Online Supplementary Information
Following Through on an Intention to Vote: Present Bias and Turnout

Political Science Research and Methods

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A   Follow-Through Model of Turnout

In this section, I extend existing theories of turnout to an intertemporal setting to highlight how and when present bias hinders turnout and follow through on an intention to vote.

A.1   Existing models of individual turnout

A set of theories have been developed to understand the turnout choice consistent with empirical regularities, but the two most common in political science are the cost-benefit model and the resource model. Early work applied a simple cost-benefit calculation to turnout, with the small probability that any individual would actually change the election outcome leading to the equilibrium of near-zero turnout in large election (Downs, 1957). An enriched version of the Downs (1957) model aimed to rationalize turnout despite small probabilities of being pivotal by adding a consumption value to participation separate from influence over the outcome (Riker and Ordeshook, 1968, henceforth RO). The RO framework is now probably the most common simple model of turnout in political science.[1] A second well-used model of turnout is the "resource model" of Brady, Verba, and Schlozman (1995), which builds upon the cost-benefit model. The resource model suggests that many of the reasons one might not vote, from costs to interest to social networks, vary by the social, economic, and educational resources available to the individual. The model explains how turnout should vary across the population as those with higher SES are better able to navigate the costs to voting, more likely to understand politics and have an interest in participating, and more likely to be part of social networks where voting is expected and solicited.

A.2   Economic models of intertemporal choice with present bias

In this section, I present a brief background on the theory and evidence of present bias in economic decision-making. The economic evidence shows that present bias is widespread and consequential for many economic actors. In the following section, I apply these insights to the choice to vote.

   As a simple model of decision making, consider first a standard discrete-time discounted utility function for a single action x_i for individual i, where i's utility u_{it} in each time period t depends on action x_i and the time period. Utility in future time periods is discounted exponentially by factor δ_i. Then, i maximizes utility by

$$\max_{x_i \in X_i} \sum_{t=0}^{\infty} \left[\delta_i^t u_{it}(x_i) \right]. \tag{S1}$$

The specification highlights that a single choice x_i has consequences for the individual's utility in current ($t = 0$) *and* future ($t > 0$) time periods, and that this utility depends not only on the costs to action chosen x_i but also on future time periods differentially experienced as a function of that action. In the context of turnout, voting and abstaining have different streams of future benefits that accrue in time periods after the election.

   Equation S1 presents a standard discounted utility model of intertemporal choice. A revisionist school of economists and psychologists have argued for modification to the standard model in light of evidence from observational and experimental research showing that most individuals do not appear to make financial choices consistent with the standard model.[2] One common revision is to

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[1] Political economists have developed models of political participation that also aim to rationalize non-zero turnout by creating some form of socialized utility (e.g., Ali and Lin, 2013; Feddersen, Gailmard, and Sandroni, 2009; Feddersen and Sandroni, 2006).

[2] For a review, see e.g., DellaVigna (2009).

the assumption of fixed intertemporal discounting. The standard model assumes that the discount factor δ between two periods is independent of when the utility is evaluated. That is, no matter in what time period t the agent considers the difference in utility between, for example, $t = 10$ and $t = 11$, the standard model assumes a fixed discount to utility between $t = 10$ and $t = 11$. A large body of evidence "suggests that discounting is steeper in the immediate future than in the further future (DellaVigna, 2009, p. 318)." That is, economic agents are *present biased*, discounting future utility more between time $t = 0$ and time $t = x$ than between time $t = b$ and $t = b+x$, $b > 0$.[3] This observation has been used to understand evidence for a variety of important economic and health outcomes that seem inconsistent with the standard model, from excessive consumption of tobacco and unhealthy food to procrastination, credit card debt, and insufficient saving for retirement.

A variety of models have been proposed to represent present-biased preferences. One popular variant is the (β, δ) model formalized by Laibson (1997) and O'Donoghue and Rabin (1999). The (β, δ) model modifies the standard discounting model with discount factor δ by adding a $\beta \leq 1$ parameter that represents present bias with respect to future utility, where total utility evaluated at time t is

$$U_t(x_i) = u_{it}(x_i) + \beta\delta u_{i,t+1}(x_i) + \beta\delta^2 u_{i,t+2}(x_i) + \beta\delta^3 u_{i,t+3}(x_i) \dots \tag{S2}$$

When $\beta = 1$, this reduces to the standard discounting model. When $\beta < 1$, discounting between the current period and future periods is greater than discounting between future periods further in the future, a simple way to model how much individuals overweight the here and now.

