences and electability perceptions, as respondents rated women candidates as both less preferred and less electable than their competitors on average, with the gap in electability larger than that for preferences. The finding is consistent with the case against “electability” made by critics during the 2020 primary season.

Notwithstanding the clarity and coherence of these findings, our study has at least four important limitations. First, we lack the ability to characterize whether perceptions of electability were accurate, or whether, in some cases, e.g., because of media discussion, electability salience may improve those perceptions. Second, our study is silent on the origins of beliefs about electability. Those origins are important because perceptions of electability could be objective and yet remain unfair, e.g., if they are based on accurate estimates of other voters’ biases (Bateson, 2020; Green, Schaffner and Luks, 2021). Third, we used actual candidates in the 2020 Democratic presidential primary. As usual, there is a tradeoff between using actual and hypothetical candidates. Our use of actual candidates is advantageous in that it provides a difficult test, given that, in many cases, respondents may have already-formed preferences and beliefs, meaning that electability salience has a high

barrier to cross if it is to have an effect. However, this design choice also means that there are only two women candidates in the study, meaning that it is difficult to generalize our results illustrating the effect of electability on women candidates' prospects. For example, had we run a similar experiment in the 2016 Democratic presidential primary, with Clinton and Sanders, we may have observed the opposite effect. Fourth, our study does not permit us to identify which individuals are most influenced by electability salience, nor does it reveal the mechanisms by which campaigns can raise or lower it. Future work should focus on addressing each of these limitations.

Nevertheless, our findings are consistent with the idea that mere discussion of electability in mass and social media has the potential to alter voter decisions. Even in the (perhaps unlikely) best case scenario, in which voters' perceptions track objective information, electability salience shifts voters from a myopic focus on one dimension to another—from preference to electability—and is insufficient to motivate voters to use the more rational and cognitively complex decision rule. It remains possible that such discussion might encourage voters to seek out information that could improve their beliefs about candidates' objective electability, though such improvements would not necessarily reduce disparities in descriptive representation. Whether voters seek more information, whether their beliefs become more accurate, and whether such beliefs conduce toward further inequality are important questions for further inquiry.

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# Appendix to

## Electability Salience Can Bias Voting Decisions

Appendix A: Survey Flow and Questionnaire  
Appendix B: Descriptive Statistics  
Appendix C: Covariate Balance  
Appendix D: Robustness  
Appendix E: Replication of Results on All Respondents

## Appendix A: Survey Flow and Questionnaire

The survey flow consists of random assignment and fielding 9 blocks. Block names (not shown to respondents) appear in bold, and survey items appear in italics. The block were fielded as follows:

1. Field **Consent** block. If *Consent* = Yes, continue; else, end.
2. Uniformly randomly assign  $Z \in \{P, E\}$ .
3. Field **Party** block. If *Party* = Democrat or *Lean* = Democrat, continue; else, end.
4. Field **Voting Behavior and Election Knowledge** block.
5. If  $Z = P$ , field **Preferences** block; else, field **Electability** block.
6. Field **Political Covariates** block.
7. If  $Z = P$ , field **Electability** block; else, field **Preferences** block.
8. Field **Need for Cognition** block.
9. Field **Ranking** block.
10. Field **Demographics** block.

The contents of the blocks are as follows:

### Consent.

This survey is part of a research project about politics and public affairs. In the survey, you will be asked your opinions about presidential candidates and your political views. It will take approximately 5-10 minutes to complete. If you are willing to participate, we will also ask you about your background and some of your views about politics. All participants must be 18 years of age or older and live in the United States.

There are no foreseeable risks associated with this study, nor are there any direct benefits to you.

This questionnaire is completely anonymous. We will not ask for your name or any personally identifiable information, so your responses will not be identifiable in any way.

Your participation is voluntary, and you may stop completing the survey at any time.

The research study is being conducted by XXX at the University of XXX. If you have any questions about the study, you may send an email to XXX.

*Consent.* Do you voluntarily agree to participate in this study?

