Supplemental Information
Turning Out Unlikely Voters? A Field Experiment In The Top-Two Primary

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March 10, 2015

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A Construction of the target population

In this section, we describe the process for obtaining and cleaning the set of observations that make up our target population.

The California Secretary of State maintains the publicly available California registered voter file, pursuant to Title 2, Division 8, Chapter 2, Section 20108.53. This file lists the names, addresses, stated party preference, and past voting history for all registered voters in the state of California for all Federal and State elections. Municipal elections are not specifically identified in this document. We used the April, 2014 version of the voter file to construct our target population, which contains 17,651,518 rows and 73,598,901 unique voting events.

A key piece of this research is the focus on voters who have previously voted in a general election, but not in a primary election. At this stage, we also apply population filters to create a more limited, sensible sampling frame. Specifically, we limit the sampling frame to those who:

1. Have no reported ZIP code. The reduces the entries in our dataframe by 227 from 17,651,518 to 17,651,291.

2. Voted in the 2012 general election. This reduces the entries in our dataframe by 5,417,707 from 17,651,291 to 12,233,584.

3. Voted in a 2012, 2010, or 2008 primary election. This reduces the entries in our dataframe by 8,077,598 from 12,233,584 to 4,155,986.

4. Matched by a private vendor to records indicating they had subsequently moved, been incarcerated, or had died. This reduces entries in our dataframe from 4,155,986 to 3,872,268.

All together the population filters reduce the number of records from **17,651,518** to **3,872,268**. We also note that, after removing records of ineligible voters and verifying the address of eligible voters, the vendor standardized all addresses U.S. Post Office bulk rate standards.

B Blocking

One concern in experimental designs is that pre-treatment randomization will "fail" leading to covariate imbalance and an inability of researchers to draw clean causal inference. This concern is magnified when populations of interest might respond to treatment differently and the analyst is motivated to estimate heterogeneous treatment effects. Blocking on observable covariates mitigates this concern by sorting all possible recipients into groups (blocks) and then randomly assigning treatment within each block. This way, there is no risk for pre-treatment imbalance on observable covariates. Moreover, because the assignment to treatment was orthogonal to covariates and the covariates are by design balanced, researchers can work with each block as a separate experiment, which allows greater ability to make theoretically motivated comparisons within and between population sub-groups.

We block on the following variables:

1. *Age*: Recorded in 7 intervals, 18-28, 29-38, 39-48, 49-58, 59-68, 69+, and age missing.

2. *Party Preference*: Recorded in 4 groups, Republican, Democrat, Decline to State or No Party Preference, or Other/third party.

3. *District Competitiveness*: We calculated district competitiveness using data downloaded from the Federal Election Commission at `ftp.fec.gov/FEC/data.fec.gov/candidate_disbursement/all_house_senate.csv`. After downloading this data, we subset to include only records of spending that occurred after the most recent election. We classified congressional districts as competitive when two or more candidates in that district spent more than $100,000 dollars in the current election cycle prior to the primary. This criterion led to the following districts classified as competitive: 03, 07, 10, 12, 17, 25, 26, 31, 33, 36, 45, 52.

4. *Majority Minority District*: We identify majority minority districts as those districts where a plurality of the districts' residents are non-white or non-first language English. These criteria led to the following districts classified as majority minority: 19, 25, 27, 30, 31, 32, 39, 47, 48, 49, 51, 52, 53, 56, 57, 58, 59, 63, 69, 80

5. *2010 & 2008 General Election Vote History*: Vote history was drawn from the voter file.

We applied randomization within blocks defined by the unique intersection of this set of variables. For blocks too small to apply our targeted rates of treatment assignment, and for leftover cases due to rounding in larger blocks, we created a "leftover" block, in which we made treatment assignments by simple random sampling.

C Details of letters mailed

In this section, we present basic details of the letters mailed. Actual copies of the letters are included at the end of the Supplemental Information.

- Election information Letter.
  All of the information contained in the election information letter is also contained in each of the treatment letters. The opening paragraph reminds the recipient that there is an election upcoming on June 3, and expresses enthusiasm for the recipient to cast a vote. The second content paragraph reminds the recipient of the laws surrounding voting by main, and the third paragraph provides the recipient with information about how to address questions. All of the language in this letter, as will all of the letters was drawn directly from the California Secretary of State website and was also reviewed by managers at California Common Cause.

- Top-two information Letter.
  The top-two information letter contains all the content of the election information letter, but also contains two additional elements. In the first additional paragraph, we provide the recipient with the information that following the Top Two Candidate Open Primary Act of 2010 (Prop 14) all Californians can now participate in primary elections. In the second additional element, we include a bulleted list of the changes placed into effect by Prop 14. The contents of this information were borrowed from other efforts by Common Cause and the Los Angeles City Clerk to explain the top-two primary in previous election outreach. Specifically, we note that:

  - All voters can now vote in the primary election.
  - All candidates appear on one ballot.

- Candidate are not nominated by the party.
- Any voter can vote for any candidate.
- The two candidates with the most vote move on to the General Election in November.

- Partisan Identity Letter.
  The partisan identity letter contains all the content of the election information letter, but also two additional paragraphs. In the first additional paragraph, we provide the recipient of the letter with information about turnout rates of co-partisans in the 2012 California Presidential Election primary. This information was calculated using the most current California voter file, the same file that was used for the mailing list. In the second paragraph, we include an appeal to the recipient to turn out to vote.

D Additional tables and figures

In Table S1, we present OLS regressions to estimate the average treatment effect, which allow us to include randomization block fixed effects. These block fixed effects nest controlling for the interactions of each of our blocking variables. In the first column we present the treatment effect estimates for the three letters: 0.50, 0.45, and 0.53. In column two, we include block fixed effects, and estimate identical treatment effects. In columns three and four, we test for difference between the three treatment letters, finding no statistically distinguishable difference with or without block fixed effects.

Table S1: OLS estimates of treatment effects from experiment

	(All, no FEs)	(All, w FEs)	(Letters, no FEs)	(Letters, w FEs)
Intercept	9.31*		9.81*	
	(0.02)		(0.17)	
Treatment: Election info	0.50*	0.50*		
	(0.17)	(0.17)		
Treatment: Top-two info	0.45*	0.45*	–0.05	–0.05
	(0.12)	(0.12)	(0.21)	(0.21)
Treatment: Partisan	0.53*	0.53*	0.03	0.03
	(0.12)	(0.12)	(0.21)	(0.21)
N	3872268	3872268	149596	149596
R^2	0.00	0.00	0.00	0.00
adj. R^2	0.00	0.00	–0.00	–0.00
Resid. sd	29.09	28.53	29.73	29.11

Standard errors in parentheses

* indicates significance at $p < 0.05$

Note: Dependent variable is turnout in that election (100=yes, 0=no). OLS regression coefficients with standard errors in parentheses. Models indicating fixed effects have block fixed effects (within estimator). Columns three and four compare placebo letter to information and identity letters only.