A key input for individual choice in these models is whether the agent knows their own present bias β. An agent aware of their present bias β can accurately account for the future streams of utility from current action by accounting for focus on the here and now. Although everyday life provides opportunities to experience intertemporal trade offs, suggesting that most are likely to learn from these experiences about their own level of present bias, they are unlikely to become fully informed of the extent of inconsistency (Ali, 2011). Partial awareness of one's present bias suggests the potential for inaccurate forecasts of future behavior. In the next section, I apply these insights to the political problem of turnout and note how partial awareness of present bias would lead to over-reporting turnout.

A.3 Micro-foundation for choice to turn out

In this section, I apply a discounted utility model to the choice to turn out in democratic elections. The intertemporal approach provides a framework to understand why some citizens follow through on an intention to vote. The key innovation is to model the choice to vote as a function of the consequences of that choice over multiple future time periods and to include unanticipated present bias in the discounting of these streams of benefits.[4]

Applying the insights of present bias and the (β, δ) model to the political problem of turnout suggests a set of important implications. In particular, imagine the action x_i voting versus abstaining from Eqs. S1 and S2. Because turnout involves undertaking immediate costs to voting relative

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[3] See Thaler (1981) for a seminal experimental example. Note that neither model requires that the discount factor δ be *constant* between every time period, however the standard model assumes that each between-period discount be unrelated to time of evaluation.

[4] Uncertainty is an important component of individual political action. Palfrey and Rosenthal (1985) present a game-theoretic model where uncertainty about the behavior and preferences of *other* citizens can lead to non-zero turnout. Others have also applied behavioral modifications to formal models of turnout, e.g. Patty (2006).

to longer-term benefits – social or instrumental – the problem of present bias is likely to be particularly relevant in such a circumstance. In particular, those with present bias may put off the costs of voting until it is too late, and fail to cast a ballot. This suggests that those with present bias ($\beta < 1$) should be less likely to vote. It also suggests that some of those with present bias who are not fully aware of the extent of their present bias (Ali, 2011) anticipate taking action to turn out and vote, but when the day of action comes their (unanticipated) present bias prevents them from doing so. This provides an alternative interpretation of the general pattern of over-reported turnout in surveys.

Consider a choice to vote in a single election, $X_i = \{V, A\}$ for Vote or Abstain. To highlight the over-time dynamics of the election day choice to turn out, and to move towards a model with present bias, I first separate the sum in (S1) into two separate additive components and include a parameter measuring the cost to vote, c_i. Letting $u_{it}(x_i)$ represent the single-period expected utility for i at time t and $\mathcal{I}(\cdot)$ be an indicator function taking the value of one when its argument is true, zero otherwise, and assuming no anticipatory utility in periods prior to the election, the maximization problem is

$$\max_{x_i \in X_i} \left[[\delta_i^e(u_{it=e}(x_i) - \mathcal{I}(x_i = V)c_i)] + \sum_{t=e+1}^{\infty} [\delta_i^t u_{it}(x_i)] \right]. \tag{S3}$$

The broken apart sum (S3) highlights that utility surrounding the turnout choice x_i is the sum of discounted utility about x_i on the day of the election $t = e$ less the individual's costs of voting c_i when $x_i = V$, plus the discounted expected utility in time periods after the election having chosen action x_i. Note that the costs to vote are paid on the day of the election but not in subsequent time periods, while benefits to voting accrue conditional on turning out in time periods after the election.

The choice to vote for most, then, is a trade off between costs on election day and (discounted) benefits in future time periods. It seems likely that for most voters the discounted expected utility in post-election time periods is non-negative. Of course, there are some future situations that may benefit from abstention, for example being drawn for jury duty from the registration records or the inconvenience of campaign mailers or canvassers at the front door in the next election. However, if turnout on the day of the election is net costly *and* net future utility were negative for the majority of citizens, we should observe near zero turnout, which is not the case.

A key assumption of the model is that the choice to turn out in large elections is directly related to the individual's welfare, i.e., that $u_{it}(x_i = V)$ is not always equal to $u_{it}(x_i = A)$. If there were no consequence to voting or abstaining, the formulation in (S3) would provide no traction. I take as a starting point that individual utility does vary by the turnout choice given the observation that individuals *do* turn out in large elections and that levels of turnout *do* vary across different individuals and contexts, similar to the RO model.[5] Many individuals undertake the cost to vote in some elections. I note that the utility need not be fully instrumental, but could also be expressive or social.

