

Vote.org 2018 SMS Voter Mobilization Program: Message Test of Digital Sticker vs. Standard Practice

*Prepared by Christopher B. Mann, Ph.D.,
Katherine Haenschen, Ph.D.,
and Hannah Fishman*

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 on the Digital Sticker vs. Standard Practice message test evaluates one in a series of tests embedded in Vote.org’s SMS voter mobilization program for 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”.

Prior research on voter mobilization has found that reminding voters of the social rewards for voting is the most effective psychological mechanism.ⁱ The Digital Sticker treatment was developed as a way to deliver positive social rewards for voting. It is based on an earlier study showing that the opportunity to post a digital “I Voted” sticker on Facebook increased turnout.ⁱⁱ The Digital Sticker treatment allowed an easy link from the SMS message to posting a similar digital “I Voted” sticker on Facebook. Vote.org’s Standard Practice SMS treatment, identified in tests in 2016 and 2017, serves as the performance benchmark.

This test covered 1.5 million low propensity and/or newly registered voters in 6 states: Georgia, Indiana, Maryland, Missouri, New Mexico, and Pennsylvania.

Both treatments generated significant increases in turnout, and the size of the treatment effects was indistinguishable. The Standard Practice treatment generated an increase in turnout of 0.24 percentage points at a cost per net vote of \$92.83 (10.8 net votes/\$1000). The Digital Sticker treatment generated an increase in turnout of 0.25 percentage points at a cost per net vote of \$89.12 (11.2 net votes/\$1000).

In future “cold” SMS voter mobilization programs for in-person voting, the Digital Sticker treatment is neither more nor less effective than the 2018 Standard Practice for direct mobilization but adds considerable complexity to implementing the treatment. Other message tests indicate two messages were more effective than the 2018 Standard Practice: Adopt-a-voter and Social Pressure.

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 2018 SMS Voter Mobilization Program:
Message Test of Digital Sticker vs. Standard Practice

[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 testing additional message frames to determine the most effective methods of increasing voter turnout via SMS messages. Practical constraints of implementing delivery of the SMS messages required executing each message test in a subset of states. Each message test includes the Standard Practice treatment derived from the 2016 program as a shared benchmark. This memo is one of a series examining each message test. This memo evaluates a comparison of Digital Sticker vs. Standard Practice messages. The behavioral theory behind each treatment is discussed in the "Treatments" section below.

This test was conducted across 1.5 million low propensity and/or newly registered voters in 6 states: Georgia, Indiana, Maryland, Missouri, New Mexico, and Pennsylvania. These states cover a range of electoral contexts (defined by competitiveness, voting procedures, and other characteristics). In three states with extensive early in person voting (EIPV), the treatments were targeted at both EIPV and EDay voting: Georgia, Indiana, and New Mexico. In three states, the treatments targeted only EDay voting: Maryland, Missouri, and Pennsylvania.

In the states with EIPV and EDay voting, the 2018 SMS voter mobilization program addresses a secondary research question about mobilization for these 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. Therefore, treatment records in these states are assigned to mobilization for EIPV only, Election Day only, or both. This research question is evaluated in a separate memo, "Vote.org 2018 SMS Voter Mobilization Program: Timing of Encouraging In Person Voting for Early Voting or Election Day".

The overall impact of Vote.org's SMS voter mobilization program on in-person voting 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 1,532,241 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)

Vote.org 2018 SMS Voter Mobilization Program:
Message Test of Digital Sticker vs. Standard Practice

- 2) Registered to vote in the following states:
 - Georgia
 - Indiana
 - Maryland
 - Missouri
 - New Mexico
 - Pennsylvania
- 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) Females under age 30 who were not included using the criteria above
 - New Mexico only.
- 6) 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 two treatments: 1) Standard Practice and 2) Digital Sticker. Examples of each treatment are in the Appendix.

In states without EIPV (Maryland,ⁱⁱⁱ Missouri, and Pennsylvania), each treatment consisted of a series of three SMS messages. In states with EIPV (Georgia, Indiana, and New Mexico), treatment consisted of a series of three to five SMS messages. The three message series were identical to the non-EIPV states. In the five message series, the first two messages were repeated (1st & 3rd; 2nd & 4th) for EIPV and then EDay voting. In this memo, the three and five message treatments in EIPV states are pooled. As noted above, the differences between assignment to three messages for EIPV, three messages for EDay, and five messages for both EIPV and EDay is evaluated in a separate memo “Encouragement to use different methods of in-person voting”.

