When Knowledge Is Not Enough

Individual Preconditions for Strategic Voting

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Abstract

Voters often have to decide between supporting their preferred candidate or choosing a less appealing but more viable alternative. What are the underlying mechanisms that enable citizens to navigate these strategic trade-offs? Combining experimental and observational evidence from the UK, we differentiate three crucial preconditions for strategic voting—motivation, information, and capabilities—and provide converging evidence illuminating how these factors interact. Specifically, we find that high levels of motivation are a necessary condition for the beneficial effects of information and capabilities to manifest. Our findings suggest that a narrow focus on political knowledge to improve strategic voting and thereby democratic representation is short-sighted. Methodologically, we offer a novel experimental framework that enables researchers to independently manipulate different mechanisms underlying citizen competence.

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Whether in primaries or general elections—voters often face trade-offs between their ideal preferences and other strategic considerations. For instance, insufficient support for a preferred candidate in single-member districts creates incentives to consider more viable alternatives (Fisher, 2004) and scholars have examined whether different types of voters deviate from their first choice in these contexts (Eggers and Vivyan, 2020). Importantly, strategic voting requires detailed information about electoral rules and likely election outcomes—which should make it more prevalent among politically sophisticated voters (e.g., Niemi et al., 1992).

Yet, past research has largely relied on broad indicators like education or general political knowledge as core individual-level predictors of strategic voting (see e.g. Alvarez et al., 2006, Merolla and Stephenson, 2007). Of course, education is an important proxy for crucial pre-adult experiences, but its causal effect on political participation is difficult to identify (e.g., Kam and Palmer, 2008). Furthermore, standard knowledge batteries used in surveys often fail to capture people’s procedural memory or their level of motivation (Prior and Lupia, 2008). Accordingly, given the somewhat limited measurement approaches in previous—largely observational—research, we know surprisingly little about the underlying causal mechanisms that facilitate strategic voting.

In this article, we present an experimental design that independently manipulates three pre-conditions for strategic voting: motivation, information, and capabilities. Subjects participate in a mock election with three fictitious candidates. After reporting their own issue preferences, subjects learn about their policy overlap with each candidate—along with results from pre-election polls. Independent of their issue preferences, however, every participant’s ideal candidate is revealed to have the lowest chance to win the election. We use monetary incentives to manipulate motivation, uncertainty between pre-election polls to manipulate information, and a distraction task to manipulate capabilities.

We find that information and capabilities only improve voting decisions if individuals are sufficiently motivated to act strategically. We replicate similar patterns in an observational analysis using the 2015 British Election Study. By experimentally isolating and testing different underlying mechanisms, we show that knowledge alone is not sufficient to help voters achieve optimal electoral outcomes. Instead, citizens have to be convinced that their votes can make a difference in the first place. From a methodological standpoint, our research offers an experimental framework that allows scholars to differentiate aspects that are usually subsumed by “political competence.”

Strategic Voting and Political Competence

The incorporation of strategic considerations is common in elections across various institutional settings such as Germany (Herrmann, 2014), Austria (Nyhuis and Plescia, 2018), or Japan (Kawai and Watanabe, 2013). Single-member majoritarian systems provide the most unambiguous incentives to deviate from sincere votes (Fisher, 2004, Alvarez et al., 2006). If more than two candidates run for the same seat, supporters of the least viable candidate should pick between one of the two leading contenders. Similar incentives emerge even in two-party systems, particularly at the stage of primaries. In the United States, for example, primary voters tend to support candidates due to their “electability” in the general election (e.g., Rickershauser and Aldrich, 2007).

From a normative perspective, it is reassuring that voters incorporate strategic considerations. By anticipating likely election outcomes, citizens help shrink the gap between aggregate public opinion and the policy output of institutions. Considering its resulting relevance for democratic responsiveness, several studies have examined how campaign-related factors influence strategic voting. They found that it is more common if elections are close (Alvarez and Nagler, 2000), more polarized (Daoust and Bol, 2018), and if accurate polling information is available (Lago et al., 2015). Particularly crucial for equal democratic representation, however, are sources of individual-level heterogeneity in strategic voting. After all, these differences allow some people make more “effective” use of their votes than others. While not explicitly focusing on strategic voting itself, scholars similarly suggested that unequal distribution of political knowledge distorts aggregate preferences—therefore jeopardizing equal representation (e.g., Althaus, 1998).

Regarding individual-level sources of heterogeneity in strategic voting, citizens who strongly identify with a certain party are—unsurprisingly—more likely to vote for their party regardless of strategic considerations (e.g., Lanoue and Bowler, 1992). At the same time, higher levels of political knowledge and interest (Alvarez et al., 2006), or age and income (Eggers and Vivyan, 2020) are associated with an increased likelihood to vote strategically. Apart from a few notable exceptions (Loewen et al., 2015, Erisen and Blais, 2016)¹, however, these studies are largely observational and therefore limited in terms of causal identification. In sum, while previous research explored the role of political competence, the underlying mechanisms that enable people to recognize when and how to deviate from their ideal preferences remains obscure.

¹Specifically, Loewen et al. (2015) used an experimental framework to measure people’s ability to make strategic inferences, while Erisen and Blais (2016) examined the role of personality traits on strategic voting.

Differentiating Motivation, Information, and Capabilities

The notion that political competence is multi-faceted and cannot be reduced to factual knowledge alone plays a central role in understanding the individual pre-conditions for strategic voting. Previous scholars have long suggested that conventional measures of political sophistication have little practical relevance for people’s actual decision-making (e.g., [Lupia, 2006](#)). Indeed, public opinion scholars’ focus on “quality opinion” without considering people’s underlying motivations and information processing capabilities generated a disconnect with the broader literature on democratic representation ([Druckman, 2014](#)). This is somewhat surprising since influential early theories of political sophistication identified three crucial components of competence: information exposure, ability, and motivation ([Luskin, 1990](#)).

There are some notable examples of research on the quality of people’s political decision-making that incorporates such a broader conceptualization of competence. [Kuklinski et al. \(2001\)](#), to name but one, argued that the nature of decision environments can improve people’s ability to engage in policy trade-offs—for example by providing relevant information or by inducing higher levels of motivation to make reasonable decisions. Furthermore, [Prior and Lupia \(2008\)](#) emphasized the importance of people’s procedural memory and learning skills for political competence in the context of an experimental framework that varied participants’ motivation (through monetary incentives) and capabilities (through time constraints).

Previous research on strategic voting, however, has largely neglected this crucial differentiation between people’s level of motivation, information, and capabilities. Building on [Luskin’s \(1990\)](#) conceptualization of political sophistication, we argue that these factors should play distinct roles in facilitating the incorporation of strategic considerations. In addition to information about likely election outcomes, people need cognitive resources to make strategic inferences (c.f., [Loewen et al., 2015](#)) and—above all—they need to be sufficiently motivated to engage in this reasoning process in the first place (see also [Kunda, 1990](#)).