In Table S2, we present our observational analysis of turnout under California's top-two primary. The dependent variable is whether or not the registrant voted in that election. The first

specification controls for party of registration, and shows the average rate of turnout for registrants with each of these parties across the four primary elections analyzed. In the second column, we include a dummy variable for the latter two elections held under the top-two rules, whose point estimate of -1.5 shows that, on average, registrants were 1.5 percentage points less likely to vote under the top-two system. In the third column, we interact the top-two indicator with each of the parties of registration, showing how turnout by party changes across the two institutions. All four party groupings turn out at lower rates, but with a notably larger effect for other party registrants and a notably smaller effect for no party preference/decline to state registrants.

In Table S3, we extend the analysis from the main body in Table 2. We estimate heterogeneity across covariates for each treatment letter separately, rather than for any letter as in Table 2. We again find little evidence of significant heterogeneity, though find large point estimates for (a) other party registrants receiving the election information latter [coefficient of 0.89]; (b) those aged 59-69 receiving the top-two letter or the partisan letter [0.69 and 0.71]; (c) those aged 29-38 receiving the partisan letter [0.69]; and (d) 70+ receiving the partisan letter [1.33], which is our largest observed treatment effect and the only in this set statistically significant at $p < .05$. Apparently the oldest set of registrants who haven't previously voted in primaries are particularly responsive to learning about low primary turnout among their partisan group. We show in Figure S1 that the point estimate for the effect of the partisan letter is greater than 2 percentage points for those aged 71 to 78, and in Figure S2 that the effect is especially driven by those registered no party preference, with a point estimate above 4 percentage points.

Table S2: Model of turnout in top two and traditional primaries in California, 2008 to 2014 (non-experimental)

	(Base)	(DID)	(DID)
Top two primary		–1.50*	
		(0.01)	
Party REP	33.78*	34.52*	34.60*
	(0.01)	(0.01)	(0.01)
Party DEM	26.55*	27.31*	27.41*
	(0.01)	(0.01)	(0.01)
Party NPP	17.43*	18.21*	17.69*
	(0.01)	(0.01)	(0.02)
Party OTH	17.08*	17.99*	18.86*
	(0.02)	(0.02)	(0.04)
Top two*Party REP			–1.68*
			(0.02)
Top two*Party DEM			–1.70*
			(0.02)
Top two*Party NPP			–0.49*
			(0.02)
Top two*Party OTH			–2.93*
			(0.05)
N	66,002,372	66,002,372	66,002,372
R^2	0.276	0.276	0.276

Standard errors in parentheses

* indicates significance at $p < 0.05$

Note: Data are individual observations from the California voter file. Dependent variable is turnout in that election (100=yes, 0=no). OLS regression coefficients with standard errors in parentheses. Year is a linear term for time. Top two primary takes the value of 1 in 2012 and 2014, 0 in 2010 and 2008.

Table S3: OLS estimates of heterogeneous treatment effects, separate effects by letter