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).^{iv}

The Digital Sticker treatment was based on Bond et al.’s (2012) field experiment on Facebook that found offering people the opportunity to display their civic virtue with a digital “I Voted” sticker increased turnout.^v Vote.org designed SMS messages that offered a link to recipients enabling them

Vote.org 2018 SMS Voter Mobilization Program:
Message Test of Digital Sticker vs. Standard Practice

to post a similar digital “I Voted” sticker on their Facebook page. This mechanism is theorized to work by offering voters additional anticipatory benefits beyond that derived from voting: in short, they look forward to casting a ballot, and to telling their friends that they did so.

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^{vi}

- 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

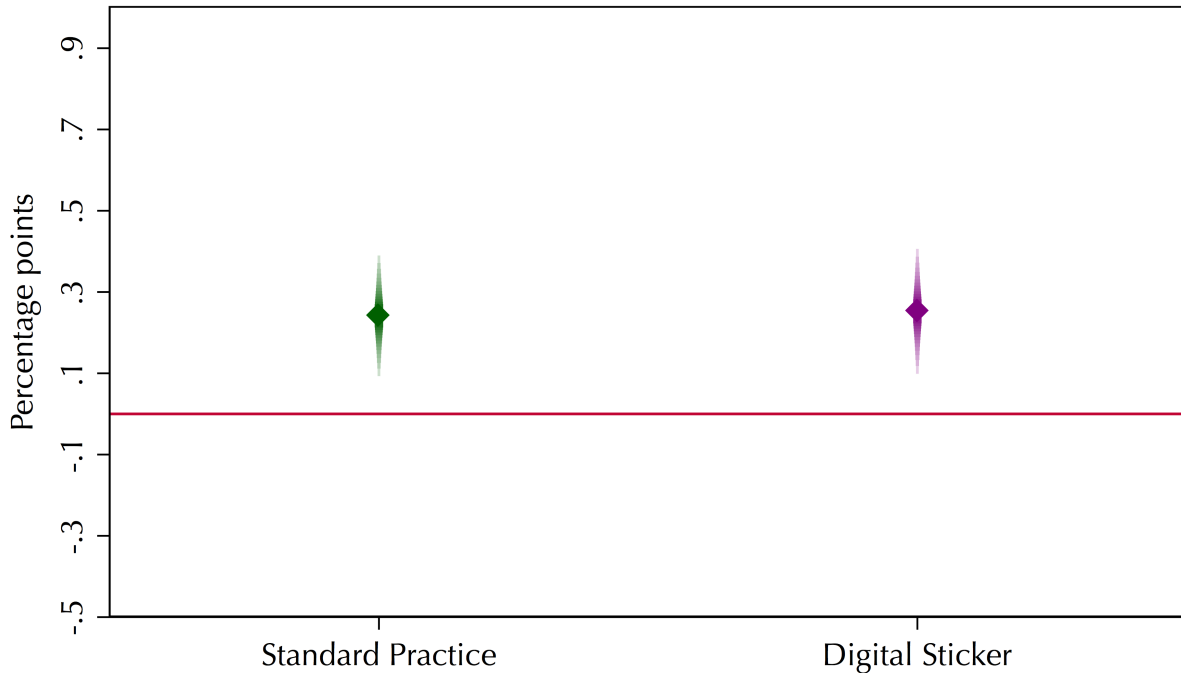
	Individuals	%
Standard Practice	510,707	33.3%
Digital Sticker	510,966	33.3%
Control	510,568	33.3%

Results

In the Digital Sticker vs. Standard Practice message test, the two messages are equally effective at increasing turnout (see graph below). The Standard Practice treatment significantly increased turnout by 0.24 percentage points.^{vii} The Digital Sticker treatment significantly increased turnout in these eleven states by 0.25 percentage points.^{viii} The magnitude of the effects is almost identical, so the difference is not statistically significant.^{ix}

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.^x

Avg Treatment Effect on Turnout by Each Treatment



Notes: Turnout in control group = 62.02%. Difference in treatment effects is *not* statistically significant (p=0.905). 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.

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 specifics of the additional cost of the Digital Sticker tool were not available, thus the difference in cost to implement this treatment is not reflected below.

Treatment	Effect	Net Votes	Votes/\$1000	CPV	Treatment Cost
Standard Practice	0.24 pp	1,226	10.8	\$92.83	[\$0.2228/individual]
Digital Sticker	0.25 pp	1,277	11.2	\$89.12	[\$0.2228/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.

Vote.org 2018 SMS Voter Mobilization Program:
Message Test of Digital Sticker vs. Standard Practice

The Digital Sticker treatment is not significantly more effective than 2018 Standard Practice.