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[5] Note that only *expected* welfare needs to vary by the action chosen. The solution to (S3) depends upon the individual's forecast of experience in future periods. They may vote so as to mitigate a low-probability event with great disutility to abstention that does not ultimately obtain.

A.4 The Follow-Through Model: Turnout with present bias

Applying the (β, δ) model to turnout yields the Follow-Through Model (FTM) of turnout and insight into why some people vote and others do not, and why some intend to vote but fail to follow through. The maximization problem when evaluated prior to the election is

$$\max_{x_i \in X_i} \left[[\beta_i \delta_i^e (u_{it=e}(x_i) - \mathcal{I}(x_i = V)c_i)] + \sum_{t=e+1}^{\infty} [\beta_i \delta_i^t u_{it}(x_i)] \right]. \tag{S4}$$

However, on the day of the election, the maximization problem is

$$\max_{x_i \in X_i} \left[[u_{it=e}(x_i) - \mathcal{I}(x_i = V)c_i] + \sum_{t=1}^{\infty} [\beta_i \delta_i^t u_{it}(x_i)] \right],$$

where the present bias parameter β_i is not applied to election day utility (and $\delta^{t=0} = 1$). The FTM implies that some citizens with $\beta_i < 1$ intend to vote prior to the election but when the time of the election arrives fail to follow through because of changes in the net present value of voting relative to abstaining.[6] When the election is in the future, the costs to voting c_i are discounted by both β and δ, lessening the net present cost to voting. On the day of the election, however, β is no longer applied to $u_{it=e}(x_i)$ or c_i, leading to a corresponding increase in the net present cost to voting for those with $\beta < 1$. Evaluating (S4) on the day of the election for some flips the solution from $x_i = V$ to $x_i = A$. When the reality of the costs to voting impose on the individual's present-biased self on the day of the election, a pre-election expectation to turn out does not translate to an actual vote. This discontinuity increases as β moves away from one such that the more present-biased the individual, the more the costs of voting may dissuade the translation of an intention to vote into an actual vote.

Table S1 classifies present-biased citizens into three types based upon their evaluation of election day costs and post-election day benefits to voting. The comparisons are evaluated separately t days prior to the election (first column) and on the day of the election (second column). The first row identifies Always Voters, those citizens for whom the net present benefits to voting outweigh the net present benefits to abstaining both with and without application of their present bias parameter β_i. The second row identifies the Never Voters for whom the net present costs to voting always outweigh the net present benefits to voting. The final row presents Intended Voters who evaluate greater net present benefits to voting prior to the election when β is applied to day of election costs, but when β is removed on the day of the election their present-biased selves prefer abstention.[7] Citizens with time consistent preferences $\beta_i = 1$ are either Always Voters or Never Voters.

If some or most of those with present bias are not fully aware of the extent of their present bias (Ali, 2011), the framework of Table S1 suggests an alternative interpretation of the observed over-report of intended turnout in pre-election opinion surveys. One common explanation is social desirability, i.e. respondents lie to surveyors knowing that they are unlikely to vote but not wanting

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[6] When the utility to voting and abstaining are normalized to one and zero, respectively, intended voters are those for whom $\frac{1}{\delta_i(1-\delta_i)} > c_i > 1 + \frac{\beta_i}{1-\delta_i}$. See Appendix Section B.

[7] A fourth type would be Unintended Voters, citizens who derive net benefits on the day of the election that move their action into voting from anticipated abstention. This type would not compose a large proportion of the electorate if voting is generally costly and if β is generally less than or equal to one.

Table S1: Classification of citizen voter types with the Follow-Through Model

	Prior to election $\beta_i\delta_i^t(u_{it=e}(V) - c_i) + \sum_{t=e+1}^{\infty} \beta_i\delta_i^t u_{it}(V)$ $> \beta_i\delta_i^t u_{it=e}(A) + \sum_{t=e+1}^{\infty} \beta_i\delta_i^t u_{it}(A)$	Day of election $u_{it=e}(V) - c_i + \sum_{t=1}^{\infty} \beta_i\delta_i^t u_{it}(V)$ $> u_{it=e}(A) + \sum_{t=1}^{\infty} \beta_i\delta_i^t u_{it}(A)$
Always Voters	✓	✓
Never Voters		
Intended Voters	✓	

to admit it to the interviewer. Table S1 and the FTM instead suggest that some of this over-report could be due to present biased citizens who truthfully report their intention to vote, only to not follow through on that intention when unanticipated present bias intervenes on the day of the election. Intended Voters mis-report if sufficiently unaware about the magnitude of their β_i when reporting their likelihood of voting prior to the election – they may know $\beta < 1$ but not by how much. Failure to accurately anticipate present bias would cause truthful reporting of an inaccurate forecast of future costly behavior such as voting.