As such, we hypothesize that motivation has a crucial role in moderating the potential impact of information and capabilities: Only people who have sufficient incentives to take into account strategic considerations will benefit from increased levels of information or cognitive capacity. Each factor should therefore have differential effects—and by focusing solely on broad measures such as education or political knowledge, we are unable to identify the underlying causal mechanisms.

Experimental Design

A major challenge in studying strategic voting with experiments is to create scenarios where participants with widely diverging attitudes have comparable incentives to deviate from their ideal preferences. For example, if all participants are simply presented with the exact same election task (i.e., same candidates, positions, etc.), then strategic voting is largely obfuscated by partisanship. On the other hand, ridding the experiment from party labels entirely risks creating such artificial scenarios that respondents feel no inherent commitment to stick with their ideal preference in the first place.

We overcome this trade-off by developing an experimental framework that invokes the same strategic incentives for all participants while incorporating their true political attitudes. Subjects participate in a mock election between three candidates A , B , and C —leaving out explicit party labels. In order to induce real preferences over candidates, participants are first asked about their opinion on a range of highly salient political issues as part of a *voting advice application* (e.g., Garzia and Marschall, 2012).² Next, participants are informed how much their own issue preferences overlap with each candidate’s policy positions. Unbeknownst to participants, this issue overlap is held constant across participants and independent of their reported attitudes.³ Thus, for any possible individual attitude configuration, participants share the exact same preference ordering of candidates ($A > B > C$).

Next, we create incentives for participants to deviate from their ideal preferences by providing the results from recent polls indicating the candidates’ relative support—and thereby invoking expectations about likely election outcomes. Again, this polling information is held constant across participants. According to the polls, Candidate A (the most preferred candidate) has the lowest chance of winning the election while Candidate B and C are tied for the lead. Given the preference ordering based on issue overlap, a strategic vote in this scenario would imply supporting Candidate B . We present results from three separate polls as part of an interactive visualization in the survey. After reviewing the polls, participants are asked to cast their vote for one of the candidates.

Overall, this experimental design generates strategic incentives that are comparable across participants despite their disparate political attitudes. In other words, by allowing participants

²Our selection focuses on the most important topics in UK politics according to Hanretty et al. (2020). For example, we include items on the death penalty, Brexit, and nuclear weapon policies (see Appendix A.I).

³Candidate A has almost perfect issue overlap (>95%), Candidate B still agrees with a majority of the issues (>50%), and Candidate C is the least favorable agreeing only on 25% of the issues (see Appendix A.I).

to “fill the candidates with meaning” based in their own unique set of preferences, we create a hypothetical election scenario that appears relevant to each participant, while at the same time remaining comparable in terms of its strategic incentives.

Within this framework, we employ a 2x2x2 (between subject) design to manipulate three preconditions for strategic voting. The first treatment addresses the amount of *information* available to generate expectations about likely election outcomes. Specifically, we manipulate the variation in candidate support across polls such that respondents in the high information condition view polls that are more precise than in the low information condition (holding constant average support for each candidate). The second treatment focuses on individual *capabilities* to process available information. Borrowing from psychology, we ask respondents in the low capabilities condition to count the number of times they blink during the voting task to increase their cognitive load (e.g., [Fitzsimons and Williams, 2000](#)). In contrast to previous studies that examined people’s ability to make strategic inferences as a trait to be measured ([Loewen et al., 2015](#)), we employ constraints on cognitive load to allow for experimental manipulation.⁴ This treatment is comparable to common aspects in daily life that may distract from politics, such as taking care of your kids or having to work on multiple jobs. We further induce *motivation* to vote strategically by offering monetary pay-offs depending on the electoral outcome (see also [Dumitrescu and Blais, 2011](#)). Participants in the high motivation condition receive £0.25 if the candidate who wins the election has sufficient overlap with their own issue positions (>50%), thus incentivizing strategic support for Candidate *B*. Outside of the experiment, this is comparable to scenarios where the election result has varying tangible pay-offs for voters.⁵

We fielded our study in the United Kingdom, thus ensuring that participants are familiar with single-member district elections involving more than two viable candidates. We present results from two quota samples of UK residents: a pre-test with 1000 respondents and a pre-registered main study with 2500 respondents, both of which were collected through the online survey platform Prolific (on Jan 29 and Sep 24, 2020, respectively).⁶ Participants received an initial amount of £1.10 for the survey and a bonus of £0.25 depending on treatment assignment.

⁴In the pre-test we evaluate distractor stories as an alternative treatment. Only the blinking task was successful in reducing performance on a cognitive test which served as a manipulation check (see Appendix [A.IV](#)).

⁵Manipulation checks for all three treatments are described in Appendix [A.IV](#).

⁶Descriptive statistics for both samples are presented in Appendix [II](#). An anonymized Pre-Analysis Plan for the main-study is included in Appendix [C](#)

(a) Proportion of strategic votes across experimental conditions (including 95% confidence intervals). (b) Conditional treatment effects of information and capabilities on strategic voting.

Figure 1: Results from Experimental Study

Results

For every participant, the voting advice application results and polling information imply that a strategic vote consists of supporting Candidate *B* instead of Candidate *A*. Figure 1a displays the proportion of respondents across treatment groups who deviate from their preferred candidate in this way. The left panel focuses on participants in the high motivation condition, where the proportion of strategic votes ranges between 26% (22% in the pre-test) in the low information/capabilities conditions and 34% (39% in the pre-test) in the high information/capabilities conditions. The right panel displays the same comparison for participants in the low motivation condition. Here, the proportion of strategic votes increases from 22% to 28% (22% to 35% in the pre-test). In sum, we observe a steady increase in the high motivation condition with more capabilities and information, but less so for subjects in the low motivation condition.

We present conditional treatment effects of information and capabilities for different levels of motivation in Figure 1b.⁷ In the high motivation condition, the probability to vote strategically is increased by 11%-pts (15%-pts in pre-test) if participants have access to precise poll results and their full cognitive capacity. Neither the capabilities nor the information treatment (or their combination), however, have a significant and replicable effect on strategic voting in the low motivation condition.⁸ In other words, only respondents who had additional incentives to take into account the outcome of the election—and who are not constrained in terms of their cognitive load—make effective use of the available information and vote strategically.

⁷See Appendix A.V for full regression tables.

⁸Only the pre-test provides some evidence for a positive effect of information on the probability to vote strategically in the low motivation condition.

(a) Proportion of strategic votes across experimental conditions (including 95% confidence intervals). (b) Conditional treatment effects of information and capabilities on strategic voting.