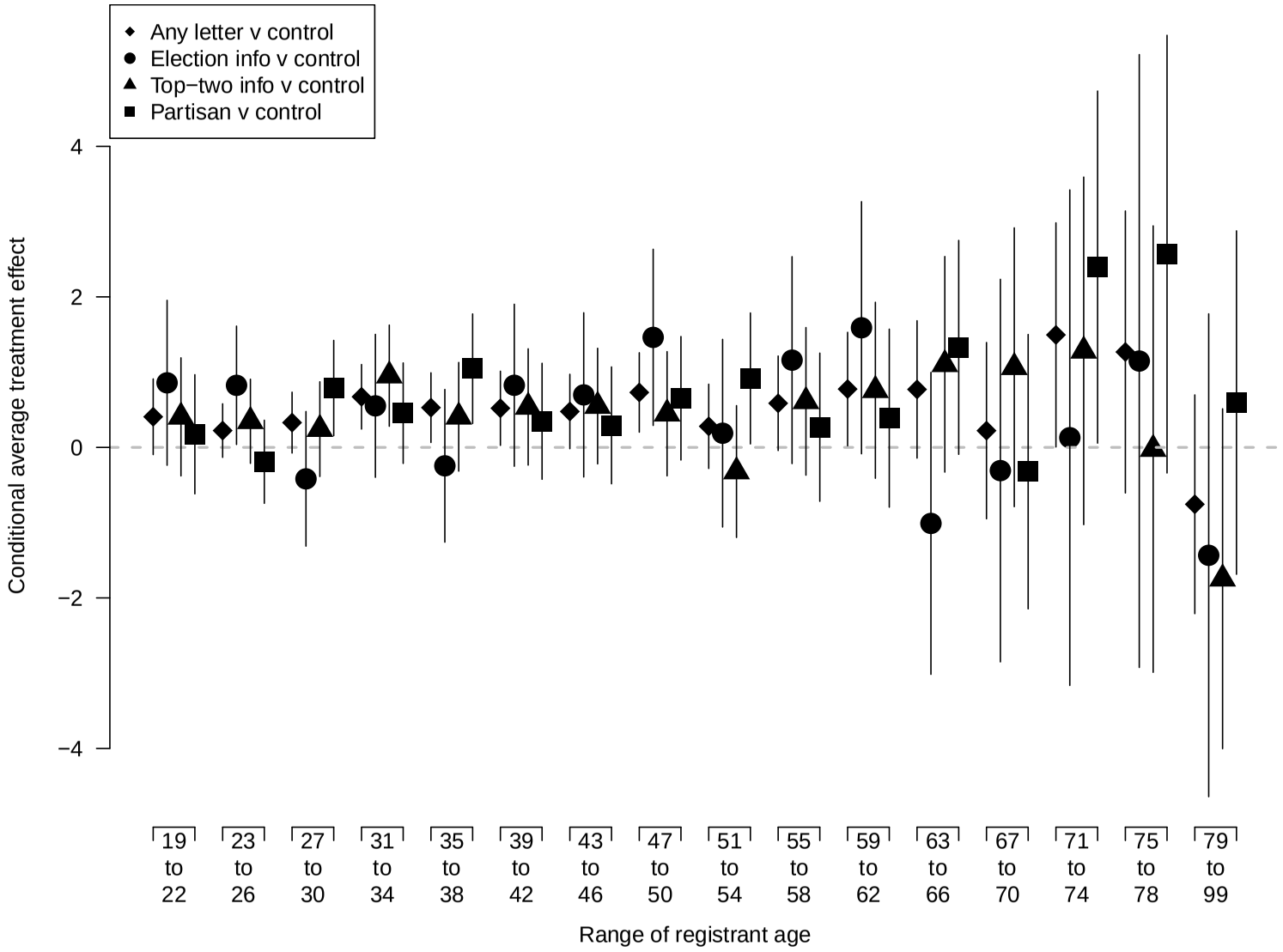
	(Direct effect)		(Age linear)		(Age binned)	
Intercept	6.27*	(0.03)	6.29*	(0.03)	2.33*	(0.04)
Election info letter	0.51*	(0.17)	0.13	(0.30)	–0.05	(0.46)
Top-two info letter	0.45*	(0.12)	0.05	(0.21)	–0.24	(0.33)
Partisan letter	0.54*	(0.12)	0.39	(0.21)	–0.09	(0.33)
Age	0.26*	(0.00)	0.26*	(0.00)		
Abstain 08 and 10	5.84*	(0.03)	5.82*	(0.03)	5.42*	(0.03)
Party NPP	–0.08*	(0.04)	–0.08*	(0.04)	–0.06	(0.04)
Party REP	1.34*	(0.04)	1.33*	(0.04)	1.42*	(0.04)
Party OTH	0.50*	(0.05)	0.49*	(0.06)	0.44*	(0.06)
Election info letter*Age			0.00	(0.01)		
Age*Top-two info letter			0.00	(0.01)		
Age*Partisan letter			0.02*	(0.01)		
Election info letter*Abstain 08 and 10			0.40	(0.34)	0.49	(0.35)
Top-two info letter*Abstain 08 and 10			0.69*	(0.24)	0.73*	(0.25)
Partisan letter*Abstain 08 and 10			0.18	(0.24)	0.19	(0.25)
Election info letter*Party NPP			0.51	(0.42)	0.50	(0.42)
Top-two info letter*Party NPP			–0.08	(0.30)	–0.08	(0.30)
Partisan letter*Party NPP			–0.07	(0.30)	–0.07	(0.30)
Election info letter*Party REP			–0.01	(0.43)	–0.03	(0.43)
Top-two info letter*Party REP			0.43	(0.30)	0.44	(0.30)
Partisan letter*Party REP			0.30	(0.30)	0.33	(0.30)
Election info letter*Party OTH			0.89	(0.63)	0.89	(0.63)
Top-two info letter*Party OTH			0.13	(0.44)	0.12	(0.44)
Partisan letter*Party OTH			0.12	(0.44)	0.13	(0.44)
Age 29-38					1.79*	(0.04)
Age 39-48					3.56*	(0.05)
Age 49-58					5.53*	(0.05)
Age 59-68					10.24*	(0.06)
Age 69+					15.04*	(0.07)
Election info letter*Age 29-38					–0.25	(0.50)
Election info letter*Age 39-48					0.58	(0.52)
Election info letter*Age 49-58					0.54	(0.54)
Election info letter*Age 59-68					0.15	(0.62)
Election info letter*Age 69+					–0.50	(0.78)
Age 29-38*Top-two info letter					0.42	(0.36)
Age 39-48*Top-two info letter					0.46	(0.37)
Age 49-58*Top-two info letter					–0.03	(0.38)
Age 59-68*Top-two info letter					0.69	(0.44)
Age 69+*Top-two info letter					0.13	(0.56)
Age 29-38*Partisan letter					0.69	(0.36)
Age 39-48*Partisan letter					0.32	(0.37)
Age 49-58*Partisan letter					0.53	(0.38)
Age 59-68*Partisan letter					0.71	(0.44)
Age 69+*Partisan letter					1.33*	(0.55)
N	3855411		3855411		3855411	
R^2	0.02		0.02		0.03	
adj. R^2	0.02		0.02		0.03	
Resid. sd	28.70		28.70		28.69	

Standard errors in parentheses

* indicates significance at $p < 0.05$

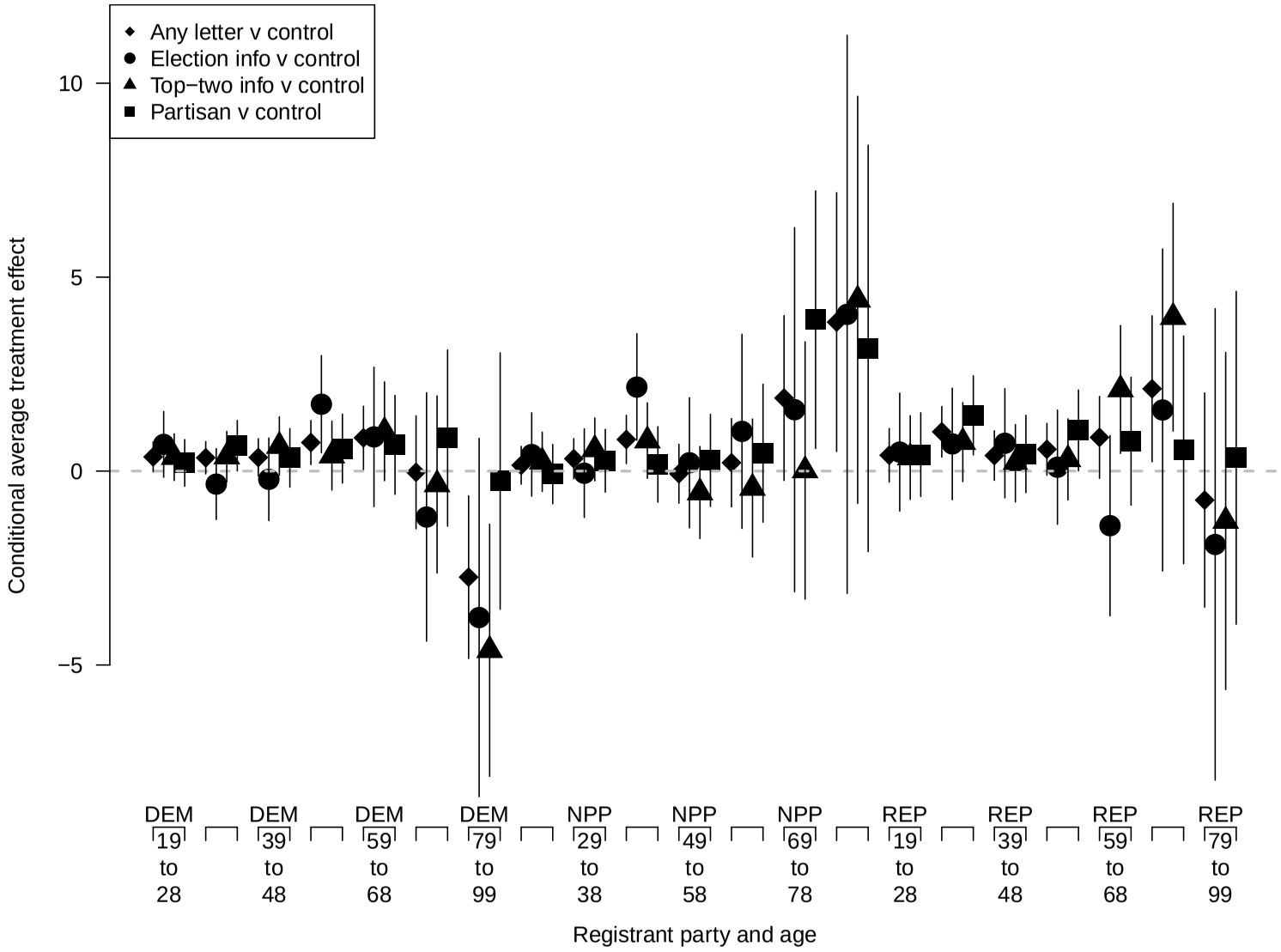
Note: Dependent variable is turnout in that election (100=yes, 0=no). OLS regression coefficients with standard errors in parentheses.

