Voting Festivals as a Method of GOTV:
Voter Mobilization in the 2018 Elections

PRE-ANALYSIS PLAN

November 5, 2018

Introduction

We use a randomized controlled trial (RCT) to evaluate the effect of different types of voting festivals and poll parties on voter turnout in precincts across the country. Hosting of poll parties was randomized between similar precincts in several states in order to measure the effect of such parties on precinct-level turnout. Poll parties and election festivals have been found to have positive effects on turnout, as demonstrated in our recent experiments in 2016 and 2017. The current study contributes to this literature and will explore heterogeneous treatment effects suggested by previous studies.

Hypotheses

The principal hypothesis is that precincts in which festivals are conducted will see increased turnout compared to similar precincts in which no festivals occur.

We also will follow-up on sites that were randomized in previous elections to see if there are enduring effects.

Sample

The units of analysis are matched voter precincts in FL, NY, NC, TN, and VA.

Random Assignment of Treatment

Precincts that were candidates for voting mobilization festivals conducted as part of the #VoteTogether initiative (https://votetogetherusa.org). Pairs of precincts that would serve as suitable locations for an election festival were submitted by partner organizations prior to Election Day; we then randomly assigned one of the precincts to treatment and one to control using the RAND() function in Google Sheets. A PDF of the treatment schedule has been included as part of this pre-analysis plan.

Intervention

Most precincts assigned to the treatment group will hold festivals on Election Day (November 6, 2018), while precincts in the control group will receive no such efforts. A small number of sites will hold their festivals during the early in-person voting period.

Data and Outcome Measures

Our primary outcome measure will be precinct-level turnout, measured by the number of votes cast compared to the number of registered voters in each precinct. We expect treatment to increase voter turnout. It is unclear whether the public outreach campaign occurring in the weeks prior to the festival will increase registration; we will test this as well. Rather than use a post-treatment variable (registrants as of election day) in the denominator of the turnout measure, we will calculate voter turnout rates in relation to fixed denominator: registration as of some pre-treatment date (no later than September 1, 2018). We will obtain this fixed registration number in a way that is consistent across treatment and control precincts within a given block. Given the vagaries of extracting such data from state and local registrars, we will rely initially on voter registration figures from 2016 and will attempt to update the registration denominator over time, as individual level data become available.

A secondary outcome is the difference in the number of votes cast for the Republican versus Democratic candidates for US House of Representatives. We do not expect an effect here, given the nonpartisan nature of the festivals and previous research that has found no change in treatment precincts' voting behavior.

Method for Estimating Average Treatment Effects

Since the experiment is blocked by location, our regression models will include indicator variables for each block in the hopes of reducing disturbance variability.

We will report 95% confidence intervals for the average treatment effect, using a margin of error equal to the estimated standard error multiplied by the appropriate critical value from the *t*-distribution. This estimate will be generated by regressing turnout on treatment assignment, using the covariates listed below to generate more precise estimates.

To assess robustness, we will also report a simple regression result with only block and treatment indicator, omitting prior turnout statistics. We expect these results to be similar but less precisely estimated due to the exclusion of prognostic covariates. When interpreting the results, we will rely primarily on the covariate-adjusted estimates.

To maintain consistency with prior studies, we will estimate the treatment effect as a change in the log-odds of turnout. See Green and McClellan (2017) for an explanation and detailed description of this transformation of the dependent variable. OLS will be used with robust standard errors. Randomization inference will be used to test the one-tailed hypothesis that

festivals increase turnout and registration. To assess robustness, we will also estimate the standard linear specification (without a log-odds transformation) using OLS.
We have included example R-code with this pre-analysis plan in order to demonstrate the estimation procedures that will be used for this study.

Covariates to use in Regression Adjustment

Consistent with the Green Lab SOP, we plan to include several covariates in our estimation in order to produce a more precise estimate of the treatment effect of election festivals. These covariates will be lagged versions of our dependent variables. We will include as covariates:

- Voter turnout in the 2016, 2014, and 2012 elections when predicting turnout.
- Share of the vote for Democratic candidates at the top of the ticket (President in 2016 and 2012) when predicting vote share.

In the event that experimental precincts are newly formed, and therefore voter turnout in previous elections is unavailable, we will use an average of the previous precincts' voting histories as covariates in the precinct-level analysis. Because this covariate missingness is unrelated to treatment assignment, our results will remain unbiased.

Heterogeneous Treatment Effects and Additional Analyses

We plan to use the voter file in Virginia to explore heterogeneous treatment effects, both at the individual and precinct level. These additional explorations include:

- Election festivals taking place in areas that experienced rain on election day. Precinct pairs in which either the treatment or control precincts experienced rain on election day will be considered "rain precincts." Precipitation data will be assembled from the National Oceanic and Atmospheric Administration's National Weather Service reports.
- Election festivals taking place in areas that were damaged by hurricanes in 2018.
- Turnout effect for young residents, age 18-25.
- Heterogeneous treatment effects for festivals put on by organizations exerting different levels of effort (with effort coded by #VoteTogether coordinators prior to Election Day).

In addition to these subgroup analyses, we plan to perform two other additional analyses:

- Non-effects of non-parties. We will analyze turnout in precincts that had been assigned to treatment but for whatever reason—usually administrative—were unable to actually host a party. If these precincts do not see any substantial change in turnout compared to the control precincts, as we would expect, this would confirm that failure to treat is unrelated to precincts' potential outcomes, allowing us to exclude these blocks. If, on the other hand, failed sites seem to have distinctive outcomes, we will include these blocks and address one-sided non-compliance in the usual manner, using assignment as an instrumental variable for actually holding a festival.
- Downstream effects of previously-held parties. We will also look for downstream treatment effects in the experimental precincts analyzed in Green and McClellan (2016)

and Green and McClellan (2017). We will compare 2018 turnout between treatment and control precincts to assess whether Civic Nation parties' effect on turnout persists in later elections.

Default Procedures for Decisions Not Explicitly Specified

For any decisions not explicitly specified in this pre-analysis plan, we plan to follow the "standard operating procedure" document of Donald P. Green's research group (version 1.05, June 7, 2016), which can be found on GitHub.