Figure 2: Results from 2015 British Election Study

Overall, the results from the experiment support the notation that motivation is a crucial moderator for the effect of information and capabilities on strategic voting. Voters need clear incentives to consider the implications of likely election outcomes in order to make full use of the available information and determine when to deviate from their preferred candidate.

Replication Using Observational Data

Do the results from the experiment transfer to real world elections? To address this question, we use data of the 2015 British Election Study that contains all necessary measures. Consistent with previous observational research, we measure a respondent’s level of *information* using a standard political knowledge score, and *capabilities* based on their formal education. We note that these measures are far from perfect to capture our underlying concepts of interest, but they nevertheless provide a useful baseline to evaluate the external validity of our experimental results. For *motivation* we rely on a measure proposed by [Eggers and Vivyan \(2020\)](#) that estimates the difference between expected utilities of the outcome resulting from an optimal insincere vote and a sincere vote in order to identify strategic voting incentives. Our dependent variable is a dichotomous indicator of strategic voting based on individual vote choices and party feeling thermometers (the same as in [Eggers and Vivyan, 2020](#)).

While Appendix B contains a more detailed description of this analysis, the results presented in Figure 2 are broadly consistent with the experiment. Information and capabilities are only associated with higher likelihoods of strategic voting among respondents with strong incentives to consider the implications of likely election outcomes. Despite obvious deviations in mea-

surement, the effect sizes are comparable to our prior findings—confirming the central role of motivation when evaluating the effect of information and capabilities on strategic voting.

Conclusion

Why is it important to understand specific mechanisms that facilitate strategic voting? Scores of public opinion researchers lamented that voters need to be more knowledgeable for representative democracy to work (e.g., [Althaus, 1998](#)). To the extent that there are systematic differences in the tendency to incorporate strategic considerations in elections, some people are able to make more “effective” use of their votes than others. Exploring these individual preconditions in more detail is therefore crucial to improve the quality of democratic representation.

Our results indicate that an exclusive focus on education or political knowledge in this context is—at the very least—incomplete. Focusing on strategic voting in particular, we find that information alone is not sufficient to help citizens achieve better electoral outcomes. In fact, only if voters are sufficiently motivated and without distractions will they make use of the available information to make strategic decisions. As such, our work has direct implications. To the extent that people’s motivation to take into account strategic considerations is associated with their social background, these systematic differences are bound to jeopardize equal representation of political interests—above and beyond inequalities due to lack of knowledge or education. In order to minimize the divergence between aggregate public preferences and actual policy outcomes, increasing people’s level of information alone is therefore no panacea. Instead, voters need to be convinced that the election outcome itself has a tangible impact on their lives.

More broadly, we offer an experimental framework that provides opportunities for future research to study voting behavior and political competence. Our design is unique in that it relies on a voting advice framework to create election scenarios that are directly comparable between participants with widely diverging preferences. Furthermore, the combination of monetary incentives, distractor tasks, and variations in polling uncertainty allows researchers to independently manipulate distinct components of political competence that prior work has been unable to differentiate empirically.

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Online Appendix

When Knowledge Is Not Enough: Individual Preconditions for Strategic Voting

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A. Experiment

I. Design Overview

Introduction

In this section of the survey, you are going to participate in a mock election featuring hypothetical candidates. Imagine for example that these candidates compete for a seat in the House of Commons.

First, we will ask you to answer a few questions about your opinion on various political issues. Similar to the popular vote advice application *Vote Match*, we will compute how much your position on these issues overlaps with each of the candidates. After being able to view some pre-election poll results, we ask you to cast your vote for one of the candidates.

Voting Advice Application

In order to match you to the candidates running for office, please state how much you agree or disagree with the following statements.

- The government needs to prioritize re-opening to bolster the economy instead of enforcing further social distancing requirements to fight COVID-19.⁹
- The death penalty should not be used.
- The UK should remain a member of the EU.
- The UK should unilaterally decommission all nuclear weapons, and no longer maintain a nuclear deterrent.
- There should be no net migration to the UK.
- The UK should give less foreign aid.
- Cannabis should be legal. Anyone should be free to possess or sell cannabis.
- Strikes should generally be banned.

⁹This item was not included in the pre-test.

Issue Overlap and Polling Results

Based on your previous responses, we will now compute the issue overlap with three candidates running for office. 0% means that the candidate's position is on the extreme opposite compared to your own opinion and 100% means that the candidate's positions perfectly match your own responses.

Next, we are going to present recent polling information on all three candidates and ask you to cast your vote for one of them.

(a) Issue Overlap

Three different polling firms conducted representative surveys to predict support for each candidate. The results are presented in the diagram below. The variation between individual polls indicates the uncertainty across survey institutes.

(b) Poll Results

Figure A.1: Experimental Manipulation of Issue Overlap and Polling Results

You have as much time as you need to make up your mind about this election. Click next once you decided which candidate you want to vote for.

II. Descriptives Statistics

Table A.1 and A.2 show the demographics of the experimental study as well of the pre-test.

var	Mean	Std	Min	Max
England	0.85	0.35	0	1
Female	0.38	0.49	0	1
Ideology	4.11	2.20	0	10
IncomeBelow5000	0.69	0.46	0	1
Knowledge	1.59	0.74	0	3
PidConservative	0.23	0.42	0	1
PidLabour	0.43	0.49	0	1
University	0.53	0.50	0	1
White	0.86	0.35	0	1

Table A.1: Descriptive statistics main study sample

var	Mean	Std	Min	Max
England	0.85	0.35	0	1
Female	0.29	0.46	0	1
Ideology	4.13	2.09	0	10
IncomeBelow5000	0.70	0.46	0	1
Knowledge	5.28	2.00	0	11
PidConservative	0.23	0.42	0	1
PidLabour	0.41	0.49	0	1
University	0.51	0.50	0	1
White	0.91	0.29	0	1

Table A.2: Descriptive statistics pre-test sample

III. Randomization

The following tables show the mean shares of pre-treatment variables in the different treatment conditions for the main study (Table A.3) and the pre-test (Table A.4). We observe no statistical significant differences between in the observed measures between treatment groups.

capabilities	information	motivation	Female	England	White	IncomeBelow5000	University	Knowledge	Pid Labour	Pid Conservative	Ideology
blinking	exact	bonus	0.34	0.86	0.88	0.72	0.52	1.58	0.46	0.22	3.84
blinking	exact	none	0.40	0.84	0.88	0.67	0.54	1.63	0.38	0.27	4.37
blinking	unprecise	bonus	0.39	0.86	0.86	0.67	0.52	1.59	0.47	0.21	3.92
blinking	unprecise	none	0.39	0.87	0.84	0.70	0.55	1.51	0.42	0.26	4.40
none	exact	bonus	0.40	0.88	0.83	0.68	0.51	1.57	0.41	0.25	4.33
none	exact	none	0.39	0.87	0.88	0.72	0.53	1.55	0.44	0.25	4.14
none	unprecise	bonus	0.39	0.82	0.84	0.70	0.57	1.65	0.40	0.20	3.97
none	unprecise	none	0.37	0.82	0.87	0.66	0.50	1.61	0.43	0.19	3.91