Yes

No

**Party.**

Branching question with the following logic:

1. Field *Party*.
2. If *Party* = Republican, field *Strong Republican*.
3. If *Party* = Democrat, field *Strong Democrat*.
4. Else, field *Lean*.

*Party*. Generally speaking, do you usually think of yourself as a Republican, Democrat, or Independent?

Republican

Democrat

Independent

Other (please specify)\_\_\_\_\_

*Strong Republican*. Would you call yourself a strong Republican or not so strong Republican?

Strong Republican

Not so strong Republican

*Strong Democrat*. Would you call yourself a strong Democrat or not so strong Democrat?

Strong Democrat

Not so strong Democrat

*Lean*. Do you usually think of yourself as closer to the Republican Party or the Democratic Party?

Republican Party

Democratic Party

Neither

Not sure

**Voting Behavior and Election Knowledge.**

*Registered*. Are you registered to vote?

Yes

No

I'm not sure

*Follow Nomination Race.* How much would you say you've been following the race for the Democratic presidential nomination?

A great deal

A lot

A moderate amount

A little

None at all

*Open Names.* Can you name some of the candidates running for president in 2020? Enter the names of as many candidates as you can remember.

Candidate 1 \_\_\_\_\_

Candidate 2 \_\_\_\_\_

Candidate 3 \_\_\_\_\_

Candidate 4 \_\_\_\_\_

Candidate 5 \_\_\_\_\_

Candidate 6 \_\_\_\_\_

*Vote 2020.* How likely are you to vote in the Democratic primary or caucus in your state in 2020?

Extremely likely

Somewhat likely

Neither likely nor unlikely

Somewhat unlikely

Extremely unlikely

*Vote 2016.* Thinking back to the 2016 election, did you vote in a Democratic primary or caucus in 2016?

Yes

No

I don't remember

If *Vote 2016* = Yes, ask: *Choice 2016* Who did you vote for in the 2016 Democratic primary or caucus?

Hillary Clinton

Bernie Sanders

Donald Trump

Other \_\_\_\_\_

*Attention Check 1.* Some people think the government should provide fewer services, even in areas such as health and education, in order to reduce spending. To demonstrate that you've read this much, just go ahead and select the numbers two and five no matter what your own views are.

Where would you place YOURSELF on this scale?

1 - Fewer services

2

3

4

5 - More services

### **Preferences.**

[Responses elicited with sliders, preceded by this text:]

Next, we want to know how much you would prefer for each of several candidates to become President, ignoring their chances of winning.

Ignoring their chances of winning, how much would you prefer for each candidate to become President?

Place each candidate on a scale where 0 means "least preferred" and 100 means "most preferred". Placing candidates farther apart indicates a larger difference in preference than candidates you put closer together.

If two candidates are equally preferred, give them the same number.

(Order of candidates randomized.)

Donald Trump

Bernie Sanders

Elizabeth Warren

Joe Biden

Pete Buttigieg

Michael Bloomberg

Amy Klobuchar

Andrew Yang

*Attention Check 2.* Drag the slider to 27.

### **Political Covariates.**

Next, we have a few questions about your political views.

*Political Interest.* In general, how interested are you in politics and public affairs?

- Very interested
- Somewhat interested
- Slightly interested
- Not at all interested

*Political Person.* In general do you consider yourself to be a political person? I consider myself:

- Very political
- Somewhat political
- Not especially political
- Not at all political

*Symbolic Ideology.* In general, do you think of yourself as...

- Extremely liberal
- Liberal
- Slightly liberal
- Moderate, or middle of the road
- Slightly conservative
- Conservative
- Extremely conservative

### **Electability.**

[Responses elicited with sliders, preceded by this text:]

Next, we want to know what you think of each Democratic candidate's chance of defeating Donald Trump, ignoring who you want to win.

Ignoring your preferences, what do you think is each Democratic candidate's chance of defeating Donald Trump in the general election?

You will indicate each candidate's likelihood of winning against Trump in terms of a percentage chance out of 100.

0 means "will certainly lose to Trump".

50 means "complete toss up".

100 means "will certainly defeat Trump".