B   Parameters of Intended Voters

Given the decision problem represented by the Follow Through Model in Equation S4, one can specify the relationship between the individual's present bias parameter β_i, discount factor δ_i, and cost to voting c_i and their classification as an Intended Voter, a citizen who intends to vote prior to the election but who, absent some commitment device, is not be able to follow through on the day of the election.[8] For simplicity of exposition, normalize $u_{it}(V) = 1$ and $u_{it}(A) = 0$. Then, the net expected utility to voting, following (S4), evaluated the day before the election is

$$\beta_i\delta_i^1(1 - c_i) + \sum_{t=2}^{\infty} [\beta_i\delta_i^t]$$

$$= \beta_i\delta_i + \sum_{t=2}^{\infty} [\beta_i\delta_i^t] - \beta_i\delta_i c_i$$

$$= \sum_{t=1}^{\infty} [\beta_i\delta_i^t] - \beta_i\delta_i c_i$$

$$= \frac{\beta_i}{1 - \delta_i} - \beta_i\delta_i c_i. \tag{S5}$$

(The net utility to abstaining evaluated at any point in time, by assumption, is zero.) The net utility to voting on the day of the election with this normalization of utility – i.e. when β_i is removed from the election day costs and benefits – is

$$\delta_i^0(1 - c_i) + \sum_{t=1}^{\infty} [\beta_i\delta_i^t]$$

$$= 1 - c_i + \frac{\beta_i}{1 - \delta_i}. \tag{S6}$$

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[8] I thank John Patty for suggesting this exposition.

The citizen is an Intended Voter when two conditions hold. First, prior to the election their evaluation of the net utility to voting exceeds the net utility to abstaining. Second, on the day of the election their evaluation of the net utility to voting is less than the net utility to abstaining. This first condition holds when, from (S5),

$$
\begin{aligned}
\frac{\beta_i}{1-\delta_i} - \beta_i\delta_i c_i &> 0 \\
\frac{\beta_i}{1-\delta_i} &> \beta_i\delta_i c_i \\
\frac{1}{\delta_i(1-\delta_i)} &> c_i.
\end{aligned}
\tag{S7}
$$

The second condition holds when, from (S6),

$$
\begin{aligned}
0 &> 1 - c_i + \frac{\beta_i}{1-\delta_i} \\
c_i &> \frac{1-\delta_i}{1-\delta_i} + \frac{\beta_i}{1-\delta_i} \\
c_i &> \frac{1+\beta_i-\delta_i}{1-\delta_i}.
\end{aligned}
\tag{S8}
$$

Thus, Intended Voters are citizens with present bias, discount factor, and cost parameters such that

$$
\frac{1}{\delta_i(1-\delta_i)} > c_i > \frac{1+\beta_i-\delta_i}{1-\delta_i}.
\tag{S9}
$$

C Measuring present bias

The survey items used to measure present bias are relatively simple, but follow a standard approach used in the literature (e.g. Ashraf, Karlan, and Yin, 2006) going back to one of the first experimental measures of present bias in behavioral economics (Thaler, 1981). The questions are designed to present situations that separate choices made by those with $\beta = 1$ and those with present bias $\beta < 1$, holding fixed discount factor δ.

There are alternative survey response measures of present bias (e.g., the restaurant certificates choices in Ameriks et al., 2007), but one established practice is to measure present bias through incentivized choice menus or "multiple price lists" (e.g., Andreoni and Sprenger, 2012; Coller and Williams, 1999; Meier and Sprenger, 2010, 2015).[9] In these experiments, subjects make choices similar to the choice pair in the measurement in this paper, but do so across multiple choice comparisons that vary the time between choices as well as the amounts. Usually one of these choices is drawn at random to actually compensate the subject consistent with their choice. Across multiple choices, these choice menu methods can measure discount factors and more granular values of a present bias parameter. The present study did not employ the choice menu approach due to constraints of space on the survey instrument.

As noted below in Section D, that this simple measure, surely subject to error, finds such a strong relationship to turnout lends support to the argument that present bias is an important factor for political choices.

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[9] I additionally fielded the restaurant certificate questions of Ameriks et al. (2007). Present bias is positively correlated for the two measures, but subjects were much more likely to skip questions in the restaurant measure, leading to more missingness than the Ashraf-Thaler questions.