Table A.3: Covariate balance across treatment groups main study

capabilities	information	motivation	Female	England	White	IncomeBelow5000	University	Knowledge	Pid Labour	Pid Conservative	Ideology
blinking	exact	bonus	0.26	0.84	0.93	0.72	0.50	5.18	0.41	0.20	4.10
blinking	exact	none	0.35	0.87	0.89	0.76	0.51	5.19	0.44	0.29	4.11
blinking	unprecise	bonus	0.27	0.87	0.90	0.74	0.50	5.41	0.38	0.28	4.15
blinking	unprecise	none	0.26	0.85	0.87	0.70	0.46	4.98	0.44	0.22	4.00
none	exact	bonus	0.31	0.88	0.95	0.66	0.43	5.25	0.45	0.21	4.25
none	exact	none	0.31	0.86	0.90	0.73	0.52	5.20	0.43	0.25	4.08
none	unprecise	bonus	0.28	0.85	0.88	0.66	0.42	5.24	0.45	0.20	4.13
none	unprecise	none	0.28	0.87	0.91	0.69	0.54	5.24	0.41	0.23	4.21

Table A.4: Covariate balance across treatment groups pre-test

IV. Manipulation Check

The following describes the manipulation checks of the experiment. For each of the three treatments, we included a manipulation check question post-treatment.

- For the **information treatment** we ask respondents: "Given the information you received about the political race: What is the probability that candidate A will win the election?" Respondents can answer on a scale that ranges from 0 to 100 %.
- For the **capability treatment** we include IQ question from a standardized test:

"We also want to study the relationship between people's logical reasoning and their political decision making, which is why we not turn to this slightly different task. Please select the figure that continues the sequence in the top row."

- For the **motivation treatment** we ask respondents about their voting reasons:

What is the reason for your voting decision? The candidate. . .

- is closest to my position
- has a realistic chance to win the election
- is the most centrist
- promises the highest pay-off
- other, please specify. . .

All three treatments work as intended as Figure A.2 shows for both the main-study and the pre-test. First, providing respondents who receive more exact polling information decreases the

perceived chance that Candidate *A* will win (top left panel). The effects are comparable between pre-test and the main study. Second, participants in the blinking condition scored lower on the cognitive test. In the pre-test, we further included an alternative capability treatment, a distractor story, that did not reduce the correct answers on the cognitive task. Finally, participants in the high motivation condition were more likely to mention the candidate's realistic chance to win the election rather than being close to their position as a reason for their vote choice.

Figure A.2: Treatment effects on manipulation check questions

V. Treatment Effect Estimates

Table B.3 describes the regression estimates and Table A.6 the conditional effects of information and capability for low and high motivation.

	Main study	Pre-Test
Intercept	0.23*** (0.02)	0.22*** (0.03)
Motiv.	0.04 (0.03)	0.04 (0.04)
Info.	0.05 (0.03)	0.09* (0.04)
Capab.	-0.04 (0.04)	0.03 (0.05)
Motiv. x Info.	-0.03 (0.05)	0.02 (0.06)
Motiv. x Capab.	0.05 (0.05)	0.00 (0.07)
Info. x Capab.	0.05 (0.05)	-0.10 (0.07)
Motiv. x Info. x Capab	0.00 (0.07)	0.09 (0.10)
R ²	0.01	0.02
Adj. R ²	0.01	0.01
Num. obs.	2503	1504

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Table A.5: Regression Results Experimental Main Study

Study	Motivation	Condition	Estimate	Std. Error	P-Value
Main Study	High Motivation	Cap.	0.05	0.03	n.s.
Main Study	High Motivation	Inf.	0.05	0.04	n.s.
Main Study	High Motivation	Inf. + Cap.	0.11	0.03	<0.05
Main Study	Low Motivation	Cap.	-0.04	0.04	n.s.
Main Study	Low Motivation	Inf.	0.05	0.03	n.s.
Main Study	Low Motivation	Inf. + Cap.	0.06	0.04	n.s.
Pre-Test	High Motivation	Cap.	0.07	0.05	n.s.
Pre-Test	High Motivation	Inf.	0.15	0.04	<0.05
Pre-Test	High Motivation	Inf. + Cap.	0.17	0.05	<0.05
Pre-Test	Low Motivation	Cap.	0.03	0.05	n.s.
Pre-Test	Low Motivation	Inf.	0.09	0.04	<0.05
Pre-Test	Low Motivation	Inf. + Cap.	0.01	0.05	n.s.

Table A.6: Experimental results – Enhancing effect of motivation on the impact of information and capabilities on strategic voting

B. Observational Analysis

I. Sample and Demographic Composition

For the observational analysis we use the recoded data set of [Eggers and Vivyan \(2020\)](#) of the British Election Study (BES). We only use data from the 2015 wave as other years do not include all relevant items. Table [B.1](#) shows the demographic distribution of our sample.

Statistic	N	Mean/Proportion	St. Dev.
age	7013	50.900	15.627
female	7013	0.496	
party ID very strong	7013	0.262	
party ID fairly strong	7013	0.503	
party ID not very strong	7013	0.235	

Table B.1: Demographics 2015 BES

II. Measures

Instead of experimentally manipulating information, capabilities, and motivation, we now have to rely on survey items included in the BES as proxies for our concepts of interest. Specifically, we measure a respondent’s level of *information* using a standard political knowledge score. Consistent with previous studies, we use formal education as a measure for individual *capabilities* (dichotomous indicator for higher educational degrees; see [Appendix IV](#) for the full list). Lastly, we capture *motivation* by relying on a measure of individual incentives to vote strategically proposed by [Eggers and Vivyan \(2020\)](#). The underlying intuition of this measure is to estimate the difference between expected utilities of the outcome resulting from an optimal insincere vote and a sincere vote in order to identify voters for whom a tactical vote would produce a better election outcome than a sincere vote. Each independent variable is dichotomized in order to allow for an easy comparison between the observational and experimental analysis. Our dependent variable is a dichotomous indicator of strategic voting based on individual vote choices and party feeling thermometers ([Eggers and Vivyan, 2020](#)). Based on this conceptualization, 1040 of the respondents in the 2015 BES voted strategically, while 5973 did not deviate from their preferred party (see [Table B.2](#) for details).