Indicate the percentage chance you think <CANDIDATE> would win the election in 2020 against Donald Trump?

(Order of candidates randomized.)

Bernie Sanders

Elizabeth Warren

Joe Biden

Pete Buttigieg

Michael Bloomberg

Amy Klobuchar

Andrew Yang

*Attention Check 3.* Drag the slider to 88.

### **Need for Cognition.**

Next, we have a few questions about how you feel about thinking.

*Need for Cognition 1.* I would prefer complex to simple problems.

*Need for Cognition 2.* I like to have the responsibility of handling a situation that requires a lot of thinking.

*Need for Cognition 3.* Thinking is not my idea of fun.

*Need for Cognition 4.* I would rather do something that requires little thought than something that is sure to challenge my thinking abilities.

*Need for Cognition 5.* I really enjoy a task that involves coming up with new solutions to problems.

*Need for Cognition 6.* I would prefer a task that is intellectual, difficult, and important to one that is somewhat important but does not require much thought.

All responses included the following options:

Strongly agree

Somewhat agree

Neither agree nor disagree

Somewhat disagree

Strongly disagree

**Ranking.**

[Responses elicited with drag-and-drop into boxes for each rank, preceded by this text:]

Please rank the candidates in terms of how likely you are to vote for them if they are on the ballot in your state's Democratic primary or caucus in 2020. Drag the names to the box on the right with your most likely vote on top (1) and your least likely vote on the bottom (6). You can rearrange the order until you are satisfied.

(Order of candidates randomized.)

Bernie Sanders

Elizabeth Warren

Joe Biden

Pete Buttigieg

Michael Bloomberg

Amy Klobuchar

Andrew Yang

**Demographics.**

*Gender.* What is your gender?

Male

Female

Other \_\_\_\_\_

*Age.* What is your age?

Under 18

18 - 24

25 - 34

35 - 44

45 - 54



55 - 64

65 - 74

75 - 84

85 or older

*Race/Ethnicity.* What is your race/ethnicity? (check all that apply)

White/Caucasian

African American

Hispanic

Asian or Pacific Islander

Native American

Other \_\_\_\_\_

*Education.* What is the highest level of education you have completed?

Less than High School

High School / GED

Some college

2 year college degree (Associate)

4 year college degree (Bachelor)

Post-graduate degree (Professional, Masters, Doctorate)

*ZIP.* What is your ZIP code?

## Appendix B: Descriptive Statistics

Table A2: Descriptive Statistics for Covariates (Main Dataset)

Covariate	Mean	SD	Min	Max
Age 18-24	0.11	0.31	0.0	1.0
Age 25-34	0.21	0.40	0.0	1.0
Age 35-44	0.16	0.36	0.0	1.0
Age 45-64	0.33	0.47	0.0	1.0
Age Over 65	0.20	0.40	0.0	1.0
Did not Vote/Supp. Other Cand. in 2016	0.16	0.37	0.0	1.0
Supported Clinton in 2016	0.68	0.47	0.0	1.0
Supported Sanders in 2016	0.16	0.37	0.0	1.0
Supported Trump in 2016	0.00	0.00	0.0	0.0
HS or Less	0.23	0.42	0.0	1.0
Some College	0.38	0.49	0.0	1.0
College Graduate	0.39	0.49	0.0	1.0
Black	0.25	0.43	0.0	1.0
Latino	0.15	0.36	0.0	1.0
Other/Mixed Race/Ethnicity	0.08	0.27	0.0	1.0
White	0.51	0.50	0.0	1.0
Female	0.58	0.49	0.0	1.0
Campaign Knowledge	0.18	0.66	-1.0	1.0
Follows Politics	0.73	0.27	0.0	1.0
Strong Democrat	0.71	0.45	0.0	1.0
Trump Least Preferred	1.00	0.00	1.0	1.0
Intend to Vote	0.93	0.17	0.0	1.0
Registered Voter	0.96	0.20	0.0	1.0
Ideology = ideology	0.30	0.24	0.0	1.0
Political Interest	0.75	0.26	0.0	1.0
# Failed Attention Checks	1.41	0.64	1.0	3.0
Need for Cognition	0.66	0.15	0.0	1.0

$n = 833$ , including only those respondents who failed no more than one attention check, who did not support Trump in 2016, and who preferred Trump least.

