Vote.org 2018 SMS Voter Mobilization Program: Mobilizing Voters For Election Day With Late SMS Messages

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Executive Summary

For the 2018 general election, Vote.org conducted SMS voter mobilization programs covering 12,681,951 people of color and unmarried women in 33 states. These programs used "cold" text messaging to registered voters who have no prior relationship to Vote.org.

This memo evaluates an extension of Vote.org's original SMS voter mobilization program for in-person voting. Due to greater than expected capacity, Vote.org was able to send additional SMS messages immediately prior to Election Day in the 2018 Midterms. To take advantage of this capacity, Vote.org extended its original SMS voter mobilization program into part or all of four additional states. This experiment determines whether assignment to receive one text message with information about when and where to vote (the final message of the Standard Practice treatment) impacts turnout. The overall impact of Vote.org's SMS voter mobilization program for in-person voting can be found in the memo "Vote.org 2018 SMS Voter Mobilization Program: Mobilization for In-person Voting from Any Treatment".

This experiment was conducted among 1,305,687 people of color and unmarried women in four jurisdictions: Connecticut, Maine, New York (excluding New York City), and several media markets in California (Bakersfield, Fresno-Visalia, Los Angeles, Sacramento-Stockton-Modesto).

Despite the late addition, the treatment generated an increase in turnout of 0.41 percentage points at a cost per net vote of $27.17 (36.8 net votes/$1000). The effect was indistinguishable between CA (one SMS sent) and the other three states (2 SMS sent).

In future "cold" SMS voter mobilization programs, Vote.org should test the number of SMS messages used in treatments to determine the balance between magnitude of increase in turnout and cost-efficiency. Vote.org's test in the 2018 Georgia run-off randomly assigning one vs. two messages was an initial step in this testing. It found that two messages added highly cost-effective increase in turnout (see memo on Vote.org 2018 SMS Voter Mobilization Program: Mobilization with 1 vs. 2 SMS Messages in the Georgia 2018 Run-Off Election).

Objectives and Context

For the 2018 general election, Vote.org conducted SMS voter mobilization programs covering 12,681,951 people of color and unmarried women in 33 states. Despite widespread use, SMS messages have received little attention from researchers as a medium for campaign communication. In 2016, Vote.org established that "cold" SMS messages could increase turnout with a randomized experiment design covering 1.2 million young people of color and unmarried women in 7 states. Vote.org's 2016 "cold" SMS voter mobilization program increased turnout by 0.2 percentage points. In 2017, Vote.org replicated and expanded testing of "cold" SMS voter mobilization with a randomized experiment covering 714k young people of color and unmarried women for the Virginia

gubernatorial and legislative elections. Vote.org's 2017 test of "cold" SMS voter mobilization increased turnout by 0.6 percentage points and identified Standard Practices regarding timing and message framing.

This memo evaluates an extension of in Vote.org's original SMS voter mobilization program for in-person voting to include four additional states: Connecticut, Maine, New York (excluding New York City), and several media markets in California (Bakersfield, Fresno-Visalia, Los Angeles, Sacramento-Stockton-Modesto). These areas were added to the SMS voter mobilization program in late October when Vote.org determined there was additional capacity for sending SMS voter mobilization messages. The overall impact of Vote.org's SMS voter mobilization program for in-person voting can be found in the memo "Vote.org 2018 SMS Voter Mobilization Program: Mobilization for In-person Voting from Any Treatment".

Due to the late addition to the in-person mobilization program, Vote.org was only able to send one (in CA) or two SMS messages (in CT, ME, NY).

Selected Universe

The data for the experiment was selected by Vote.org from the voter file maintained by TargetSmart, a firm providing voter data.