In our sample, 76.8 percent of respondents are highly informed, 51.1 percent have a higher educational degree, and 43.2 percent have an incentive to vote strategically. Motivation and

selected cases BES UK	
non strategic	85.2%
strategic	14.8%

Table B.2: Vote Choice

capability correlate with 0.084, information and capability with 0.055 while information and motivation correlation with -0.003. This shows that the three variables indeed capture distinct concepts. We estimate a multilevel model with the three variables interacting and use age, gender and strength of party identification as control variables. Furthermore, we include district indicators to account for regional differences.

III. Results

In our discussion of the observational results, we follow the same steps as in the experimental analysis. Figure B.1 shows the effect of information and capability on strategic voting for motivated and not motivated persons. Consistent with our experimental results, we find that respondents only make use of the information and their capabilities when they have an incentive to engage in strategic voting.

Figure B.1: 2015 BES – direct effect of information and capability depending on motivation

To further illustrate how motivation moderates the impact of information and capabilities, we simulate predicted probabilities of strategic voting for all variations of information and capability while setting the remaining control variables to their mean/mode. The results are

Figure B.2: 2015 BES – Proportion of strategic votes conditional on individual preconditions (including 95% confidence intervals).

shown in figure B.2. People without motivation are unlikely to vote strategic regardless of the level of information or capability (right panel). However, if people have an incentive to deviate from their sincere vote (left side of the graph), they are more likely to make use of the available information and capabilities to vote strategically. Note that in contrast to the experimental results, we also observe a main effect of motivation on strategic voting. This difference can be explained by the fact our conceptualization of motivation in the observational analysis takes into account whether a respondent's first choice is a viable candidate or not. In the experiment, on the other hand, a participant's first choice was never a viable candidate and thus there was always some incentive to vote strategically (an incentive we further boosted by offering monetary rewards for some participants). As such, our observational analysis confirms our experimental results by illustrating the crucial role of motivation in facilitating strategic voting and thereby bolstering our experiment's external validity.

IV. Capability recoding

Low capability:

- No qualifications
- youth training certificate, skill seekers
- recognised trade apprenticeship completed
- clerical and commercial qualification (e.g., typing, shorthand)
- city & guilds level 1, scotvec national certificate modules,
- city & guilds level 2 (craft/intermediate/ordinary) or scotv
- ordinary national certificate (onc) or diploma (ond), city &
- gcse d to g etc
- gcse astar to c etc
- scottish ordinary bands a-c or pass, scottish standard grade

High Capability:

- gce a level, s level, a2 level, as level, international bacc
- higher national certificate (hnc) or higher national diploma
- scottish higher/higher still grades, scottish slc/supe at hi
- nursing qualification (e.g., sen, src, scm, rgc)
- teaching qualification (not degree)
- university or cnaa diploma
- university or cnaa first degree, e.g, ba, bsc
- postgraduate degree

V. Regression Table

	Multilevel Model
information	−0.01 (0.02)
capability	−0.01 (0.02)
motivation	0.19*** (0.02)
information * motivation	0.08** (0.03)
capability * motivation	0.04 (0.03)
information * capability * motivation	−0.02 (0.04)
age	−0.00 (0.00)
female	0.01 (0.01)
party ID: not very strong	−0.00 (0.01)
party ID: very strong	−0.04*** (0.01)
constant	0.05** (0.02)
AIC	4296.21
BIC	4392.19
Log Likelihood	−2134.11
Num. obs.	7013
Num. groups: refno	631
Var: refno (Intercept)	0.00
Var: Residual	0.11

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Table B.3: Statistical models

C. Pre-analysis Plan

The analysis for the main-study is pre-registered on osf.io (2020-09-17):

██

For double-blind review we attach a anonymized version of the pre-analysis plan. The pre-analysis plan also includes a power-analysis, revealing that our main-study is considerably powered (above 0.9) to identify the conditional effects.

I. Anonymized Pre-Analysis Plan

When Knowledge Is Not Enough

Individual Preconditions for Strategic Voting

Pre-Analysis Plan

December 21, 2020

Abstract

In elections, people often have to decide between voting for their preferred candidate or supporting a less appealing but more viable alternative. However, we know surprisingly little about what enables citizens to navigate these strategic trade-offs. Combining experimental and observational evidence from the UK, we differentiate three crucial preconditions for strategic voting—motivation, information, and capabilities—and provide converging evidence illuminating how these factors interact. Specifically, we hypothesize that high levels of motivation—while having only little direct impact on strategic voting—are a necessary condition for the beneficial effects of information and capabilities to manifest.

1 Summary

This document describes a survey experiment that independently manipulates three preconditions for strategic voting in multi-party elections: motivation, information, and capabilities. Subjects participate in a mock election and are matched with one of three fictitious candidate based on their individual issue preferences. However, irrespective of their actual responses, every participants' ideal candidate is revealed to have the lowest chance to win the election. In the experiment, we use monetary incentives to manipulate motivation, uncertainty between pre-election polls to manipulate information, and a distraction task to manipulate capabilities. Our planned analyses follow a pilot study fielded in January 2020 and we expect that motivation only has little direct influence on the accuracy of voting decisions, but rather moderates the beneficial effects of available information and capabilities. In other words, information and capabilities only improve voting decisions if individuals are sufficiently motivated to act strategically. We replicate similar patterns in an observational analysis using the 2015 British Election Study.

2 Research Design

2.1 Ethics

This study has been granted exempt status by [redacted] and has been granted approval to waive documentation of informed consent. All participants can stop participation at any time in the study and are debriefed at the end.

2.2 Sample

This study will be conducted using a sample of 2500 residents in the United Kingdom recruited via Prolific. It will be advertised as a survey on “Information, Polling, and Elections,” where participants are asked to answer “a short survey on your opinions about politics and current issues covered in the news” and “participate in a mock election for the UK House of Commons.” The approximate length of the survey is 8 minutes and participants will receive an initial amount of ~\$0.90 for taking the survey as well as a bonus of \$0.25 depending on their performance in the experimental task and treatment group. Participants have to be located in the United Kingdom in order to be eligible to participate.

2.3 Overview

The goal of our experimental design is to independently manipulate three distinct aspects of political sophistication—motivation, information, and capabilities—as determinants of strategic voting in single-member district elections. In our experiment, we ask subjects to participate in a hypothetical electoral decision between three candidates. We refrain from references to existing

parties or candidates and name the candidates A, B, and C. We then employ a novel design to fill the election decision between candidates with meaning. We ask participants several questions about their opinion on salient political issues (e.g., the death penalty, Brexit, nuclear weapon policies) as part of a “voting advice application” (see for example Garzia and Marschall 2012).¹

After completing this part of the questionnaire, participants are being told that we compute how much their reported issue positions overlap with each of three candidates competing for the same seat in a district. Unbeknownst to participants, the issue overlap is held constant across respondents and independent of their actual issue preferences. Using this strategy we can induce the same issue closeness for all respondents. Figure 1 shows the issue overlap with each candidate as it is presented to the participants. For all respondents, candidate A is presented as having almost perfect overlap with the respondent ($>95\%$), while Candidate B still agrees with the respondent on a majority of the issues ($>50\%$). As such, we are able to replicate the same strategic scenario across subjects even if they have widely different preferences.