Table A3: Descriptive Statistics of Candidate Evaluations (Main Dataset)

Candidate	Preferences		Electability		Ranking	
	Mean	SD	Mean	SD	Mean	SD
Biden	73	26	74	24	2.7	1.9
Bloomberg	58	29	62	27	4.2	1.9
Buttigieg	54	28	53	27	4.5	1.7
Klobuchar	50	27	44	29	5.2	1.6
Sanders	73	26	69	26	3.0	1.9
Warren	67	26	62	27	3.3	1.7
Yang	50	28	44	29	5.1	1.7
Trump	6	13	—	—	—	—

$n = 833$ , including only those respondents who failed no more than one attention check, who did not support Trump in 2016, and who preferred Trump least.

## Appendix C: Covariate Balance

We check covariate balance with Hartman and Hidalgo's (2018) equivalence test method. The figure presents equivalence tests of covariate balance (Hartman and Hidalgo, 2018), using only those observations included in the main analysis dataset (i.e., those who passed most attention checks and did not indicate support for Trump). The tests indicate that we can reject the null hypotheses of differences for all covariates ( $p < .001$ ).

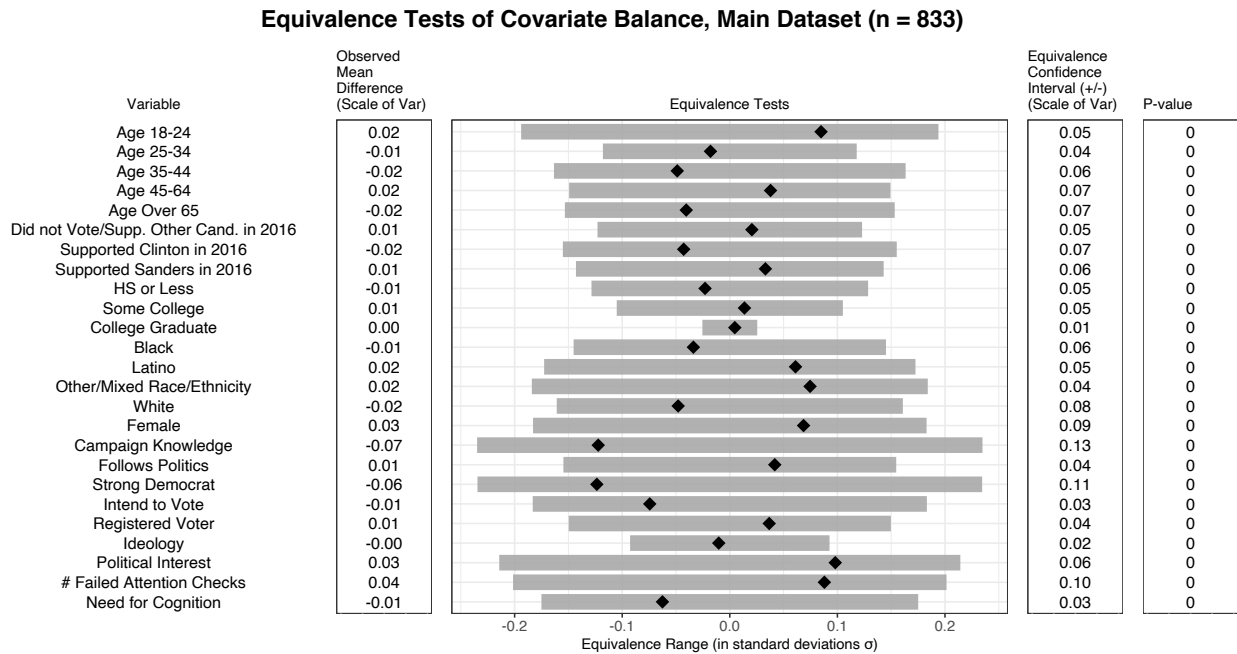


Figure A4: Covariate Balance (Main Dataset)

