Vote.org 2018 SMS Voter Mobilization Program: Timing of Encouraging In Person Voting for Early Voting or Election Day

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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 a test of timing of mobilization for Election Day voting, Early In Person voting, or both embedded in Vote.org's SMS voter mobilization program for in-person voting in 13 states with a large share of Early In Person voting. 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 covered 4.97 million low propensity and/or newly registered voters in 13 states: Arizona, Florida, Georgia, Illinois, Indiana, Kansas, North Carolina, New Mexico, Nevada, Tennessee, Texas, Wisconsin, West Virginia.

SMS mobilization is most cost effective for Election Day voting, generating an increase in turnout of 0.28 percentage points at a cost per net vote of $51.21 (19.5 net votes/$1000). SMS mobilization for only Early In Person voting did not significantly increase turnout. The impact of SMS mobilization for Early In Person voting and Election Day voting was not significantly or substantively larger than Election Day only (0.32 percentage points; cost per net vote of $113.34, 8.8 net votes/$1000).

In future "cold" SMS voter mobilization programs, Vote.org should focus on mobilization for Election Day voting.

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.

The 2018 programs build on Vote.org's successful SMS voter mobilization programs in 2016 and 2017. This memo evaluates an important research question about the timing of mobilization for the two types of in-person voting: is it more effective to mobilize voters to vote early, to vote on Election

Day, or to mobilize for early voting and then for Election Day voting? To the best of our knowledge, this question has received almost no attention despite the widespread availability of early in person voting.

This memo pools different messages (evaluated in separate memos) in order to have maximum statistical power for assessing timing of message delivery. Using a random assignment independent of the message tests, treatment records in these states are assigned to mobilization for EIPV only (20% of treated individuals), Election Day only (20% of treated individuals), or both (60% of treated individuals).

This test was conducted across 4.97 million low propensity and/or newly registered voters in 13 states with extensive EIPV use: Arizona, Florida, Georgia, Illinois, Indiana, Kansas, North Carolina, New Mexico, Nevada, Tennessee, Texas, Wisconsin, West Virginia.

The overall impact of Vote.org's SMS voter mobilization program can be found in the memo "Vote.org 2018 SMS Voter Mobilization Program: Mobilization for In-person Voting from Any Treatment".

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 4,973,943 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 states:
    - Arizona
    - Florida
    - Georgia
    - Illinois
    - Indiana
    - Kansas
    - North Carolina
    - New Mexico
    - Nevada
    - Tennessee
    - Texas
    - Wisconsin
    - West Virginia
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 or unmarried women:

- 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 criteria 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.
- Females under age 30 who were not included using the criteria above
    - Arizona, Illinois, Michigan, New Mexico, Nevada and Wisconsin only.

5) Exclusions:
    - Request mail ballot for Gen 2018 -OR- permanent mail ballot status
    - Age under 18 years old or over 100 years old

Treatments:

The experiment compares an uncontacted control group to three treatments: 1) EIPV only, 2) Election Day only, or 3) both EIPV and EDay voting. This experiment was conducted at the same time as the message tests (evaluated in other memos). For this analysis, the different messages are pooled to provide the greatest statistical precision in estimating the effects of timing.

Each treatment consisted of a series of three to five SMS messages. For the EDay only treatment, each treatment consisted of a series of three SMS messages in the six days prior to Election Day. For the EIPV only treatment, the three message series were identical to the EDay only treatment except references to EIPV rather than Election Day and were delivered before and during EIPV in each state. In the five message series, the first two messages were repeated (1st & 3rd; 2nd & 4th) for EIPV and then EDay voting. Examples of the EDay only and EIPV only Standard Practice Treatment are in the Appendix.

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[i]

- Each treatment was intended to increase turnout in the November 2018 election.
- Each treatment was expected to have different effects on 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).

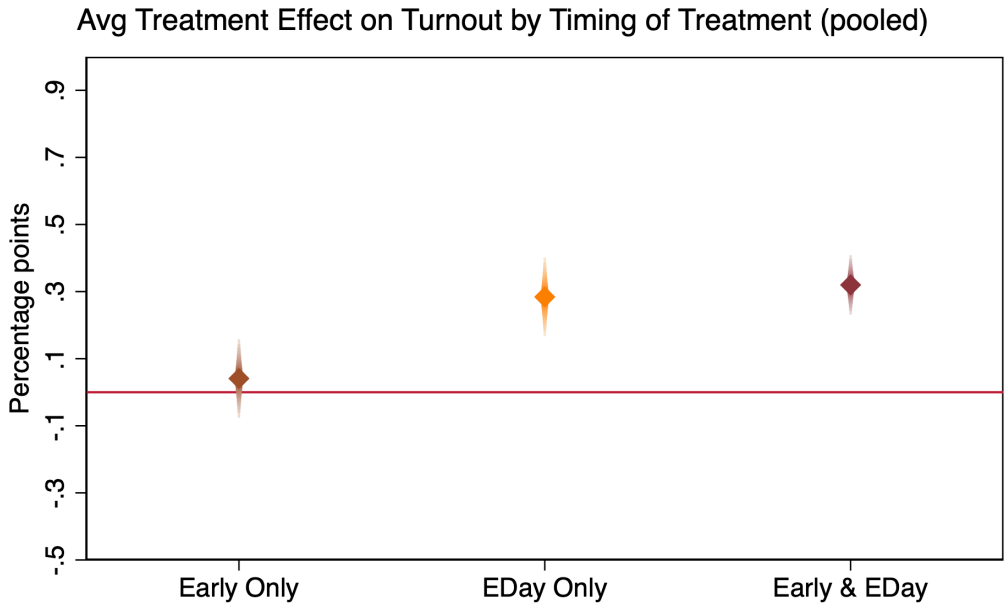
Random Assignment to Treatment & Control