Next, we are going to present recent polling information on all three candidates and ask you to cast your vote for one of them.

Figure 1: Issue Overlap

¹We chose the set of issues based on Hanretty, Lauderdale, and Vivyan (2020), who provides a measure of issue importance in the UK (see Appendix for full set of issues). In addition, we added one item related to the enforcement of social distancing measures in the context of the COVID-19 pandemic. It is worth emphasizing that the issue questions are selected from a wide range of topics to ensure that respondents consider them relevant to inform their candidate preferences.

Three different polling firms conducted representative surveys to predict support for each candidate. The results are presented in the diagram below. The variation between individual polls indicates the uncertainty across survey institutes.

Figure 2: Poll Results

Next, we create incentives for a strategic vote by further presenting polling information for all the candidates. Specifically, subjects are being told that three different polling firms conducted representative surveys to predict support for each candidate. They are shown all three poll results and the variation between individual polls indicates the uncertainty across survey institutions. Figure 2 provides an example of the polling information. Given these poll results, Candidate A (which is the most preferred candidate) has the lowest chance of winning the election while Candidate B and Candidate C are tied for the lead. Given the preference ordering based on issue overlap is $A > B > C$, a strategic vote in this scenario would imply supporting Candidate B. Again, it should be noted that the polling information is held constant across participants. After reviewing the polls, participants are asked to cast their vote for one of the candidates.

Given this basic mock election framework, we employ a 2x2x2 (between subject) design to manipulate three preconditions for strategic voting. The first manipulation addresses the amount of information that is available to the participant when choosing one of the parties. *Information levels* are varied by introducing greater variation between poll results of different survey firms. We only manipulate the precision of the information by holding the expected vote share of the different candidates constant over the three different polls, but increase the variance in the low information condition. Respondents in the high information condition see polls with less variance. Individual *capabilities* to calculate the best decision are manipulated by asking respondents to count the number of times they blink over the period of the voting task (see Fitzsimons and Williams 2000; Ülkümen, Thomas, and Morwitz 2008 for examples of this manipulation). This

treatment condition manipulates people's cognitive load and therefore makes it considerably more difficult to focus on identifying an optimal decision. We further induce *motivation* to vote strategically by offering monetary pay-off depending on the electoral outcome (for similar design see e.g. Dumitrescu and Blais 2011). Specifically, participants in this treatment group received \$0.25 if the candidate who wins the election has sufficient overlap with their own issue positions ($>50\%$). This creates incentives for respondents to choose Candidate B, as the Candidate still has a reasonable chance to beat Candidate C.²

2.4 Outcome measure & hypotheses

Our outcome of interest is whether participants voted strategically by supporting the candidate that is less preferred but has a higher chance of winning the election (i.e., supporting Candidate B). With regard to our three treatment conditions, we are planning to test the following hypotheses:

- *Hypothesis 1a*: Participants in the high information condition are more likely to vote strategically than participants in the low information condition (collapsing all other conditions).
- *Hypothesis 1b*: Participants in the high capabilities condition are more likely to vote strategically than participants in the low capabilities condition (collapsing all other conditions).
- *Hypothesis 1c*: Participants in the high motivation condition are *no* more likely to vote strategically than participants in the low motivation condition (collapsing all other conditions).
- *Hypothesis 2*: The positive effects of information and capabilities on the likelihood to vote strategically are more pronounced for respondents in the high motivation condition than for respondents in the low motivation condition.

In other words, we expect the highest impact on the proportion of strategic votes when information and capabilities are available, but only for participants in the high motivation condition.

3 Estimation strategy

3.1 Statistical significance

Throughout this study, we will use two-sided tests with an α -value of 0.05 as the cutoff for statistical significance. In our graphical displays we will additionally plot 90% intervals to signal statistical significance at $p < 0.10$.

²We evaluate the treatment conditions using a set of manipulation checks and the treatments work as intended (see Appendix). In our pilot study, respondents in the blinking condition have a lower chance to correctly answer a simple IQ test question. Providing respondents with exact information decreases the perceived chances that Candidate A will win the election. Financial incentives increases the share of people who indicate that they voted for a candidate with a realistic chance, and decreases the share of respondents who say they voted for the candidate who is closest.

3.2 Missing data

Respondents who report “don’t know” on the outcome measures (if applicable) or who skipped the question will be treated as missing and excluded from the respective analysis (basic listwise deletion). While we are going to use the manipulation checks to evaluate whether respondents read the information provided to them, we decided not to drop respondents who failed to pass the manipulation checks in the subsequent analyses (see for example Aronow, Baron, and Pinson 2019).

3.3 Main analyses

As a first step, we will compare the proportion of strategic voting decisions (i.e., supporting Candidate B) across treatment conditions. Figure 3 provides an example of this comparison using data from our pilot study. The panel on the left focuses on participants who received a monetary incentive to consider the outcome of the election and were therefore motivated to vote strategically. If participants additionally experienced high amounts of cognitive load and were only given imprecise polling information, only 20% cast a strategic vote by deviating from their most preferred candidate to support a more viable option. If, on the other hand, participants were given more precise polling information and without high amounts of cognitive load, then the proportion of strategic votes is increased to about 40%.

Figure 3: Pretest results – Proportion of strategic votes across experimental conditions (including 95% confidence intervals).

The panel on the right of Figure 3 displays the same comparison for participants who did not receive additional bonus payments conditional on the outcome of the election. Here, the proportion of strategic votes remains around 20% irrespective of cognitive load or the precision of polling information (with the exception of the blinking condition combined with exact information). Overall, the results suggest that the level of information and cognitive resources only affect strategic voting if participants are sufficiently motivated to consider the consequences of election outcomes. Except for the unexpected deviation in the high information / low capabilities / low motivation condition, we anticipate the same patterns in our main study.

In our main analysis, we directly estimate the enhancing effect of motivation on the impact of information and capabilities using linear regression models and including interactions between all three treatment indicators. Table 1 shows the respective model estimates using data from our pilot study. In addition to this baseline specification, we are going to include a model controlling for pre-treatment covariates and basic sociodemographics in order to increase precision (c.f., Bowers 2011).

	Model 1
Intercept	0.22*** (0.04)
Motiv.	0.00 (0.06)
Info.	0.13* (0.05)
Capab.	0.03 (0.06)
Motiv. x Info.	-0.02 (0.08)
Motiv. x Capab.	0.04 (0.08)
Info. x Capab.	-0.14 (0.08)
Motiv. x Info. x Capab	0.14 (0.11)
R ²	0.02
Adj. R ²	0.01
Num. obs.	1005
RMSE	0.45

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Table 1: Regression results pilot Study

Based on the estimated regression coefficients, we are going to compute how motivation changes the effect of information and capabilities on strategic voting. Table 2 displays these quantities of interest for our pilot study. In the pilot, motivation increases the combined effect of information and capabilities by 15% percentage points. This means that respondents make more use of the information and their capabilities when they are also motivated. We expect similar patterns in our

main study.