D   Magnitude of the relationship: Measurement error

It is important to observe that though the survey questions to classify present bias are well-used in the literature, they are likely to measure present bias with some error. In addition to the usual error induced by survey question wording and inattentive participants, there is also likely to be systematic error due to heterogeneity in discount factors across participants. The simple questions asking participants to choose between $26 and $30 identifies only those with present bias with discount factors in a specific range. Individuals with discount factors outside of this range always strictly prefer $26 to $30 or $30 to $26 regardless of present bias and so these questions do not identify the present bias of respondents with such discount factors. It is likely that these two questions systematically produce *false negatives* of unknown magnitude.[10] Measurement error makes it more difficult to detect the influence of present bias. In this section, I explore the potential consequences of this error.

With a binary predictor, measurement error manifests as classification error. I apply the correction for classification error in binary predictors of Savoca (2000). The procedure statistically corrects the OLS coefficient estimated from the observed data as a function of false negative and false positive rates (either assumed or brought from some external validation) and the true rate of the binary indicator in the population (Savoca, 2000, Eq. 3).[11] Figure S1 explores what the true relationship of present bias to turnout would be for various values of false positive and false negative rates given the OLS estimates from the CCES for validated 2014 general election turnout. The figure plots the implied relationship as the false negative rate is varied along the x-axis from 0 to 0.4 and for four values of false positive rate (separate lines).[12]

Figure S1 shows that if this measure suffers from small to modest amounts of measurement error, Figure 1 along with the OLS estimates in Tables 2 and 3 likely understate the true relationship. The horizontal dashed line is the estimate from the observed data. The point at which the line with false positive rate zero (solid black) intersects with the OLS estimate occurs where the false negative rate equals zero – the OLS assumption of error-free regressors. For a false positive rate of zero, there are only minor changes in the estimator as the false negative rate increases towards 0.4, and in fact at some values of false negative the magnitude of the true relationship would be smaller. However, if the CCES has false positives and false negatives due to respondent misunderstanding or inattentiveness in addition to false negatives due to heterogeneity in discount factor, the figure suggests this combination likely leads to an underestimate, potentially on the order of 50 or 100 percent.

At many values of false negative above 0.15 (meaning that 15 percent of respondents are actually present biased but coded as time consistent due to either survey measurement error or discount

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[10] Outside opportunities for arbitrage may also lead to the instrument misclassifying those with present bias as time consistent.

[11] Specifically, Savoca (2000) shows that for a true relationship β of a binary regressor measured with classification error, plim $\hat{\beta}_{OLS} = \beta\left[\frac{P(1-P)(1-r_o-r_1)}{\tilde{P}(1-\tilde{P})}\right]$, with P the true rate in the population, $\tilde{P}$ the sample proportion, r_0 the sample false positive rate, and r_1 the sample false negative rate.

[12] I explore values where the false negative rate is greater than or equal to the false positive rate because the systematic error is likely to mostly generate false negatives while the survey measurement error is likely more symmetric, generating both false positives and false negatives. This suggests that the sample should suffer from more false negatives than false positives. A given combination of false negative and false positive rate, along with the sample observed proportion present biased, implies a true rate of present biased in the population. I limit to combinations where the implied true rate of present biased is between 0 and 0.8.

Figure S1: Present bias and turnout with correction for measurement error
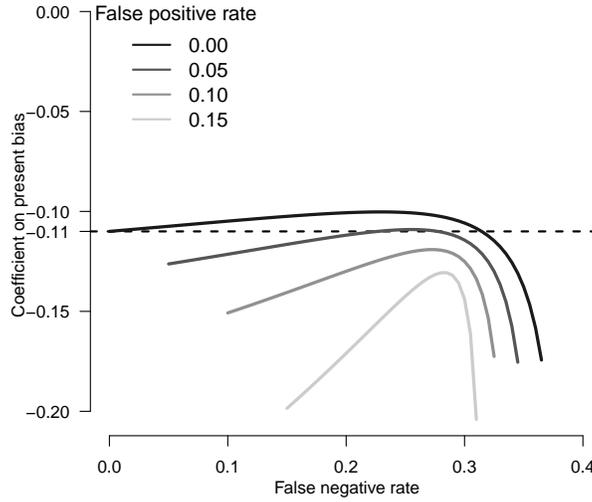
Note: At modest amounts of measurement error, the relationship of present bias to turnout can be one and a half or two times larger. Plots the present bias and validated 2014 general election turnout from the CCES when applying the measurement error correction for binary regressors of Savoca (2000) at given false negative and false positive rates. Dashed lines are the uncorrected OLS relationship. Limited to combinations that generate an implied present bias rate in the population of 0.8 or less and where the false negative rate is greater than or equal to the false positive rate.

factor), true relationships are one and a half or two times greater than the OLS estimate. For example, if the false positive rate is 0.15 and the false negative rate is 0.20, the correction suggests that those with present bias are 17 percentage points less likely to turn out, about 1.5 times the OLS estimate of 11 points. In sum, this exploration suggests that measurement error is likely to attenuate the estimated relationship between present bias and turnout.

