Vote.org 2018 SMS Voter Mobilization Program: Mobilization with 1 vs. 2 SMS Messages in the Georgia 2018 Run-Off Election

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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. Vote.org continued its mobilization efforts in 2018 run-off elections in Georgia and Mississippi.

This memo evaluates an element of Vote.org's SMS voter mobilization program intended to encourage participation by voters in the run-off election in Georgia. Georgia holds run-off elections for offices in which no candidate receives 50% of the votes cast in the general election. Several offices did not have majority winners in the November General election, most prominently the contest for Secretary of State and Public Service Commissioner. The run-off election was held on December 4, 2018.

This program delivered either one or two SMS messages to randomly assigned treatment groups. The messages were derived from Vote.org's Standard Practices SMS messages, identified in tests in 2016 and 2017. This test covered 950,765 people of color.

The Two Message treatment increased turnout by a statistically significant 0.57 percentage points, (cost per net vote = \$30.42, 32.9 votes/\$1000). The One Message treatment increased turnout by a statistically significant 0.39 percentage points (cost per net vote = \$22.82, 43.8 votes/\$1000). The difference between these treatments is statistically significant.

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. Vote.org continued its mobilization efforts in 2018 run-off elections in Georgia and Mississippi. 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 element of Vote.org's SMS voter mobilization program intended to

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ensure participation by voters in the run-off election in Georgia. Georgia holds run-off elections for offices in which no candidate receives 50% of the votes cast in the general election. Several offices did not have majority winners in the November General election, most prominently the contests for Secretary of State and Public Service Commissioner. The run-off election was held on December 4, 2018.

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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 950,765 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 Georgia
- 3) People of color: individuals coded as non-white by TargetSmart or individuals residing in areas with a Census population of at least 66% 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.
- 4) Exclusions:
 - Age under 18 years old or over 100 years old

Treatments

The experiment compares an uncontacted control group to One Message or Two Messages based on Vote.org's Standard Practice treatment. Examples of the treatments are 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).

Prior to each round of text messages, anyone who "opted out" of receiving text messages was removed from the contact list. Also, anyone who cast a ballot (early in person voting 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 Effectsⁱ

- The treatment was intended to increase turnout in the November 2018 election.
- Each treatment was expected to have different effects.
- Different treatment effects were expected across the following groups:
 - Voters under and over age 30
 - Cell phone match confidence
 - o Gender
 - o Age
 - Vote propensity score
 - Drop-off voters (voted in 2016 but not 2014)
 - New registrants (since 2016)
 - Race / ethnicity
 - Households with single vs. multiple targets

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).

U	Individuals	%
One Message	380,471	40%
Two Messages	380,181	40%
Control	190,113	20%

Random Assignment to Treatment & Control

Results

The One Message treatment generated a statistically significant increase in turnout of 0.39 percentage points.ⁱⁱ The Two Message treatment generated a statistically significant increase in turnout of 0.57 percentage points.ⁱⁱⁱ The 0.18 percentage point difference between the treatments is statistically significant.^{iv}

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.^v



Avg Treatment Effect on Turnout by Each Treatment

Notes: Turnout in control group = 19.92%. Difference in treatment effects is statistically significant (p=0.038). 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.

By Age

Both treatments had significantly larger effects on voters over 30 than voters under 30. The age difference at 30 years old also appears in more detailed analysis of smaller age subgroups.





Notes: Turnout of 30 & over in control group = 22.03%. Turnout of under 30 in control group = 5.44%. Difference in One Msg Treatment effect between 30 & over vs under 30 is statistically significant (p=0.004). Difference in Two Msgs Treatment effect between 30 & over vs under 30 is statistically significant (p=0.000). 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.

Other Subgroups

No statistically significant or substantively notable patterns were found in other subgroups listed in the *"Intended Effects"* section. Notably, this includes no difference across cell phone confidence scores, an interesting contrast to the higher effects among higher confidence scores in the 2018 General election program.

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
One Message	0.38 pp	1446	43.8	\$22.82	[\$0.0867/individual]
Two Messages	0.57 pp	2167	32.9	\$30.42	[\$0.1734/individual]

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

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Lessons Learned

Sending two messages was significantly more effective than a single message. The marginal improvement does somewhat reduce cost effectiveness, but still remains well within a range that is cost effective compared to other tactics.

Future Steps

Vote.org should continue to deliver multi-message treatments to mobilize voters.

Future testing should consider examining the marginal effect of 3, 4, and more SMS messages to better determine where returns diminish to the point of unjustified investment.

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



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.^{vi}

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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

https://ideas.repec.org/c/boc/bocode/s458028.html (May 16, 2017).

¹ Following Standard 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 The effect of the One Message treatment is statistically significant at p<0.001.

ⁱⁱⁱ The effect of the Two Messages treatment is statistically significant at p<0.001.

^{iv} The difference between the treatments is statistically significant at p=0.038.

^v 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.

^{vi} 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.