	Estimate	Std. Error	P-Value
Information + Capabilities	0.15	0.08	0.03
Information	-0.02	0.08	0.38
Capabilites	0.04	0.08	0.32

Table 2: Pilot study results – Enhancing effect of motivation on the impact of information and capabilities on strategic voting

4 Power Analysis

We conduct a power-analysis based on the results of the pre-test. The Figure and Table below display the power to detect point-estimates from the pre-test. We see that from 2500 observations onwards we have a power above 0.9 to detect the enhancing effect of motivation on the impact of information combined with capabilities on strategic voting (M:I:C). Therefore, we choose to field our final survey with 2500 respondents.

	estimand_label	sample_size	power	bias
1	M:C	1000	0.12	0.00
2	M:C	1500	0.15	-0.00
3	M:C	2000	0.15	0.00
4	M:C	2500	0.18	-0.00
5	M:I	1000	0.12	0.00
6	M:I	1500	0.10	0.00
7	M:I	2000	0.10	0.00
8	M:I	2500	0.14	-0.00
9	M:I:C	1000	0.58	-0.00
10	M:I:C	1500	0.76	0.00
11	M:I:C	2000	0.82	-0.00
12	M:I:C	2500	0.91	-0.00

Appendices

Appendix A Full Questionnaire

A.1 Study Details (for Prolific)

- *Title:* Information, Polling, and Elections
- *Description:* Answer a short survey on your opinions about politics and current issues covered in the news. Then participate in a mock election for the UK House of Commons. The survey should take approximately 8 minutes to complete.
- *Length:* 8 min
- *Reward:* ~\$0.90
- *Requirements:* UK resident, age ≥ 18

A.2 Design Summary

- Subjects are asked to participate in a mock election that features three candidates who vary in their issue overlap with the subject as well as their relative support in pre-election polls. The study examines how different dimensions of sophistication (motivation, information, cognitive load) affect the subjects' ability to vote strategically.
- **Basic design:** 2X2X2 (motivation X information X cognitive load)
 - motivation: no bonus for optimal decision vs. bonus payment as incentive
 - information: polling information shows low variability vs. high variability
 - cognitive load: no constraint vs. blinking task
- **Outcome measures:**
 - Optimal/strategic vote choice
 - Time to make decision
 - Certainty about decision

A.3 Survey Flow Overview

- Pre-treatment measures
 - Political interest & attitudes
 - Political knowledge
- Voting task
 - Introduction
 - Issue questions / VAA
 - Cognitive load treatment: Blinking task reminder (if cognitive load == blinking)

- Present issue overlap (motivation treatment)
- Present poll information (information treatment)
- Report vote choice
- Post-treatment measures
 - Cognitive task
 - Blinking task end (if cognitive load != blinking)
 - Manipulation checks
 - Cognitive load check (blinking treatment)
 - Sociodemographics

A.4 Pretreatment measures

A.4.1 Political interest & attitudes

First, we would like you to answer a few questions about your political viewpoints.

[polint] How much attention do you generally pay to politics?

- *SLIDER*: [0 (Pay no attention) - 10 (Pay a great deal of attention)]

[ideol] In politics people sometimes talk of left and right. Where would you place yourself on the following scale?

- *SLIDER*: [0 (Left) - 10 (Right)]

[pid] Generally speaking, do you think of yourself as Labour, Conservative, Liberal Democrat, or what?

- Labour
- Conservative
- Liberal Democrat
- Scottish National Party (SNP)
- Plaid Cymru
- Green Party
- United Kingdom Independence Party (UKIP)
- Other
- None/No
- Don't know

[pid_lean1] *(only display if pid == None/No / pid == Don't know)* Do you generally think of yourself as a little closer to one of the parties than the others?

- Yes
- No
- Don't know

[pid_lean2] *(only display if pid_lean == Yes)* Which party is that?

- Labour

- Conservative
- Liberal Democrat
- Scottish National Party (SNP)
- Plaid Cymru
- Green Party
- United Kingdom Independence Party (UKIP)
- Other
- None/No
- Don't know

A.4.2 Political knowledge

Next, we will ask you several factual questions about politics. It is important to us that you do NOT use outside sources like the Internet to search for answers. Many people don't know the answers to these questions, but it is helpful for us if you answer, even if you're not sure what the correct answer is. Please just give your best guess on every question without help from outside sources.

(randomize question order)

[know_scotland] *(randomize order)* What is the essence of the Scotland Act of 2016?

- It forbids Scotland from organizing another independence referendum.
- It devolves additional powers to Holyrood.
- It forces Scotland to adhere more closely to laws decided in Westminster.
- It allows Scotland to negotiate with the European Union after Brexit.

[know_spend] *(randomize order)* What does the UK government spend the most money for each year?

- Defence
- Education
- Healthcare (NHS)
- Pensions

[know_commons] *(randomize order)* Which party has the most seats in the House of Commons?

- Conservatives
- Labour
- Liberal Democrats
- UKIP

A.5 Voting task

A.5.1 Introduction

In this section of the survey, you are going to participate in a mock election featuring hypothetical candidates. Imagine for example that these candidates compete for a seat in the House of Commons.

First, we will ask you to answer a few questions about your opinion on various political issues. Similar to the popular vote advice application *Vote Match*, we will compute how much your position on these issues overlaps with each of the candidates. After being able to view some pre-election poll results, we ask you to cast your vote for one of the candidates.

A.5.2 Issue questions / VAA

[vaa] In order to match you to the candidates running for office, please state how much you agree or disagree with the following statements.

(randomize order of statements)

- The government needs to prioritize re-opening to bolster the economy instead of enforcing further social distancing requirements to fight COVID-19.
- The death penalty should not be used.
- The UK should remain a member of the EU.
- The UK should unilaterally decommission all nuclear weapons, and no longer maintain a nuclear deterrent.
- There should be no net migration to the UK.
- The UK should give less foreign aid.
- Cannabis should be legal. Anyone should be free to possess or sell cannabis.
- Strikes should generally be banned.

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

(NOTE: Issues chosen based on Hanretty et al. 2019, rephrased to agree-disagree)

A.5.3 Cognitive load treatment: Blinking task

(only display if cognitive load == blinking)

Among other things, we are interested in studying people's cognitive processes when answering survey questions. Previous research has shown that the level of engagement with any task is related to certain characteristics like eye movement and blinking.

