

Pre-Analysis Plan: Additional Information

Note: This additional information was added on 5/9/15 to the registration submitted on 3/20/15 via the EGAP registration form. It provides additional details to the EGAP form but does not change any of the proposed tests described in the original submission. The original registration was submitted before the first randomization, while this additional information was provided after treatment but before the author has access to the outcome data.

Project Title: Party mobilization in a repressive electoral system: Testing the impact of positive and negative messages

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Hypotheses and Tests

H1: In a repressive environment, messages that induce anger will be more effective than hopeful messages in generating political action.

This hypothesis will be tested by comparing the mean of the group assigned to the anger treatment to the mean of the group assigned to the hopeful control. This will be done both with a t-test and using regression analysis. Regression will be done both as a bivariate and with SES, group size, and past repression as controls.

H2: Anger inducing messages will be more effective compared to hopeful messages with populations who have experienced more past repression.

This hypothesis will be tested using regression analysis with the interaction of treatment assignment and past violence. Regression will be done both with and without SES, group size, and past repression as controls.

H3: Anger inducing messages will be more effective compared to hopeful messages with populations that have higher socioeconomic status.

This hypothesis will be tested using regression analysis with the interaction of treatment assignment and the weight-for-height z-scores of each constituency. Regression will be done both with and without SES, group size, and past repression as controls.

H4: Anger inducing messages will be more effective in conjunction with messages that emphasize personal power and control.

This hypothesis will be tested using the interaction of the two treatments: first, whether the constituency received the anger treatment or hopeful control, and

second, whether the constituency received a message about being held back (lack of control) or having the power to change (control).

Manipulation check

As a manipulation check, I will have two Shona speakers read the transcripts of each group and code them from 1 to 3 (low, medium, high) for anger, fear, and enthusiasm. First, I will translate the . I predict that people assigned to the anger treatment will be higher than those in the hope treatment on the anger scale. I have no prior over which group will be higher on the enthusiasm scale.

Text analysis

I will also use text analysis to describe differences in the content of the communications on WhatsApp between treatment and control. Specifically, I will first translate the text into English. Then I will remove “stop words” (i.e. “the”, “and”, etc) and “stem” the words so that different forms of verbs and singular and plural nouns are recognized as the same root word. After these transformations, I will use data mining techniques (lasso, topic modeling) to test which words predict assignment into the anger vs. enthusiasm treatments.

Construction of variables

The main outcome variables will be the proportion of group members who respond to the party’s message and the volume of the response in number of words. Last, I will count the number of times people send emoticons representing the party’s symbol of a hand making a “V for victory” sign and the number of emoticons used in general. All of these will be calculated as the change from the 24 hours before the messages are sent out to the 24 hours after they are received.

We also plan to use donations as an outcome measure, although the donation system was only recently set up and the party is skeptical that many people will make donations from these mostly poor groups of supporters. If there are fewer than 20 donations in total from the groups during each round of the experiment, we will not use the donations as an outcome. If there are more than 20, we will again look at the change in donations by group from the 24 hours before to the 24 after the messages are sent out.

Socioeconomic status (SES) will be measured using the average weight-for-height z-scores for children under 5 in the constituency from the 2011 DHS for Zimbabwe. I will calculate the average z-score by constituency using a shape file of the constituency boundaries in 2015 and the DHS data linked to the enumeration point. Lower weight-for-height z-scores indicate worse socioeconomic status.

Group size indicates the size of the constituency WhatsApp group at the time of assignment to treatment. This variable is provided by the party.

Past repression will be measured for the months preceding the elections in 2000, 2002, and 2005 with data from the Zimbabwe Human Rights NGO Forum at the constituency level for the three months preceding each of those elections. For 2008 I will use both the Voice for Democracy constituency-level data on major violent events and the Sokwanele data by constituency. I will use both sources in different specifications because they have different types of errors: the VfD data is based on extensive constituency-level fieldwork but covers only 100 out of 210 constituencies selected on the basis of where the most violence occurred. The Sokwanele violence data is based on an undisclosed source, most likely from a provider of services to victims of violence. Because I have no priors over whether total pre-election violence or recent pre-election violence should have a bigger influence on behavior, I will also test for heterogeneous effects on just 2008 violence and all violence separately, giving me four different specifications testing for heterogeneous effects by past repression.

The data for this study will be pooled from two experiments with largely the same population of groups participating. I will include a dummy for the round of the experiment in all regressions and also test for whether the treatments had different effects across the two rounds. I have no priors over whether the effect of the treatments should be different in different rounds.

Sample

The study was done in two rounds with a month of time separating the two. Randomization was done on the morning that the messages were sent out and was blocked on the number of individuals in each group (above or below the province average) and the province. For the analysis, the data from both rounds will be pooled.