Figure S1: Heterogeneous treatment effects by small age ranges



Note: Each point is the coefficient from an OLS regression of turnout on an indicator for that treatment assignment for that subgroup of the target population, with randomization block fixed effects. Confidence intervals extend to ± 1.96 standard errors.

Figure S2: Heterogeneous treatment effects by small age cross party



Note: Each point is the coefficient from an OLS regression of turnout on an indicator for that treatment assignment for that subgroup of the target population, with randomization block fixed effects. Confidence intervals extend to ± 1.96 standard errors.

E Treatment effects for 2014 general election

In this section, we reproduce the tables and figures from the primary election, instead analyzing treatment effects and their variation for turnout in the November 2014 general election. We matched 96.5% of our target population to records in the January 2015 voter file with turnout history; all non-matches are set to abstention in the general. Table S4 presents the difference in mean turnout in the 2014 general election by treatment assignment. The letters have no effect on general election turnout on average. No differences within party are statistically significant when Bonferroni corrected for multiple comparisons. In Table S5, we produce OLS estimates with block fixed effects, and again find no average treatment effect.

In Figures S3 and S4, we present treatment effects by party, age, and turnout history. The treatment effect on registrants aged 59 and above is close to statistically significant. We specify the turnout history differently for these treatment effects because it is a general election rather than a primary. The effects by turnout history are suggestive that the letters are more effective on non-midterm voters (2008 voters and non-2010 voters) than for midterm voters.

In Table S6, we present OLS estimates of these heterogeneous treatment effects with each covariate of interest considered together in a multiple regression setting. We do find evidence of variation in the effect by age. While most ages show little influence of being assigned to receive any letter, those aged 59-68 turn out about 0.5 points higher when assigned to receive any letter, and those aged 69+ about 0.4 points higher.

In Table S7, we estimate variation in average effects across covariates for each treatment letter separately, rather than for any letter as in Table S6. The treatment effects on those aged 59 and above for any letter appear to be driven by the top-two letter and the partisan letter. We show in Figure S5 that the conditional average treatment effect of the partisan letter is greater than 2 percentage points for those aged 63 to 66 and aged 71 to 78, and that the effect of the top-two letter is close to one point for those aged 59 to 74. The points in Figure S6 suggest that the effect is especially driven by those registered no party preference.

Table S4: Turnout in 2014 general by treatment assignment and party (experimental results)

	All	NPP	DEM	REP	OTH
Control	27.4	26.1	26.5	30.7	26.1
	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)
	3,722,672	919,917	1,584,950	898,297	319,508
Any Letter	27.4	26.0	26.4	31.0	26.0
	(0.1)	(0.2)	(0.2)	(0.2)	(0.4)
	149,596	36,959	63,733	36,095	12,809
Election Info	27.4	26.4	26.4	30.2	26.6
	(0.3)	(0.5)	(0.4)	(0.5)	(0.9)
	29,885	7,381	12,733	7,211	2,560
Top-two Info	27.3	25.8	26.4	31.1	25.0
	(0.2)	(0.4)	(0.3)	(0.4)	(0.6)
	59,854	14,789	25,500	14,441	5,124
Partisan	27.5	26.0	26.4	31.2	26.8
	(0.2)	(0.4)	(0.3)	(0.4)	(0.6)
	59,857	14,789	25,500	14,443	5,125

Note: Cell entries are turnout for that party (column) and treatment assignment (row) for the target population in our field experiment. Standard errors in parentheses and cell counts below. NPP=no party preference or decline to state; DEM=Democrat; REP=Republican; OTH=Other/third-party. Of 12 two-way difference of proportion tests comparing each individual letter to each other for each partisan group, 1 are significant at $p < .05$*, two-tailed. Applying a Bonferroni correction for the number of tests, 0 are significant at* $p < 0.0042$*, two-tailed .*