The 1,305,687 registered voters included in the experiment met the following criteria:

1) A cell number available in the TargetSmart database
    - TargetSmart provided the best single record for each available cell phone number (i.e. no duplicate numbers)
2) Registered to vote in the following jurisdictions:
    - Connecticut
    - Maine,
    - New York (excluding New York City),
    - media markets in California (Bakersfield, Fresno-Visalia, Los Angeles, Sacramento-Stockton-Modesto)
3) Low propensity voter or new registrant:
    - 10-70 Vote propensity OR
    - Voted in Gen 2016 and registered between Dec 2014-Nov 2016 OR
    - Registered December 2016-present)
4) People of color: individuals coded as non-white by TargetSmart or individuals residing in areas with a Census population of at least 67% non-white.
        - The latter criterion is intended to capture false negatives for non-white in the individual coding data. The race coding is based on state voter file information about race (where available) and proprietary models of race maintained by TargetSmart.
5) Exclusions:
    - Request mail ballot for Gen 2018 -OR- permanent mail ballot status
    - Age under 18 years old or over 100 years old

Treatment

Since this data was added to Vote.org's in-person SMS mobilization program late, the treatment consisted of a two text messages in CT, ME and NY and one text message in CA.

The final messages of Vote.org's Standard Practice treatment were used (example in the Appendix). The Standard Practice treatment is based on prior tests and programs by Vote.org. The Standard Practice treatment relies on positive descriptive norms, civic duty and information about voting to increase turnout. These tactics are very common in voter mobilization and have been successful in randomized controlled tests of mail, phone calls and canvassing (see Green and Gerber 2015 for review).[i]

Prior to each round of text messages, anyone who "opted out" of receiving text messages was removed from the contact list. Also, anyone who who cast a ballot (EIPV or mail ballots) according to public records acquired by TargetSmart LLC were removed from the contact list upon Vote.org's receipt of this information.

Intended Effects[ii]

- Assignment to receive text messages was expected to increase turnout

Evaluation Design

The evaluation is based on a randomized trial design (or field experiment) that is considered best practice by academic researchers and the Analyst Institute. Each treatment group received SMS messages from Vote.org; the control group was sent none of the SMS messages.

The randomization is conducted at the household level to reduce the risk of contaminating behavior of co-habitants. For this experiment, households were defined as people with the same mailing address. The randomization uses an automated re-randomization procedure to ensure good balance in characteristics available from the voter file prior to delivery of treatment (see Technical Appendix).

80% of subjects were randomly assigned to the treatment group, with 20% assigned to a control group that received no contact from Vote.Org.

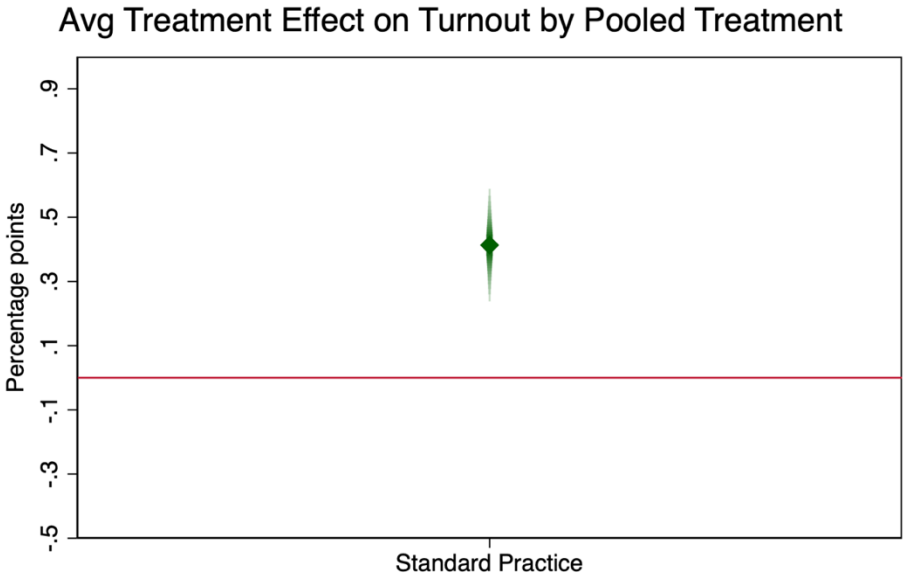
Random Assignment to Experimental Condition