	Individuals	%	% of treated
EDay Only	731,231	14.7%	20%
EIPV Only	731,985	14.7%	20%
EIPV + EDay	2,194,640	44.1%	60%
Control	1,316,087	26.5%	

Results

The EDay only treatment generated a statistically significant 0.28 percentage point increase in turnout.[ii] The EIPV + EDay treatment generated a statistically significant 0.32 percentage point increase in turnout.[iii] The addition of the SMS messages about EIPV did not significantly increase turnout over only the EDay messages.[iv] The EIPV only treatment did not generate a statistically significant increase in turnout (0.04 percentage points).[v]

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.[vi]



Notes: 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.
Difference between Early Only vs. EDay Only is statistically significant (p=0.002).
Difference between Early+EDay vs. EDay Only is *not* statistically significant (p=0.586).
Difference between Early+EDay vs. EIPV Only is statistically significant (p=0.000).

Net Votes

The cost per net vote (and net votes/$1000) calculation includes all costs of design, delivering, and managing the treatment delivery process. The Election Day only treatment had much lower costs because SMS messages were not sent to people assigned to this treatment who had already voted. Thus, there is greater cost-efficiency in the original targeted universe.

Treatment	Effect	Net Votes	Votes/$1000	CPV	Treatment Cost
EDay Only	0.28 pp	2,047	19.5	$51.21	[$0.1434/individual]
EIPV Only	0.04 pp	293	1.8	$548.25	[$0.2193/individual]
EIPV + EDay	0.32 pp	7,023	8.8	$113.34	[$0.3627/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

Vote.org's strategy of using "cold" SMS messages for voter mobilization continues to generate significant and cost-effective increases in voter turnout in mid-term elections, but should focus on mobilization for Election Day voting (not Early In-Person voting).

Future Steps

Vote.org should continue to invest in "cold" SMS voter mobilization programs to increase voter turnout, but should focus on mobilization for Election Day voting (not Early In-Person voting).

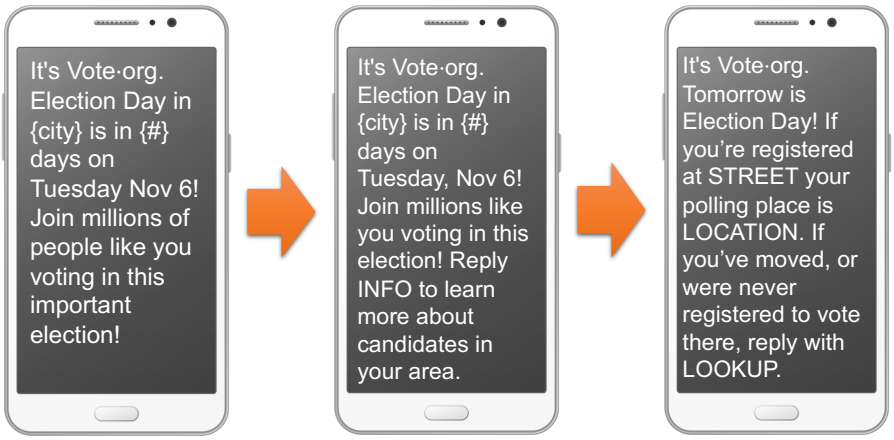
Cautions

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: Examples of Treatments

Standard Practice

- Series of 3 text messages for Election Day



- Based 2016 & 2017 testing by VOTE.ORG

Standard Practice
[in person voting]

- Early Voting

- Early Voting + EDay: Above then last 2 of EDay

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.[vii]

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] 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).

[ii] Avg. treatment effect for EDay only compared to the control group is statistically significant at $p<0.001$, one-tailed. SE = 0.07.

[iii] Avg. treatment effect for EIPV + EDay compared to the control group is statistically significant at $p<0.001$, one-tailed. SE = 0.07.

[iv] Difference in avg. treatment effect across two voting method combination treatments is not statistically significant at $p=0.586$.

[v] Avg. treatment effect for EIPV only compared to the control group is not statistically significant p=0.283, one-tailed. SE = 0.05.

[vi] 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.

[vii] 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).