Table S5: 2014 General OLS estimates of treatment effects from experiment

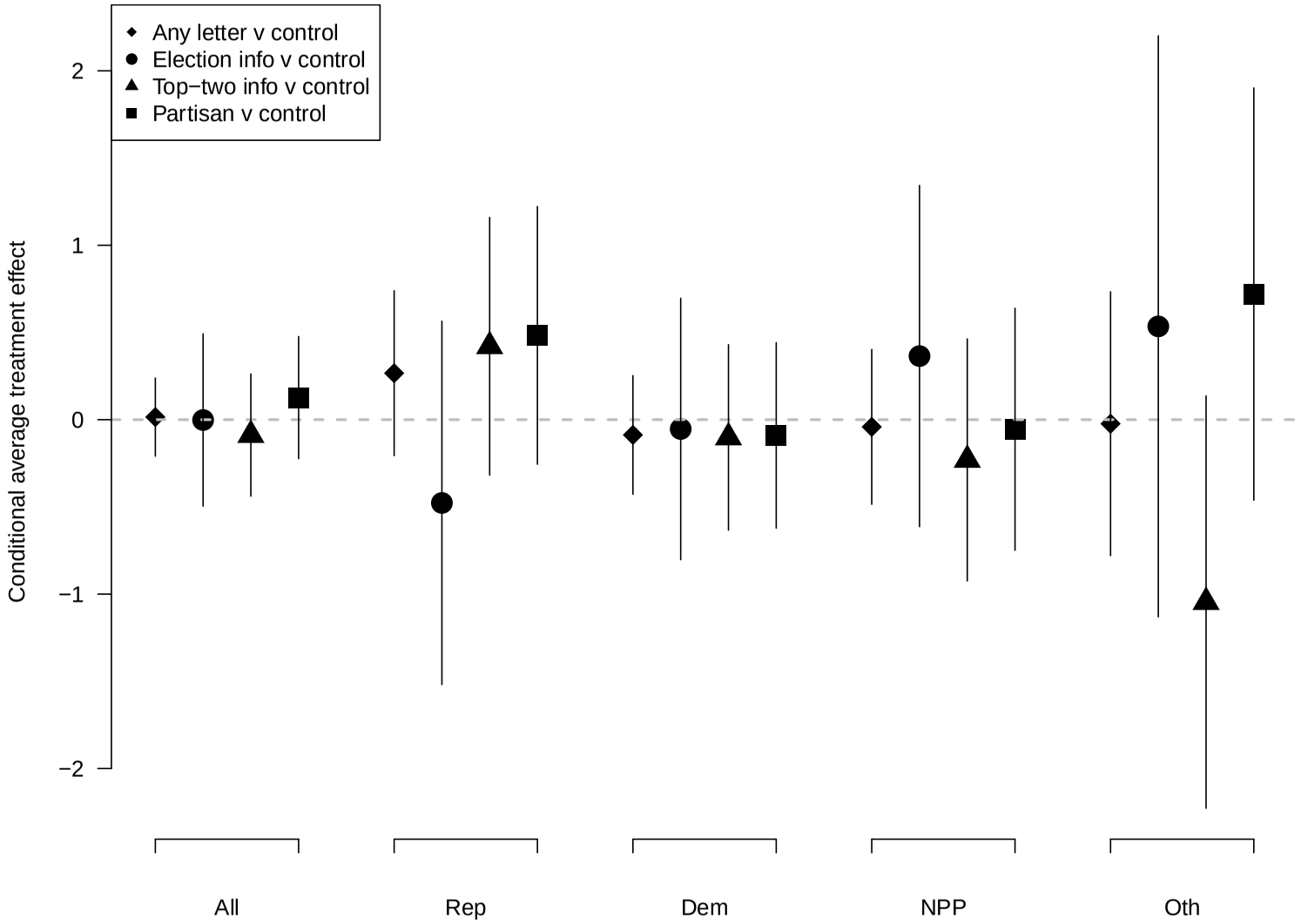
	(All, no FEs)	(All, w FEs)	(Letters, no FEs)	(Letters, w FEs)
Intercept	27.36*		27.35*	
	(0.02)		(0.26)	
Treatment: Election info	–0.01	–0.00		
	(0.26)	(0.25)		
Treatment: Top-two info	–0.09	–0.09	–0.09	–0.09
	(0.18)	(0.18)	(0.32)	(0.31)
Treatment: Partisan	0.12	0.13	0.13	0.13
	(0.18)	(0.18)	(0.32)	(0.31)
N	3872268	3872268	149596	149596
R^2	0.00	0.00	0.00	0.00
adj. R^2	–0.00	–0.00	–0.00	–0.00
Resid. sd	44.58	43.39	44.59	43.31

Standard errors in parentheses

* indicates significance at $p < 0.05$

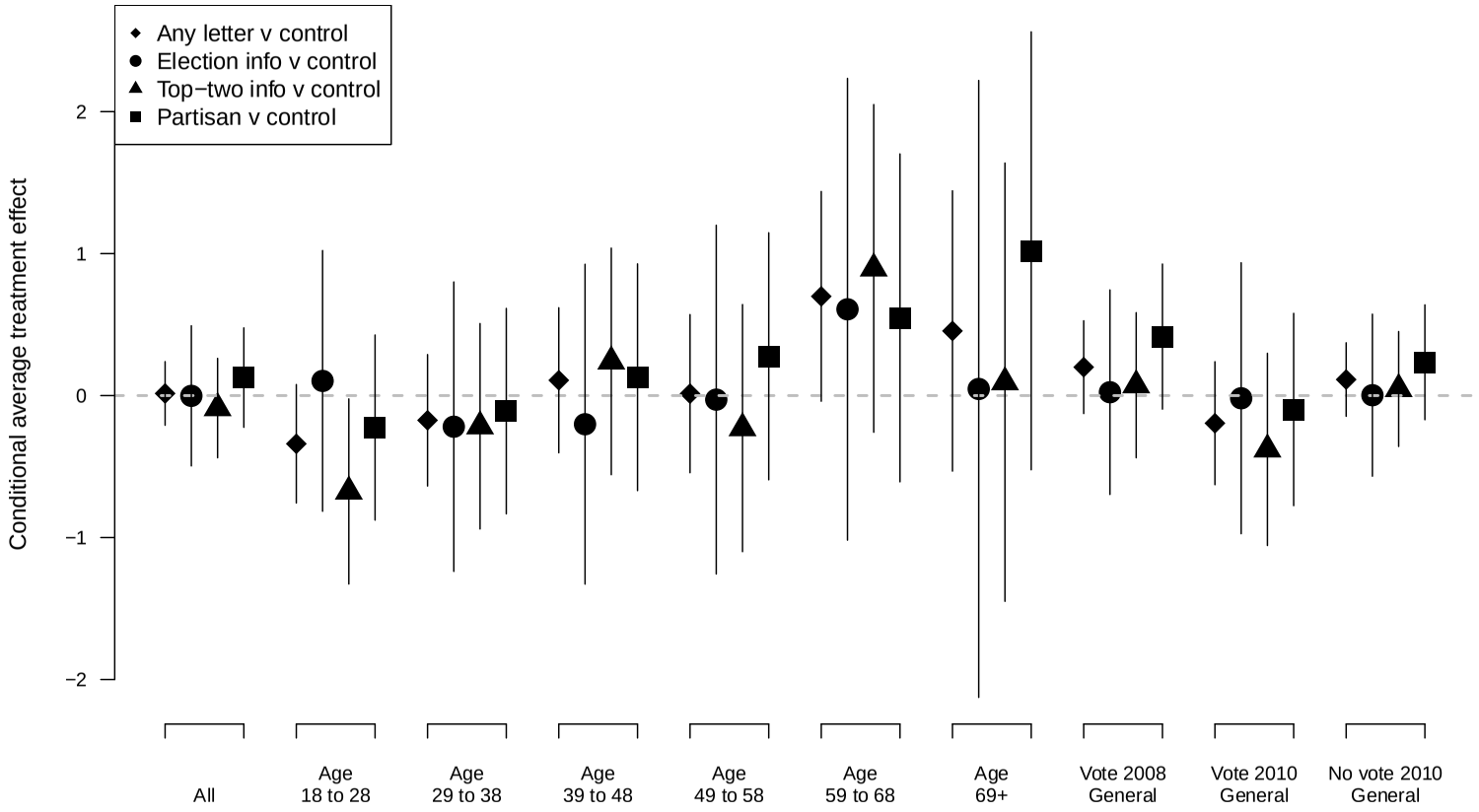
Note: Dependent variable is turnout in that election (100=yes, 0=no). OLS regression coefficients with standard errors in parentheses. Models indicating fixed effects have block fixed effects (within estimator). Columns three and four compare placebo letter to information and identity letters only.