	Individuals
Control	261,187
Standard Practice	1,044,500
Total	1,305,687

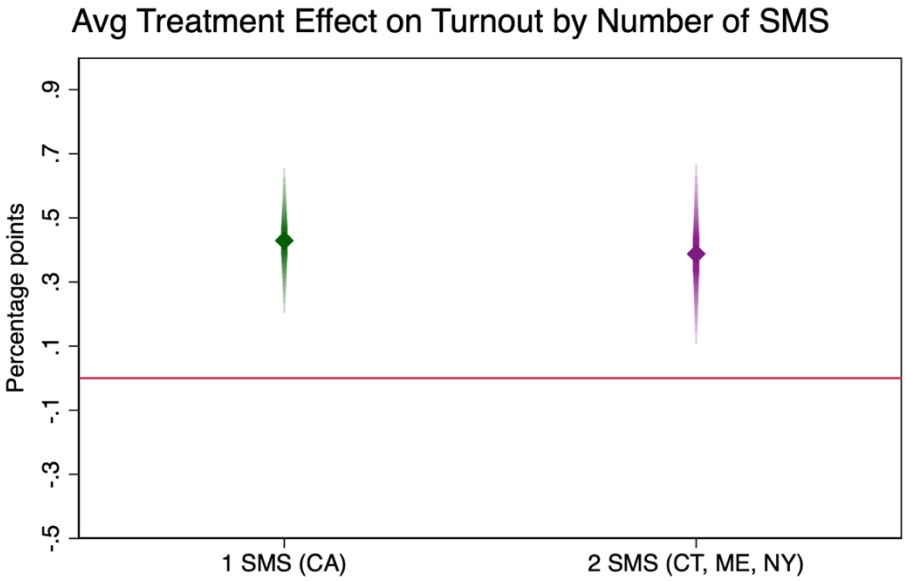
Results

The average treatment effect, across all four states, was a statistically significant 0.41 percentage point (pp) increase in turnout.[iii] The average treatment effect was 0.43 percentage points in California (1 SMS message sent)[iv] and 0.39 percentage points in the other three states (2 SMS messages sent)[v], although this small difference is not statistically significant.[vi]

Note on reading the graphs in this memo: The estimated treatment effect is represented by the diamond shape in the middle of each bar. The gradient error bars display the statistical uncertainty of this estimate. Like traditional error bars, the ends of the gradient error bars indicate the 95% confidence range. If these bars cross the red horizontal line at zero, the difference from the control group is not statistically significant. The width and intensity (darkness) of the bar indicate the statistical likelihood that the treatment effect falls in this range, so the bars are wider and darker close to the diamonds, thinning and fading farther away. When comparing to treatment effects, the likelihood of being different can be seen by the width and intensity of the overlapping gradient bars.[vii]



Notes: Turnout in control group = 57.68%. Treatment effects estimated from regression with covariates for precision. Gradient confidence intervals by line width and intensity (max=95% c.i.). If confidence intervals cross line at zero, then effect is not statistically significant.



Notes: Difference in effects between states is *not* statistically significant (p=0.849). Treatment effects estimated from regression with covariates for precision. Gradient confidence intervals by line width and intensity (max=95% c.i.). If confidence intervals cross line at zero, effect is not statistically significant.

Net Votes

The cost per net vote (and net votes/$1000) calculation includes all costs of design, delivering, and managing the treatment delivery process.

Treatment	Effect	Net Votes	Votes/$1000	CPV	Treatment Cost
All Four States	0.41 pp	4,282	36.8	$27.17	[$0.1114/individual]
CA (1 SMS)	0.43 pp	2,751	55.3	$18.09	[$0.0778/individual]
CT, ME, NY (2 SMS)	0.39 pp	1,578	24.4	$41.03	[$0.1600/individual]

Notes: Treatment cost reflects average cost for the series of SMS messages in each treatment. Net votes is the number of people who voted in response to the treatment(s), and would not have otherwise voted in the November 2018 election.

Lessons Learned

This experiment demonstrates that a one to two SMS messages before Election Day with information on when and where to vote can increase turnout.

Future Steps

Vote.org should test the number of SMS messages used in treatments to determine the balance between magnitude of increase in turnout and cost-efficiency. Vote.org's test in the 2018 Georgia run-off randomly assigning one vs. two messages was an initial step in this testing. It found that two messages added highly cost-effective increase in turnout (see memo on Vote.org 2018 SMS Voter Mobilization Program: Mobilization with 1 vs. 2 SMS Messages in the Georgia 2018 Run-Off Election).