## Appendix D: Robustness

In this appendix, we test the robustness of the results in the main paper by directly modeling candidate rankings with a rank-ordered logit model. The unit of analysis is the respondent-candidate, and, because we have full rankings from each respondent, we now have  $833 \times 7 = 5831$  observations. A rank-ordered logit can be estimated with a Cox proportional hazard model, provided that we stratify by respondent (Allison and Christakis, 1994). Because the model includes this stratification, it cannot also include the main effect of treatment, as respondents are nested within treatment conditions. Therefore, we estimate the following model:

$$\begin{aligned} \text{Reversed Ranking}_{iC} \sim & \text{Preferences}_{iC} + \text{Electability}_{iC} + \text{Expected Utility}_{iC} + \\ & \text{Preferences}_{iC} \times \text{Electability Last}_i + \\ & \text{Electability}_{iC} \times \text{Electability Last}_i + \\ & \text{Expected Utility}_{iC} \times \text{Electability Last}_i, \end{aligned}$$

where  $i$  indexes respondents and  $C$  indexes candidates. For uncertainty, we draw 1000 bootstrap resamples over respondents. Table A4 presents the results of this model.

Table A4: Robustness of Main Results to Rank-Ordered Regression

Variable	Estimate	95% Interval
Preferences	-0.052	[-0.065, -0.041]
Electability	-0.001	[-0.009, 0.006]
Expected Utility	-0.044	[-0.057, -0.030]
Preferences $\times$ Electability Last	0.015	[-0.000, 0.030]
Electability $\times$ Electability Last	-0.023	[-0.034, -0.011]
Expected Utility $\times$ Electability Last	0.010	[-0.010, 0.028]

$n = 833$ .

The table indicates that the coefficients on both Preferences and Electability are altered by interaction with Electability Last. As with Cox proportional hazard models, negative coefficients imply decreasing hazard, and therefore longer “survival”. Because we also reversed rankings, a negative coefficient, for example on Preferences, therefore means that if a respondent rated a candidate as high on Preferences, that respondent is also likely to rank that candidate more highly. The interaction coefficients can be interpreted as the effects of elicitation order on the weights placed on each component of decision making. For example, the coefficient estimate of 0.015 on Preferences  $\times$  Electability Last means that, in that condition, preferences were less important to decision making. In contrast, the coefficient of -0.023 on Electability  $\times$  Electability Last indicates that, in that condition, Electability weighed more heavily in voters’ rankings. These effects are consistent with those reported in the main paper.

## Appendix E: Analyses with All Respondents

Table A5: Descriptive Statistics for Covariates (All Respondents)

Covariate	Mean	SD	Min	Max
Age 18-24	0.09	0.29	0.0	1.0
Age 25-34	0.18	0.39	0.0	1.0
Age 35-44	0.15	0.36	0.0	1.0
Age 45-64	0.36	0.48	0.0	1.0
Age Over 65	0.22	0.41	0.0	1.0
Did not Vote/Supp. Other Cand. in 2016	0.18	0.38	0.0	1.0
Supported Clinton in 2016	0.62	0.48	0.0	1.0
Supported Sanders in 2016	0.17	0.38	0.0	1.0
Supported Trump in 2016	0.03	0.16	0.0	1.0
HS or Less	0.21	0.41	0.0	1.0
Some College	0.38	0.49	0.0	1.0
College Graduate	0.41	0.49	0.0	1.0
Black	0.22	0.41	0.0	1.0
Latino	0.13	0.34	0.0	1.0
Other/Mixed Race/Ethnicity	0.07	0.26	0.0	1.0
White	0.58	0.49	0.0	1.0
Female	0.57	0.49	0.0	1.0
Campaign Knowledge	0.26	0.63	-1.0	1.0
Follows Politics	0.70	0.28	0.0	1.0
Strong Democrat	0.67	0.47	0.0	1.0
Trump Least Preferred	0.84	0.36	0.0	1.0
Intend to Vote	0.93	0.17	0.0	1.0
Registered Voter	0.95	0.22	0.0	1.0
Ideology = ideology	0.31	0.23	0.0	1.0
Political Interest	0.74	0.27	0.0	1.0
# Failed Attention Checks	0.86	0.91	0.0	3.0
Need for Cognition	0.66	0.17	0.0	1.0

$n = 1211$ .