Future Steps

Vote.org should continue to invest in “cold” SMS voter mobilization programs to increase voter turnout.

The Digital Sticker treatment should not be considered for use in future programs due to additional complexity of the digital sticker mechanism without commensurate increase in treatment effect.

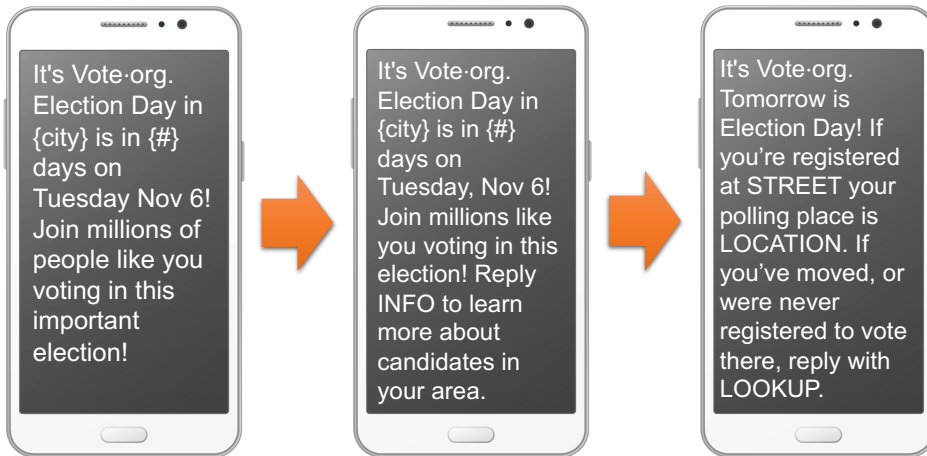
Cautions

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

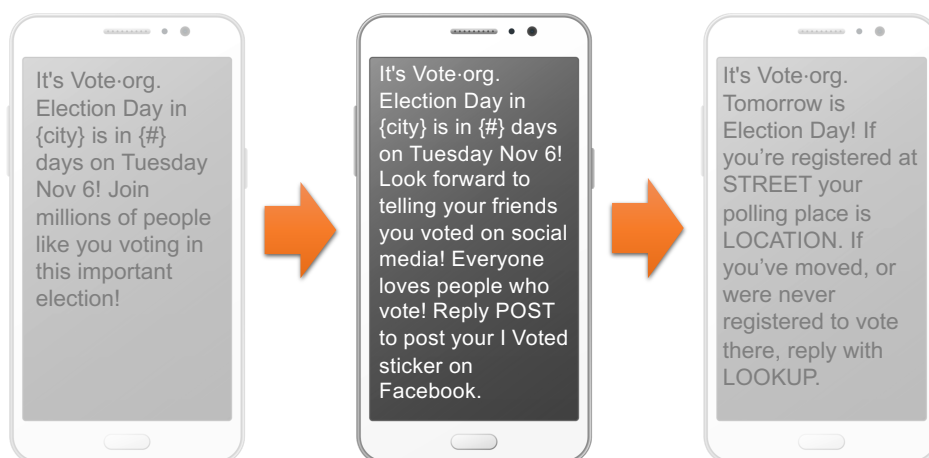
Standard Practice

- Series of 3 text messages for Election Day



□ Based 2016 & 2017 testing by **VOTE.ORG**

I Voted Sticker on Social Media



- Based on Bond et al (2012)

* Designed and evaluated with Hannah Fishman

38

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.^{xi}

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 Mahalanobis 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 Bond, Robert M. et al. 2012. "A 61-Million-Person Experiment in Social Influence and Political Mobilization." *Nature* 489(7415): 295–98.

ⁱⁱⁱ Maryland allows early in-person voting, but usage was low in 2016 so the mobilization program focused on Election Day voting.

^{iv} Green, Donald P., and Alan S. Gerber. 2019. *Get Out the Vote: How to Increase Voter Turnout*. 4th ed. Brookings Institution Press.

^v Bond, Robert M. et al. 2012. "A 61-Million-Person Experiment in Social Influence and Political Mobilization." *Nature* 489(7415): 295–98

^{vi} 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).

^{vii} Avg. treatment effect for Standard Practice compared to the control group is statistically significant at $p=0.004$, one-tailed. SE = 0.09

^{viii} Avg. treatment effect for Digital Sticker treatment compared to the control group is statistically significant at $p=0.004$, one-tailed. SE = 0.09

^{ix} Difference in avg. treatment effect across two voting method combination treatments is not statistically significant at $p=0.905$.

^x 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.

^{xi} 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).