Figure S3: 2014 General Heterogeneous treatment effects by party



Note: Each point is the coefficient from an OLS regression of turnout on an indicator for that treatment assignment for that subgroup of the target population, with randomization block fixed effects. Confidence intervals extend to ± 1.96 standard errors.

Figure S4: 2014 General Heterogeneous treatment effects by age and previous turnout



Note: Each point is the coefficient from an OLS regression of turnout on an indicator for that treatment assignment for that subgroup of the target population, with randomization block fixed effects. Confidence intervals extend to ± 1.96 standard errors.

Table S6: 2014 General OLS estimates of heterogeneous treatment effects, any letter

	(Direct effect)		(Age linear)		(Age binned)		(Age binned)	
Intercept	25.51*	(0.04)	25.51*	(0.04)	16.29*	(0.06)	22.89*	(0.08)
Any letter	0.01	(0.12)	–0.12	(0.21)	–0.47	(0.32)	–0.51	(0.39)
Age	0.44*	(0.00)	0.44*	(0.00)				
Abstain 08 and 10	2.08*	(0.05)	2.08*	(0.05)	2.13*	(0.05)	–3.81*	(0.06)
Party NPP	0.07	(0.06)	0.07	(0.06)	0.02	(0.06)	0.41*	(0.06)
Party REP	3.32*	(0.06)	3.31*	(0.06)	3.32*	(0.06)	3.79*	(0.06)
Party OTH	0.93*	(0.08)	0.93*	(0.09)	0.90*	(0.09)	–0.22*	(0.09)
Any letter*Age			0.02*	(0.01)				
Any letter*Abstain 08 and 10			0.05	(0.24)	0.02	(0.24)	0.11	(0.30)
Any letter*Party NPP			0.11	(0.29)	0.11	(0.29)	0.08	(0.29)
Any letter*Party REP			0.30	(0.30)	0.32	(0.30)	0.29	(0.30)
Any letter*Party OTH			0.17	(0.44)	0.15	(0.44)	0.13	(0.44)
Age 29-38					5.94*	(0.07)	6.85*	(0.07)
Age 39-48					10.16*	(0.07)	11.85*	(0.07)
Age 49-58					13.33*	(0.07)	15.55*	(0.07)
Age 59-68					19.79*	(0.09)	22.08*	(0.09)
Age 69+					21.79*	(0.11)	24.12*	(0.11)
Any letter*Age 29-38					0.17	(0.35)	0.13	(0.35)
Any letter*Age 39-48					0.44	(0.36)	0.41	(0.37)
Any letter*Age 49-58					0.34	(0.38)	0.31	(0.38)
Any letter*Age 59-68					1.04*	(0.43)	1.02*	(0.44)
Any letter*Age 69+					0.87	(0.54)	0.85	(0.55)
Registered prior to 08							–8.11*	(0.08)
Registered prior to 10							–3.05*	(0.08)
Any letter*Registered prior to 08							0.43	(0.40)
Any letter*Registered prior to 10							–0.28	(0.41)
N	3855411		3855411		3855411		3855411	
R^2	0.02		0.02		0.02		0.03	
adj. R^2	0.02		0.02		0.02		0.03	
Resid. sd	44.05		44.05		44.03		43.84	

Standard errors in parentheses

* indicates significance at $p < 0.05$

Note: Dependent variable is turnout in that election (100=yes, 0=no). OLS regression coefficients with standard errors in parentheses. Heterogeneous effects separated by each treatment letter in Supplemental Table S7.

Table S7: 2014 General OLS estimates of heterogeneous treatment effects, separate effects by letter