Table A6: Descriptive Statistics of Candidate Evaluations (All Respondents)

Candidate	Preferences		Electability		Ranking	
	Mean	SD	Mean	SD	Mean	SD
Biden	71	27	74	24	2.8	1.9
Bloomberg	57	29	62	27	4.1	2.0
Buttigieg	52	28	53	27	4.5	1.7
Klobuchar	47	28	44	29	5.1	1.6
Sanders	69	28	69	26	3.1	1.9
Warren	64	28	62	27	3.4	1.8
Yang	46	28	44	29	5.0	1.7
Trump	12	24	–	–	–	–

$n = 1211$ .

### Equivalence Tests of Covariate Balance, Main Dataset (n = 1211)

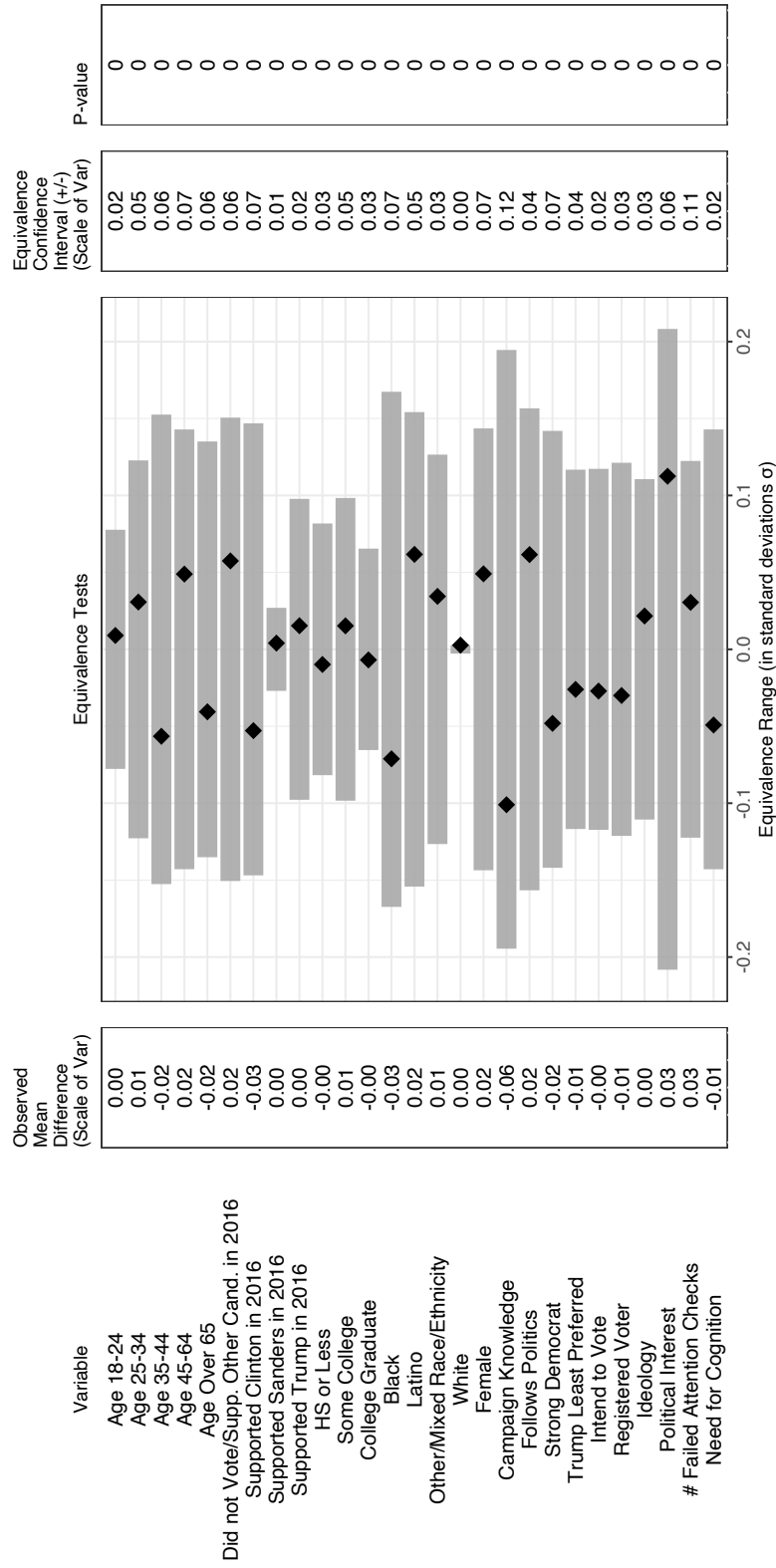


Figure A5: The figure presents equivalence tests of covariate balance (Hartman and Hidalgo, 2018), using all observations (i.e., regardless of passage of attention checks or support for Trump). The tests indicate that we can reject the null hypotheses of differences for all covariates ( $p < .001$ ).



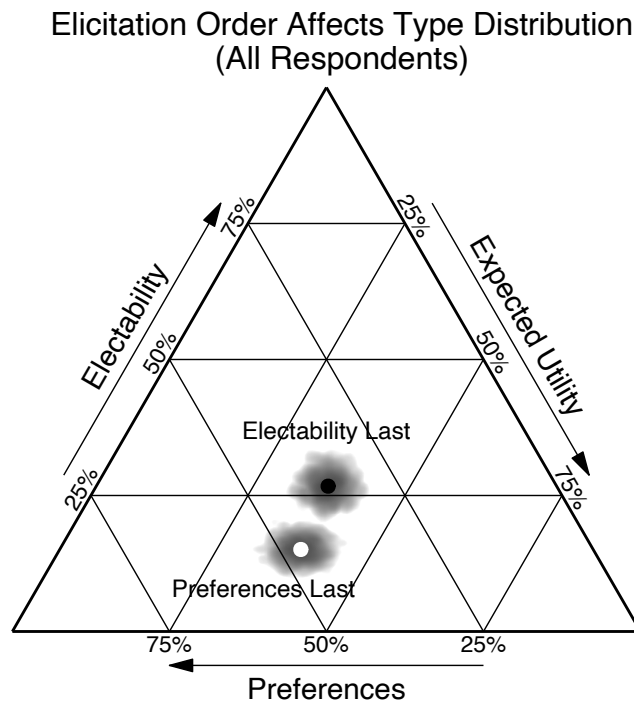


Figure A6: The figure displays ternary plots of the distributions of behavioral types in each treatment condition. Each of the three vertices of the triangles indicates a distribution composed entirely of one type, and the center of the triangles indicates a completely mixed distribution. When electability is elicited most recently, the distribution tends toward the electability vertex (top).