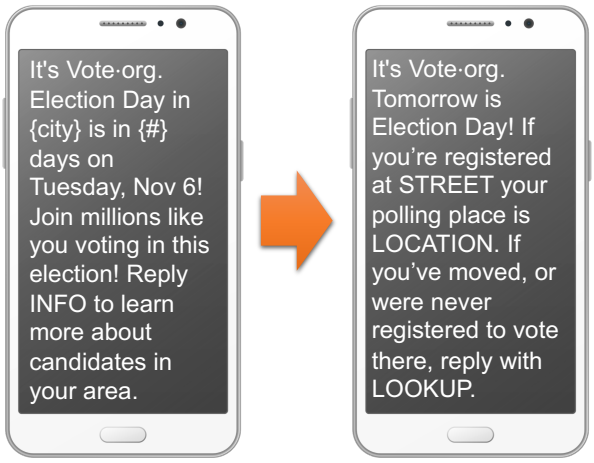
Cautions

The effect of any voter mobilization communication is conditional on the execution of the program, the jurisdiction, the type of election, the level of interest in the election, and the activities of other organizations. Repeating these treatments in other election contexts or with variations of the treatments could produce different results.

Appendix: Example of Treatments

Standard Practice

- Final two messages



- Based 2016 & 2017 testing by VOTE.ORG

Technical Appendix

Randomization Procedure:

Randomization was conducted at the household level. The random assignment was conducted in Stata using the "re-randomize" procedure developed by Kennedy and Mann (2015) to ensure balance across observable covariates.[viii]

This procedure rejects any instance of randomization outside of pre-determined parameters: minimum of 10 iterations and maximum of 25 iterations. Iterations stopped between 10 and 25 when iteration had $p>0.8$ based on Malahanobis distance test. This procedure produced equal sized groups, and each group was designated as an experimental condition. Blocked randomization used equal probabilities of assignment in all blocks.

Blocked randomization using the following variables: State, Young (under 30 years old), Quality of cell phone match to individual (three strata based on TargetSmart cell phone match confidence code)

Balance checked using age, female, individual-level race codes (Hispanic, African American, white), past voting history (dummies for voting in the 2010, 2012, 2014, and 2016 general elections), and three-digit zip-code (geography).

Statistical Methods for Analysis:

The analysis is based on matching the pre-election experimental population to post-election vote history from TargetSmart. The matching used the unique TargetSmart record identification number. Analysis was conducted using standard regression techniques for evaluating experimental results.

Hypothesis testing uses robust standard errors clustered by unique address to account for potential correlation between the behaviors of co-habitants.

All reported estimates are calculated using models that include the covariates used to check balance in the random assignment procedure. As expected from a well-balanced experiment, the estimates are essentially identical when estimated without these covariates.

Technical Endnotes

[i] Green, Donald P., and Alan S. Gerber. 2019. *Get Out the Vote: How to Increase Voter Turnout*. 4th ed. Brookings Institution Press.

[ii] Following best practice in academic research, the intended treatment effects and plans for analysis were pre-registered with the Evidence in Governance and Politics program at the University of California at Berkeley (egap.org).

[iii] The average treatment effect for all four states relative to the control group is statistically significant at $p < 0.001$. SE = 0.11

[iv] The average treatment effect for one SMS message (CA) relative to the control group is statistically significant at $p = 0.002$. SE = 0.14

[v] The average treatment effect for two SMS messages (CT, ME, NY) relative to the control group is statistically significant at $p = 0.022$. SE = 0.17

[vi] Difference between the average treatment effects for one and two SMS messages is <u>not</u> statistically significant at $p = 0.849$

[vii] Research by Isabelle Fischer (2018) finds that people are much more likely to correctly interpret data displayed with gradient error bars than other more commonly used data visualizations.

[viii] Kennedy, Chris, and Christopher B. Mann. 2015. *RANDOMIZE: Stata Module to Create Random Assignments for Experimental Trials, Including Blocking, Balance Checking, and Automated Rerandomization*. Boston College Department of Economics. https://ideas.repec.org/c/boc/bocode/s458028.html (May 16, 2017).