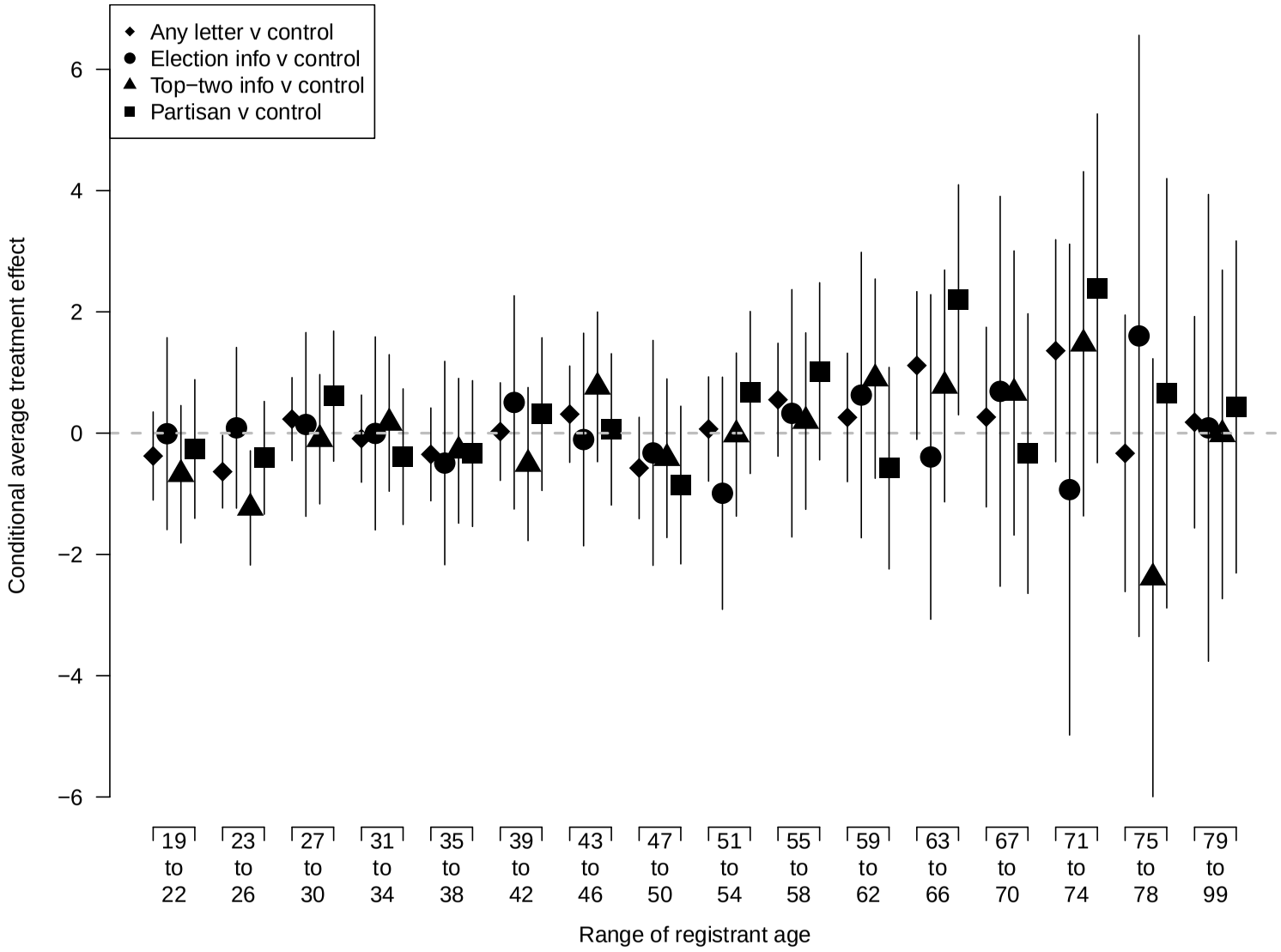
	(Direct effect)		(Age linear)		(Age binned)	
Intercept	25.51*	(0.04)	25.51*	(0.04)	22.89*	(0.08)
Election info letter	–0.00	(0.26)	–0.06	(0.46)	0.48	(0.85)
Top-two info letter	–0.08	(0.18)	–0.21	(0.33)	–1.06	(0.60)
Partisan letter	0.12	(0.18)	–0.06	(0.33)	–0.46	(0.61)
Age	0.44*	(0.00)	0.44*	(0.00)		
Abstain 08 and 10	2.08*	(0.05)	2.08*	(0.05)	–3.81*	(0.06)
Party NPP	0.07	(0.06)	0.07	(0.06)	0.41*	(0.06)
Party REP	3.32*	(0.06)	3.31*	(0.06)	3.79*	(0.06)
Party OTH	0.93*	(0.08)	0.93*	(0.09)	–0.22*	(0.09)
Election info letter*Age			0.01	(0.02)		
Age*Top-two info letter			0.03*	(0.01)		
Age*Partisan letter			0.02	(0.01)		
Election info letter*Abstain 08 and 10			–0.03	(0.53)	–0.35	(0.66)
Top-two info letter*Abstain 08 and 10			0.24	(0.37)	0.48	(0.47)
Partisan letter*Abstain 08 and 10			–0.11	(0.37)	–0.04	(0.47)
Election info letter*Party NPP			0.48	(0.65)	0.47	(0.65)
Top-two info letter*Party NPP			–0.06	(0.46)	–0.12	(0.46)
Partisan letter*Party NPP			0.10	(0.46)	0.07	(0.46)
Election info letter*Party REP			–0.40	(0.66)	–0.37	(0.65)
Top-two info letter*Party REP			0.45	(0.46)	0.45	(0.46)
Partisan letter*Party REP			0.49	(0.46)	0.48	(0.46)
Election info letter*Party OTH			0.65	(0.96)	0.58	(0.96)
Top-two info letter*Party OTH			–0.84	(0.68)	–0.90	(0.68)
Partisan letter*Party OTH			0.93	(0.68)	0.94	(0.68)
Age 29-38					6.85*	(0.07)
Age 39-48					11.85*	(0.07)
Age 49-58					15.55*	(0.07)
Age 59-68					22.08*	(0.09)
Age 69+					24.12*	(0.11)
Registered prior to 08					–8.11*	(0.08)
Registered prior to 10					–3.05*	(0.08)
Election info letter*Age 29-38					–0.25	(0.77)
Election info letter*Age 39-48					–0.31	(0.81)
Election info letter*Age 49-58					–0.04	(0.84)
Election info letter*Age 59-68					0.68	(0.96)
Election info letter*Age 69+					–0.05	(1.20)
Age 29-38*Top-two info letter					0.41	(0.55)
Age 39-48*Top-two info letter					0.90	(0.57)
Age 49-58*Top-two info letter					0.47	(0.60)
Age 59-68*Top-two info letter					1.53*	(0.68)
Age 69+*Top-two info letter					0.98	(0.85)
Age 29-38*Partisan letter					0.05	(0.55)
Age 39-48*Partisan letter					0.28	(0.57)
Age 49-58*Partisan letter					0.34	(0.59)
Age 59-68*Partisan letter					0.69	(0.68)
Age 69+*Partisan letter					1.19	(0.85)
Election info letter*Registered prior to 08					1.15	(0.88)
Top-two info letter*Registered prior to 08					0.12	(0.62)
Partisan letter*Registered prior to 08					0.38	(0.62)
Election info letter*Registered prior to 10					–1.54	(0.92)
Top-two info letter*Registered prior to 10					0.18	(0.65)
Partisan letter*Registered prior to 10					–0.12	(0.65)
N	3855411		3855411		3855411	
R^2	0.02		0.02		0.03	
adj. R^2	0.02		0.02		0.03	
Resid. sd	44.05		44.05		43.84	