E   Self-reported turnout

Table S2 reproduces the specifications of Table 2 for self-reported turnout.

F   Limited dependent variable models

Table S2: Present bias and self-reported turnout in 2014 general

	(1) Self-report	(2) Self-report	(3) Self-report
Present biased (1=yes,0=no)	-0.095**	-0.019	-0.020
	(0.03)	(0.02)	(0.02)
Constant	0.69**	0.041	0.066
	(0.01)	(0.07)	(0.07)
Observations	2,004	2,004	1,998
R-squared	0.007	0.215	0.454
Demographic controls	No	Yes	Yes
Additional controls			Yes

Standard errors in parentheses
** p<0.01, * p<0.05

Note: Dependent variable in each column is self-reported general 2014 turnout, 1=yes 0=no. Columns with demographic controls include indicators for age in decades, for each category of education, of family income, and of race. Columns with additional controls include indicators for each category of party identification, each category of ideology, and if the individual over-reported turnout on the post-election survey.

Table S3: Present bias and turnout in 2014 elections, Probit

	(1) General	(2) General	(3) General	(4) Primary	(5) Primary	(6) Primary
Present biased (1=yes,0=no)	-0.29*	-0.22	-0.26*	-0.37**	-0.31**	-0.28*
	(0.12)	(0.11)	(0.13)	(0.11)	(0.11)	(0.12)
Constant	0.60**	0.12	-0.39	-0.31**	-5.99**	-6.02**
	(0.05)	(0.52)	(0.57)	(0.05)	(0.40)	(0.49)
Observations	1,295	1,290	1,175	1,295	1,288	1,286
Demographic controls	No	Yes	Yes	No	Yes	Yes
Additional controls			Yes			Yes

Robust standard errors in parentheses
** p<0.01, * p<0.05

Note: Dependent variable in each column is turnout validated to voter files, 1=yes 0=no. Columns with demographic controls include indicators for age in decades, for each category of education, of family income, and of race. Columns with additional controls include indicators for each category of party identification, each category of ideology, and if the individual over-reported turnout on the post-election survey. Statistical model is Probit.

Table S4: Following through on an intention to vote, 2014 general elections, Probit

	(1) General	(2) General	(3) General
Present biased (1=yes,0=no)	-0.25	-0.23	-0.16
	(0.14)	(0.14)	(0.15)
Constant	0.91**	4.30**	5.06**
	(0.07)	(0.59)	(0.60)
Observations	940	927	926
Demographic controls	No	Yes	Yes
Additional controls			Yes

Robust standard errors in parentheses
** p<0.01, * p<0.05

Note: Sample limited to respondents responding "Yes, definitely" to a pre-election question asking if they intended to vote. Dependent variable in each column is an indicator for following through on the intention to vote in the 2014 general election based on validated voter file turnout, 1=yes 0=no. Columns with demographic controls include indicators for age in decades, for each category of education, of family income, and of race. Columns with additional controls include indicators for each category of party identification, each category of ideology, and if the individual over-reported turnout on the post-election survey. Statistical model is Probit.

Table S5: Present bias and self-reported turnout in 2014 general, Probit

	(1) Self-report	(2) Self-report	(3) Self-report
Present biased (1=yes,0=no)	-0.25**	-0.066	-0.19
	(0.10)	(0.10)	(0.10)
Constant	0.50**	-1.37**	-2.21**
	(0.04)	(0.37)	(0.50)
Observations	2,004	1,999	1,571
Demographic controls	No	Yes	Yes
Additional controls			Yes

Robust standard errors in parentheses
** p<0.01, * p<0.05

Note: Dependent variable in each column is self-reported general 2014 turnout, 1=yes 0=no. Columns with demographic controls include indicators for age in decades, for each category of education, of family income, and of race. Columns with additional controls include indicators for each category of party identification, each category of ideology, and if the individual over-reported turnout on the post-election survey. Statistical model is Probit.

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