### Benefits of Electability (All Respondents)

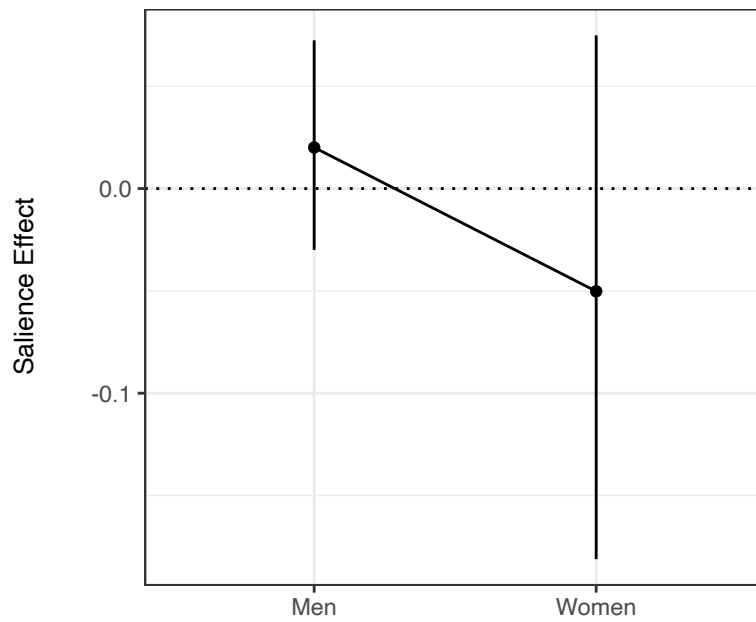


Figure A7: The figure displays the estimated average effects of eliciting electability last on the (reversed) rankings of men candidates compared to women candidates, with 95% intervals. Effects are generally less precisely estimated for this dataset, which includes all respondents, than they are for the dataset that includes only those who passed attention checks and did not support Trump.

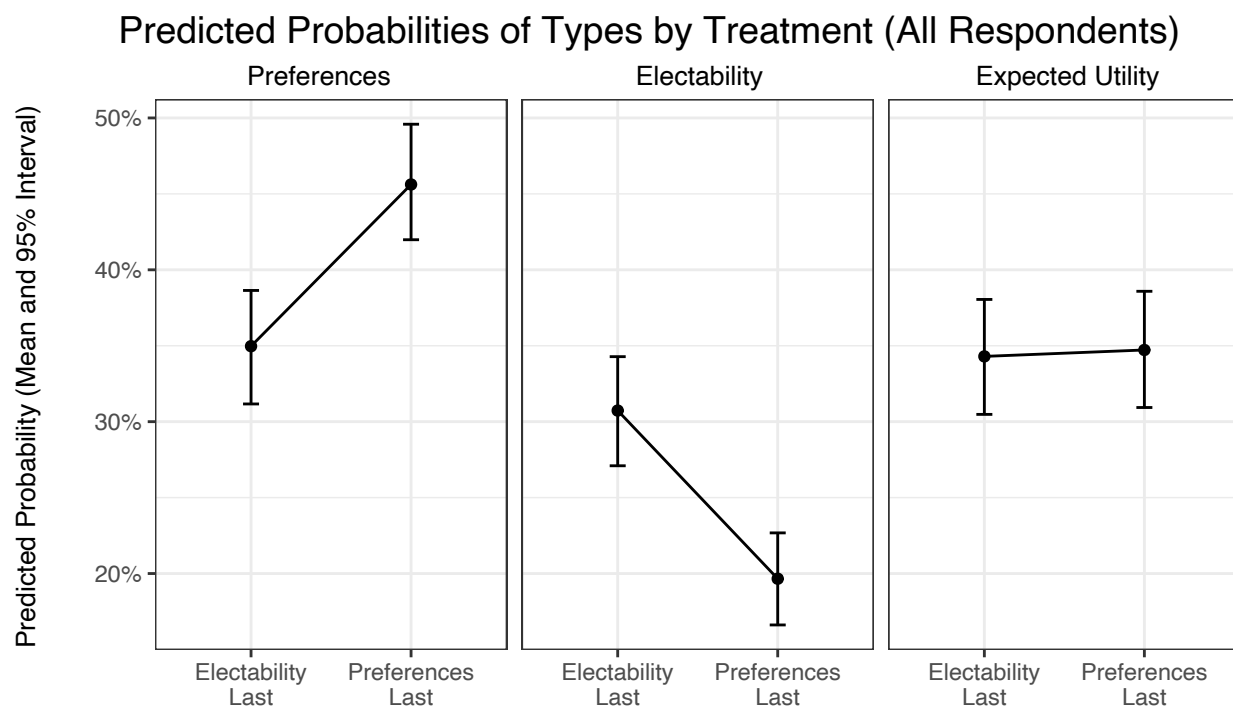


Figure A8: The figure displays the estimated average effects of elicitation order on the predicted probabilities of types, based on a multinomial logit. When preferences are elicited last, there is a statistically significant increase in the probability of a respondent being classified as a preferences type, with a concomitant change in the probability of being an electability type when it is elicited last.