For this part of the survey, we would like to ask you to keep a **mental count of the number of times you are blinking** as you answer the following questions. It is very important for our research that you keep this count as accurate as possible, but **please do not write down the number on a piece of paper**.

A.5.4 Present issue overlap introduction

[(only display if cognitive load == blink) Please remember to count the number of times you blink!]

Based on your previous responses, we will now compute the issue overlap with three candidates running for office. 0% means that the candidate's position is on the extreme opposite compared to your own opinion and 100% means that the candidate's positions perfectly match your own responses.

(only display the following paragraph if motivation == bonus)

If the candidate who wins the election has enough overlap with your own issue positions (>50%), then you will receive an additional bonus payment of \$0.25 after completing the study.

[NEXT PAGE]

(measure time spent on this page)

[(only display if cognitive load == blink) Please remember to count the number of times you blink!]

We calculated the issue overlap with the candidates for you. Here is your personal result:

Next, we are going to present recent polling information on all three candidates and ask you to cast your vote for one of them.

Figure 4: Issue Overlap

A.5.5 Present polling information

(measure time spent on this page)

[(only display if cognitive load == blink) Please remember to count the number of times you blink!]

Three different polling firms conducted representative surveys to predict support for each candidate. The results are presented in the diagram below. The variation between individual polls indicates the uncertainty across survey institutes.

Figure 5: Poll Results

You have as much time as you need to make up your mind about this election. Click next once you decided which candidate you want to vote for.

Values Exact

Poll	Candidate A	Candidate B	Candidate C
1	0.28	0.36	0.36
2	0.27	0.36	0.37
3	0.30	0.35	0.35
Avg.	0.2833	0.3567	0.36

Values Imprecise

Poll	Candidate A	Candidate B	Candidate C
1	0.28	0.36	0.36
2	0.25	0.37	0.38
3	0.32	0.33	0.35
Avg.	0.2833	0.3533	0.3633

A.5.6 Report vote choice

(measure response latency)

[(only display if cognitive load == blink) Please remember to count the number of times you blink!]

[vote] Please choose which candidate you want to vote for in the election.

1. Candidate A
2. Candidate B
3. Candidate C
4. Abstain

[certain] How certain are you about this decision?

1. Completely certain
2. Very certain
3. Somewhat certain
4. Not at all certain

A.6 Post-Treatment Measures

A.6.1 Cognitive task

[(only display if cognitive load == blink) Please remember to count the number of times you blink!]

We also want to study the relationship between people's logical reasoning and their political decision making, which is why we not turn to this slightly different task. Please select the figure that continues the sequence in the top row.

Figure 6: Cognitive task

(measure response latency)

A.6.2 Blinking task end

(only display if cognitive load == blink)

Please enter the total number of times you blinked as you were answering the previous questions.

- [TEXTBOX]

[accurate] Thank you for your answer. How accurate do you think your count is?

1. Completely accurate
2. Very accurate (+/- 5)
3. Somewhat accurate (+/- 10)
4. Not accurate / had to guess

For the remainder of this survey, you are not required to keep track of the number of times you blinked.

A.6.3 Manipulation Checks

[probability] Given the information you received about the political race: What is the probability that candidate A will win the election?

[Slider 0 - 100]

[overlap] What is the amount of issue overlap between you and candidate B?

[Slider 0 - 100]

[reason] What is the reason for your voting decision? The candidate. . .

[checkbox item]

- is closest to my position
- has a realistic chance to win the election
- is the most centrist
- promises the highest pay-off
- other, please specify. . .

[partyA] From which party do you think is Candidate A?

- Labour
- Conservatives (Tories)
- Liberal Democrats
- Scottish National Party (SNP)
- Plaid Cymru
- Green Party
- United Kingdom Independence Party (UKIP)
- Other
- None/No

- Don't know

[partyB] From which party do you think is Candidate B?

- Labour
- Conservatives (Tories)
- Liberal Democrats
- Scottish National Party (SNP)
- Plaid Cymru
- Green Party
- United Kingdom Independence Party (UKIP)
- Other
- None/No
- Don't know

[partyC] From which party do you think is Candidate C?

- Labour
- Conservatives (Tories)
- Liberal Democrats
- Scottish National Party (SNP)
- Plaid Cymru
- Green Party
- United Kingdom Independence Party (UKIP)
- Other
- None/No
- Don't know

A.6.4 Sociodemographics

This almost completes our survey, we only need some additional information about your background.

[age] What is your age?

- [TEXTBOX]

[gender] Do you consider yourself Male, Female, or other?

1. Male
2. Female
3. Other

[country] In which country do you live?

1. England
2. Northern Ireland
3. Scotland
4. Wales

[race] What racial or ethnic group best describes you?

1. White
2. Mixed/Multiple ethnic groups
3. Asian/Asian British
4. Black/African/Caribbean/Black British
5. Other ethnic group

[educ] What is the highest educational qualification that you have?

1. no educational degree
2. compulsory education
3. (Modern) Apprenticeship, Advanced (Modern) Apprenticeship, SVQ/NVQ/Key Skills Level 1 and 2, City and Guilds Craft/Intermediate/Advanced (Levels 1 to 3/Parts I - III), RSA/OCR Vocational or First Certificate/Diploma, Advanced Diploma, Edexcel/BTEC First/General Diploma
4. Vocational A-level (AVCE), GCE Applied A-level, NVQ/SVQ Level 3 GNVQ/GSVQ Advanced, Edexcel/BTEC/BEC/TEC (General/Ordinary) National Certificate or Diploma (ONC/OND)
5. HE Access
6. Edexcel/BTEC/BEC/TEC - Higher National Certificate (HNC) or equivalent, Vocational A-level (AVCE), GCE Applied A-level, NVQ/SVQ Level 3, GNVQ/GSVQ Advanced, Edexcel/BTEC/BEC/TEC (General/Ordinary), National Certificate or Diploma (ONC/OND)
7. Nursing certificate, Teacher training, HE Diploma, Edexcel/BTEC/BEC/TEC - Higher National Diploma (HND), OCR/RSA - Higher Diploma, City and Guilds - Level 4/Full Technological/Part IV, NVQ/SVQ Level 4 or 5 or equivalent
8. University/CNAA

(NOTE: Response categories from BES 2017, maybe we can simplify?)

[income] Thinking back over the last year, what was your family's annual income from all sources before tax - including benefits, savings, and so on?

(NOTE: Maybe skip income question?)

1. Under £2,500
2. £2,500-£4,999
3. £5,000-£9,999
4. £10,000-£19,999
5. £20,000-£29,999
6. £30,000-£39,999
7. £40,000-£49,999
8. £50,000-£59,999
9. £60,000-£74,999
10. £75,000-£99,999
11. £100,000 or more

[comments] Thank you for answering our survey. Do you have any comments for us?

- [TEXTBOX]

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