Standard errors in parentheses

* indicates significance at $p < 0.05$

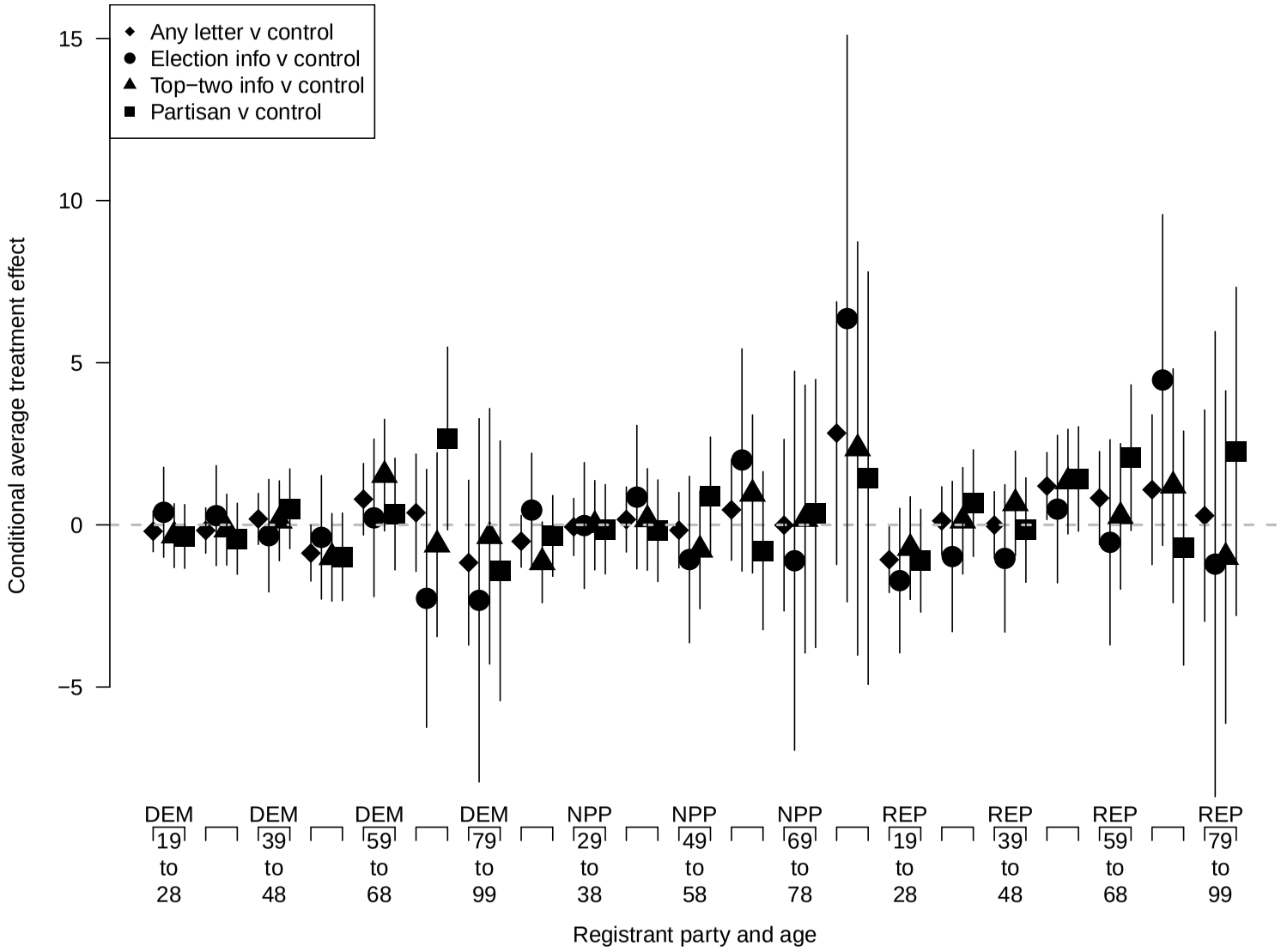
Note: Dependent variable is turnout in that election (100=yes, 0=no). OLS regression coefficients with standard errors in parentheses.

Figure S5: 2014 General Heterogeneous treatment effects by small age ranges



Note: Each point is the coefficient from an OLS regression of turnout on an indicator for that treatment assignment for that subgroup of the target population, with randomization block fixed effects. Confidence intervals extend to ± 1.96 standard errors.

Figure S6: 2014 General Heterogeneous treatment effects by small age cross party



Note: Each point is the coefficient from an OLS regression of turnout on an indicator for that treatment assignment for that subgroup of the target population, with randomization block fixed effects. Confidence intervals extend to ± 1.96 standard errors.

F Example letters

In the next three pages, we present a sample of each of our three treatment letters. The first letter is the election information letter, the second the top-two information letter, and the final an example of the partisan identity letter.

California
COMMON CAUSE
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www.commoncause.org

JULIA ROBERTS
123 HOLLYWOOD BLVD
LOS ANGELES, CA 90001

Dear Registered Voter,

You are currently a registered voter in the State of California. *This letter is to remind you that a Primary Election will be held on Tuesday, June 3, 2014.* Polls will be open from 7 AM to 8 PM on Election Day. Don't forget to vote!

Please vote on June 3!

If you choose to vote by mail, your ballot must be received on or before Election Day. Alternatively, you may drop it off in person at any polling place within your county on Election Day. If you receive a mail ballot but you would like to vote in-person, you must bring your blank mail ballot with you to your polling location or you will have to vote provisionally.

If you have any questions about the voting process, please visit the official Secretary of State website (http://www.ca.sos.gov/) or call your County Registrar of Voters. We hope you will vote in the upcoming June election!

Sincerely,

Kathay Feng, Executive Director
California Common Cause

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All Californians, regardless of party of registration, now have a voice in primary elections. Voters passed Proposition 14, the Top Two Candidates Open Primary Act, in 2010, which changed the primary election process for congressional, statewide, and legislative races. Proposition 14 declared that, "No voter shall be denied the right to vote for the candidate of his or her choice … based upon his or her disclosure or nondisclosure of party preference." Important changes to be aware of are that:

- All voters can now vote in the primary election.
- All candidates appear on one ballot.
- Candidates are not nominated by the party.
- Any voter can vote for any candidate.
- The two candidates with the most votes move on to the General Election in November.

Please vote on June 3!

If you choose to vote by mail, your ballot must be received on or before Election Day. Alternatively, you may drop it off in person at any polling place within your county on Election Day. If you receive a mail ballot but you would like to vote in-person, you must bring your blank mail ballot with you to your polling location or you will have to vote provisionally.

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In the last California primary election, held in 2012, only 18.5% of voters like you registered as No Party Preference turned out to vote and make their voices heard. Voting in the primary election determines the candidates for the general election. I hope you will take advantage of this opportunity to make your voice heard.

Your voice starts with your vote. As a voter, you help decide who will lead us. You make your voice heard on important issues that affect the future of our state and nation. Every time you exercise your precious right to vote, our democracy grows stronger.

Please vote on June 3!

If you choose to vote by mail, your ballot must be received on or before Election Day. Alternatively, you may drop it off in person at any polling place within your county on Election Day. If you receive a mail ballot but you would like to vote in-person, you must bring your blank mail ballot with you to your polling location or you will have to vote provisionally.

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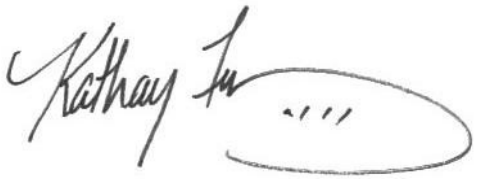
Sincerely,



Kathay Feng, Executive Director
California Common Cause